









HANDLING TECHNOLOGY 1 OVERVIEW OF SERIES

GRIPP	ERS	10 - 529
2-JAW PA	ARALLEL GRIPPERS	
PNEUMA	ATIC	
-	Series GPP1000	14
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	Series GP200	76
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ELECTR	ICAL	
	Series GEP9000	132
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	Series GEP5000	144
2-JAW PA	ARALLEL GRIPPERS WITH LON	IG STROKE
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	Series MGH8000	160
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	Series GH7000	222
ELECTR	ICAL	
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	Series GEH8000	240
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PNEUMA	ATIC	
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	Series GD	266
	Series GD300	274
	Series GPD5000	294
ELECTR	ICAL	
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	Series GED5000	342
3-JAW C	ONCENTRIC GRIPPERS WITH L	ONG STROKE
PNEUMA	ATIC	
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2-JAW AN	IGULAR GRIPPERS	
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P	Series GZ1000	368
	Series MGW800	376
	Series GG1000	394
	Series GPW5000	404
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PNEUMA	TIC	
	Series GK	420
Ą	Series GG4000	434
GRIPPER	S FOR SPECIFIC TASKS	
PNEUMA	TIC	
	Series LGS	450
	Series LG1000	458
	Series LGG	468
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and the second	Series ST	480
	Series SCH	486
	Series GS	492
	Series GSI	500
	Series HM1000	504
ELECTRIC	CAL	
•	Series GEN9100	516
9	Series HEM1000	520
ROTAR	Y GRIPPERS	530 - 539
ROTARY	GRIPPERS	
PNEUMA	TIC	
	Series DGK	532
13	Series DGP400	536

780

Series HZ

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852 - 861

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1	TOOL (CHANGERS MANUAL	8
	6	Series HWR2000	10
	0	Series HWR	20
2	TOOL (CHANGERS PNEUMATIC	28
		Series WWR	30
		Series WWR1000	54
3	ROTAR	RY DISTRIBUTORS	64
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6	ANGLE	FLANGE	138
		Series WFR	138

OUR APPLICATION PROFILES ADAPTED TO YOUR REQUIREMENTS

FIND THE BEST SELECTION QUICKLY: ZIMMER APPLICATION PROFILES

HOW DO I FIND THE RIGHT GRIPPER FOR MY NEEDS?

All gripper users ask themselves this question at some point. Surely, at some point you too have looked for a suitable gripper, but were perplexed by the sheer number of options.

FIND THE GRIPPER THAT IS AN EXACT FIT.

With the introduction of Application Profiles, the Zimmer Group now makes it fast and easy to find the gripper that is an exact fit from our extensive product portfolio. We have grouped the Application Profiles (AP for short) into multiple categories according to application-specific features. This easy-to-use system enables the user to efficiently find exactly the product needed for his or her tasks.

ADVANTAGES FOR OUR CUSTOMERS.

In addition to the faster search, the greatest benefit for the customer is in the fact that only those components are used that are actually needed to fulfill the task. This saves money, increases value creation in production and makes machines and systems more competitive.

YOU CAN'T GO WRONG HERE: AP CLASS 5

Many users find it valuable for the gripper components installed to be universally usable. They are looking for a gripper that can not only master all handling tasks, but also reduces stockkeeping costs, parts list depth and restocking effort to a minimum. For these users, in our Application Profiles of Class 5 (AP5), we have created a platform that includes all of our genuine all-around talents. These include universally usable grippers that are equally well suited to all tasks and can be used even under harsh environmental conditions - premium grippers with a wide range of outstanding features, excellent performance data and a universal range of applications. The new 5000 series of premium grippers demonstrate what today's technology can deliver. Our V-ways made of stainless steel, an extremely hard coating, the double seal of the guides, high precision and complete interchangeability of the pneumatic and electric versions mean that these grippers offer a level of performance previously unavailable on the market.

The grippers have an IP67 protection class and boast a full 30 million maintenance-free cycles. This maintenance-free performance is made possible by a grease reservoir in the gripper jaw. A similar reservoir has proven its value for decades in the AP class 3, but in Class 5, it has been improved by the combination of DLC coating and a double lip seal. This is virtually equivalent to a lifetime lubrication that enables an extremely high number of cycles.

However, the premium AP5 class offers you other advantages that makes them future-proof and indispensable. For example, with its platform strategy and the ability to change between pneumatic and electric drives, it reduces the system costs and design effort of tomorrow. Only the AP5 offers pneumatic and electrical grippers with nearly identical performance data. The electric grippers, equipped with a brushless motor, offer significantly more performance compared to the pneumatic version. In addition to the integrated control system, the likewise integrated sensors for 3-position sensing and the single-cable solution, these grippers will, in the future, also offer an IO-Link interface that makes configuring and implementing the gripper amazingly easy. Therefore, if you need outstanding performance and future-proof quality, Class AP5 is the best choice. It is the best tool to equip users for the path towards the single-energy machine 4.0, even if they are currently still using pneumatics and don't plan to switch over to electric components until sometime in the future.



GRIPPERSOVERVIEW OF SERIES

Products		Gripping force [N]	Stroke per jaw [mm]	Number of installation sizes
2-jaw parallel grippers pneumatic	Page 12			
Series GPP1000		100	4-16	•
Series MGP800		6 400	1-12	•••••
Series GP		4 5250	3-13	•••••
Series GP400		85 19275	3 30	••••••
Series GP200		160 4500	6 40	••••
Series GPP5000		140 26950	2,5-45	••••••
2-jaw parallel grippers electric F	age 130			
Series GEP9000		11-50	2-4	••
Series GEP1400		140-350	2-6	••
Series GEP5000		540 1900	6-10	•••
2-Jaw Parallel Grippers with Long F	age 158			
Stroke pneumatic	Ŭ			
Series MGH8000		60 910	10 100	••••
Series GH6000		120 3400	20 200	••••
Series GH7000		8500	65-100	••
2-Jaw Parallel Grippers with Long Stroke electric	age 228			
Series GEH6000IL		60 2400	0 80	••
Series GEH8000		~200 3200	0 60	•
3-jaw concentric grippers F pneumatic	age 246			
Series MGD800		30 1420	1-12	•••••
Series GD		24 530	11-33	•••
Series GD300		200 34700	3 30	•••••
Series GPD5000		310 72500	2,5-45	••••••
3-jaw concentric grippers electric F	age 334			
Series GED1300		140-350	2-6	••
Series GED5000		540 1900	6-10	•••
3-Jaw Concentric Grippers with Long Stroke pneumatic	age 356			
Series GD500		1300-2480	30-60	•••
		Gripping force [N]	Stroke per jaw [°]	Number of installa- tion sizes
2-Jaw Angular Grippers pneumatic F	age 366			
Series GZ1000		62-315	8-10	•••
Series MGW800		5-325	37,5	•••••
Series GG1000		2910 29110	20	••••
Series GPW5000		1330 14500	15	•••
	age 418			
Series GK		70 4250	0 90	•••••
Series GG4000		430 4000	0 90	•••••

	Position :	ion sensing Options			Safety characteristics		Maintenance					
AP	+\$	+ 📆		1+	(F)			I P	(M)	₩ **		z pe
AP class	Magnetic field sensor	Inductive	Integrated sensing	Tempera- ture-resistant	High-strength S	Corrosion resistance	Purged air	IP class	Spring closing C	Spring opening O	Self locking mechanism	Mainte- nance-free cycles (max.)
1	•							30				2 million
2	•							40	•			10 million
2		•						30	•			10 million
3	•	•			•		•	40	•	•		10 million
3	•	•			•		•	40	•			10 million
5	•	•		•	•	•	•	64/67*	•	•		30 million
2			•				•	40	•	•		30 million
3								52				5 million
5			•			•	•	64			•	30 million
2	•	•						64				10 million
3	•	•						40				10 million
3		•						64				10 million
0								10./5.4				- ····
3			•					40/54			•	5 million 10 million
3								54			•	10 million
2	•							40	•			10 million
2		•						40				10 million
3	•	•			•		•	40	•	•		10 million
5	•	•		•	•	•	•	64/67*	•	•		30 million
3								40				5 million
5			•			•	•	64			•	30 million
0		•						40				10 million
3								40				10 million
												40 111
1		•						30	•			10 million
2	•	•					•	30	•			10 million
3 5		•		•		•	•	40 64	•			30 million
J								04				30 111111011
2	•	•						20	•			10 million
3	•	•			•		•	64	•			10 million

2-JAW PARALLEL GRIPPERS **OVERVIEW OF SERIES**



► PNEUMAT	ГІС	
	Series GPP1000	14
	Series MGP800	24
	Series GP	42
	Series GP400	56
	Series GP200	76
	Series GPP5000	86

2-JAW PARALLEL GRIPPERS **SERIES GPP1000**

PRODUCT ADVANTAGES



"Cost-effective"

- Parallel gripper with an unbeatable price/performance
- Gripper jaw set and fixation material included
- Can be configured for spring opening or spring closing
- ▶ One installation size, three strokes: 4, 8 and 16 mm per gripper jaw
- Gripping force of 100 N
- Service life of up to 2 million cycles

► THE BEST PRODUCT FOR YOUR APPLICATION

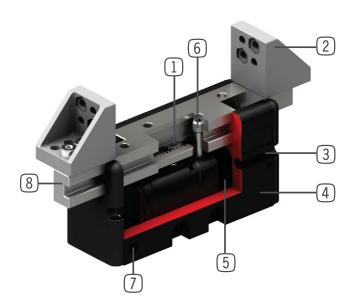


Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com



BENEFITS IN DETAIL



1 Synchronization

- via rack and pinion

2 Intermediate jaws

- incl. mounting material
- included in scope of delivery

(3) Sensing

- mounting and positioning of magnetic field sensors

4 Lightweight housing

- Hard-coated aluminum alloy

5 Single-acting pneumatic cylinder

- Spring return

6 Jaw slave screw

- for changing the gripper's direction of force

7 Energy supply

- possible from several sides

8 Gripper jaw

for connecting the intermediate jaw or an individual gripper finger via centering sleeves

> SERIES CHARACTERISTICS



Number of installation sizes	1
Stroke per jaw	4 mm - 16 mm
Gripping force	100 N
Weight	0,16 kg - 0,20 kg
AP class	1



Magnetic field sensor

IP 30

IP30

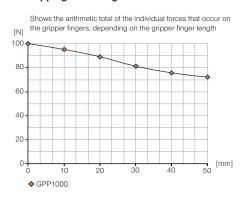


2 million maintenance-free cycles (max.)

> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



	Steel top	jaws	Plastic	top	iaws
--	-----------	------	---------	-----	------

Mr [Nm]	4	1
Mx [Nm]	4	2
My [Nm]	2	1
Fa [N]	400	100

► INCLUDED IN DELIVERY



assembly material ZUB1100

> RECOMMENDED ACCESSORIES



PNP Magnetic field sensor Straight Cable 0.3 m - Connector M8 MFS1000SKHR



NPN Magnetic field sensor Straight Cable 0.3 m - Connector M8

MFS1000SKHR-NPN



Straight Fittings - Quick Connect Style

GVM5



Angled Fittings - Quick Connect Style

WVM5



MCS Adapter plate

AP1100

► RECOMMENDED ACCESSORY MCS ADAPTER PLATE



Straight Fittings - Quick Connect Style GV1-4X6

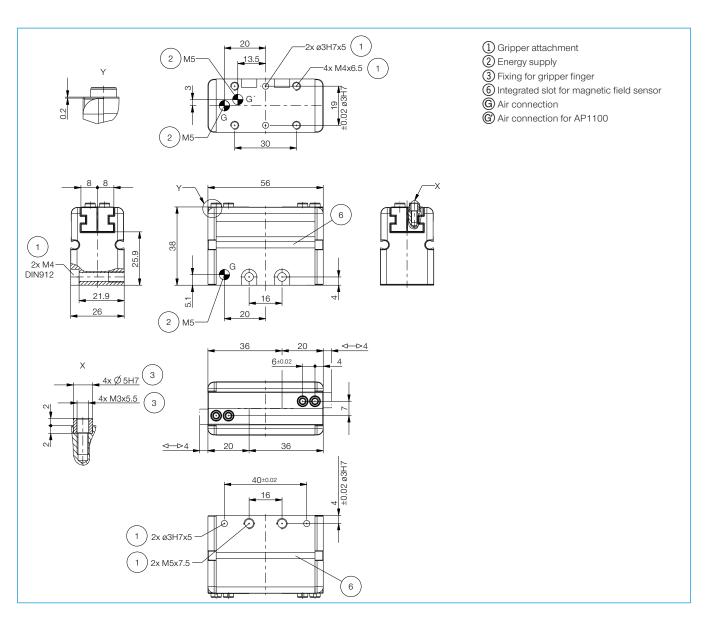


Angled Fittings - Quick Connect Style

WV1-4X6

	► Technical Data*
Order no.	GPP1104CO-00-A
Stroke per jaw [mm]	4
Grip force in grip direction min. [N]	100
Travel time in gripping direction [ms]	20
Reset time using spring [ms]	30
Permissible weight per jaw max [kg]	0.10
Repetition accuracy +/- [mm]	0.05
Operating pressure [bar]	2 6
Operating temperature [°C]	5 +60
Air volume per cycle [cm³]	1.4
Protection to IEC 60529	IP30
Weight [kg]	0.16

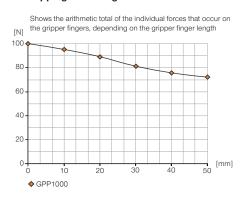
^{*}All data measured at 6 bar



> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Steel top laws I lastic top law	Steel top	iaws	Plastic	top	iaws
---------------------------------	-----------	------	---------	-----	------

Mr [Nm]	4	1
Mx [Nm]	4	2
My [Nm]	2	1
Fa [N]	400	100

► INCLUDED IN DELIVERY



assembly material ZUB1100

> RECOMMENDED ACCESSORIES



Cable 0.3 m - Connector M8 MFS1000SKHR



NPN Magnetic field sensor Straight Cable 0.3 m - Connector M8

MFS1000SKHR-NPN



Straight Fittings - Quick Connect Style

GVM5



Angled Fittings - Quick Connect Style

WVM5



MCS Adapter plate

AP1100

► RECOMMENDED ACCESSORY MCS ADAPTER PLATE



Straight Fittings - Quick Connect Style GV1-4X6

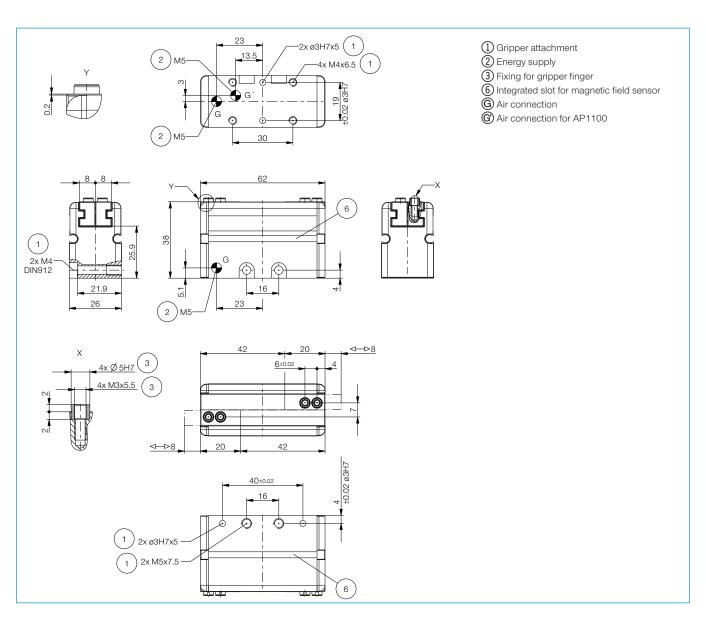


Angled Fittings - Quick Connect Style

WV1-4X6

	► Technical Data*
Order no.	GPP1108CO-00-A
Stroke per jaw [mm]	8
Grip force in grip direction min. [N]	100
Travel time in gripping direction [ms]	25
Reset time using spring [ms]	40
Permissible weight per jaw max [kg]	0.10
Repetition accuracy +/- [mm]	0.05
Operating pressure [bar]	2 6
Operating temperature [°C]	5 +60
Air volume per cycle [cm³]	2.7
Protection to IEC 60529	IP30
Weight [kg]	0.17

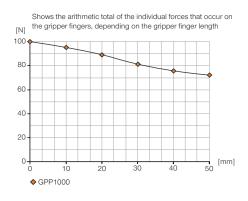
^{*}All data measured at 6 bar



> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



	Steel top	jaws	Plastic	top	iaws
--	-----------	------	---------	-----	------

Mr [Nm]	4	1
Mx [Nm]	4	2
My [Nm]	2	1
Fa [N]	400	100

► INCLUDED IN DELIVERY



assembly material ZUB1100

> RECOMMENDED ACCESSORIES



PNP Magnetic field sensor Straight Cable 0.3 m - Connector M8

MFS1000SKHR



NPN Magnetic field sensor Straight Cable 0.3 m - Connector M8

MFS1000SKHR-NPN



Straight Fittings - Quick Connect Style

GVM5



Angled Fittings - Quick Connect Style

WVM5



MCS Adapter plate

AP1100

► RECOMMENDED ACCESSORY MCS ADAPTER PLATE



Straight Fittings - Quick Connect Style GV1-4X6

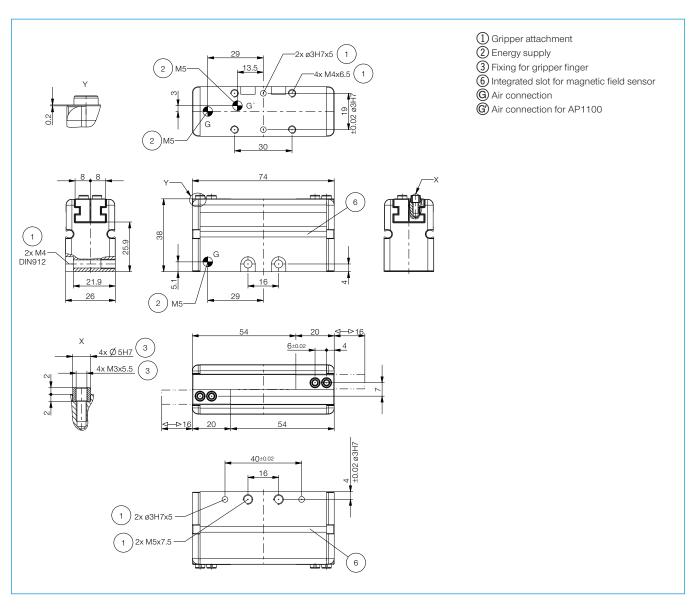


Angled Fittings - Quick Connect Style

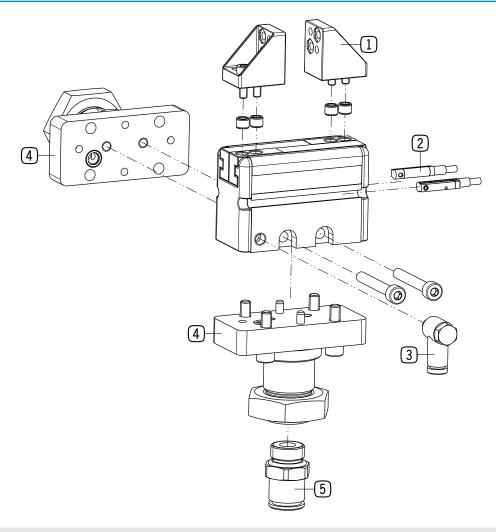
WV1-4X6

	► Technical Data*
Order no.	GPP1116CO-00-A
Stroke per jaw [mm]	16
Grip force in grip direction min. [N]	100
Travel time in gripping direction [ms]	30
Reset time using spring [ms]	100
Permissible weight per jaw max [kg]	0.10
Repetition accuracy +/- [mm]	0.05
Operating pressure [bar]	2 6
Operating temperature [°C]	5 +60
Air volume per cycle [cm³]	5.6
Protection to IEC 60529	IP30
Weight [kg]	0.20

^{*}All data measured at 6 bar



2-JAW PARALLEL GRIPPERS **SERIES GPP1000**



► INCLUDED IN DELIVERY



Plastic top jaws and assembly material

ZUB1100

► RECOMMENDED ACCESSORIES



PNP Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS1000SKHR



NPN Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS1000SKHR-NPN



Straight Fittings - Quick Connect Style

GVM5



Angled Fittings - Quick Connect Style

WVM5



MCS Adapter plate

AP1100



Straight Fittings - Quick Connect Style

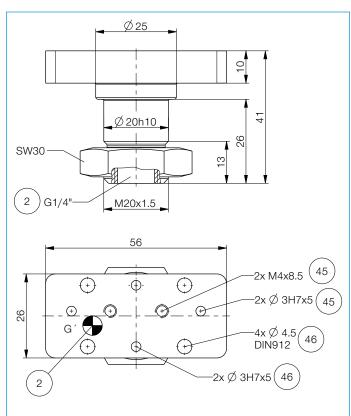
GV1-4X6

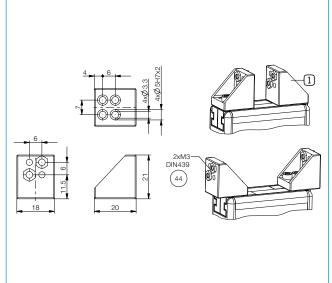


Angled Fittings - Quick Connect Style

WV1-4X6

TECHNICAL DRAWINGS ACCESSORIES





- 2 Energy supply
- Fixing for gripper finger
- 45 Horizontal mounting
- 46 Vertical mounting
- G Gripper air connection

2-JAW PARALLEL GRIPPERS **SERIES MGP800**

PRODUCT ADVANTAGES



"The powerful"

Over 40% more powerful than the benchmark

Optimisation of weight and force reduces your application costs since all components can have a smaller scale

Gripper jaws up to 50% longer than the benchmark

The highest force and torque measurement enables flexible use for maximum dynamics

► Failure-free continuous operation

Our uncompromising "Made in Germany" quality guarantees up to 10 million maintenance-free gripping cycles

THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com

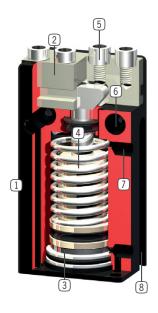
HOW TO ORDER CORRECTLY

The product order numbers are arranged according to this diagram:

Order no.	MGP803N		
For external gripping, self-locking, spring closing		С	



BENEFITS IN DETAIL



1 Robust, lightweight housing

- Hard-coated aluminum alloy

2 Gripper jaw

- individual gripper finger mounting

3 Position sensing

- permanent magnet for direct monitoring of piston movement

4 Integrated gripping force safety device

- spring integrated into cylinder as energy storage (from size 803 upwards)

5 Removable centering sleeves

- quick and economical positioning of the gripper fingers

6 Mounting and positioning

- mounting possible from several sides for versatile positioning

7 Energy supply

- possible from several sides

8 Sensing slot

- mounting and positioning of magnetic field sensors

> SERIES CHARACTERISTICS



Number of installation sizes	8
Stroke per jaw	1 mm - 12 mm
Gripping force	6 N - 400 N
Weight	0,008 kg - 0,46 kg
AP class	2



10 million maintenance-free cycles (max.)



Spring closing C



IP40



Magnetic field sensor

> PRODUCT SPECIFICATIONS



Gripping force diagram

[N] Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length ♦MGP801N [mm]

Colored area: increased wear and tear to be expected

Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	1
Mx [Nm]	2
My [Nm]	1
Fa [N]	54

► INCLUDED IN DELIVERY



Centering Disc

DST80100

> RECOMMENDED ACCESSORIES



Straight Fittings - Barb Style Connection

GVM3



Angled Fittings - Barb Style Connection

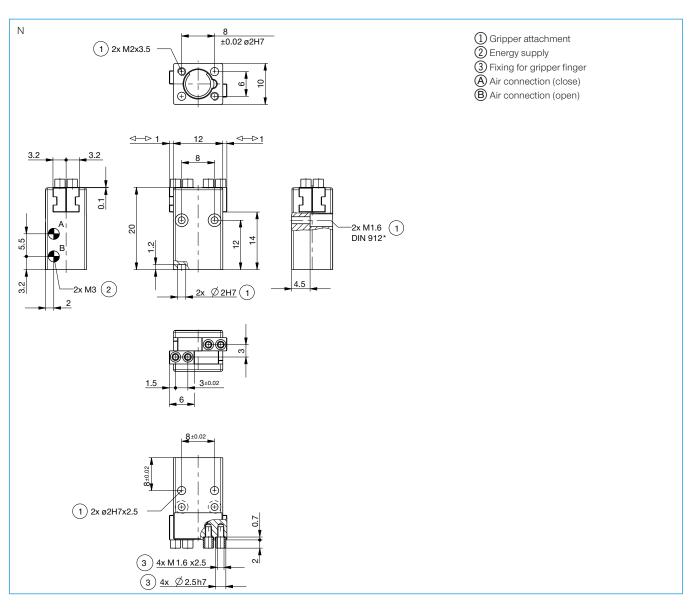
WVM3



Quick Exhaust Valve

	► Technical Data*
Order no.	MGP801N
Stroke per jaw [mm]	1
Gripping force in closing [N]	6
Gripping force in opening [N]	8
Gripping force secured by spring min. [N]	
Closing time [s]	0.01
Opening time [s]	0.01
Repetition accuracy +/- [mm]	0.025
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	0.09
Weight [kg]	0.008

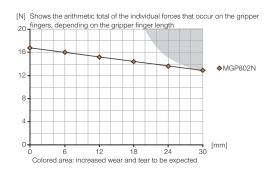
^{*}All data measured at 6 bar



> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	1
Mx [Nm]	3
My [Nm]	2
Fa [N]	90

► INCLUDED IN DELIVERY



Centering Disc

DST80200

> RECOMMENDED ACCESSORIES



Straight Fittings - Barb Style Connection GVM3



Angled Fittings - Barb Style Connection WVM3

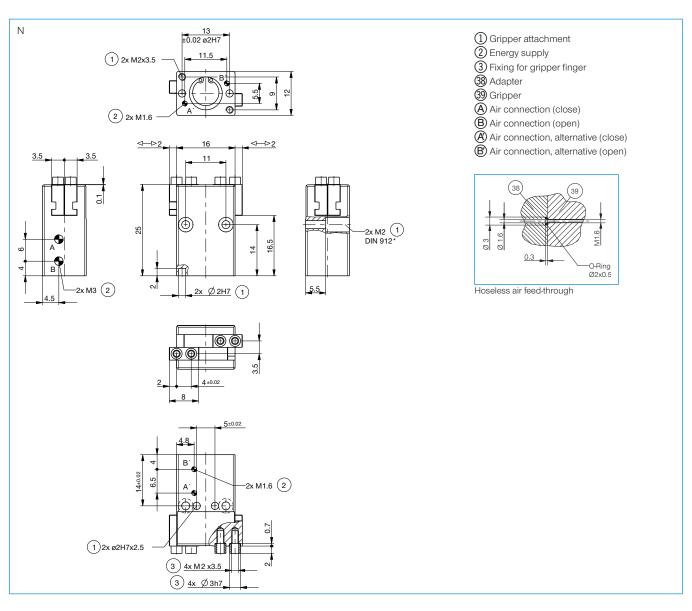


Quick Exhaust Valve

DEV04

	► Technical Data*
Order no.	MGP802N
Stroke per jaw [mm]	2
Gripping force in closing [N]	16
Gripping force in opening [N]	19
Gripping force secured by spring min. [N]	
Closing time [s]	0.01
Opening time [s]	0.01
Repetition accuracy +/- [mm]	0.025
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	0.26
Weight [kg]	0.016

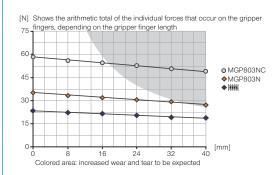
^{*}All data measured at 6 bar



> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



2
5
2
140

► INCLUDED IN DELIVERY



Centering Disc

DST80320

> RECOMMENDED ACCESSORIES



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Straight Fittings - Barb Style Connection

GVM3



Angled Fittings - Barb Style Connection

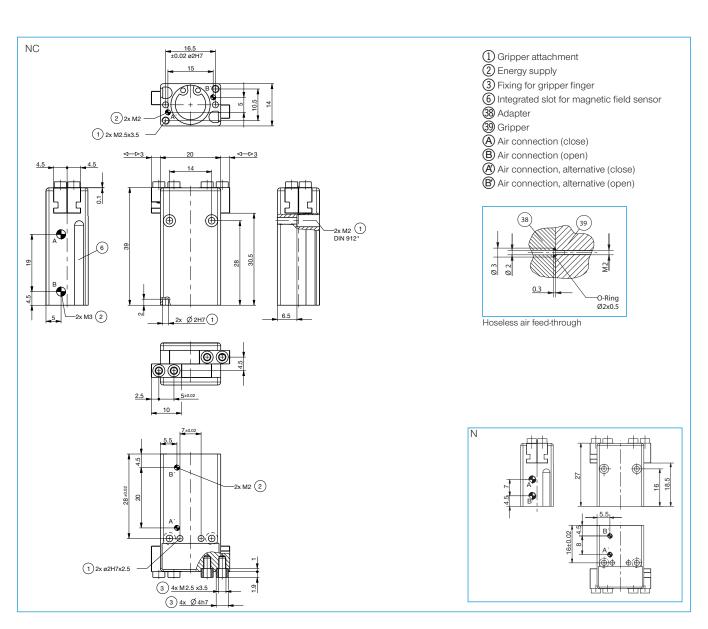
WVM3



Quick Exhaust Valve

	► Technical Data*	
Order no.	MGP803N	MGP803NC
Stroke per jaw [mm]	3	3
Gripping force in closing [N]	35	55
Gripping force in opening [N]	40	
Gripping force secured by spring min. [N]		20
Closing time [s]	0.01	0.01
Opening time [s]	0.01	0.03
Repetition accuracy +/- [mm]	0.025	0.025
Operating pressure min. [bar]	3	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	0.8	1.1
Weight [kg]	0.025	0.035

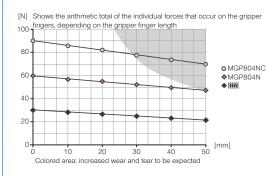
^{*}All data measured at 6 bar



> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	3
Mx [Nm]	7
My [Nm]	3
Fa [N]	230

► INCLUDED IN DELIVERY



Centering Disc

DST40400

> RECOMMENDED ACCESSORIES



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Straight Cable 0,3 m -

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Straight Fittings - Barb Style Connection

GVM3



Angled Fittings - Barb Style Connection

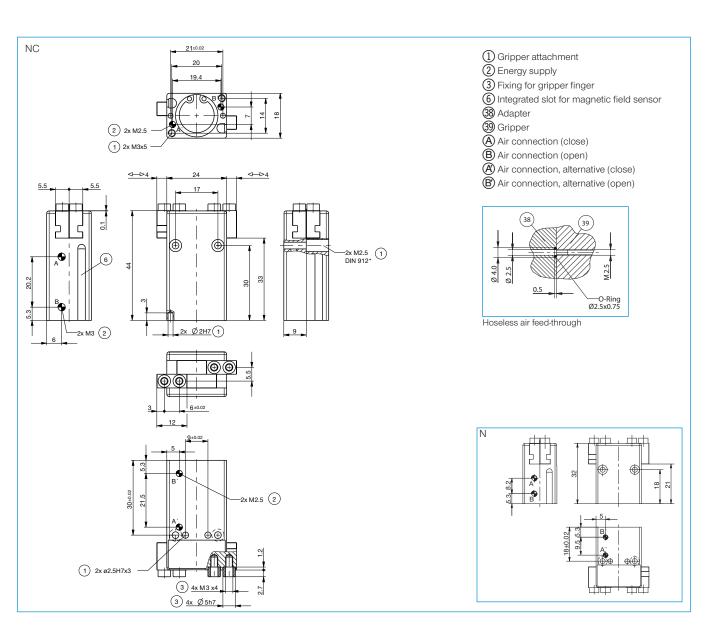
WVM3



Quick Exhaust Valve

	► Technical Data*	
Order no.	MGP804N	MGP804NC
Stroke per jaw [mm]	4	4
Gripping force in closing [N]	60	90
Gripping force in opening [N]	65	
Gripping force secured by spring min. [N]		30
Closing time [s]	0.02	0.02
Opening time [s]	0.02	0.04
Repetition accuracy +/- [mm]	0.025	0.025
Operating pressure min. [bar]	3	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	1.9	2.5
Weight [kg]	0.05	0.07

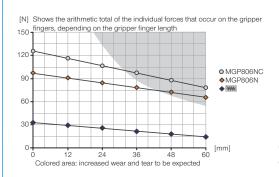
^{*}All data measured at 6 bar



> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	4
Mx [Nm]	14
My [Nm]	5
Fa [N]	330

► INCLUDED IN DELIVERY



Centering Disc

DST40400

> RECOMMENDED ACCESSORIES



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Straight Fittings - Barb Style Connection

GVM3



Angled Fittings - Barb Style Connection

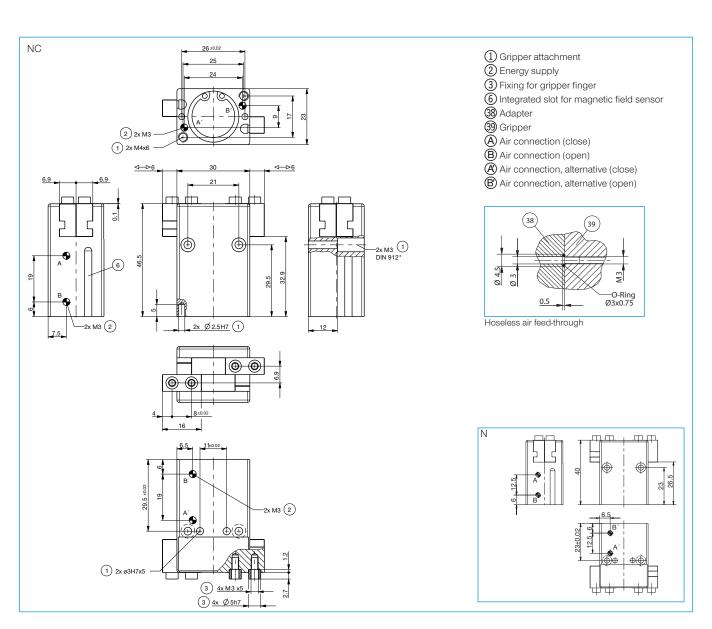
WVM3



Quick Exhaust Valve

	Technical Data*	
Order no.	MGP806N	MGP806NC
Stroke per jaw [mm]	6	6
Gripping force in closing [N]	100	140
Gripping force in opening [N]	120	
Gripping force secured by spring min. [N]		40
Closing time [s]	0.02	0.02
Opening time [s]	0.02	0.04
Repetition accuracy +/- [mm]	0.025	0.025
Operating pressure min. [bar]	3	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	4.2	5.4
Weight [kg]	0.1	0.11

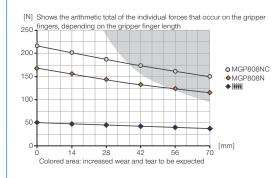
^{*}All data measured at 6 bar



> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



6
21
7
450

► INCLUDED IN DELIVERY



Centering Disc

DST40600

> RECOMMENDED ACCESSORIES



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Straight Fittings - Quick Connect Style

GVM5



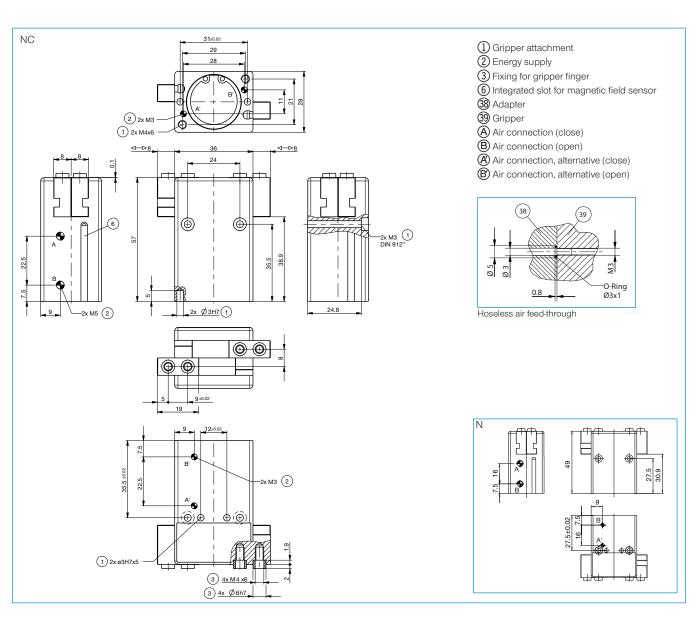
Angled Fittings - Quick Connect Style WVM5



Quick Exhaust Valve

	► Technical Data*	
Order no.	MGP808N	MGP808NC
Stroke per jaw [mm]	8	8
Gripping force in closing [N]	170	220
Gripping force in opening [N]	190	
Gripping force secured by spring min. [N]		50
Closing time [s]	0.04	0.04
Opening time [s]	0.04	0.06
Repetition accuracy +/- [mm]	0.02	0.02
Operating pressure min. [bar]	3	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	8.4	11.3
Weight [kg]	0.16	0.18

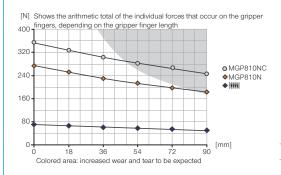
^{*}All data measured at 6 bar



> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



9
32
12
590

► INCLUDED IN DELIVERY



Centering Disc

DST07540

> RECOMMENDED ACCESSORIES



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Straight Cable 0,3 m -

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Straight Fittings - Quick Connect Style

GVM5



Angled Fittings - Quick Connect Style

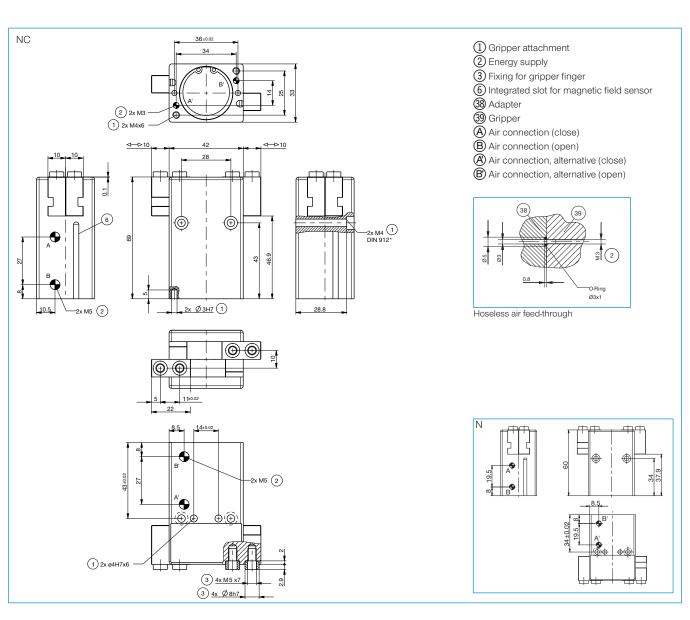
WVM5



Quick Exhaust Valve

	► Technical Data*	
Order no.	MGP810N	MGP810NC
Stroke per jaw [mm]	10	10
Gripping force in closing [N]	270	350
Gripping force in opening [N]	310	
Gripping force secured by spring min. [N]		80
Closing time [s]	0.04	0.04
Opening time [s]	0.04	0.06
Repetition accuracy +/- [mm]	0.02	0.02
Operating pressure min. [bar]	3	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	15.2	20.5
Weight [kg]	0.28	0.32

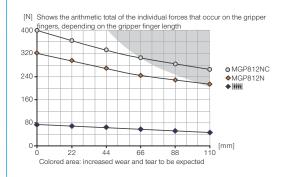
^{*}All data measured at 6 bar



▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	11
Mx [Nm]	42
My [Nm]	16
Fa [N]	790

► INCLUDED IN DELIVERY



Centering Disc

DST07540

> RECOMMENDED ACCESSORIES



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Straight Cable 0,3 m -

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Straight Fittings - Quick Connect Style

GVM5



Angled Fittings - Quick Connect Style

WVM5

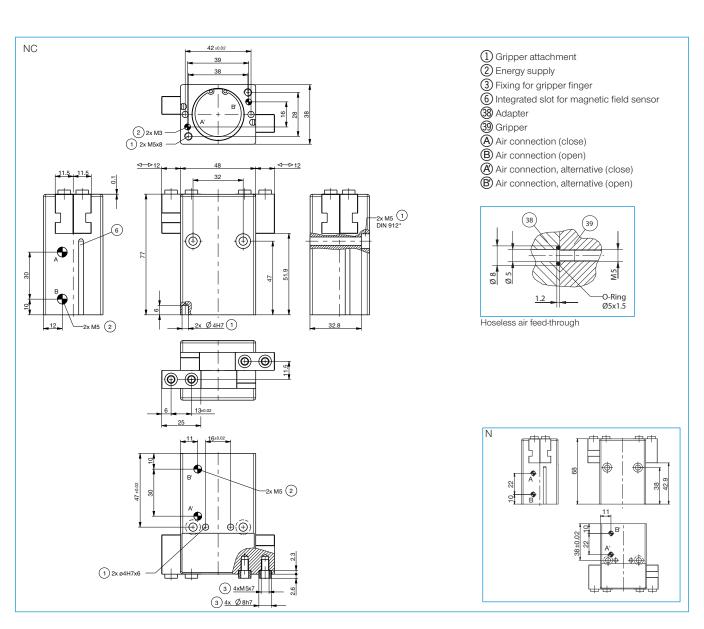


Quick Exhaust Valve

DEV04

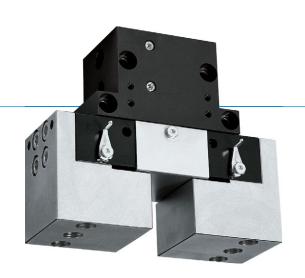
	► Technical Data*	
Order no.	MGP812N	MGP812NC
Stroke per jaw [mm]	12	12
Gripping force in closing [N]	320	400
Gripping force in opening [N]	350	
Gripping force secured by spring min. [N]		80
Closing time [s]	0.06	0.06
Opening time [s]	0.06	0.08
Repetition accuracy +/- [mm]	0.02	0.02
Operating pressure min. [bar]	3	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	22.3	28.1
Weight [kg]	0.41	0.46

^{*}All data measured at 6 bar



2-JAW PARALLEL GRIPPERS **SERIES GP**

PRODUCT ADVANTAGES



"The enduring"

Proven technology

We have more than 20 years of proven reliability, which ensures uninterrupted production for you

Very short cycle times

Low-friction circular guides enable very short cycle times and, therefore, high component output for your machine

► Failure-free continuous operation

Our uncompromising "Made in Germany" quality guarantees up to 10 million maintenance-free gripping cycles

THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com

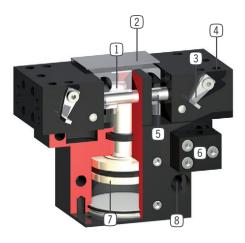
HOW TO ORDER CORRECTLY

The product order numbers are arranged according to this diagram:

Order no.	GP45		-B	
For external gripping, self-locking, spring closing		S		
Without intergrated spring				-99



BENEFITS IN DETAIL



1 Wedge hook mechanism

- synchronized the movement of the gripper jaws
- high force transfer

2 Cover plate

- to protect the guide and mechanics (from GP45)

(3) Adjustable switch cam

- for position sensing

4 Gripper jaw

- individual gripper finger mounting

5 Roller slide

- for low wear movement sequence

6 Mounting block

- mounting for inductive proximity switch

7 Drive

- double-acting pneumatic cylinder

8 Mounting and positioning

- mounting possible from several sides for versatile positioning

> SERIES CHARACTERISTICS



Number of installation sizes	6
Stroke per jaw	3 mm - 13 mm
Gripping force	4 N - 5250 N
Weight	0,033 kg - 1,4 kg
AP class	2



10 million maintenance-free cycles (max.)



Spring closing C



Inductive sensor

IP 30

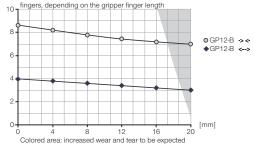
IP30

▶ PRODUCT SPECIFICATIONS



Gripping force diagram

[N] Shows the arithmetic total of the individual forces that occur on the gripper



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	0.15
Mx [Nm]	0.15
My [Nm]	0.15
Fa [N]	15

> RECOMMENDED ACCESSORIES



Universal Jaw Aluminium

UB12



Centering Disc

ZE10H7X6



Mounting block

КВЗМ





NJ3-E2



Inductive Proximity Switch Cable 0,3 m -Connector M8

NJ3-E2SK



Plug-in connector Straight Cable 5m - Socket M8 (female) KAG500

Straight Fittings - Barb Style Connection GVM3



Angled Fittings - Barb Style Connection WVM3

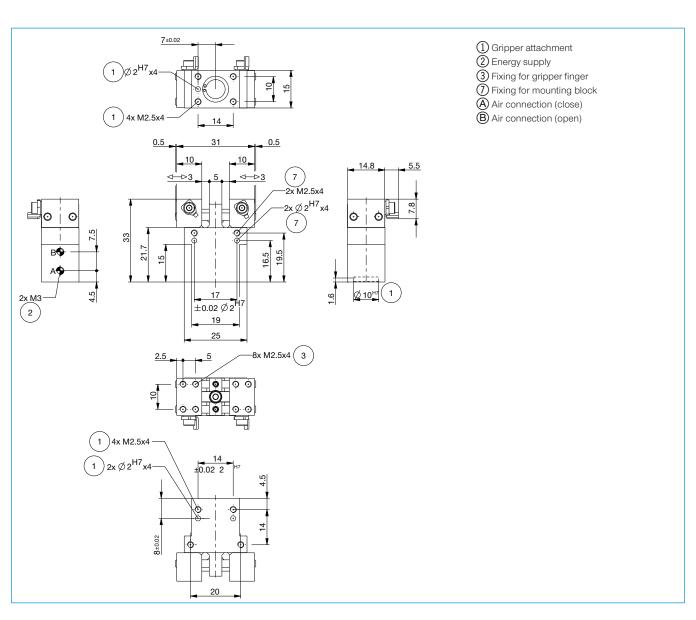


Quick Exhaust Valve

DEV04

	► Technical Data*
Order no.	GP12-B
Stroke per jaw [mm]	3
Gripping force in closing [N]	8.4
Gripping force in opening [N]	4
Gripping force secured by spring min. [N]	
Closing time [s]	0.02
Opening time [s]	0.02
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	0.4
Weight [kg]	0.033

^{*}All data measured at 6 bar

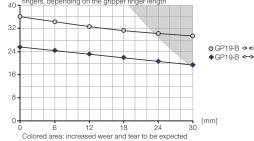


▶ PRODUCT SPECIFICATIONS



Gripping force diagram

[N] Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	0.8
Mx [Nm]	0.8
My [Nm]	0.8
Fa [N]	40

► RECOMMENDED ACCESSORIES



Universal Jaw Aluminium

UB19



Centering Disc

ZE12H7X4



Mounting block

КВ3





NJ3-E2



Inductive Proximity Switch Cable 0,3 m -Connector M8

NJ3-E2SK



ble 5m - Socket M8 (female) KAG500

Straight Fittings - Quick Connect Style GVM5



Angled Fittings - Quick Connect Style WVM5

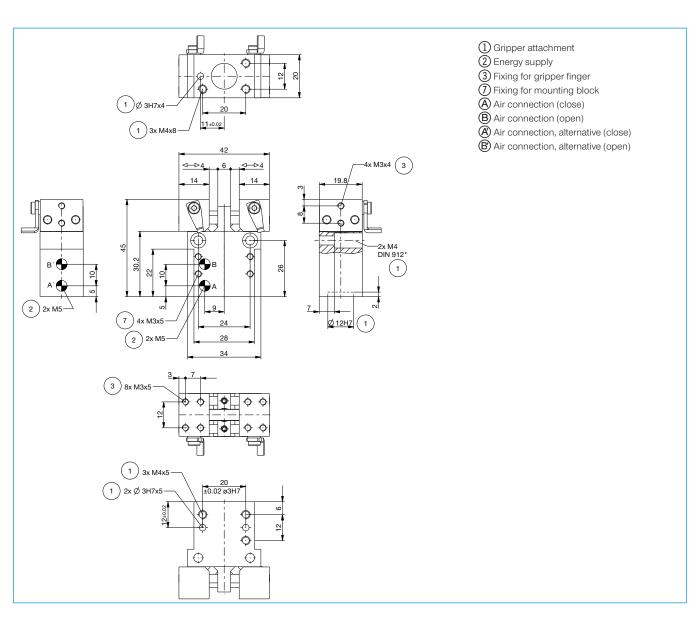


Quick Exhaust Valve

DEV04

	► Technical Data*
Order no.	GP19-B
Stroke per jaw [mm]	4
Gripping force in closing [N]	36
Gripping force in opening [N]	26
Gripping force secured by spring min. [N]	
Closing time [s]	0.02
Opening time [s]	0.02
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	1
Weight [kg]	0.081

^{*}All data measured at 6 bar



▶ PRODUCT SPECIFICATIONS



Gripping force diagram

[N] Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length 100 **a** 80 **⊙** GP30-B → < 60 ◆GP30-B <-->

Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.

Mr [Nm]	2
Mx [Nm]	2
My [Nm]	2
Fa [N]	80

RECOMMENDED ACCESSORIES



Universal Jaw Aluminium



Centering Disc

ZE15H7X4



Colored area: increased wear and tear to be expected

Mounting block

KB5



[mm]

Inductive proximity switch - Cable 5 m



Inductive Proximity Switch Cable 0,3 m -Connector M8

NJ5-E2SK







Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Straight Fittings - Quick Connect Style

GVM5



Angled Fittings - Quick Connect Style

WVM5



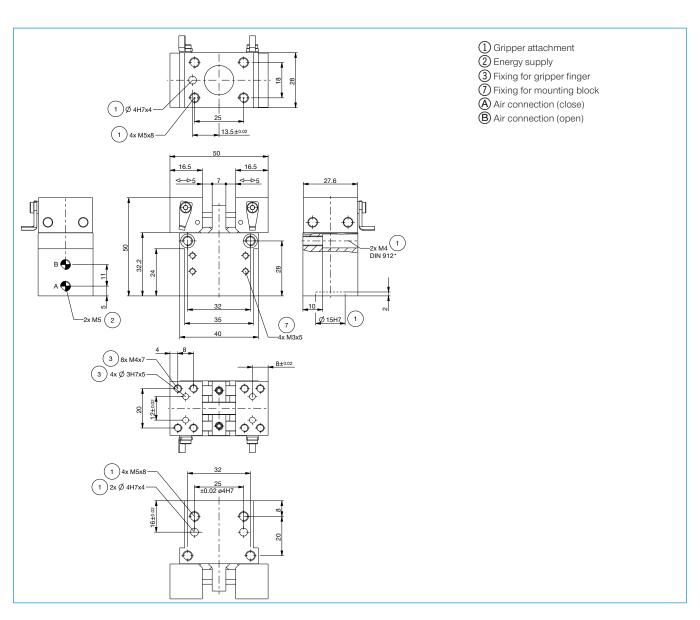
Quick Exhaust Valve

DEV04

NJ5-E2

	► Technical Data*
Order no.	GP30-B
Stroke per jaw [mm]	5
Gripping force in closing [N]	94
Gripping force in opening [N]	76
Gripping force secured by spring min. [N]	
Closing time [s]	0.02
Opening time [s]	0.02
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	3
Weight [kg]	0.15

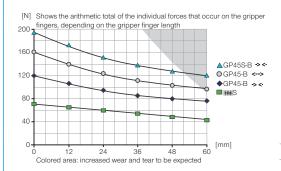
^{*}All data measured at 6 bar



▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	4
Mx [Nm]	4
My [Nm]	4
Fa [N]	160

> RECOMMENDED ACCESSORIES



Universal Jaw Aluminium

UB45



Centering Disc

ZE20H7X4



Mounting block

KB6.5



Inductive proximity switch Cable 5 m

NJ6.5-E2-01



- Connector M8

NJ6.5-E2S



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Straight Fittings - Quick Connect Style

GVM5



Angled Fittings - Quick Connect Style

WVM5

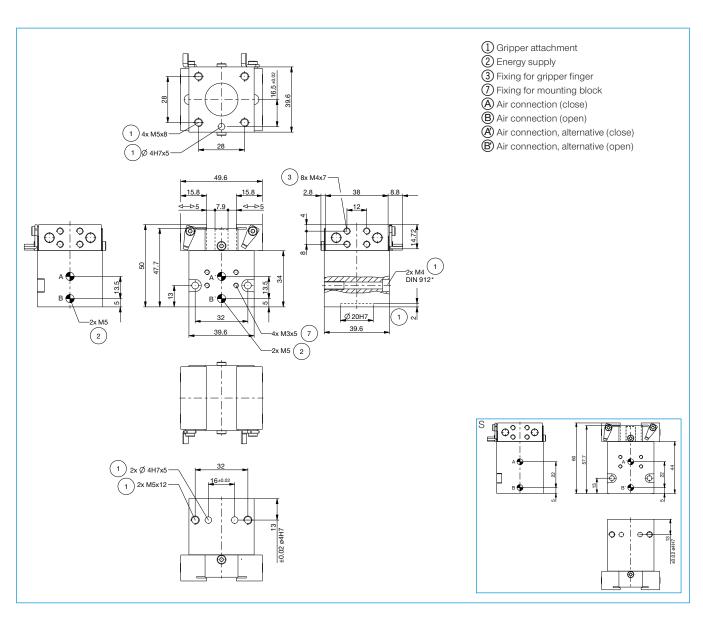


Quick Exhaust Valve

DEV04

	► Technical Data*	
Order no.	GP45-B	GP45S-B
Stroke per jaw [mm]	5	5
Gripping force in closing [N]	118	190
Gripping force in opening [N]	155	
Gripping force secured by spring min. [N]		75
Closing time [s]	0.03	0.04
Opening time [s]	0.03	0.04
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	5
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	4	8
Weight [kg]	0.255	0.3

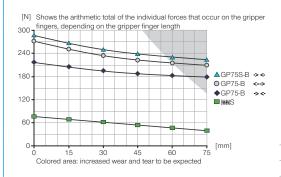
^{*}All data measured at 6 bar



▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	5
Mx [Nm]	5
My [Nm]	5
Fa [N]	180

► INCLUDED IN DELIVERY



Mounting block

KB8K

UB75

> RECOMMENDED ACCESSORIES



Universal Jaw Aluminium



Centering Disc

ZE20H7X4



Inductive proximity switch - Cable 5 m



Inductive proximity switch - Connector M8



Plug-in connector Straight Cable 5m - Socket M8 (female) KAG500

NJ8-E2S



Straight Fittings - Quick Connect Style

GV1-8X6



Angled Fittings - Quick Connect Style

WV1-8X6



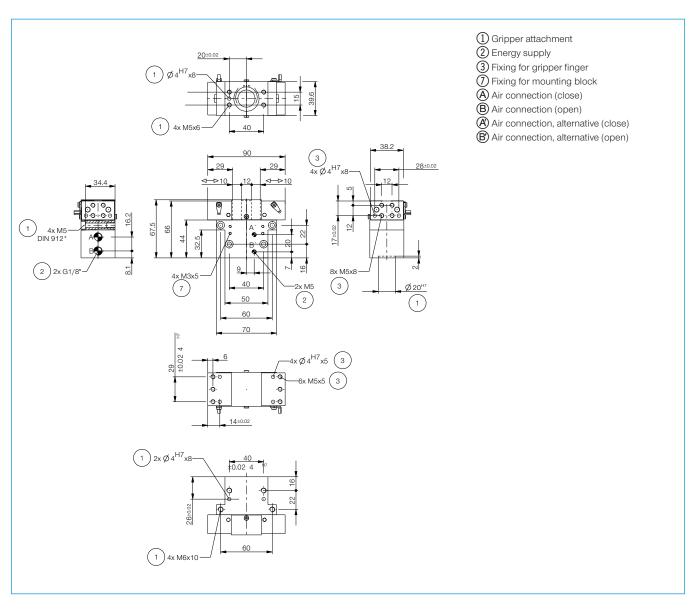
Quick Exhaust Valve

DEV06

NJ8-E2

	► Technical Data*	
Order no.	GP75-B	GP75S-B
Stroke per jaw [mm]	10	10
Gripping force in closing [N]	220	275
Gripping force in opening [N]	260	
Gripping force secured by spring min. [N]		63
Closing time [s]	0.03	0.04
Opening time [s]	0.03	0.04
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	5
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	13	19
Weight [kg]	0.45	0.5

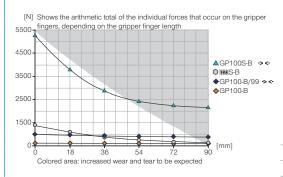
^{*}All data measured at 6 bar



▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	10
Mx [Nm]	10
My [Nm]	10
Fa [N]	400

► INCLUDED IN DELIVERY



Mounting block

KB8K

> RECOMMENDED ACCESSORIES



Universal Jaw Aluminium



Centering Disc

ZE30H7X4



Inductive proximity switch - Cable 5 m



Inductive proximity switch - Connector M8



Plug-in connector Straight Cable 5m - Socket M8 (female) KAG500

NJ8-E2S



Straight Fittings - Quick Connect Style

GV1-8X6

UB100



Angled Fittings - Quick Connect Style

WV1-8X6



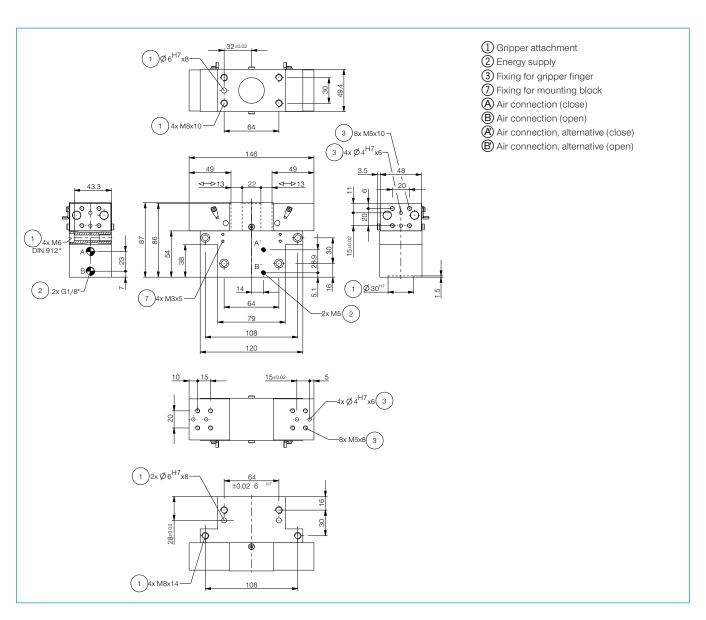
Quick Exhaust Valve

DEV06

NJ8-E2

	► Technical Data*		
Order no.	GP100-B	GP100-B-99	GP100S-B
Stroke per jaw [mm]	13	13	8
Gripping force in closing [N]	450	450	5250
Gripping force in opening [N]		450	
Gripping force secured by spring min. [N]	70		250
Closing time [s]	0.05	0.04	0.05
Opening time [s]	0.05	0.04	0.05
Repetition accuracy +/- [mm]	0.05	0.05	0.05
Operating pressure min. [bar]	5	4	5
Operating pressure max. [bar]	8	8	8
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+80	+80	+80
Air volume per cycle [cm³]	30	30	30
Weight [kg]	1.4	1.4	1.4

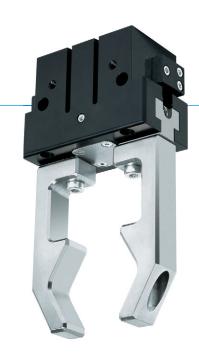
^{*}All data measured at 6 bar



2-JAW PARALLEL GRIPPERS

SERIES GP400

PRODUCT ADVANTAGES



"The economical"

Concentration on the essentials

The most economic type of gripping: This is how you reduce your production costs

Proven T slot guide

This established and proven guiding technology stands for the highest process reliability like no other

Compact structure

Reduces the interference contours for your application

> THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com

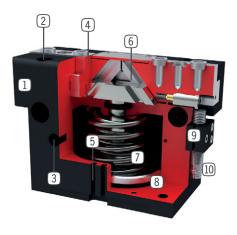
HOW TO ORDER CORRECTLY

The product order numbers are arranged according to this diagram:

Order no.	GP410			-C
Long stroke		N		
High force		S		
For external gripping, self-locking, spring closing			С	
For internal gripping, self-locking, spring opening			0	



BENEFITS IN DETAIL



- 1 Robust, lightweight housing
 - Hard-coated aluminum alloy
- 2 Mounting and positioning
 - mounting possible from several sides for versatile positioning
- (3) Energy supply
 - possible from several sides
- 4 Gripper jaw
 - individual gripper finger mounting
- 5 Sensing slot
 - mounting and positioning of magnetic field sensors
- 6 Wedge hook mechanism
 - synchronized the movement of the gripper jaws
- (7) Integrated gripping force safety device
 - spring integrated into cylinder as energy storage
- 8 Position sensing
 - permanent magnet for direct monitoring of piston movement
- 9 Mounting block
 - mounting for inductive proximity switch (10)

> SERIES CHARACTERISTICS



Number of installation sizes	9
Stroke per jaw	3 mm - 30 mm
Gripping force	85 N - 19275 N
Weight	0,08 kg - 18,9 kg
AP class	3



10 million maintenance-free cycles (max.)



High-strength S



Magnetic field sensor



Spring closing C



Inductive sensor



Purged air



Spring opening O

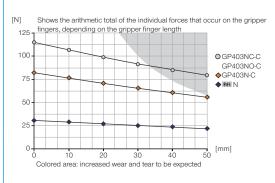


IP40

▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	6
Mx [Nm]	9
My [Nm]	12
Fa [N]	500

INCLUDED IN DELIVERY



Mounting block

Centering Disc

KB3-03

DST40400

> RECOMMENDED ACCESSORIES



Universal Jaw Aluminium



Universal Jaw Steel

UB403ST



Inductive Proximity Switch Cable 0,3 m - Connector

NJ3-E2SK



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500

UB403



Straight Fittings - Quick Connect Style

GVM5



Angled Fittings - Quick Connect Style

WVM5



Quick Exhaust Valve

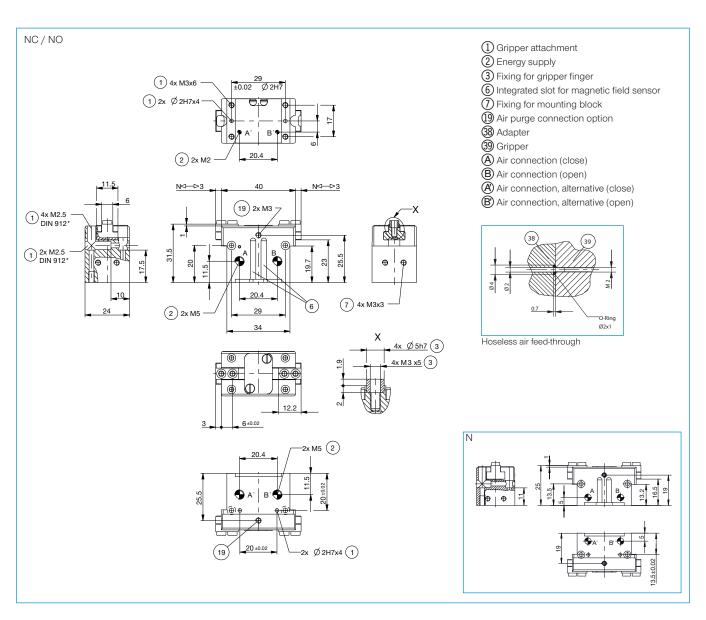
DEV04



Pressure Safety Valve

	Technical Data*		
Order no.	GP403N-C	GP403NC-C	GP403NO-C
Stroke per jaw [mm]	3	3	3
Gripping force in closing [N]	85	115	
Gripping force in opening [N]	100		115
Gripping force secured by spring min. [N]		32	32
Closing time [s]	0.015	0.01	0.02
Opening time [s]	0.015	0.02	0.01
Repetition accuracy +/- [mm]	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4
Operating pressure max. [bar]	8	8	8
Max. operating pressure for sealing air [bar]	0.5	0.5	0.5
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+80	+80	+80
Air volume per cycle [cm³]	1.8	3.3	3.3
Weight [kg]	0.08	0.1	0.1

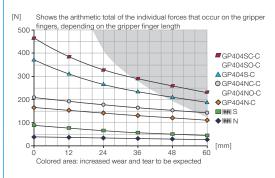
^{*}All data measured at 6 bar



▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



8
15
15
700

► INCLUDED IN DELIVERY



Mounting block

Centering Disc

KB3-08

DST40400

> RECOMMENDED ACCESSORIES



Universal Jaw Aluminium



Universal Jaw Steel

UB404ST



Inductive Proximity Switch Cable 0,3 m - Connector

NJ3-E2SK



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500

UB404



Straight Fittings - Quick Connect Style

GVM5



Angled Fittings - Quick Connect Style

WVM5



Quick Exhaust Valve

DEV04

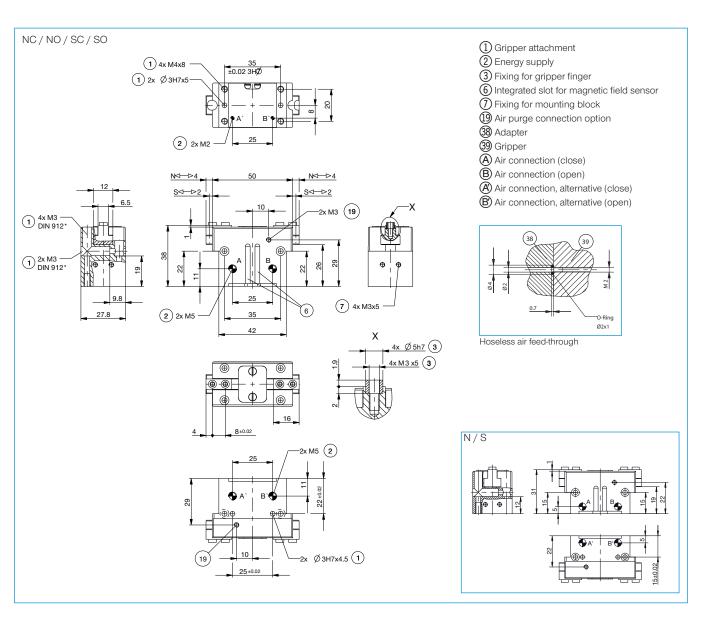


Angle flange

WFR01

	► Technical Data*					
Order no.	GP404N-C	GP404NC-C	GP404NO-C	GP404S-C	GP404SC-C	GP404SO-C
Stroke per jaw [mm]	4	4	4	2	2	2
Gripping force in closing [N]	170	210		375	465	
Gripping force in opening [N]	185		225	410		500
Gripping force secured by spring min. [N]		40	40		90	90
Closing time [s]	0.02	0.015	0.025	0.02	0.015	0.025
Opening time [s]	0.02	0.025	0.015	0.02	0.025	0.015
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	8	8	8	8	8
Max. operating pressure for sealing air [bar]	0.5	0.5	0.5	0.5	0.5	0.5
Operating temperature min. [°C]	5	5	5	5	5	5
Operating temperature max. [°C]	+80	+80	+80	+80	+80	+80
Air volume per cycle [cm³]	4.1	6.9	6.9	4.1	6.9	6.9
Weight [kg]	0.14	0.16	0.16	0.14	0.16	0.16

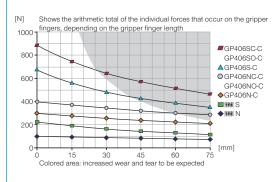
^{*}All data measured at 6 bar



▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	35
Mx [Nm]	50
My [Nm]	45
Fa [N]	1200

► INCLUDED IN DELIVERY



Mounting block



Centering Disc

KB8K

DST40600

RECOMMENDED ACCESSORIES



Universal Jaw Aluminium

UB406



Universal Jaw Steel

UB406ST



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 0,3 m -MFS103SKHC



Magnetic field sensor

Straight Cable 0,3 m -

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Straight Fittings - Quick Connect Style

GVM5



Angled Fittings - Quick Connect Style

WVM5

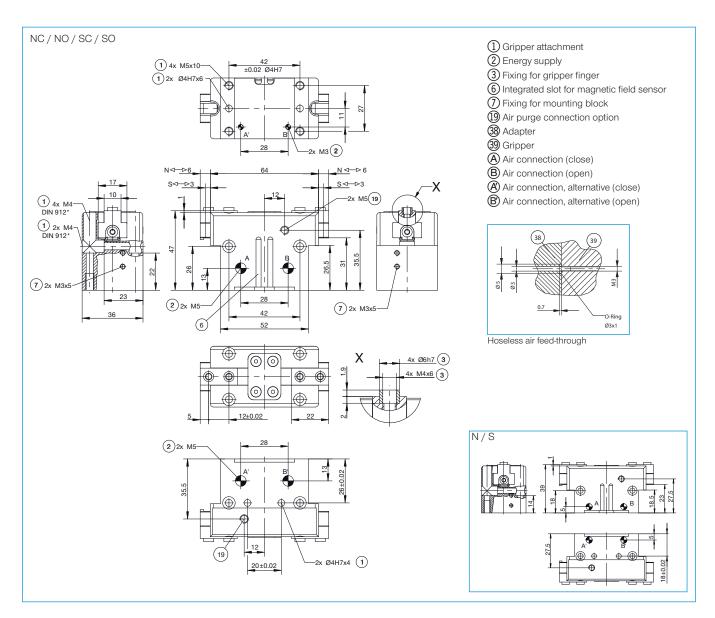


Angle flange

WFR01

	► Technical Data*					
Order no.	GP406N-C	GP406NC-C	GP406NO-C	GP406S-C	GP406SC-C	GP406SO-C
Stroke per jaw [mm]	6	6	6	3	3	3
Gripping force in closing [N]	300	400		670	900	
Gripping force in opening [N]	325		425	725		950
Gripping force secured by spring min. [N]		100	100		230	230
Closing time [s]	0.03	0.025	0.04	0.03	0.025	0.04
Opening time [s]	0.03	0.04	0.025	0.03	0.04	0.025
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	8	8	8	8	8
Max. operating pressure for sealing air [bar]	0.5	0.5	0.5	0.5	0.5	0.5
Operating temperature min. [°C]	5	5	5	5	5	5
Operating temperature max. [°C]	+80	+80	+80	+80	+80	+80
Air volume per cycle [cm³]	10.1	15.5	15.5	10.1	15.5	15.5
Weight [kg]	0.27	0.32	0.32	0.27	0.32	0.32

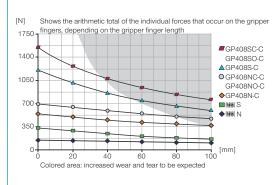
^{*}All data measured at 6 bar



▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	50
Mx [Nm]	80
My [Nm]	60
Fa [N]	1800

► INCLUDED IN DELIVERY



Mounting block



Centering Disc

KB8K

DST40800

RECOMMENDED ACCESSORIES



Universal Jaw Aluminium



Universal Jaw Steel



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC









Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500

Straight Fittings - Quick

Connect Style GVM5



Angled Fittings - Quick Connect Style



MFS204SKHC

Angle flange

WVM5

WFR02

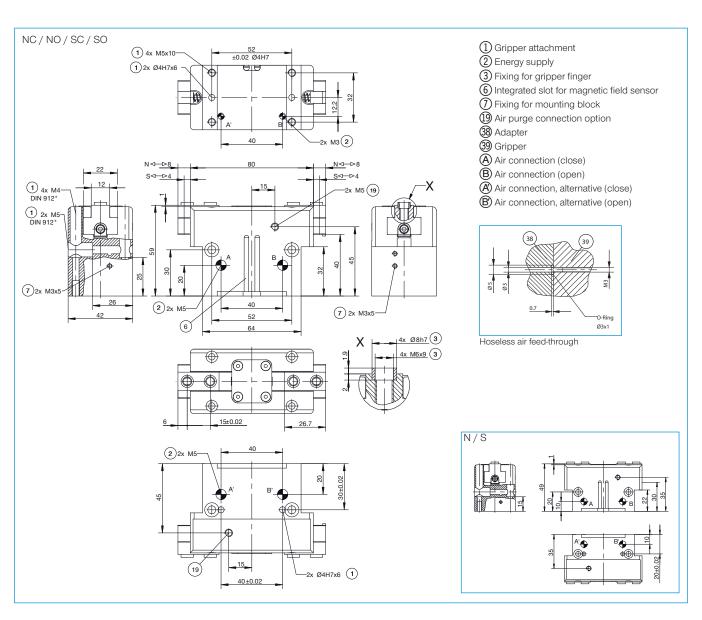
2-Position-Sensor Cable

0,3 m - Connector M8

MFSP2SKHC-02

	► Technical Data*					
Order no.	GP408N-C	GP408NC-C	GP408NO-C	GP408S-C	GP408SC-C	GP408SO-C
Stroke per jaw [mm]	8	8	8	4	4	4
Gripping force in closing [N]	550	700		1230	1570	
Gripping force in opening [N]	590		740	1320		1660
Gripping force secured by spring min. [N]		150	150		340	340
Closing time [s]	0.04	0.03	0.05	0.04	0.03	0.05
Opening time [s]	0.04	0.05	0.03	0.04	0.05	0.03
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	8	8	8	8	8
Max. operating pressure for sealing air [bar]	0.5	0.5	0.5	0.5	0.5	0.5
Operating temperature min. [°C]	5	5	5	5	5	5
Operating temperature max. [°C]	+80	+80	+80	+80	+80	+80
Air volume per cycle [cm³]	23.6	35.5	35.5	23.6	35.5	35.5
Weight [kg]	0.5	0.57	0.57	0.5	0.57	0.57

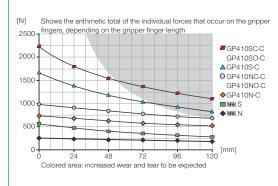
^{*}All data measured at 6 bar



▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	75
Mx [Nm]	100
My [Nm]	90
Fa [N]	2500

► INCLUDED IN DELIVERY



Mounting block



Centering Disc

KB8K

DST41000

RECOMMENDED ACCESSORIES



Universal Jaw Aluminium

UB410



Universal Jaw Steel

UB410ST



Alternate proximity bracket

KHA410-B-8



Inductive proximity switch - Connector M8



Magnetic field sensor Angled Cable 0,3 m -MFS103SKHC

NJ8-E2S



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500



Straight Fittings - Quick Connect Style

GV1-8X6

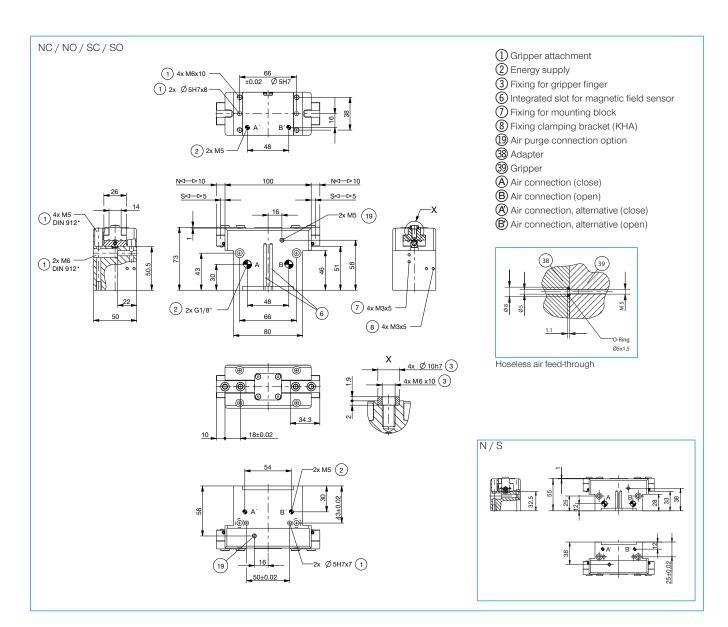


Angle flange

WFR02

	► Technical Data*					
Order no.	GP410N-C	GP410NC-C	GP410NO-C	GP410S-C	GP410SC-C	GP410SO-C
Stroke per jaw [mm]	10	10	10	5	5	5
Gripping force in closing [N]	740	990		1650	2215	
Gripping force in opening [N]	795		1050	1770		2340
Gripping force secured by spring min. [N]		250	250		570	570
Closing time [s]	0.07	0.06	0.09	0.07	0.06	0.09
Opening time [s]	0.07	0.09	0.06	0.07	0.09	0.06
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	8	8	8	8	8
Max. operating pressure for sealing air [bar]	0.5	0.5	0.5	0.5	0.5	0.5
Operating temperature min. [°C]	5	5	5	5	5	5
Operating temperature max. [°C]	+80	+80	+80	+80	+80	+80
Air volume per cycle [cm³]	39.3	66.7	66.7	39.3	66.7	66.7
Weight [kg]	0.85	1	1	0.85	1	1

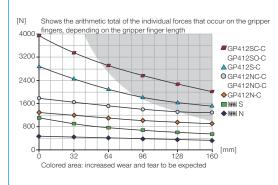
^{*}All data measured at 6 bar



▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	100
Mx [Nm]	120
My [Nm]	120
Fa [N]	3200

► INCLUDED IN DELIVERY



Mounting block



Centering Disc

KB8K

DST41000

RECOMMENDED ACCESSORIES



Universal Jaw Aluminium

UB412



Universal Jaw Steel

UB412ST



Alternate proximity bracket

KHA412-B-8



Magnetic field sensor Angled Cable 0,3 m -





Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Straight Fittings - Quick Connect Style

GV1-8X6



Angled Fittings - Quick Connect Style

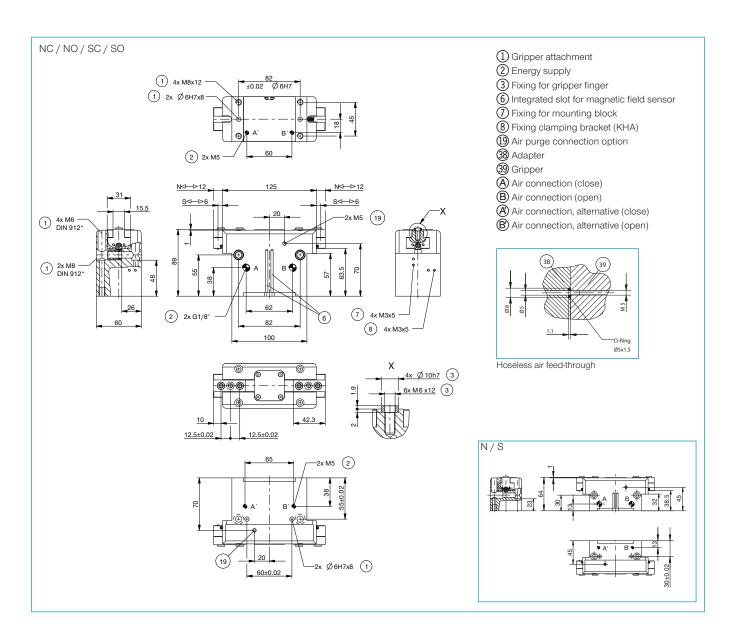
WV1-8X6



Pressure Safety Valve

	► Technical Data*					
Order no.	GP412N-C	GP412NC-C	GP412NO-C	GP412S-C	GP412SC-C	GP412SO-C
Stroke per jaw [mm]	12	12	12	6	6	6
Gripping force in closing [N]	1290	1780		2890	3960	
Gripping force in opening [N]	1370		1850	3050		4130
Gripping force secured by spring min. [N]		490	490		1080	1080
Closing time [s]	0.1	80.0	0.12	0.1	0.08	0.12
Opening time [s]	0.1	0.12	0.08	0.1	0.12	80.0
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	8	8	8	8	8
Max. operating pressure for sealing air [bar]	0.5	0.5	0.5	0.5	0.5	0.5
Operating temperature min. [°C]	5	5	5	5	5	5
Operating temperature max. [°C]	+80	+80	+80	+80	+80	+80
Air volume per cycle [cm³]	80	148	148	80	148	148
Weight [kg]	1.5	1.78	1.78	1.5	1.78	1.78

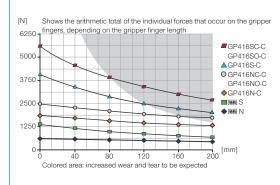
^{*}All data measured at 6 bar



▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	140
Mx [Nm]	160
My [Nm]	180
Fa [N]	5000

► INCLUDED IN DELIVERY



Mounting block



Centering Disc

KB8K

DST41600

RECOMMENDED ACCESSORIES



Universal Jaw Aluminium

UB416



Universal Jaw Steel

UB416ST



Alternate proximity bracket

KHA416-B-8



Magnetic field sensor Angled Cable 0,3 m -





Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Straight Fittings - Quick Connect Style

GV1-8X6



Angled Fittings - Quick Connect Style

WV1-8X6



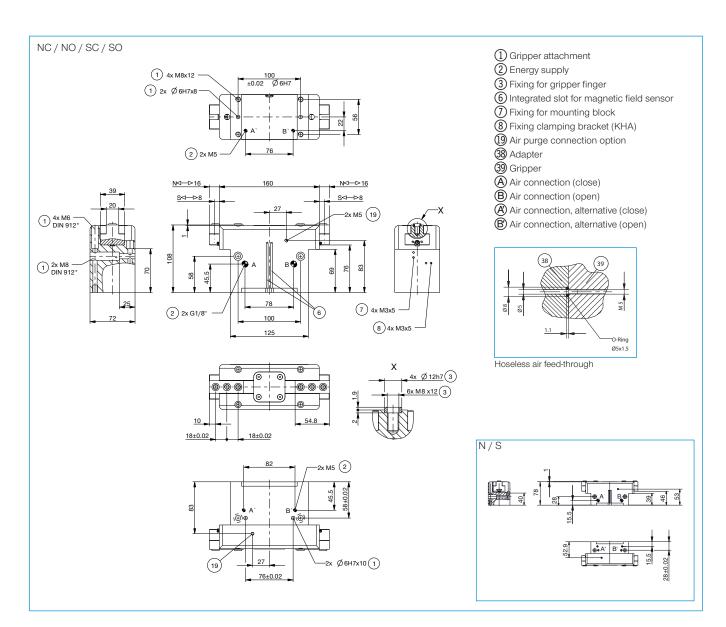
Pressure Safety Valve

DSV1-8

70

	► Technical Data*					
Order no.	GP416N-C	GP416NC-C	GP416NO-C	GP416S-C	GP416SC-C	GP416SO-C
Stroke per jaw [mm]	16	16	16	8	8	8
Gripping force in closing [N]	1860	2490		4160	5560	
Gripping force in opening [N]	1960		2590	4390		5780
Gripping force secured by spring min. [N]		630	630		1400	1400
Closing time [s]	0.2	0.15	0.25	0.2	0.15	0.25
Opening time [s]	0.2	0.25	0.15	0.2	0.25	0.15
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	8	8	8	8	8
Max. operating pressure for sealing air [bar]	0.5	0.5	0.5	0.5	0.5	0.5
Operating temperature min. [°C]	5	5	5	5	5	5
Operating temperature max. [°C]	+80	+80	+80	+80	+80	+80
Air volume per cycle [cm³]	268	477	477	268	477	477
Weight [kg]	2.9	3.4	3.4	2.9	3.4	3.4

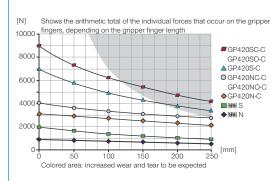
^{*}All data measured at 6 bar



▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	170
Mx [Nm]	180
My [Nm]	220
Fa [N]	7000

► INCLUDED IN DELIVERY



Mounting block

KB8K



Centering Disc

DST42000

RECOMMENDED ACCESSORIES



Universal Jaw Aluminium

UB420



Universal Jaw Steel

UB420ST



Alternate proximity bracket

KHA420-B-8



Inductive proximity switch - Connector M8

NJ8-E2S



Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500



Straight Fittings - Quick Connect Style

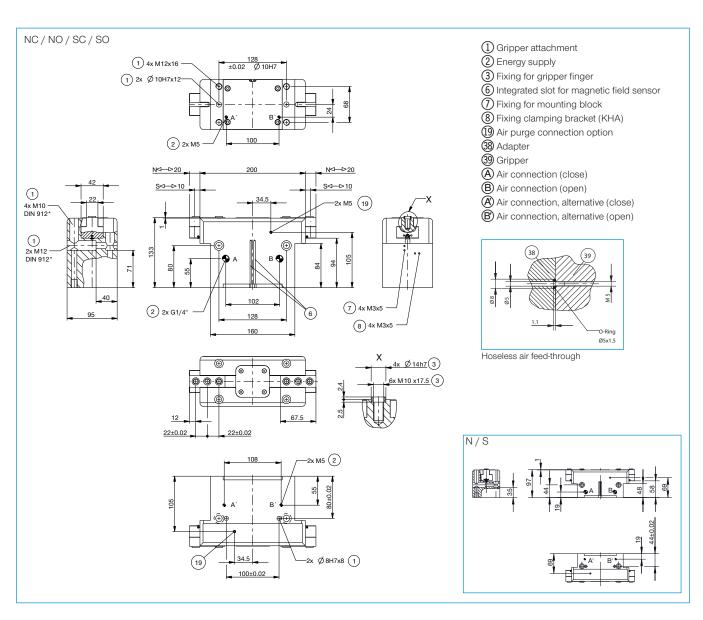
GV1-4X8



Pressure Safety Valve

	► Technical Data*					
Order no.	GP420N-C	GP420NC-C	GP420NO-C	GP420S-C	GP420SC-C	GP420SO-C
Stroke per jaw [mm]	20	20	20	10	10	10
Gripping force in closing [N]	3175	4060		7080	9060	
Gripping force in opening [N]	3330		4215	7430		9400
Gripping force secured by spring min. [N]		900	900		1975	1975
Closing time [s]	0.35	0.3	0.4	0.35	0.3	0.4
Opening time [s]	0.35	0.4	0.3	0.35	0.4	0.3
Repetition accuracy +/- [mm]	0.02	0.02	0.02	0.02	0.02	0.02
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	8	8	8	8	8
Max. operating pressure for sealing air [bar]	0.5	0.5	0.5	0.5	0.5	0.5
Operating temperature min. [°C]	5	5	5	5	5	5
Operating temperature max. [°C]	+80	+80	+80	+80	+80	+80
Air volume per cycle [cm³]	320	590	590	320	590	590
Weight [kg]	5.5	6.7	6.7	5.5	6.7	6.7

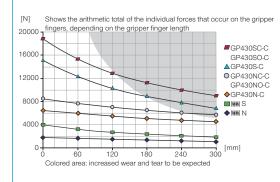
^{*}All data measured at 6 bar



> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	200
Mx [Nm]	275
My [Nm]	300
Fa [N]	9000

► INCLUDED IN DELIVERY



Mounting block



Centering Disc

KB8K

DST43000

RECOMMENDED ACCESSORIES



Universal Jaw Aluminium

UB430



Universal Jaw Steel

UB430ST



Alternate proximity bracket

KHA430-B-8



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500



Straight Fittings - Quick Connect Style

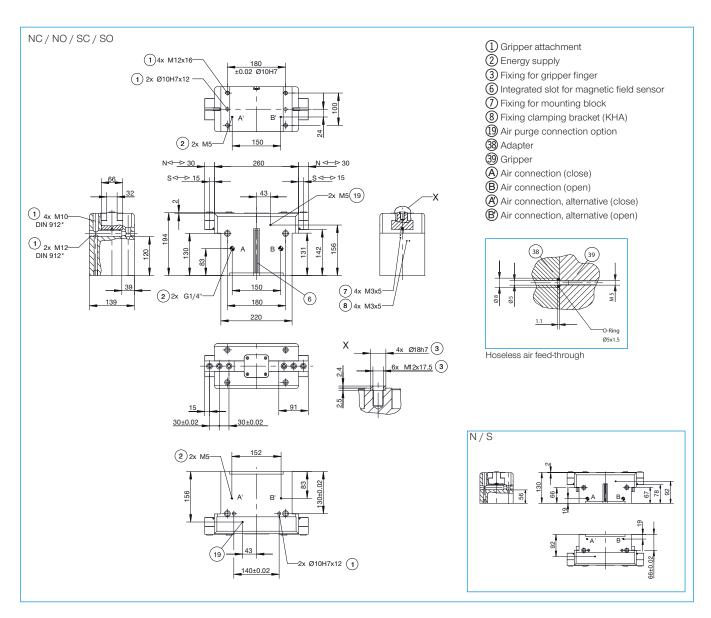
GV1-4X8



Pressure Safety Valve

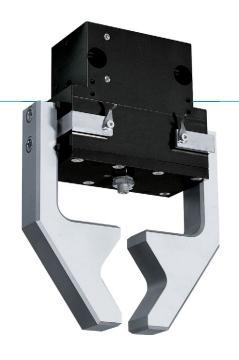
	Technical	Data*				
Order no.	GP430N-C	GP430NC-C	GP430NO-C	GP430S-C	GP430SC-C	GP430SO-C
Stroke per jaw [mm]	30	30	30	15	15	15
Gripping force in closing [N]	6675	8480		14900	18930	
Gripping force in opening [N]	6830		8640	15250		19275
Gripping force secured by spring min. [N]		1800	1800		4030	4030
Closing time [s]	0.4	0.4	0.8	0.4	0.4	0.8
Opening time [s]	0.4	0.8	0.4	0.4	0.8	0.4
Repetition accuracy +/- [mm]	0.04	0.04	0.04	0.04	0.04	0.04
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	8	8	8	8	8
Max. operating pressure for sealing air [bar]	0.5	0.5	0.5	0.5	0.5	0.5
Operating temperature min. [°C]	5	5	5	5	5	5
Operating temperature max. [°C]	+80	+80	+80	+80	+80	+80
Air volume per cycle [cm³]	980	1850	1850	980	1850	1850
Weight [kg]	14	18.9	18.9	14	18.9	18.9

^{*}All data measured at 6 bar



2-JAW PARALLEL GRIPPERS **SERIES GP200**

PRODUCT ADVANTAGES



"The variable"

Smooth stroke configuration

An adjusting screw allows you to adjust the stroke to your specific application

Proven technology

We have more than 20 years of proven reliability, which ensures uninterrupted production for you

Dirt protection

Using the scrapers on the guides, you can reliably use the gripper even under the harshest conditions

► THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com

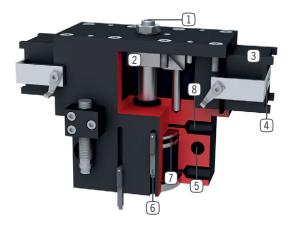
HOW TO ORDER CORRECTLY

The product order numbers are arranged according to this diagram:

Order no.	GP280			
High force		S		
Without intergrated spring			-99	



BENEFITS IN DETAIL



1 Stroke adjustment

- infinitely adjustable in "open" movement
- adjusting screw in delivery

2 Wedge hook mechanism

- synchronized the movement of the gripper jaws
- high force transfer

3 Square guide

- high forces and moments capacity

4 Gripper jaw

- individual gripper finger mounting

5 Mounting and positioning

- mounting possible from several sides for versatile positioning

6 Sensing slot

- mounting and positioning of magnetic field sensors

7 Drive

- double-acting pneumatic cylinder

8 Energy supply

- possible from several sides

> SERIES CHARACTERISTICS



Number of installation sizes	4
Stroke per jaw	6 mm - 40 mm
Gripping force	160 N - 4500 N
Weight	0,33 kg - 8,3 kg
AP class	3



10 million maintenance-free cycles (max.)



Inductive sensor



Purged air



Spring closing C



IP40



High-strength S

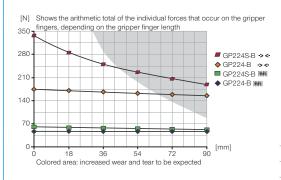


Magnetic field sensor

> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



8
15
8
250

► INCLUDED IN DELIVERY



Mounting block

KB8K

> RECOMMENDED ACCESSORIES



Centering Disc

ZE15H7X4



Inductive proximity switch

NJ8-E2S



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500



Straight Fittings - Quick Connect Style

GVM5



Angled Fittings - Quick Connect Style

WVM5



Quick Exhaust Valve

DEV04

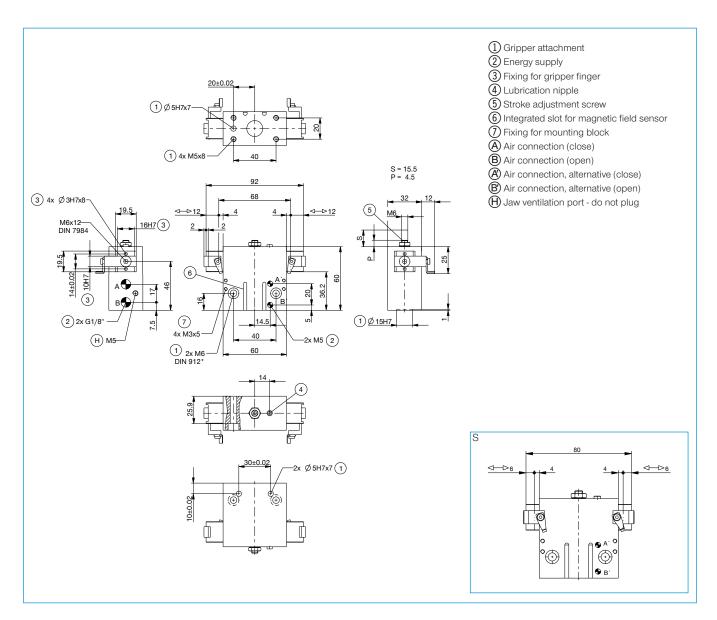


Pressure Safety Valve

DSV1-8

	Technical Data*			
Order no.	GP224-B	GP224-B-99	GP224S-B	GP224S-B-99
Stroke per jaw [mm]	12	12	6	6
Gripping force in closing [N]	170	160	335	335
Gripping force in opening [N]		160		335
Gripping force secured by spring min. [N]	10		35	
Closing time [s]	0.06	0.04	0.06	0.04
Opening time [s]	0.06	0.04	0.06	0.04
Repetition accuracy +/- [mm]	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	5	3	5	3
Operating pressure max. [bar]	8	8	8	8
Operating temperature min. [°C]	5	5	5	5
Operating temperature max. [°C]	+80	+80	+80	+80
Air volume per cycle [cm³]	12	12	12	12
Weight [kg]	0.33	0.33	0.33	0.33

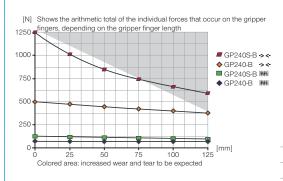
^{*}All data measured at 6 bar



> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



15
30
15
400

► INCLUDED IN DELIVERY



Mounting block

KB8K

> RECOMMENDED ACCESSORIES



Centering Disc

ZE30H7X4



Inductive proximity switch

NJ8-E2S



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500



Straight Fittings - Quick Connect Style

GVM5



Angled Fittings - Quick Connect Style

WVM5



Quick Exhaust Valve

DEV04

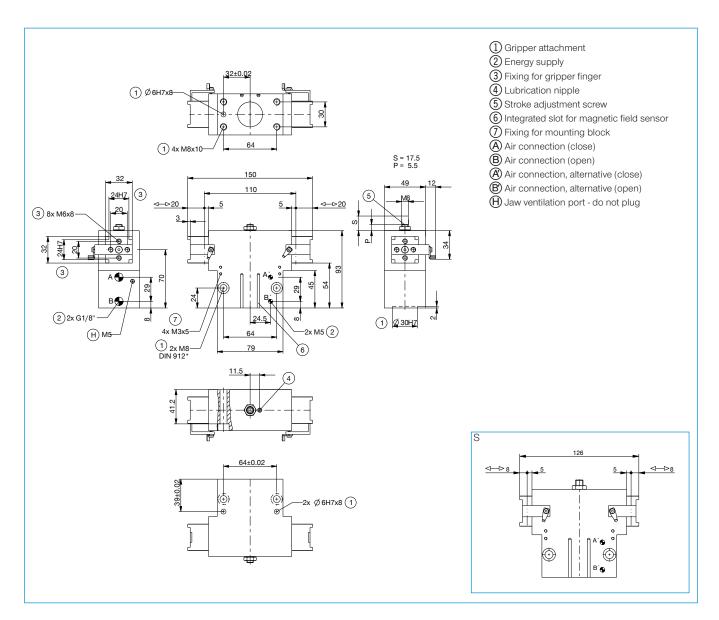


Pressure Safety Valve

DSV1-8

	Technical Data*			
Order no.	GP240-B	GP240-B-99	GP240S-B	GP240S-B-99
Stroke per jaw [mm]	20	20	8	8
Gripping force in closing [N]	510	435	1290	1105
Gripping force in opening [N]		435		1105
Gripping force secured by spring min. [N]	75		185	
Closing time [s]	0.1	0.08	0.1	0.08
Opening time [s]	0.1	0.08	0.1	0.08
Repetition accuracy +/- [mm]	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	5	3	5	3
Operating pressure max. [bar]	8	8	8	8
Operating temperature min. [°C]	5	5	5	5
Operating temperature max. [°C]	+80	+80	+80	+80
Air volume per cycle [cm³]	49	49	49	49
Weight [kg]	1.2	1.2	1.2	1.2

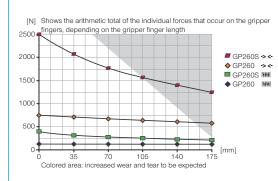
^{*}All data measured at 6 bar



> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	25
Mx [Nm]	45
My [Nm]	25
Fa [N]	600

► INCLUDED IN DELIVERY



Mounting block

KB8K

> RECOMMENDED ACCESSORIES



Centering Disc

ZE40H7X6



Inductive proximity switch

NJ8-E2S



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500



Straight Fittings - Quick Connect Style

GV1-8X8



Angled Fittings - Quick Connect Style

WV1-8X8



Quick Exhaust Valve

DEV08

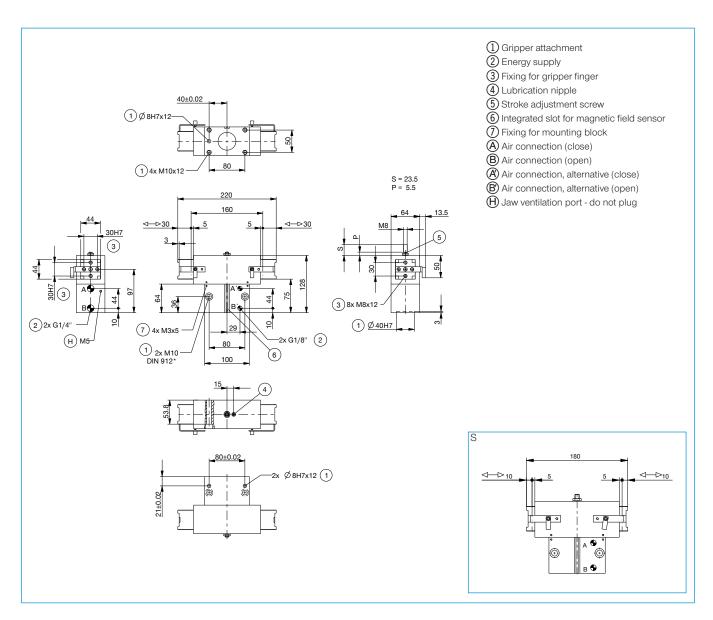


Pressure Safety Valve

DSV1-8

	Technical Data*			
Order no.	GP260	GP260-99	GP260S	GP260S-99
Stroke per jaw [mm]	30	30	10	10
Gripping force in closing [N]	800	665	2480	2120
Gripping force in opening [N]		665		2120
Gripping force secured by spring min. [N]	135		360	
Closing time [s]	0.15	0.1	0.15	0.1
Opening time [s]	0.15	0.1	0.15	0.1
Repetition accuracy +/- [mm]	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	5	3	5	3
Operating pressure max. [bar]	8	8	8	8
Operating temperature min. [°C]	5	5	5	5
Operating temperature max. [°C]	+80	+80	+80	+80
Air volume per cycle [cm³]	115	115	115	115
Weight [kg]	2.9	2.9	2.9	2.9

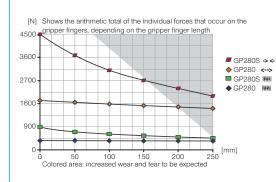
^{*}All data measured at 6 bar



> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	40
Mx [Nm]	75
My [Nm]	40
Fa [N]	1000

► INCLUDED IN DELIVERY



Mounting block

KB8-23

> RECOMMENDED ACCESSORIES



Centering Disc

ZE45H7X6



Inductive proximity switch

NJ8-E2S



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500



Straight Fittings - Quick Connect Style

GV1-8X8



Angled Fittings - Quick Connect Style

WV1-8X8



Quick Exhaust Valve

DEV08

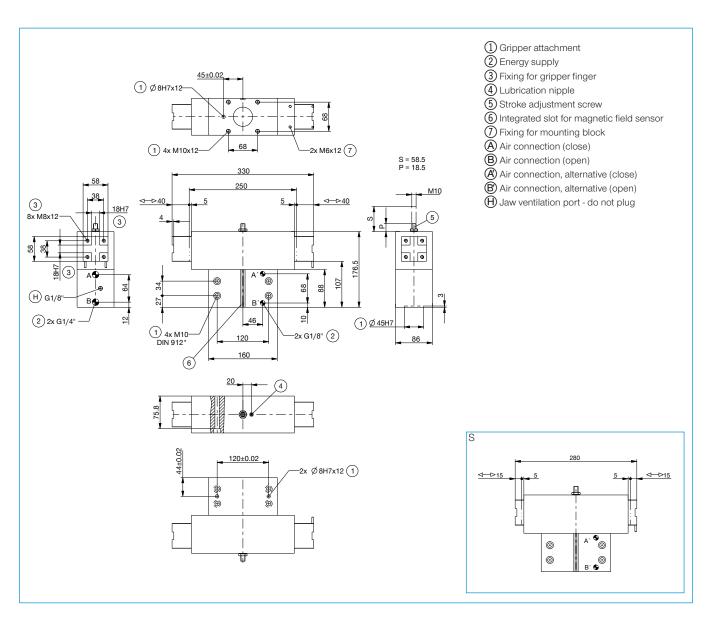


Pressure Safety Valve

DSV1-8

	Technical Data*			
Order no.	GP280	GP280-99	GP280S	GP280S-99
Stroke per jaw [mm]	40	40	15	15
Gripping force in closing [N]	1690	1390	4500	3690
Gripping force in opening [N]		1390		3690
Gripping force secured by spring min. [N]	300		810	
Closing time [s]	0.25	0.2	0.25	0.2
Opening time [s]	0.25	0.2	0.25	0.2
Repetition accuracy +/- [mm]	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	5	5	5	5
Operating pressure max. [bar]	10	10	10	10
Operating temperature min. [°C]	5	5	5	5
Operating temperature max. [°C]	+80	+80	+80	+80
Air volume per cycle [cm³]	300	300	300	300
Weight [kg]	8.3	8.3	8.3	8.3

^{*}All data measured at 6 bar



2-JAW PARALLEL GRIPPERS **SERIES GPP5000**

PRODUCT ADVANTAGES



"The Universal One"

- ▶ Up to 30% more gripping force than the benchmark
- ▶ 10% more static forces and moments than the benchmark
- Gripper fingers up to 10% longer than the bench-
- Gripper fingers weight up to 15% higher than the benchmark
- Sealed guide IP64 / Protector version IP67 (with purged air)
- Protected against corrosion
- ▶ Up to 30 million cycles without maintenance

► THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com

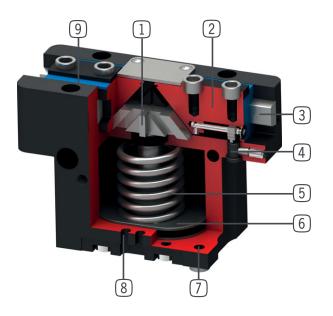
HOW TO ORDER CORRECTLY

The product order numbers are arranged according to this diagram:

Order no.	GPP5010			-	-A
Basis version		N			
High force		S			
For external gripping, self-locking, spring closing			С		
For internal gripping, self-locking, spring opening			0		
temperature-resistant version to 130 °C				20	
Protector version IP67 for use in adverse environments (w	rith purged air)			21	
temperature-resistant protector version IP67 for use in adv (with purged air)to 130 °C	erse environmer	nts		24	



BENEFITS IN DETAIL



1 Wedge hook mechanism

- Supports to absorb high forces and moments
- Synchronized gripper jaw movement

2 Gripper jaw

- Gripper fingers mounted using removable centring sleeves
- Lubricated for life via incorporated lubrication slots

3 Steel Linear Guide

- Steel in steel guide
- Enables use of extremely long gripper fingers

4 Mounting block

- mounting for inductive proximity switch

5 Integrated gripping force safety device

- Spring built into cylinder chamber as an energy store

6 Drive

- Double-acting pneumatic rotor cylinder

7 Mounting and positioning

- Alternatively, on several sides for customized mounting
- Pneumatic and electrical versions identical apart from height

8 Sensing slot

- mounting and positioning of magnetic field sensors

9 Dual lip seal

- IP64 and up to IP67 (with purged air) for Protector version
- Prevents grease from being squeezed out, increasing service life

SERIES CHARACTERISTICS



Number of installation sizes	11
Stroke per jaw	2,5 mm - 45 mm
Gripping force	140 N - 26950 N
Weight	0,08 kg - 41,5 kg
AP class	5
Gripping force Weight	140 N - 26950 N 0,08 kg - 41,5 kg



30 million maintenance-free cycles (max.)



High-strength S



IP67



Temperature-resistant



Spring closing C



Inductive sensor



Corrosion resistance



Purged air



Spring opening O



IP64

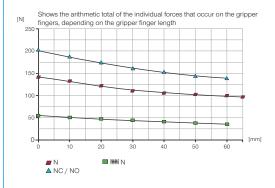


Magnetic field sensor

▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	7
Mx [Nm]	14
My [Nm]	13
Fa [N]	550

TECHNICAL DATA

	Technical Data*		
Order no.	GPP5003N-00-A	GPP5003NC-00-A	GPP5003NO-00-A
Stroke per jaw [mm]	2.5	2.5	2.5
Gripping force in closing [N]	140	195	
Gripping force in opening [N]	150	150	205
Gripping force secured by spring min. [N]		55	55
Closing time [s]	0.01	0.01	0.025
Opening time [s]	0.01	0.025	0.01
Permissible weight per jaw max [kg]	0.12	0.12	0.12
Length of the gripper fingers max. [mm]	65	60	60
Repetition accuracy +/- [mm]	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4
Operating pressure max. [bar]	8	7	7
Operating temperature [°C]	-10 +90	-10 +90	-10 +90
Air volume per cycle [cm³]	2.1	4.8	4.8
Protection to IEC 60529	IP64	IP64	IP64
Weight [kg]	0.08	0.1	0.1

	➤ Technical Data - Protector Version					
Order no.	GPP5003N-21-A GPP5003NC-21-A GPP5003NO-21-A					
Protection to IEC 60529	IP67**	IP67**	IP67**			
Weight [kg]	0.1	0.12	0.12			

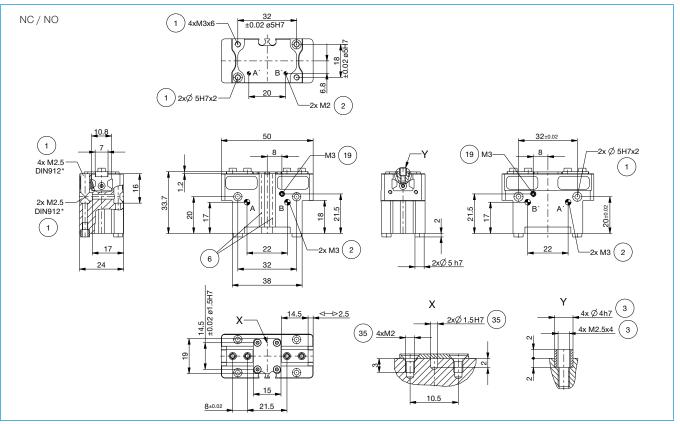
	► Technical Data - High Temperature Version					
Order no.	GPP5003N-20-A	GPP5003NC-20-A	GPP5003NO-20-A			
Operating temperature [°C]	-10 +130	-10 +130	-10 +130			

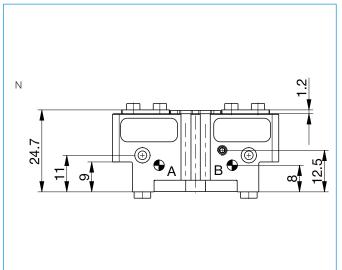
	Technical Data - High Temperature Protector Version				
Order no.	GPP5003N-24-A	GPP5003NC-24-A	GPP5003NO-24-A		
Operating temperature [°C]	-10 +130	-10 +130	-10 +130		
Protection to IEC 60529	IP67**	IP67**	IP67**		
Weight [kg]	0.1	0.12	0.12		

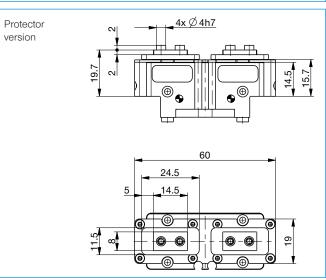
^{*}All data measured at 6 bar

^{**} with purged air (max. 0,5 bar)

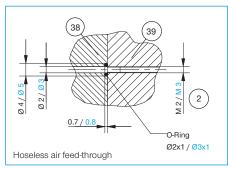
TECHNICAL DRAWINGS

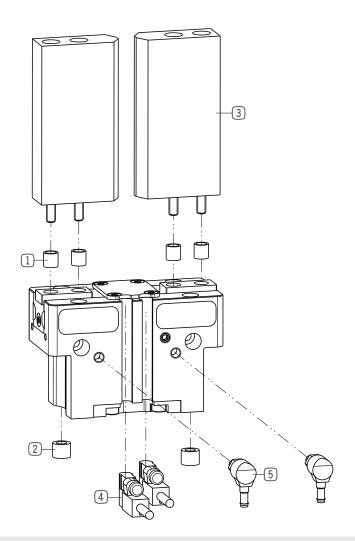






- ① Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- 19 Air purge connection option
- 35 Attachment option for customer-specific fittings
- 38 Adapter
- 39 Gripper
- Air connection (close)
- (open)
- Air connection, alternative (close)
- B Air connection, alternative (open)





► INCLUDED IN DELIVERY



Centering Disc



Centering Disc

DST06510

015761

► RECOMMENDED ACCESSORIES



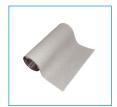
Universal jaw aluminium

UB5003AL



Universal jaw steel

UB5003ST



Rubber Coated Tape Knobbed

KF50N



Aluminum adjustment jaw

EB5003AL



Steel adjustment jaw

EB5003ST



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector customizable Straight - Connector M8

S8-G-3



Plug-in connector customizable Straight - Connector M12

S12-G-3



Straight Fittings - Barb Style Connection

GVM3



Angled Fittings - Barb Style Connection

WVM3



Quick Exhaust Valve

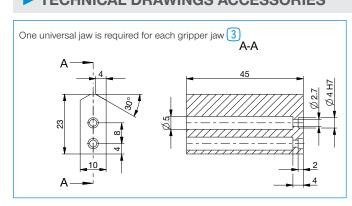
DEV04



Pressure Safety Valve

DSV1-8

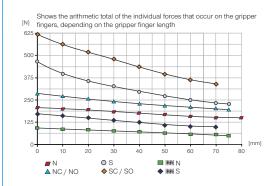
▶ TECHNICAL DRAWINGS ACCESSORIES



▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	14	
Mx [Nm]	29	
My [Nm]	23	
Fa [N]	750	

► TECHNICAL DATA

	Technical	Data*				
Order no.	GPP5004N-00-A	GPP5004NC-00-A	GPP5004NO-00-A	GPP5004S-00-A	GPP5004SC-00-A	GPP5004SO-00-A
Stroke per jaw [mm]	4	4	4	2	2	2
Gripping force in closing [N]	200	280		440	600	
Gripping force in opening [N]	215		295	470		630
Gripping force secured by spring min. [N]		80	80		160	160
Closing time [s]	0.015	0.015	0.025	0.015	0.015	0.025
Opening time [s]	0.015	0.025	0.015	0.015	0.025	0.015
Permissible weight per jaw max [kg]	0.2	0.2	0.2	0.2	0.2	0.2
Length of the gripper fingers max. [mm]	80	75	75	75	70	70
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90
Air volume per cycle [cm³]	5	12	12	5	12	12
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	0.16	0.21	0.21	0.16	0.21	0.21

	Technical	Data - Protector	Version			
Order no.	GPP5004N-21-A	GPP5004NC-21-A	GPP5004NO-21-A	GPP5004S-21-A	GPP5004SC-21-A	GPP5004SO-21-A
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	0.25	0.3	0.3	0.25	0.3	0.3

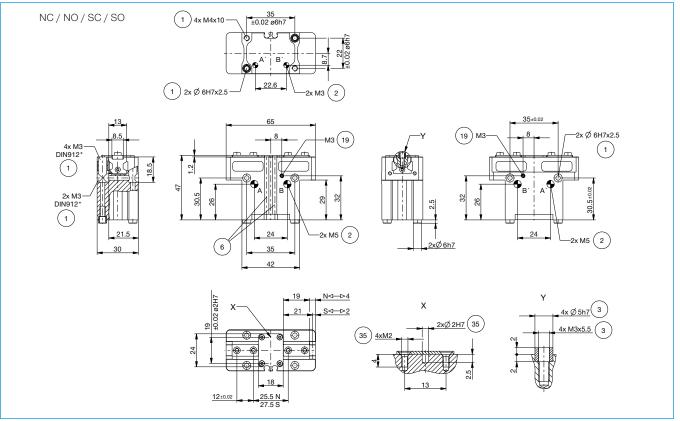
	Technical Data - High Temperature Version					
Order no.	GPP5004N-20-A	GPP5004NC-20-A	GPP5004NO-20-A	GPP5004S-20-A	GPP5004SC-20-A	GPP5004SO-20-A
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130
	► Technical Data - High Temperature Protector Version					

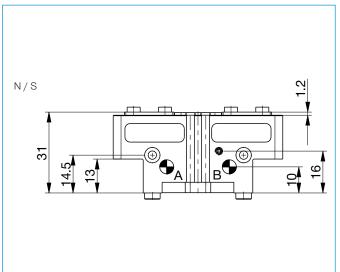
	reclinical Data - High Temperature Protector Version					
Order no.	GPP5004N-24-A	GPP5004NC-24-A	GPP5004NO-24-A	GPP5004S-24-A	GPP5004SC-24-A	GPP5004SO-24-A
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	0.25	0.3	0.3	0.25	0.3	0.3

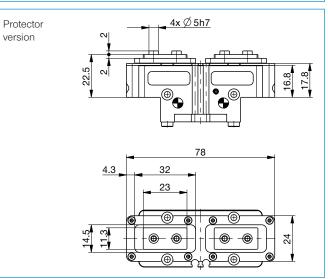
^{*}All data measured at 6 bar

^{**} with purged air (max. 0,5 bar)

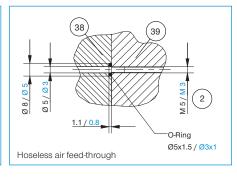
TECHNICAL DRAWINGS

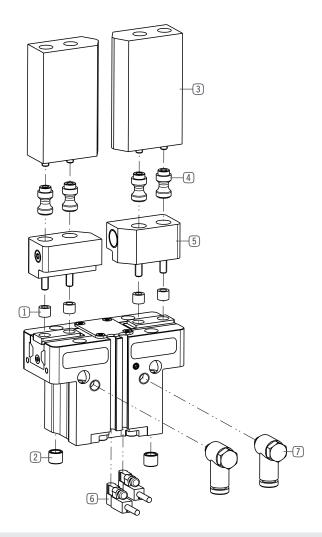






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- 19 Air purge connection option
- 35 Attachment option for customer-specific fittings
- 38 Adapter
- 39 Gripper
- Air connection (close)
- (open)
- Air connection, alternative (close)
- B Air connection, alternative (open)





► INCLUDED IN DELIVERY





015761



024230

► RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5004AL



Universal jaw steel

UB5004ST



Aluminum adjustment jaw

EB5004AL



Steel adjustment jaw

EB5004ST



Changeable jaw, loosepart-set

WB5004L



Changeable jaw, fix-part

WB5004F



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector customizable Straight - Connector M8

able Straight - Connector N S8-G-3

Straight Fittings - Quick Connect Style

GVM5

(7)



Angled Fittings - Quick Connect Style

WVM5



Quick Exhaust Valve

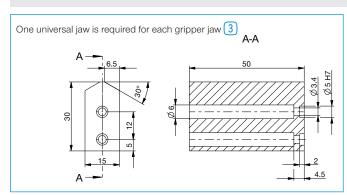
DEV04

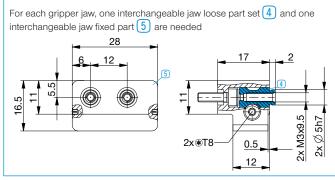


Pressure Safety Valve

DSV1-8

► TECHNICAL DRAWINGS ACCESSORIES

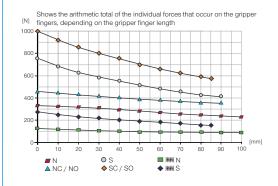




▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	43	
Mx [Nm]	70	
My [Nm]	46	
Fa [N]	1250	

► TECHNICAL DATA

	► Technical Data*					
Order no.	GPP5006N-00-A	GPP5006NC-00-A	GPP5006NO-00-A	GPP5006S-00-A	GPP5006SC-00-A	GPP5006SO-00-A
Stroke per jaw [mm]	6	6	6	3	3	3
Gripping force in closing [N]	330	455		740	1020	
Gripping force in opening [N]	360		485	800		1080
Gripping force secured by spring min. [N]		125	125		280	280
Closing time [s]	0.025	0.015	0.035	0.025	0.015	0.035
Opening time [s]	0.025	0.035	0.015	0.025	0.035	0.015
Permissible weight per jaw max [kg]	0.4	0.4	0.4	0.4	0.4	0.4
Length of the gripper fingers max. [mm]	100	90	90	90	85	85
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90
Air volume per cycle [cm³]	11	24	24	11	24	24
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	0.28	0.35	0.35	0.28	0.35	0.35
	0.28		0.35			

	► Technical Data - Protector Version						
Order no.	GPP5006N-21-A	GPP5006NC-21-A	GPP5006NO-21-A	GPP5006S-21-A	GPP5006SC-21-A	GPP5006SO-21-A	
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**	
Weight [kg]	0.37	0.44	0.44	0.37	0.44	0.44	
Technical Data - High Temperature Version							
	Tochnical	Data - High Tomi	naratura Varcian				

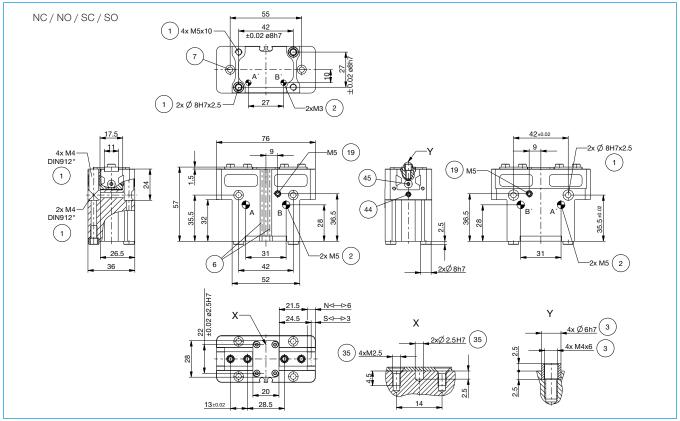
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Order no.	GPP5006N-20-A	GPP5006NC-20-A	GPP5006NO-20-A	GPP5006S-20-A	GPP5006SC-20-A	GPP5006SO-20-A	
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	

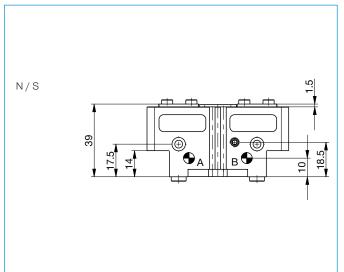
	► Technical Data - High Temperature Protector Version							
Order no.	GPP5006N-24-A	GPP5006NC-24-A	GPP5006NO-24-A	GPP5006S-24-A	GPP5006SC-24-A	GPP5006SO-24-A		
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130		
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**		
Weight [kg]	0.37	0.44	0.44	0.37	0.44	0.44		

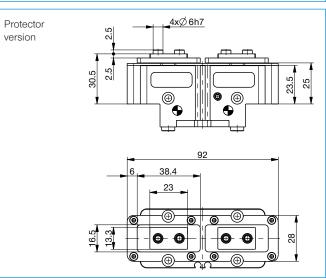
^{*}All data measured at 6 bar

^{**} with purged air (max. 0,5 bar)

TECHNICAL DRAWINGS

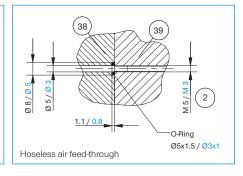


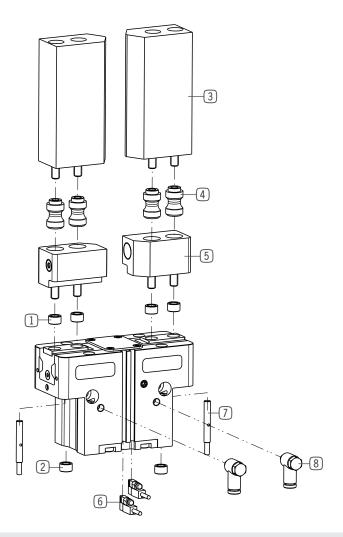




- ① Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- 7 Mounting block
- (19) Air purge connection option
- 35 Attachment option for customer-specific fittings
- 38 Adapter

- 39 Gripper
- Clamp for sensor
- 45 Switch cam adjustment
- Air connection (close)
- (open) Air connection (open)
- Air connection, alternative (close)
- B Air connection, alternative (open)





▶ INCLUDED IN DELIVERY





024230



024231

► RECOMMENDED ACCESSORIES



UB5006AL

Universal jaw aluminium



Universal jaw steel

UB5006ST



Aluminum adjustment jaw

EB5006AL

Steel adjustment jaw

EB5006ST



Changeable jaw, loose part-set

WB5006L



Changeable jaw, fix-part

WB5006F



Inductive Proximity Switch

NJ4-E2SK-01



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500



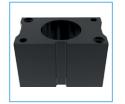
Angled Fittings - Quick Connect Style

WVM5



Pressure Safety Valve

DSV1-8



Compensation module

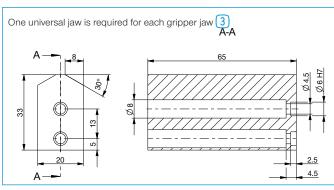
ZUB5006PNS

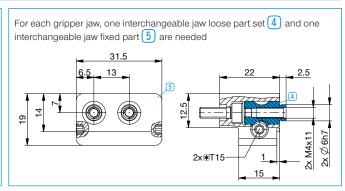


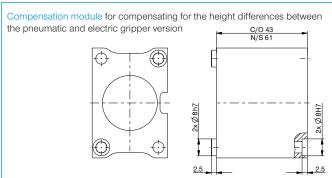
Compensation module NC / NO / SC / SO

ZUB5006PCO

TECHNICAL DRAWINGS ACCESSORIES



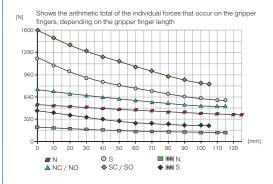




▶ PRODUCT SPECIFICATIONS

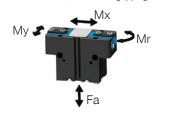


Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	60
Mx [Nm]	105
My [Nm]	65
Fa [N]	1900

► TECHNICAL DATA

	► Technical Data*					
Order no.	GPP5008N-00-A	GPP5008NC-00-A	GPP5008NO-00-A	GPP5008S-00-A	GPP5008SC-00-A	GPP5008SO-00-A
Stroke per jaw [mm]	8	8	8	4	4	4
Gripping force in closing [N]	520	710		1150	1580	
Gripping force in opening [N]	560		750	1240		1670
Gripping force secured by spring min. [N]		190	190		430	430
Closing time [s]	0.035	0.025	0.045	0.035	0.025	0.045
Opening time [s]	0.035	0.045	0.025	0.035	0.045	0.025
Permissible weight per jaw max [kg]	0.7	0.7	0.7	0.7	0.7	0.7
Length of the gripper fingers max. [mm]	125	115	115	115	105	105
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90
Air volume per cycle [cm³]	22	43	43	22	43	43
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	0.53	0.63	0.63	0.53	0.63	0.63

	Technical Data - Protector Version						
Order no.	GPP5008N-21-A	GPP5008NC-21-A	GPP5008NO-21-				
Protection to IEC 60529	IP67**	IP67**	IP67**				
Weight [kg]	0.66	0.76	0.76				

IP67**

0.66

	GPP5008N-21-A	GPP5008NC-21-A	GPP5008NO-21-A	GPP5008S-21-A	GPP5008SC-21-A	GPP5008SO-21-A
	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
	0.66	0.76	0.76	0.66	0.76	0.76
_						

IP67**

0.66

IP67**

0.76

IP67**

0.76

► Technical Data - High Temperature Version						
Order no.	GPP5008N-20-A	GPP5008NC-20-A	GPP5008NO-20-A	GPP5008S-20-A	GPP5008SC-20-A	GPP5008SO-20-A
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130
	Technical	Data - High Tem	perature Protecto	or Version		
Order no.	GPP5008N-24-A	GPP5008NC-24-A	GPP5008NO-24-A	GPP5008S-24-A	GPP5008SC-24-A	GPP5008SO-24-A
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130

IP67**

0.76

IP67**

0.76

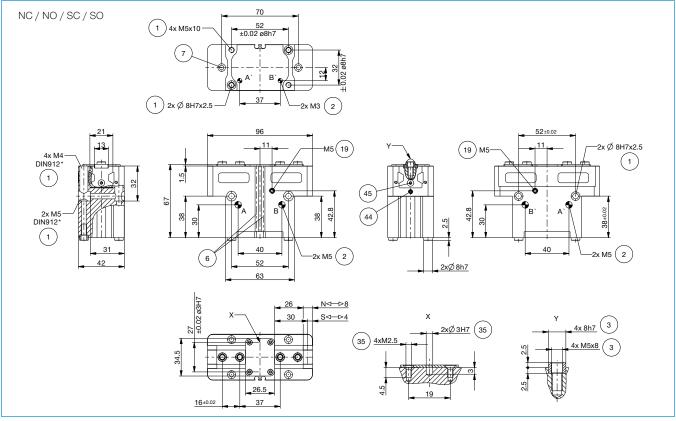
*All	data	measured	at	6	bar

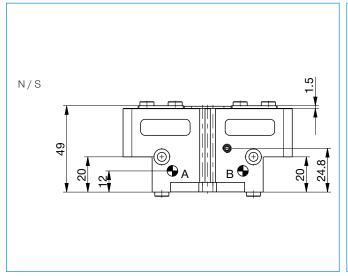
Weight [kg]

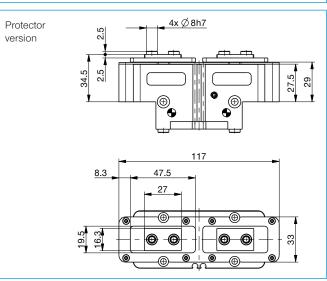
Protection to IEC 60529

^{**} with purged air (max. 0,5 bar)

TECHNICAL DRAWINGS

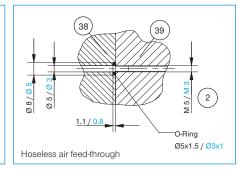


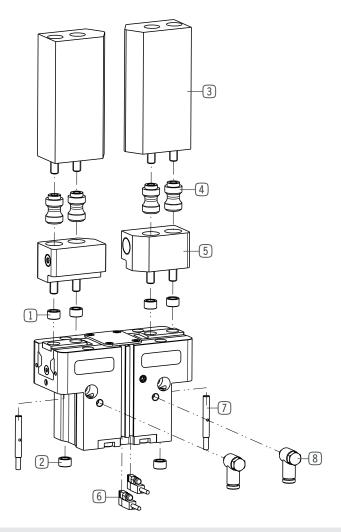




- ① Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- 7 Mounting block
- (19) Air purge connection option
- 35 Attachment option for customer-specific fittings
- 38 Adapter

- 39 Gripper
- (4) Clamp for sensor
- 45 Switch cam adjustment
- Air connection (close)
- (open) Air connection (open)
- Air connection, alternative (close)
- (open) Air connection, alternative (open)





▶ INCLUDED IN DELIVERY



Centering Disc

024231

► RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5008AL



Universal jaw steel

UB5008ST

Aluminum adjustment jaw

EB5008AL

Steel adjustment jaw

EB5008ST



Changeable jaw, loose part-set

WB5008L



Changeable jaw, fix-part

WB5008F



Inductive Proximity Switch

NJ4-E2SK-01



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500



Angled Fittings - Quick Connect Style

WVM5



Pressure Safety Valve

DSV1-8



Compensation module

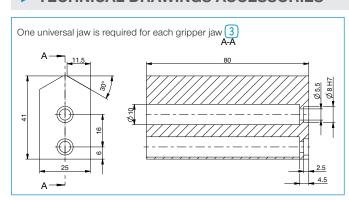
ZUB5008PNS

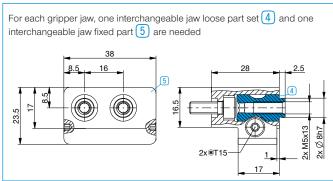


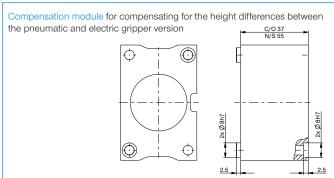
Compensation module NC / NO / SC / SO

ZUB5008PCO

> TECHNICAL DRAWINGS ACCESSORIES



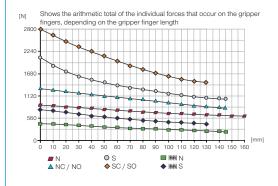




▶ PRODUCT SPECIFICATIONS

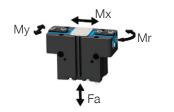


Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	75
Mx [Nm]	125
My [Nm]	95
Fa [N]	2700

► TECHNICAL DATA

	► Technical Data*					
Order no.	GPP5010N-00-A	GPP5010NC-00-A	GPP5010NO-00-A	GPP5010S-00-A	GPP5010SC-00-A	GPP5010SO-00-A
Stroke per jaw [mm]	10	10	10	5	5	5
Gripping force in closing [N]	885	1260		1940	2750	
Gripping force in opening [N]	945		1320	2080		2890
Gripping force secured by spring min. [N]		375	375		810	810
Closing time [s]	0.06	0.05	0.08	0.06	0.05	0.08
Opening time [s]	0.06	0.08	0.05	0.06	0.08	0.05
Permissible weight per jaw max [kg]	1.3	1.3	1.3	1.3	1.3	1.3
Length of the gripper fingers max. [mm]	160	145	145	145	130	130
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90
Air volume per cycle [cm³]	44	92	92	44	92	92
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	0.87	1.09	1.09	0.87	1.09	1.09

	► Technical Data - Protector Version							
Order no.	GPP5010N-21-A	GPP5010NC-21-A	GPP5010NO-21-A	GPP5010S-21-A	GPP5010SC-21-A	GPP5010SO-21-A		
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**		
Weight [kg]	0.99	1.31	1.31	0.99	1.31	1.31		

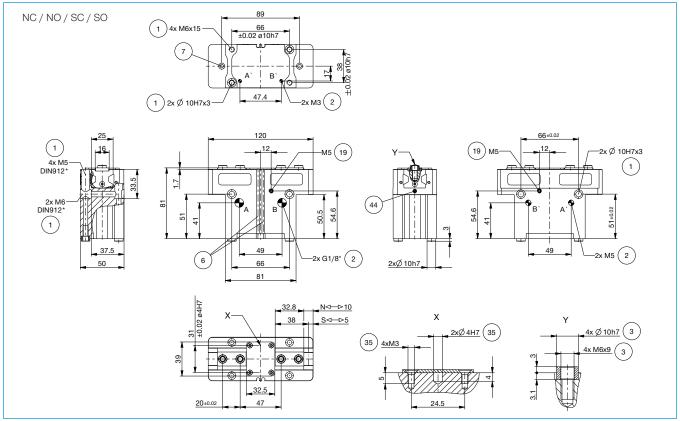
	► Technical Data - High Temperature Version							
Order no.	GPP5010N-20-A	GPP5010NC-20-A	GPP5010NO-20-A	GPP5010S-20-A	GPP5010SC-20-A	GPP5010SO-20-A		
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130		

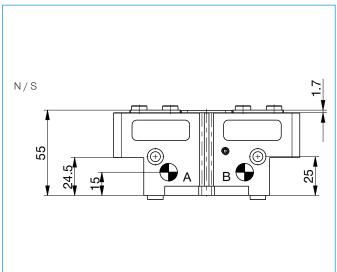
	► Technical Data - High Temperature Protector Version							
Order no.	GPP5010N-24-A	GPP5010NC-24-A	GPP5010NO-24-A	GPP5010S-24-A	GPP5010SC-24-A	GPP5010SO-24-A		
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130		
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**		
Weight [kg]	0.99	1.31	1.31	0.99	1.31	1.31		

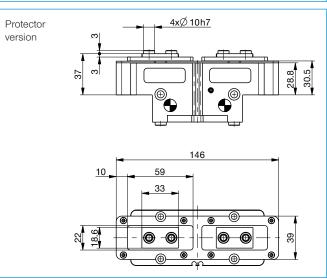
^{*}All data measured at 6 bar

^{**} with purged air (max. 0,5 bar)

TECHNICAL DRAWINGS

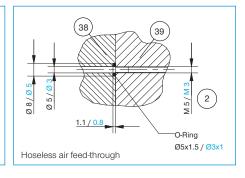


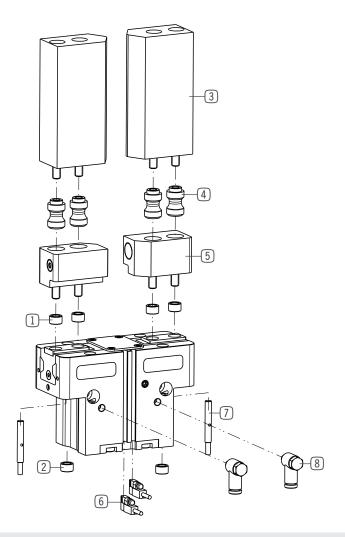




- ① Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- 7 Mounting block
- (19) Air purge connection option
- 35 Attachment option for customer-specific fittings
- 38 Adapter

- 39 Gripper
- Clamp for sensor
- 45 Switch cam adjustment
- Air connection (close)
- B Air connection (open)
- Air connection, alternative (close)
- (open) Air connection, alternative (open)





► INCLUDED IN DELIVERY



Centering Disc

018187

► RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5010AL



Universal jaw steel

UB5010ST

Aluminum adjustment jaw

EB5010AL

Steel adjustment jaw

EB5010ST



Changeable jaw, loose part-set

WB5010L



Changeable jaw, fix-part

WB5010F



Inductive Proximity Switch

NJ4-E2SK-01



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500



Angled Fittings - Quick Connect Style

WV1-8X6



Pressure Safety Valve

DSV1-8



Compensation module

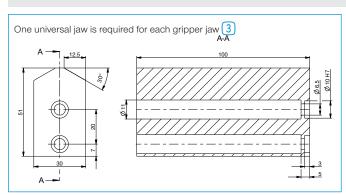
ZUB5010PNS

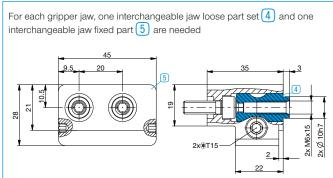


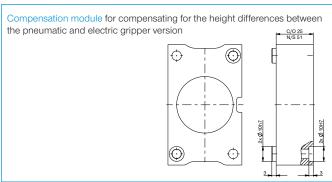
Compensation module NC / NO / SC / SO

ZUB5010PCO

TECHNICAL DRAWINGS ACCESSORIES



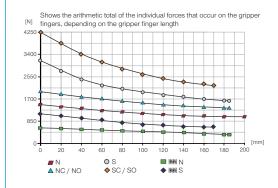




▶ PRODUCT SPECIFICATIONS

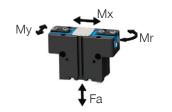


Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	110	
Mx [Nm]	150	
My [Nm]	130	
Fa [N]	3300	

IP67**

2.26

► TECHNICAL DATA

	► Technical Data*							
Order no.	GPP5013N-00-A	GPP5013NC-00-A	GPP5013NO-00-A	GPP5013S-00-A	GPP5013SC-00-A	GPP5013SO-00-A		
Stroke per jaw [mm]	13	13	13	6	6	6		
Gripping force in closing [N]	1410	1920		3100	4220			
Gripping force in opening [N]	1490		1860	3280		4400		
Gripping force secured by spring min. [N]		510	510		1120	1120		
Closing time [s]	0.09	0.07	0.11	0.09	0.07	0.11		
Opening time [s]	0.09	0.11	0.08	0.09	0.11	0.08		
Permissible weight per jaw max [kg]	2.4	2.4	2.4	2.4	2.4	2.4		
Length of the gripper fingers max. [mm]	200	185	185	185	170	170		
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01		
Operating pressure min. [bar]	3	4	4	3	4	4		
Operating pressure max. [bar]	8	7	7	8	7	7		
Operating temperature [°C]	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90		
Air volume per cycle [cm³]	88	171	171	88	171	171		
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64		
Weight [kg]	1.5	1.9	1.9	1.5	1.9	1.9		

	► Technical Data - Protector Version							
Order no.	GPP5013N-21-A	GPP5013NC-21-A	GPP5013NO-21-A	GPP5013S-21-A	GPP5013SC-21-A	GPP5013SO-21-A		
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**		
Weight [kg]	1.86	2.26	2.26	1.86	2.26	2.26		

IP67**

1.86

Weight [kg]	1.86	2.26	2.26	1.86	2.26	2.26
	Technical	Data - High Tem	perature Version			
Order no.	GPP5013N-20-A	GPP5013NC-20-A	GPP5013NO-20-A	GPP5013S-20-A	GPP5013SC-20-A	GPP5013SO-20-A
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130
	Technical	Data - High Tem	perature Protect	or Version		
Order no.	GPP5013N-24-A	GPP5013NC-24-A	GPP5013NO-24-A	GPP5013S-24-A	GPP5013SC-24-A	GPP5013SO-24-A
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130

IP67**

2.26

IP67**

1.86

IP67**

2.26

IP67**

2.26

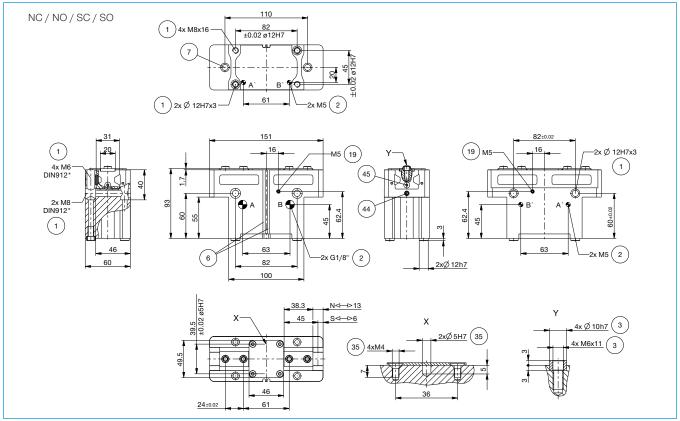
Weight [kg]

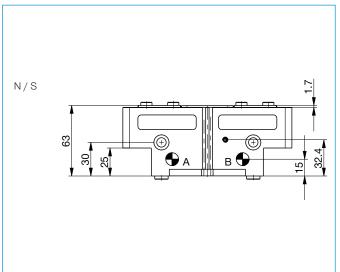
Protection to IEC 60529

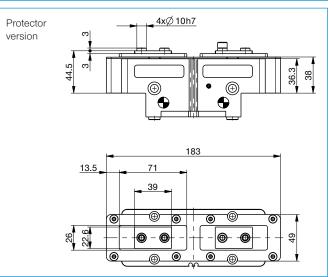
^{*}All data measured at 6 bar

^{* *} with purged air (max. 0,5 bar)

TECHNICAL DRAWINGS

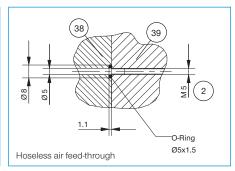


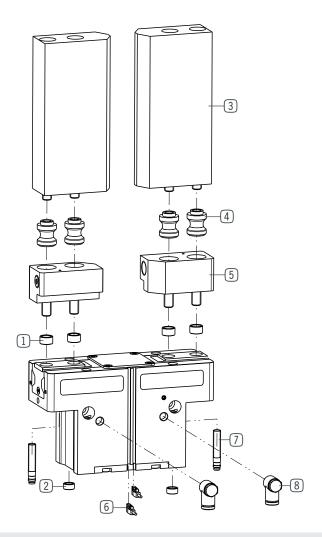




- ① Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- 7 Mounting block
- (19) Air purge connection option
- 35 Attachment option for customer-specific fittings
- 38 Adapter

- 39 Gripper
- (4) Clamp for sensor
- 45 Switch cam adjustment
- Air connection (close)
- (open) Air connection (open)
- Air connection, alternative (close)
- (open) Air connection, alternative (open)





► INCLUDED IN DELIVERY





018187



019280

► RECOMMENDED ACCESSORIES



Universal jaw aluminium

omrorodi jarr diariii ila

UB5013AL



Universal jaw steel

Omrorodi jarr otoo

UB5013ST



Aluminum adjustment jaw

EB5013AL



Steel adjustment jaw

EB5013ST



Changeable jaw, loosepart-set

WB5013L



Changeable jaw, fix-part

WB5013F



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector customizable Straight - Connector M8

S8-G-3



Angled Fittings - Quick Connect Style

WV1-8X6



Quick Exhaust Valve

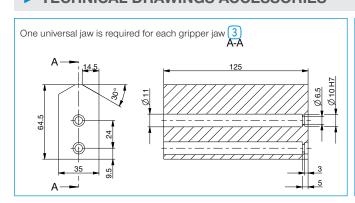
DEV06

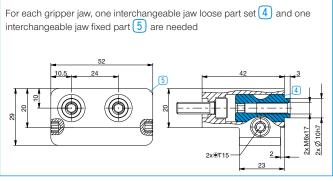


Pressure Safety Valve

DSV1-8

► TECHNICAL DRAWINGS ACCESSORIES

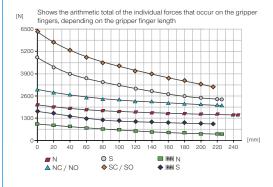




▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	145	
Mx [Nm]	195	
My [Nm]	185	
Fa [N]	5200	

► TECHNICAL DATA

	► Technical Data*					
Order no.	GPP5016N-00-A	GPP5016NC-00-A	GPP5016NO-00-A	GPP5016S-00-A	GPP5016SC-00-A	GPP5016SO-00-A
Stroke per jaw [mm]	16	16	16	8	8	8
Gripping force in closing [N]	2090	2860		4610	6310	
Gripping force in opening [N]	2220		2990	4900		6600
Gripping force secured by spring min. [N]		770	770		1700	1700
Closing time [s]	0.13	0.11	0.24	0.13	0.11	0.24
Opening time [s]	0.13	0.24	0.11	0.13	0.24	0.11
Permissible weight per jaw max [kg]	3.8	3.8	3.8	3.8	3.8	3.8
Length of the gripper fingers max. [mm]	245	225	225	225	215	215
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90
Air volume per cycle [cm³]	166	332	332	166	332	332
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	2.9	3.7	3.7	2.9	3.7	3.7

	Technical Data - Protector Version					
Order no.	GPP5016N-21-A	GPP5016NC-21-A	GPP5016NO-21-A	GPP5016S-21-A	GPP5016SC-21-A	GPP5016SO-21-A
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	3.6	4.4	4.4	3.6	4.4	4.4

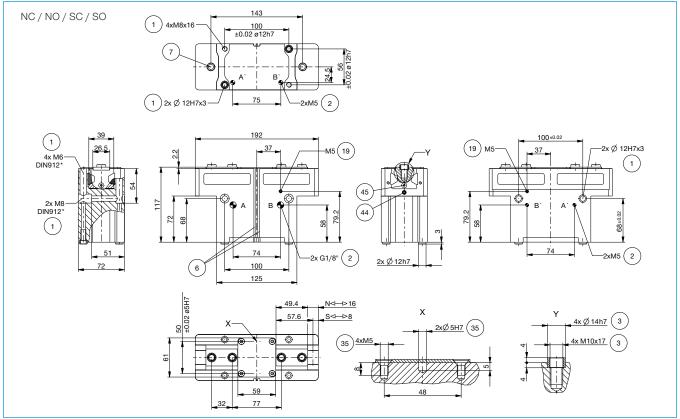
	► Technical Data - High Temperature Version								
Order no.	GPP5016N-20-A	GPP5016NC-20-A	GPP5016NO-20-A	GPP5016S-20-A	GPP5016SC-20-A	GPP5016SO-20-A			
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130			
	Technical	► Technical Data - High Temperature Protector Version							

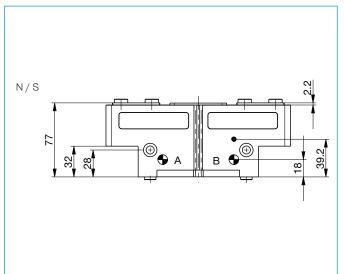
	recillical	reclinical bata - night temperature Protector version						
Order no.	GPP5016N-24-A	GPP5016NC-24-A	GPP5016NO-24-A	GPP5016S-24-A	GPP5016SC-24-A	GPP5016SO-24-A		
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130		
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**		
Weight [kg]	3.6	4.4	4.4	3.6	4.4	4.4		

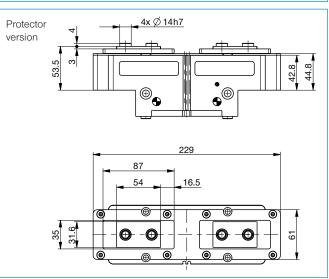
^{*}All data measured at 6 bar

^{**} with purged air (max. 0,5 bar)

TECHNICAL DRAWINGS

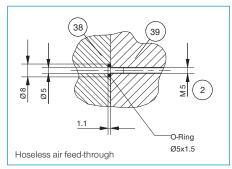


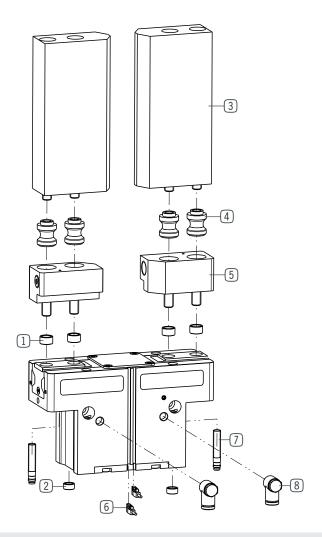




- ① Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- 7 Mounting block
- (19) Air purge connection option
- 35 Attachment option for customer-specific fittings
- 38 Adapter

- 39 Gripper
- (4) Clamp for sensor
- 45 Switch cam adjustment
- Air connection (close)
- (open) Air connection (open)
- Air connection, alternative (close)
- B Air connection, alternative (open)





► INCLUDED IN DELIVERY





019387



019280

► RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5016AL



Universal jaw steel

UB5016ST



Aluminum adjustment jaw

EB5016AL



Steel adjustment jaw

EB5016ST



Changeable jaw, loosepart-set

WB5016L



Changeable jaw, fix-part

WB5016F



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector customizable Straight - Connector M8

S8-G-3



Angled Fittings - Quick Connect Style

WV1-8X8



Quick Exhaust Valve

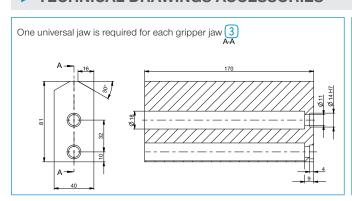
DEV08

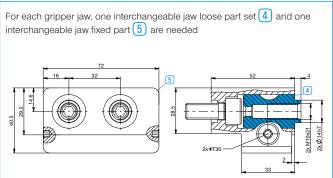


Pressure Safety Valve

DSV1-8

► TECHNICAL DRAWINGS ACCESSORIES

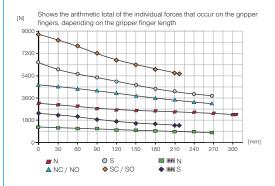




▶ PRODUCT SPECIFICATIONS

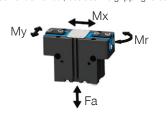


Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	180
Mx [Nm]	205
My [Nm]	225
Fa [N]	7500

-10 ... +130 IP67**

8.75

► TECHNICAL DATA

	► Technical Data*					
Order no.	GPP5025N-00-A	GPP5025NC-00-A	GPP5025NO-00-A	GPP5025S-00-A	GPP5025SC-00-A	GPP5025SO-00-A
Stroke per jaw [mm]	25	25	25	14	14	14
Gripping force in closing [N]	3280	4510		6360	8730	
Gripping force in opening [N]	3490		4710	6760		9130
Gripping force secured by spring min. [N]		1220	1220		2370	2370
Closing time [s]	0.33	0.28	0.57	0.33	0.28	0.57
Opening time [s]	0.33	0.57	0.28	0.33	0.57	0.28
Permissible weight per jaw max [kg]	7	7	7	7	7	7
Length of the gripper fingers max. [mm]	310	265	265	265	220	220
Repetition accuracy +/- [mm]	0.02	0.02	0.02	0.02	0.02	0.02
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90
Air volume per cycle [cm³]	420	830	830	420	830	830
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	6.1	7.65	7.65	6.1	7.65	7.65

	► Technical Data - Protector Version					
Order no.	GPP5025N-21-A	GPP5025NC-21-A	GPP5025NO-21-A	GPP5025S-21-A	GPP5025SC-21-A	GPP5025SO-21-A
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	7.20	8.75	8.75	7.2	8.75	8.75

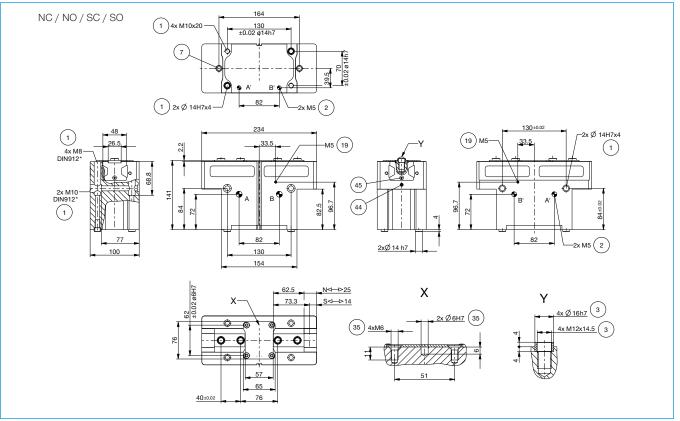
	► Technical Data - High Temperature Version							
Order no.	GPP5025N-20-A	GPP5025NC-20-A	GPP5025NO-20-A	GPP5025S-20-A	GPP5025SC-20-A	GPP5025SO-20-A		
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130		
► Technical Data - High Temperature Protector Version								
Order no.	GPP5025N-24-A	GPP5025NC-24-A	GPP5025NO-24-A	GPP5025S-24-A	GPP5025SC-24-A	GPP5025SO-24-A		

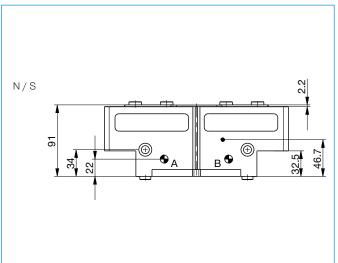
	recillical	Data - High Tellip	berature Frotecti	JI VEISIOII	
Order no.	GPP5025N-24-A	GPP5025NC-24-A	GPP5025NO-24-A	GPP5025S-24-A	GPP5025SC-24
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	7.20	8.75	8.75	7.2	8.75

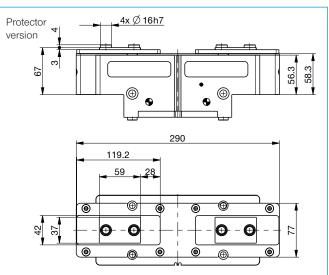
^{*}All data measured at 6 bar

^{**} with purged air (max. 0,5 bar)

TECHNICAL DRAWINGS

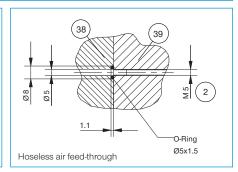


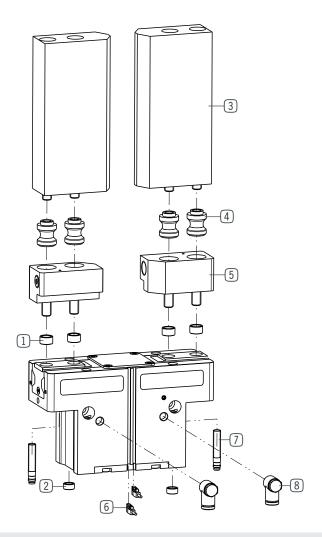




- ① Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- 7 Mounting block
- (19) Air purge connection option
- 35 Attachment option for customer-specific fittings
- 38 Adapter

- 39 Gripper
- (4) Clamp for sensor
- 45 Switch cam adjustment
- Air connection (close)
- B Air connection (open)
- Air connection, alternative (close)
- (open) Air connection, alternative (open)





► INCLUDED IN DELIVERY







030529

019387

► RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5025AL



Universal jaw steel

UB5025ST



Aluminum adjustment jaw

EB5025AL



Steel adjustment jaw

EB5025ST



Changeable jaw, loosepart-set

WB5025L



Changeable jaw, fix-part

WB5025F



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector customizable Straight - Connector M8

S8-G-3



Angled Fittings - Quick Connect Style

WV1-8X8



Quick Exhaust Valve

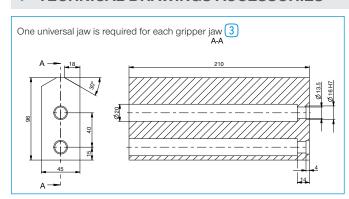
DEV08

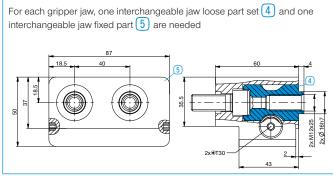


Pressure Safety Valve

DSV1-8

► TECHNICAL DRAWINGS ACCESSORIES

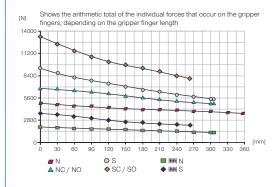




▶ PRODUCT SPECIFICATIONS

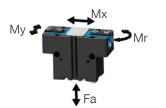


Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	210
Mx [Nm]	290
My [Nm]	310
Fa [N]	9500

► TECHNICAL DATA

	► Technical Data*					
Order no.	GPP5030N-00-A	GPP5030NC-00-A	GPP5030NO-00-A	GPP5030S-00-A	GPP5030SC-00-A	GPP5030SO-00-A
Stroke per jaw [mm]	30	30	30	17	17	17
Gripping force in closing [N]	5000	6850		9600	13160	
Gripping force in opening [N]	5210		7060	9990		13550
Gripping force secured by spring min. [N]		1850	1850		3560	3560
Closing time [s]	0.4	0.35	0.65	0.4	0.35	0.65
Opening time [s]	0.4	0.65	0.35	0.4	0.65	0.35
Permissible weight per jaw max [kg]	9.5	9.5	9.5	9.5	9.5	9.5
Length of the gripper fingers max. [mm]	355	305	305	305	260	260
Repetition accuracy +/- [mm]	0.04	0.04	0.04	0.04	0.04	0.04
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90
Air volume per cycle [cm³]	745	1430	1430	745	1430	1430
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	9.2	12	12	9.2	12	12

	Technical	► Technical Data - Protector Version				
Order no.	GPP5030N-21-A	GPP5030NC-21-A	GPP5030NO-21-A	GPP5030		
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**		
Weight [kg]	10.9	13.7	13.7	10.9		

Order no.	GPP5030N-21-A	GPP5030NC-21-A	GPP5030NO-21-A	GPP5030S-21-A	GPP5030SC-21-A	GPP5030SO-21-A	
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**	
Weight [kg]	10.9	13.7	13.7	10.9	13.7	13.7	
► Technical Data - High Temperature Version							

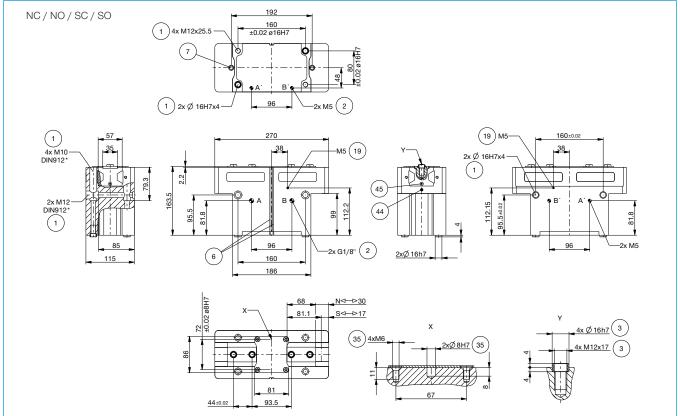
Order no.	GPP5030N-20-A	GPP5030NC-20-A	GPP5030NO-20-A	GPP5030S-20-A	GPP5030SC-20-A	GPP5030SO-20-A
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130
► Technical Data - High Temperatur				or Version		
Order no.	GPP5030N-24-A	GPP5030NC-24-A	GPP5030NO-24-A	GPP5030S-24-A	GPP5030SC-24-A	GPP5030SO-24-A

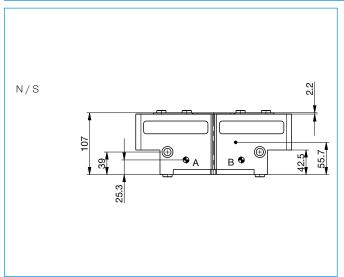
	,					
Order no.	GPP5030N-24-A	GPP5030NC-24-A	GPP5030NO-24-A	GPP5030S-24-A	GPP5030SC-24-A	GPP5030SO-24-
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	10.9	13.7	13.7	10.9	13.7	13.7
Weight [kg]	10.9	13.7	13.7	10.9	13.7	13.7

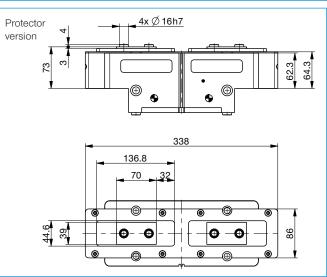
^{*}All data measured at 6 bar

^{**} with purged air (max. 0,5 bar)

TECHNICAL DRAWINGS

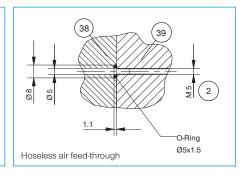


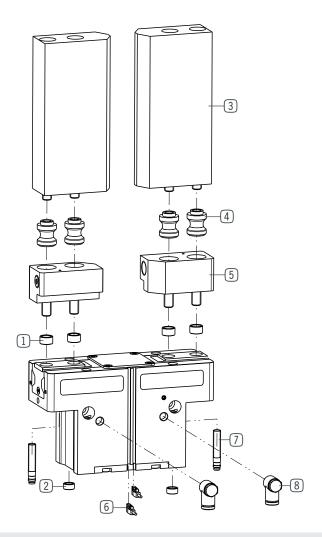




- ① Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- 7 Mounting block
- (19) Air purge connection option
- 35 Attachment option for customer-specific fittings
- 38 Adapter

- 39 Gripper
- (4) Clamp for sensor
- 45 Switch cam adjustment
- Air connection (close)
- B Air connection (open)
- Air connection, alternative (close)
- (open) Air connection, alternative (open)





► INCLUDED IN DELIVERY



Centering Disc

030529

► RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5030AL



Universal jaw steel

UB5030ST

(7)

NJ8-E2S



Aluminum adjustment jaw

EB5030AL



Steel adjustment jaw

EB5030ST



Changeable jaw, loosepart-set

wb5030L



Changeable jaw, fix-part



Inductive proximity switch - Connector M8



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



KAG500



Plug-in connector Straight Cable 5m - Socket M8 (female)



Plug-in connector customizable Straight - Connector M8 **S8-G-3**



Angled Fittings - Quick Connect Style WV1-8X8



Quick Exhaust Valve

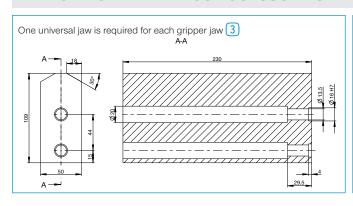


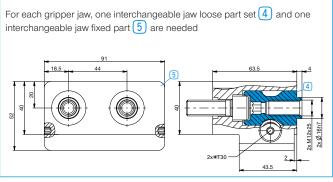
Pressure Safety Valve

DEV08

DSV1-8

TECHNICAL DRAWINGS ACCESSORIES

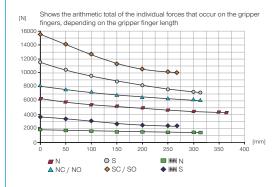




▶ PRODUCT SPECIFICATIONS

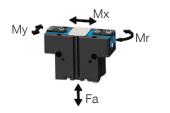


Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	260
Mx [Nm]	430
My [Nm]	450
Fa [N]	10400

► TECHNICAL DATA

	Technical	Data*				
Order no.	GPP5035N-00-A	GPP5035NC-00-A	GPP5035NO-00-A	GPP5035S-00-A	GPP5035SC-00-A	GPP5035SO-00-A
Stroke per jaw [mm]	35	35	35	20	20	20
Gripping force in closing [N]	6100	8000		11700	15500	
Gripping force in opening [N]	6300		8200	12100		15900
Gripping force secured by spring min. [N]		1900	1900		3700	3700
Closing time [s]	0.5	0.4	0.7	0.5	0.4	0.7
Opening time [s]	0.5	0.7	0.4	0.5	0.7	0.4
Permissible weight per jaw max [kg]	12.5	12.5	12.5	12.5	12.5	12.5
Length of the gripper fingers max. [mm]	365	315	315	315	260	260
Repetition accuracy +/- [mm]	0.05	0.05	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	6.5	6.5	8	6.5	6.5
Operating temperature [°C]	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90
Air volume per cycle [cm³]	1185	2075	2075	1185	2075	2075
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	15.8	18.6	18.6	16.1	18.9	18.9

Order no.	
Operating temperature [°C]	

lechnical Data - High Temperature Version									
GPP5035N-20-A	GPP5035NC-20-A	GPP5035NO-20-A	GPP5035S-20-A	GPP5035SC-20-A	GPP5035SO-20-A				
-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130				

Order no.	
Protection to IEC 60529	
Weight [kg]	

► Technical Data - Protector Version									
GPP5035N-21-A	GPP5035NC-21-A	GPP5035NO-21-A	GPP5035S-21-A	GPP5035SC-21-A	GPP5035SO-21-A				
IP67**	IP67**	IP67**	IP67**	IP67**	IP67**				
20.2	23	23	20.5	23.3	23.3				

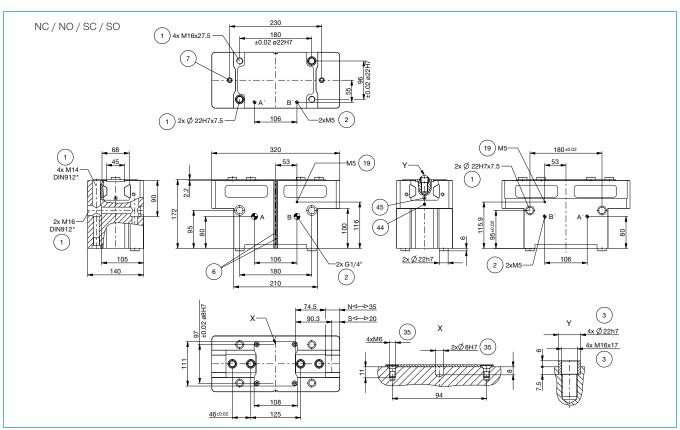
Order no.
Operating temperature [°C]
Protection to IEC 60529
Weight [kg]

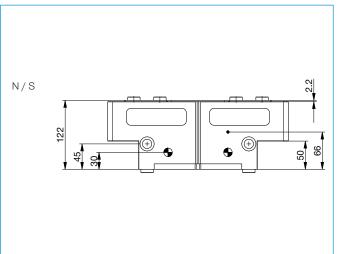
reclinical Data - High Temperature Protector Version									
GPP5035N-24-A	GPP5035NC-24-A	GPP5035NO-24-A	GPP5035S-24-A	GPP5035SC-24-A	GPP5035SO-24-A				
-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130				
IP67**	IP67**	IP67**	IP67**	IP67**	IP67**				
20.2	23	23	20.5	23.3	23.3				

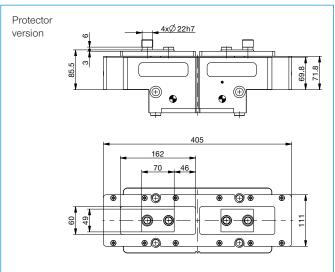
^{*}All data measured at 6 bar

^{* *} with purged air (max. 0,5 bar)

TECHNICAL DRAWINGS ACCESSORIES

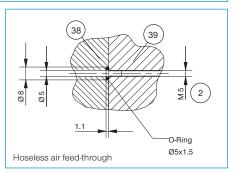


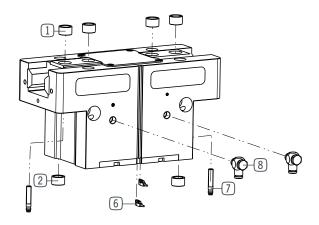




- ① Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- 7 Mounting block
- (19) Air purge connection option
- 35 Attachment option for customer-specific fittings
- 38 Adapter

- (39) Gripper
- 44 Clamp for sensor
- 45 Switch cam adjustment
- Air connection (close)
- (open)
- Air connection, alternative (close)
- Air connection, alternative (open)





► INCLUDED IN DELIVERY



Centering Disc

035358

► RECOMMENDED ACCESSORIES



Inductive proximity switch -Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500



Plug-in connector customiz-able Straight - Connector M8

S8-G-3



Straight Fittings - Quick Connect Style

GV1-4X8



Angled Fittings - Quick Connect Style

WV1-4X8



Quick Exhaust Valve

DEV04



Pressure Safety Valve

DSV1-8

▶ PRODUCT SPECIFICATIONS





Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	390
Mx [Nm]	580
My [Nm]	600
Fa [N]	11500

► TECHNICAL DATA

	Technical	Data*				
Order no.	GPP5045N-00-A	GPP5045NC-00-A	GPP5045NO-00-A	GPP5045S-00-A	GPP5045SC-00-A	GPP5045SO-00-A
Stroke per jaw [mm]	45	45	45	26	26	26
Gripping force in closing [N]	10200	13700		19400	26050	
Gripping force in opening [N]	10700		14200	20300		26950
Gripping force secured by spring min. [N]		3500	3500		6650	6650
Closing time [s]	0.55	0.45	0.7	0.55	0.45	0.7
Opening time [s]	0.55	0.7	0.45	0.55	0.7	0.45
Permissible weight per jaw max [kg]	17	17	17	17	17	17
Length of the gripper fingers max. [mm]	400	350	350	350	300	300
Repetition accuracy +/- [mm]	0.05	0.05	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	6.5	6.5	8	6.5	6.5
Operating temperature [°C]	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90
Air volume per cycle [cm³]	2420	4400	4400	2420	4400	4400
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	33	40.5	40.5	34	41.5	41.5
	Technical	Data - High Tem	perature Version			
Order no.	GPP5045N-20-A	GPP5045NC-20-A	GPP5045NO-20-A	GPP5045S-20-A	GPP5045SC-20-A	GPP5045SO-20-A
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130
	Technical	Data - Protector	Version			
Order no.	GPP5045N-21-A	GPP5045NC-21-A	GPP5045NO-21-A	GPP5045S-21-A	GPP5045SC-21-A	GPP5045SO-21-A
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	41.5	49	49	42.5	50	50
	Technical	Data - High Tem	perature Protect	or Version		
Order no.	GPP5045N-24-A	GPP5045NC-24-A	GPP5045NO-24-A	GPP5045S-24-A	GPP5045SC-24-A	GPP5045SO-24-A
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	41.5	49	49	42.5	50	50

^{*}All data measured at 6 bar

^{**} with purged air (max. 0,5 bar)

2-JAW PARALLEL GRIPPERS **OVERVIEW OF SERIES**



► ELECTRI	CAL	
	Series GEP9000	132
	Series GEP1400	138
	Series GEP5000	144

2-JAW PARALLEL GRIPPERS

SERIES GEP9000

PRODUCT ADVANTAGES



"The quickest"

Plug and play

Reduce programming and assembly costs to a minimum with the integrated control system and the 3 position query

▶ 250 cycles per minute

No more worrying about cycle times: There is nothing faster on the market!

► Failure-free continuous operation

Our "Made in Germany" quality guarantees up to 30 million maintenance-free gripping cycles

► THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com

HOW TO ORDER CORRECTLY

The product order numbers are arranged according to this diagram:

Order no.	GEP9002N		-B	
Grip direction closed		С		
Grip direction opened		0		



BENEFITS IN DETAIL



1 Energy supply

- standardized interface M12 round connector

2 Drive

- via Pot magnet and coil bobbin according to the coil system principle
- energy consumption only at opening and closing (<25ms)

3 Position sensing

- integrated Hallsensor
- 3 positions monitorable

4 Status control

- optical LED position display
- gripper opened, gripper closed, "workpiece available"

5 Wedge hook mechanism

- self locking mechanism at stop position

6 Mounting and positioning

- mounting possible from several sides for versatile positioning

7 Robust, lightweight housing

- Hard-coated aluminum alloy

8 Gripper jaw

- from high-strength, hard-anodized aluminium
- removable centering sleeves for individual gripper finger mounting

> SERIES CHARACTERISTICS



Number of installation sizes	2
Stroke per jaw	2 mm - 4 mm
Gripping force	11 N - 50 N
Weight	0,25 kg - 0,57 kg
AP class	2



30 million maintenance-free cycles (max.)



Integrated sensing



Spring closing C



IP40



Spring opening O

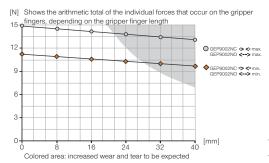


Purged air

> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



1.5
1.5
2.1
270

► INCLUDED IN DELIVERY



Centering Disc

DST80320

RECOMMENDED ACCESSORIES



Plug-in Connector Straight Cable 10 m -

KAG1000B8



Plug-in Connector Angled Cable 10 m - Female M12

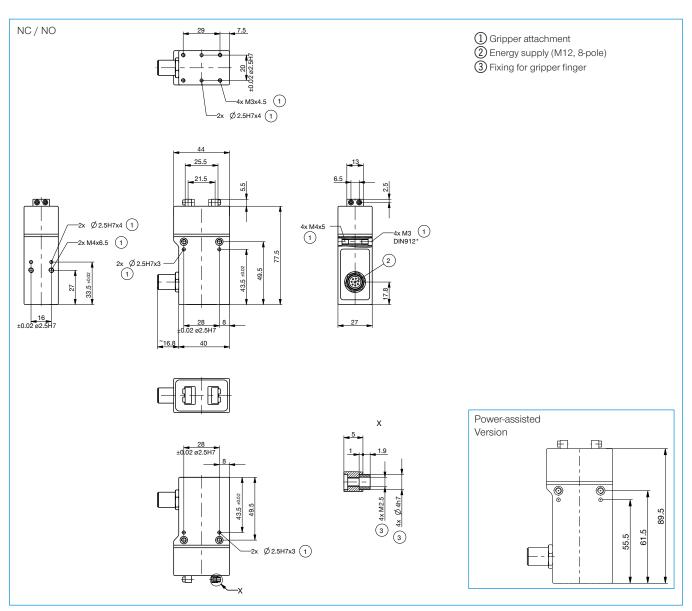
KAW1000B8



Busbox see page 875

ZUBBOX9000-01

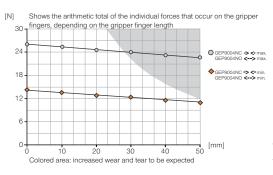
	► Technical Data		
Order no.	GEP9002NC-B	GEP9002NO-B	GEP9002NCV-B
Stroke per jaw [mm]	2	2	2
Grip force in grip direction min. [N]	11	11	20
Grip force in grip direction max. [N]	15	15	30
Permanent operation cycle count max. [cycle/min]	200	200	200
Cycle count max. [cycle/min]	250	250	250
Operating time [ms]	<20	<20	<20
Pulse time in opening [ms]	25	7	25
Pulse time in closing [ms]	7	25	7
Repetition accuracy +/- [mm]	0.05	0.05	0.05
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+50	+50	+50
Current consumption per pulse max. [A]	5	5	5
Length of the gripper fingers max. [mm]	40	40	40
Weight per jaw max. [g]	20	20	20
Protection to IEC 60529	IP40	IP40	IP40
Weight [kg]	0.25	0.25	0.34



> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



2.7
2.7
4.3
335

► INCLUDED IN DELIVERY



Centering Disc

DST80320

RECOMMENDED ACCESSORIES



Plug-in Connector Straight Cable 10 m -KAG1000B8



Plug-in Connector Angled Cable 10 m - Female M12

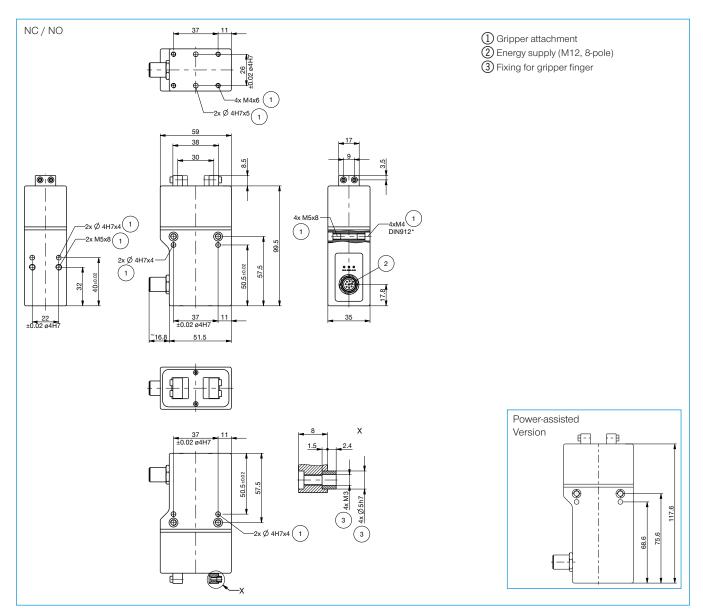
KAW1000B8



Busbox see page 875

ZUBBOX9000-01

	► Technical Data		
Order no.	GEP9004NC-B	GEP9004NO-B	GEP9004NCV-B
Stroke per jaw [mm]	4	4	4
Grip force in grip direction min. [N]	14	14	30
Grip force in grip direction max. [N]	26	26	50
Permanent operation cycle count max. [cycle/min]	200	200	200
Cycle count max. [cycle/min]	250	250	250
Operating time [ms]	<20	<20	<20
Pulse time in opening [ms]	35	9	35
Pulse time in closing [ms]	9	35	9
Repetition accuracy +/- [mm]	0.05	0.1	0.05
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+50	+50	+50
Current consumption per pulse max. [A]	5	5	5
Length of the gripper fingers max. [mm]	50	50	50
Weight per jaw max. [g]	30	30	30
Protection to IEC 60529	IP40	IP40	IP40
Weight [kg]	0.57	0.57	0.79



2-JAW PARALLEL GRIPPERS **SERIES GEP1400**

PRODUCT ADVANTAGES



"The robust"

Proven T slot guide

This established and proven guiding technology stands for the highest process reliability like no other

Integrated position sensing

You can detect the gripper status safely via the motor current using your control system

▶ The simplest activation

The included control unit is controlled easily via plus and minus buttons, while you can optionally adjust the gripping force using the potentiometer

► THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com



BENEFITS IN DETAIL



1 Removable centering sleeves

quick and economical positioning of the gripper fingers

2 Positively driven curve disc

- synchronized the movement of the gripper jaws
- high force transfer
- rapid stroke and force stroke (version with 6 mm stroke per jaw)

3 Robust, lightweight housing

- Hard-coated aluminum alloy

4 Gripper jaw

- hardened steel
- individual gripper finger mounting

5 Guide

- precise T-Slot guide for high forces and moments capacity

6 Drive

- electric drive by 24 VDC step motor

7 Position sensing

- measured at the end of stroke via power increase on the motor

8 Energy supply

- standardized interface M8 round plug
- signal control line (use only cable without diode)

> SERIES CHARACTERISTICS



Number of installation sizes	2
Stroke per jaw	2 mm - 6 mm
Gripping force	140 N - 350 N
Weight	0,3 kg - 1 kg
AP class	3



5 million maintenance-free cycles (max.)

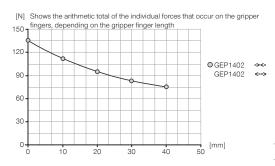
IP 52

IP52

> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	5
Mx [Nm]	5
My [Nm]	4
Fa [N]	70

► INCLUDED IN DELIVERY







Control

DST02900

ELEGR01

RECOMMENDED ACCESSORIES



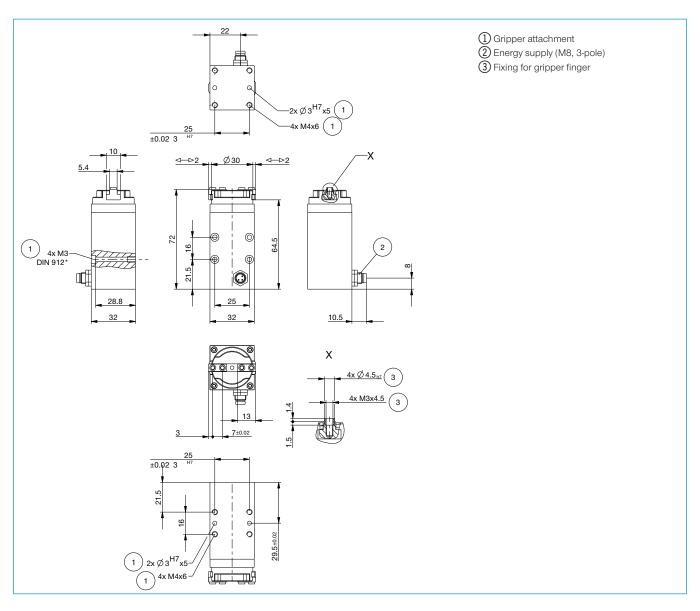
Plug-in connector Straight Cable 5m - Socket M8 KAG500



Plug-in connector Angled Cable 5m - Socket M8

KAW500

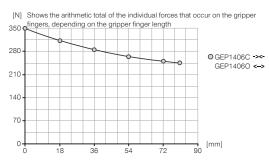
	► Technical Data
Order no.	GEP1402
Stroke per jaw [mm]	2
Gripping force in closing (adjustable) max. [N]	140
Gripping force in opening (adjustable) max. [N]	140
Opening time [s]	0.2
Closing time [s]	0.2
Repetition accuracy +/- [mm]	0.1
Voltage [V]	24
Max. current regulable by potentiometer [mA]	140
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Protection to IEC 60529	IP52
Weight [kg]	0.3



> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	30
Mx [Nm]	30
My [Nm]	20
Fa [N]	500

► INCLUDED IN DELIVERY







Control

DST40800

ELEGR04

RECOMMENDED ACCESSORIES



Plug-in connector Straight Cable 5m - Socket M8

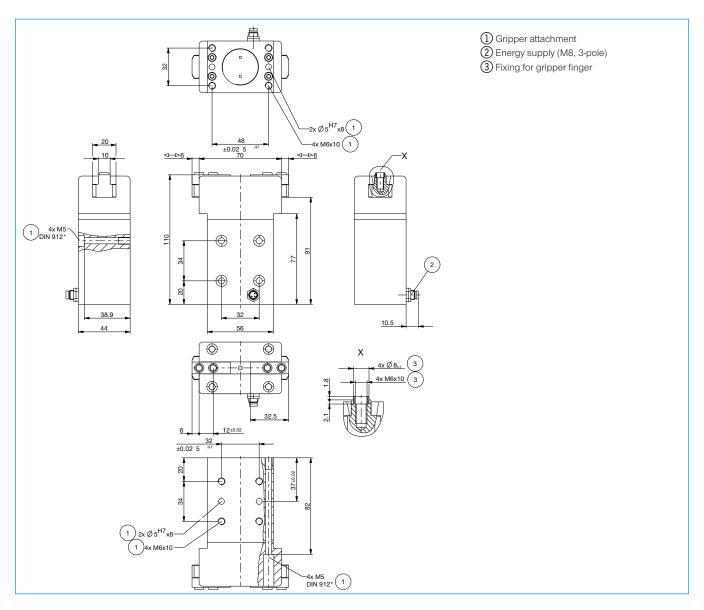
KAG500



Plug-in connector Angled Cable 5m - Socket M8

KAW500

	Technical Data	
Order no.	GEP1406C	GEP1406O
Stroke per jaw [mm]	6	6
Gripping force in closing (adjustable) max. [N]	350	
Gripping force in opening (adjustable) max. [N]		350
Opening time [s]	0.4	0.4
Closing time [s]	0.4	0.4
Repetition accuracy +/- [mm]	0.1	0.1
Voltage [V]	24	24
Max. current regulable by potentiometer [mA]	210	210
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Protection to IEC 60529	IP52	IP52
Weight [kg]	1	1



2-JAW PARALLEL GRIPPERS **SERIES GEP5000**

PRODUCT ADVANTAGES



"ALL in ONE"

- Approximately the same gripping force as a comparable pneumatic gripper
- Self locking mechanism in case of power drop
- Same connection hole patterns as a comparable pneumatic gripper
- Plug and play single-cable solution, supports incredibly easy control using I/O signals or IO-Link
- Integrated ACM control module option of configuring gripping force, travel time and switching points
- Protected from corrosion and sealed in accordance with IP64
- ▶ Brushless DC motor up to 30 million cycles without maintenance

► THE BEST PRODUCT FOR YOUR APPLICATION



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Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com

HOW TO ORDER CORRECTLY

The product order numbers are arranged according to this diagram:

Order no.	GEP5008		-00	-A
Digital control		Ю		
IO-Link control		IL		



BENEFITS IN DETAIL



1 Wedge hook mechanism

- Supports to absorb high forces and moments
- Synchronized gripper jaw movement

2 Gripper jaw

- Gripper fingers mounted using removable centring sleeves
- Lubricated for life via incorporated lubrication slots

3 Dual lip seal

- Enables IP64
- Prevents grease from being squeezed out, increasing service life

4 Steel Linear Guide

- Steel in steel quide
- Enables use of extremely long gripper fingers

5 Mounting and positioning

- Alternatively, on several sides for customized mounting
- Pneumatic and electrical versions identical apart from height

6 BLDC motor

- Wear-resistant brushless DC motor

7 Advanced control module

- Integrated control module with single-cable solution
- Gripping force, travel time and query programmable via the control panel on the housing

8 Drive train

- Combination of trapezoidal spindle and gear
- Durable and robust

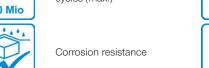
> SERIES CHARACTERISTICS



Number of installation sizes	3
Stroke per jaw	6 mm - 10 mm
Gripping force	540 N - 1900 N
Weight	0,79 kg - 1,66 kg
AP class	5



30 million maintenance-free cycles (max.)





Integrated sensing



Self locking mechanism



IP64

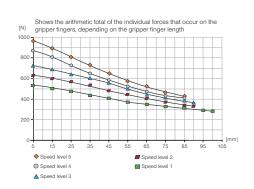


Purged air

▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	43	
Mx [Nm]	70	
My [Nm]	46	
Fa [N]	1250	

▶ TECHNICAL DATA - BASIC VERSION

	Technical Data	
Order no.	GEP5006IO-00-A	GEP5006IL-00-A
Control	IO	Q IO -Link
Stroke per jaw [mm]	6	6
Drive	BLDC motor	BLDC motor
Self locking mechanism	mechanical	mechanical
Control time [s]	0.035	0.035
Permissible weight per jaw max [kg]	0.4	0.4
Length of the gripper fingers max. [mm]	100	100
Repetition accuracy +/- [mm]	0.01	0.01
Voltage [V]	24	24
Current consumption max. [A]	5	5
Operating temperature [°C]	5 50	5 50
Protection to IEC 60529	IP64	IP64
Weight [kg]	0.79	0.79

► TECHNICAL DATA - MODES

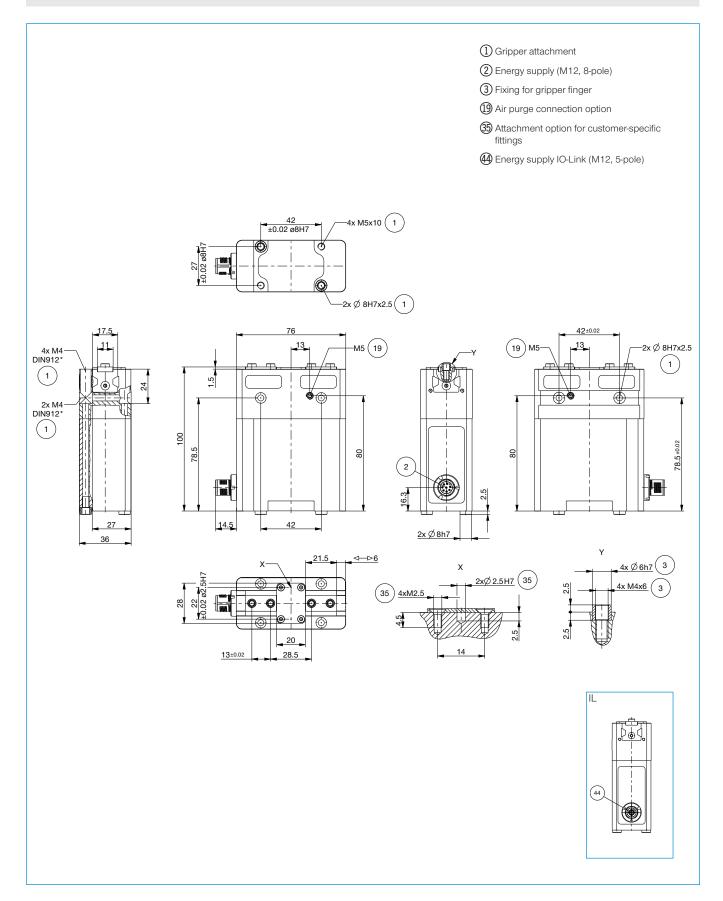
Travel time | ← → | min. / max. [s]

	Technical data - N mode	
Order no.	GEP5006IO-00-A	GEP5006IL-00-A
Gripping force → ← min. / max. [N]	540 / 960	540 / 960
Gripping force ← → min. / max. [N]	540 / 960	540 / 960
Travel time → ← min. / max. [s]	0,15 / 0,22	0,15 / 0,22
Travel time ← min. / max. [s]	0,15 / 0,22	0,15 / 0,22
	Technical data - NC mode	
Order no.	GEP5006IO-00-A	GEP5006IL-00-A
Gripping force → ← min. / max. [N]	540 / 960	540 / 960
Gripping force ← → min. / max. [N]	-	-
Travel time → ← min. / max. [s]	0,15 / 0,22	0,15 / 0,22
Travel time ← → min. / max. [s]	0,13	0,13
	Technical data - NO mode	
Order no.	GEP5006IO-00-A	GEP5006IL-00-A
Gripping force → ← min. / max. [N]	-	-
Gripping force ← → min. / max. [N]	540 / 960	540 / 960
Travel time → ← min. / max. [s]	0,13	0,13

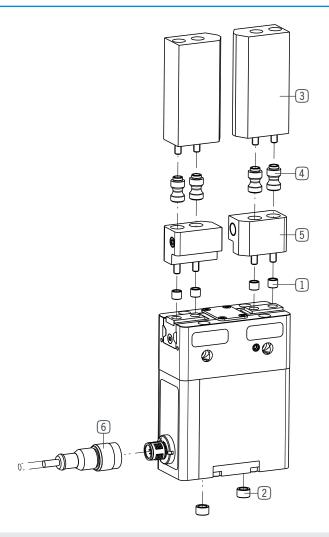
0,15 / 0,22

0,15 / 0,22

TECHNICAL DRAWINGS



2-JAW PARALLEL GRIPPERS **INSTALLATION SIZE GEP5006**



► INCLUDED IN DELIVERY



Centering Disc



Centering Disc

024230

024231

► RECOMMENDED ACCESSORIES



Universal jaw aluminium



Plug-in Connector Straight

Cable 10 m - Female M12

Universal jaw steel

UB5006ST

6



Aluminum adjustment jaw

EB5006AL

6



Steel adjustment jaw

EB5006ST



Changeable jaw, loose part-set

WB5006L



Plug-in Connector Angled Cable 10 m - Female M12 KAW1000B8



Plug-in connector straight 5m - plug / socket M12 KAG500IL



Y-Plug-in Connector

B12-Y-5IL

UB5006AL

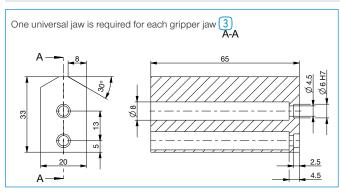
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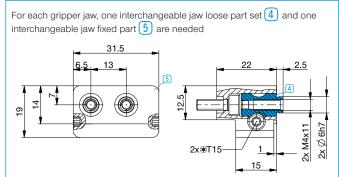
WB5006F

Changeable jaw, fix-part

▶ TECHNICAL DRAWINGS ACCESSORIES

KAG1000B8



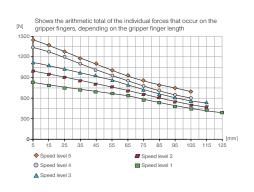


2-JAW PARALLEL GRIPPERS **INSTALLATION SIZE GEP5008**

▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	60
Mx [Nm]	105
My [Nm]	65
Fa [N]	1900

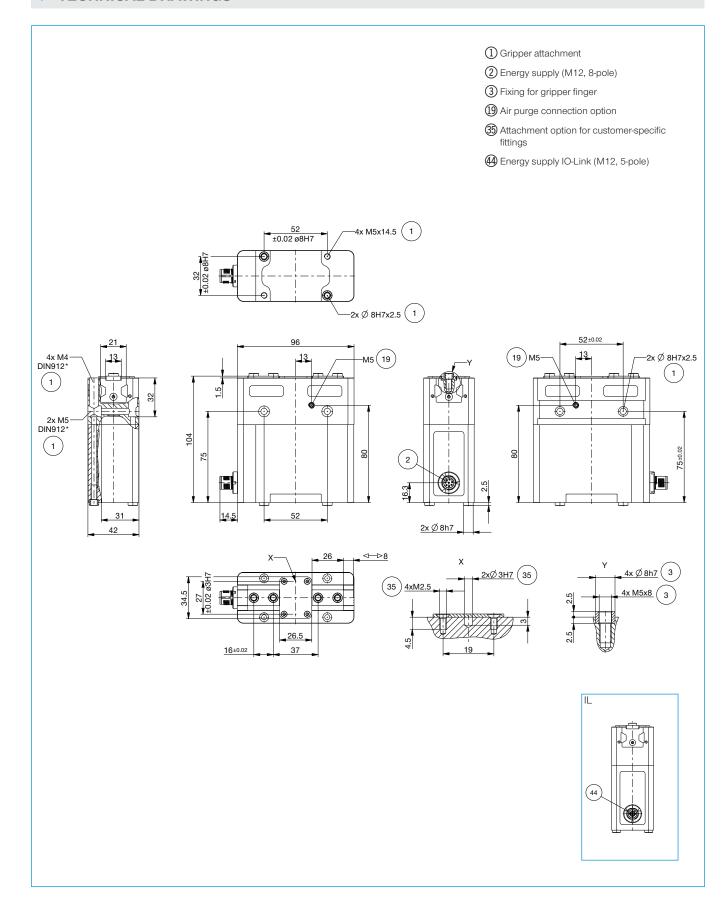
▶ TECHNICAL DATA - BASIC VERSION

	► Technical Data	
Order no.	GEP5008IO-00-A	GEP5008IL-00-A
Control	IO	② IO -Link
Stroke per jaw [mm]	8	8
Drive	BLDC motor	BLDC motor
Self locking mechanism	mechanical	mechanical
Control time [s]	0.035	0.035
Permissible weight per jaw max [kg]	0.7	0.7
Length of the gripper fingers max. [mm]	125	125
Repetition accuracy +/- [mm]	0.01	0.01
Voltage [V]	24	24
Current consumption max. [A]	5	5
Operating temperature [°C]	5 50	5 50
Protection to IEC 60529	IP64	IP64
Weight [kg]	1.16	1.16

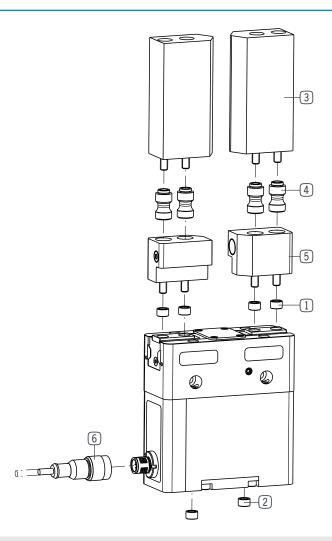
TECHNICAL DATA - MODES

	► Technical data - N mode	
Order no.	GEP5008IO-00-A	GEP5008IL-00-A
Gripping force → ← min. / max. [N]	800 / 1450	800 / 1450
Gripping force ← → min. / max. [N]	800 / 1450	800 / 1450
Travel time → ← min. / max. [s]	0,18 / 0,29	0,18 / 0,29
Travel time ← → min. / max. [s]	0,18 / 0,29	0,18 / 0,29
	► Technical data - NC mode	
Order no.	GEP5008IO-00-A	GEP5008IL-00-A
Gripping force → ← min. / max. [N]	800 / 1450	800 / 1450
Gripping force ← → min. / max. [N]	-	-
Travel time → ← min. / max. [s]	0,18 / 0,29	0,18 / 0,29
Travel time ← → min. / max. [s]	0,15	0,15
	► Technical data - NO mode	
Order no.	GEP5008IO-00-A	GEP5008IL-00-A
Gripping force → ← min. / max. [N]	-	-
Gripping force ← → min. / max. [N]	800 / 1450	800 / 1450
Travel time → ← min. / max. [s]	0,15	0,15
Travel time ← → min. / max. [s]	0,18 / 0,29	0,18 / 0,29

TECHNICAL DRAWINGS



2-JAW PARALLEL GRIPPERS **INSTALLATION SIZE GEP5008**



► INCLUDED IN DELIVERY



Centering Disc

024231

► RECOMMENDED ACCESSORIES



Universal jaw aluminium



Universal jaw steel

UB5008ST

6



Aluminum adjustment jaw

EB5008AL

6



Steel adjustment jaw

EB5008ST



Changeable jaw, loose part-set

WB5008L



Plug-in connector straight 5m - plug / socket M12



Y-Plug-in Connector

WB5008F

Changeable jaw, fix-part

UB5008AL

(5)

Plug-in Connector Straight Cable 10 m - Female M12



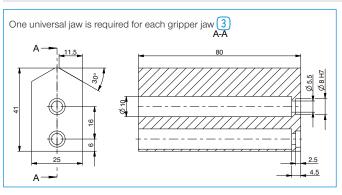
KAW1000B8

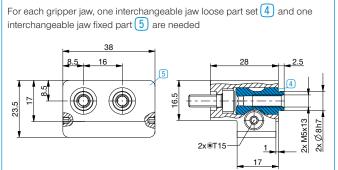
KAG500IL

B12-Y-5IL

▶ TECHNICAL DRAWINGS ACCESSORIES

KAG1000B8



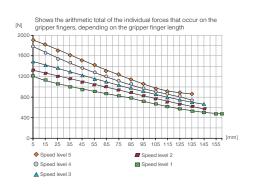


2-JAW PARALLEL GRIPPERS INSTALLATION SIZE GEP5010

▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	75
Mx [Nm]	125
My [Nm]	95
Fa [N]	2700

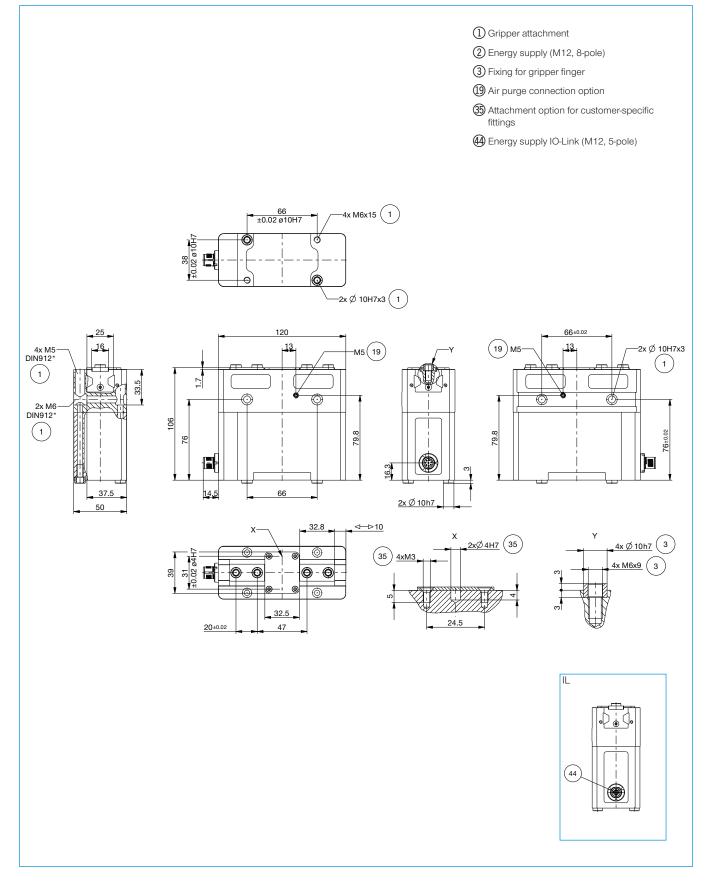
▶ TECHNICAL DATA - BASIC VERSION

	Technical Data	
Order no.	GEP5010IO-00-A	GEP5010IL-00-A
Control	Ю	② IO -Link
Stroke per jaw [mm]	10	10
Drive	BLDC motor	BLDC motor
Self locking mechanism	mechanical	mechanical
Control time [s]	0.035	0.035
Permissible weight per jaw max [kg]	1.3	1.3
Length of the gripper fingers max. [mm]	160	160
Repetition accuracy +/- [mm]	0.01	0.01
Voltage [V]	24	24
Current consumption max. [A]	5	5
Operating temperature [°C]	5 50	5 50
Protection to IEC 60529	IP64	IP64
Weight [kg]	1.66	1.66

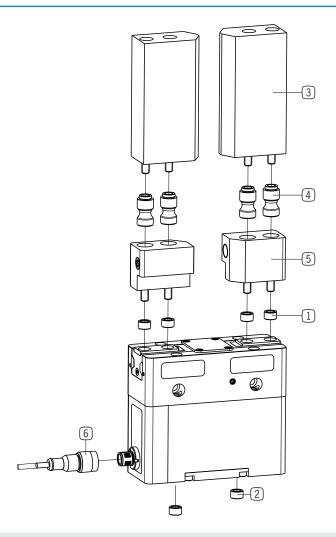
► TECHNICAL DATA - MODES

	► Technical data - N mode	
Order no.	GEP5010IO-00-A	GEP5010IL-00-A
Gripping force → ← min. / max. [N]	1200 / 1900	1200 / 1900
Gripping force ← → min. / max. [N]	1200 / 1900	1200 / 1900
Travel time → ← min. / max. [s]	0,21 / 0,32	0,21 / 0,32
Travel time ← → min. / max. [s]	0,21 / 0,32	0,21 / 0,32
	► Technical data - NC mode	
Order no.	GEP5010IO-00-A	GEP5010IL-00-A
Gripping force → ← min. / max. [N]	1200 / 1900	1200 / 1900
Gripping force ← → min. / max. [N]	-	-
Travel time → ← min. / max. [s]	0,21 / 0,32	0,21 / 0,32
Travel time ← → min. / max. [s]	0,16	0,16
	► Technical data - NO mode	
Order no.	GEP5010IO-00-A	GEP5010IL-00-A
Gripping force → ← min. / max. [N]	-	-
Gripping force ← → min. / max. [N]	1200 / 1900	1200 / 1900
Travel time → ← min. / max. [s]	0,16	0,16
Travel time ← → min. / max. [s]	0,21 / 0,32	0,21 / 0,32

TECHNICAL DRAWINGS



2-JAW PARALLEL GRIPPERS **INSTALLATION SIZE GEP5010**



► INCLUDED IN DELIVERY



Centering Disc

018187

► RECOMMENDED ACCESSORIES



Universal jaw aluminium



Universal jaw steel



Aluminum adjustment jaw



Steel adjustment jaw

EB5010ST



Changeable jaw, loose part-set





Y-Plug-in Connector

UB5010AL

WB5010F



Changeable jaw, fix-part

UB5010ST



Plug-in Connector Straight Cable 10 m - Female M12 KAG1000B8

KAW1000B8

EB5010AL

6

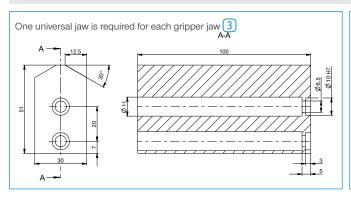
Plug-in Connector Angled Cable 10 m - Female M12

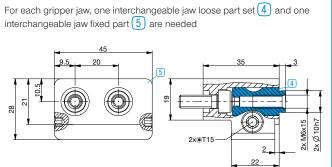
5m - plug / socket M12

KAG500IL

B12-Y-5IL

▶ TECHNICAL DRAWINGS ACCESSORIES





♦ IO-Link

Plug-in connector straight

2-JAW PARALLEL GRIPPERS WITH LONG STROKE **OVERVIEW OF SERIES**



► PNEUMATIC		
	Series MGH8000	160
	Series GH6000	180
	Series GH7000	222

2-JAW PARALLEL GRIPPERS WITH LONG STROKE **SERIES MGH8000**

PRODUCT ADVANTAGES



"The compact"

Reduced interference contours

Low-profile designs and versatile screw connection options enable simple integration into your design

Dirt protection

Using the scrapers on the guides, you can reliably use the gripper even under the harshest conditions

► Failure-free continuous operation

Our uncompromising "Made in Germany" quality guarantees up to 10 million maintenance-free gripping cycles

▶ THE BEST PRODUCT FOR YOUR APPLICATION

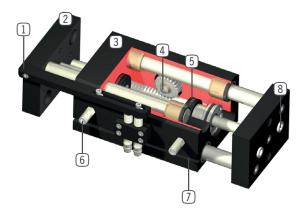


Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com



BENEFITS IN DETAIL



1 Attachment kit (cam switch and clamping block)

- for sensing position by means of proximity switch (optional feature)

2 Gripper jaw

- individual gripper finger mounting

3 Robust, lightweight housing

- Hard-coated aluminum alloy

4 Synchronization

- via rack and pinion

5 Drive

- two double-acting pneumatic cylinders

6 Energy supply

- possible from several sides

7 Integrated groove

- mounting and positioning of magnetic field sensors

8 Removable centering sleeves

- quick and economical positioning of the gripper fingers

> SERIES CHARACTERISTICS



3
10 mm - 100 mm
60 N - 910 N
0,35 kg - 7,3 kg
2



10 million maintenance-free cycles (max.)



Inductive sensor



IP64

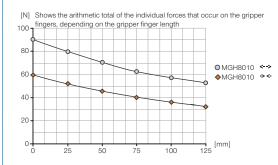


Magnetic field sensor

▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	12
Mx [Nm]	12
My [Nm]	8
Fa [N]	260

► INCLUDED IN DELIVERY



Centering Disc

DST40400

RECOMMENDED ACCESSORIES



tive Proximity Switch



ANS0027



Inductive proximity switch - Cable 5 m

NJ4-E2-01



Inductive Proximity Switch Cable 0,3 m - Connector

NJ4-E2SK-01



Magnetic field sensor Angled Cable 5 m





Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Ca-ble 5m - Socket M8 (female)

KAW500

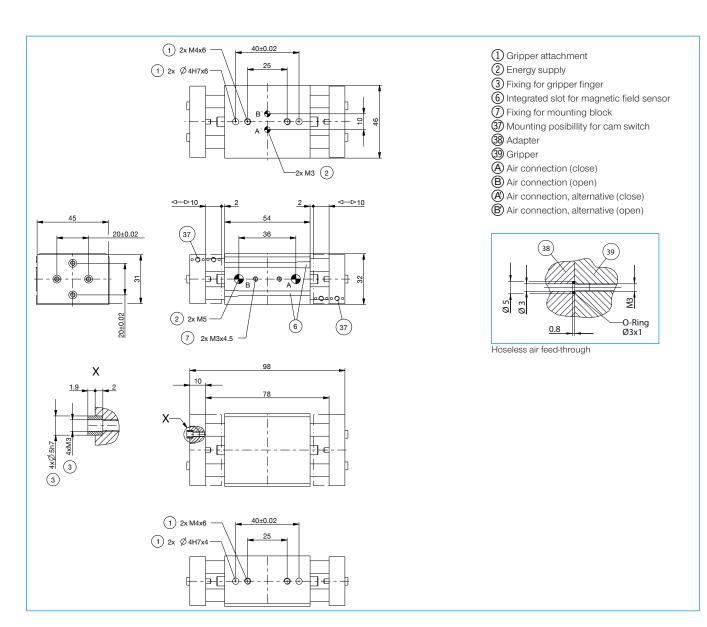


Straight Fittings - Quick Connect Style

GVM5

	► Technical Data*
Order no.	MGH8010
Stroke per jaw [mm]	10
Gripping force in closing [N]	60
Gripping force in opening [N]	90
Closing time [s]	0.07
Opening time [s]	0.04
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	4
Weight [kg]	0.35

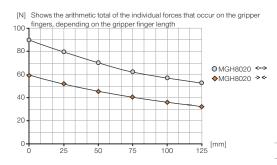
^{*}All data measured at 6 bar



▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



12
12
8
260

► INCLUDED IN DELIVERY



Centering Disc

DST40400

RECOMMENDED ACCESSORIES



Attachment Kit for Inductive Proximity Switch



ANS0028



Inductive proximity switch - Cable 5 m

NJ4-E2-01



Inductive Proximity Switch Cable 0,3 m - Connector

NJ4-E2SK-01



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

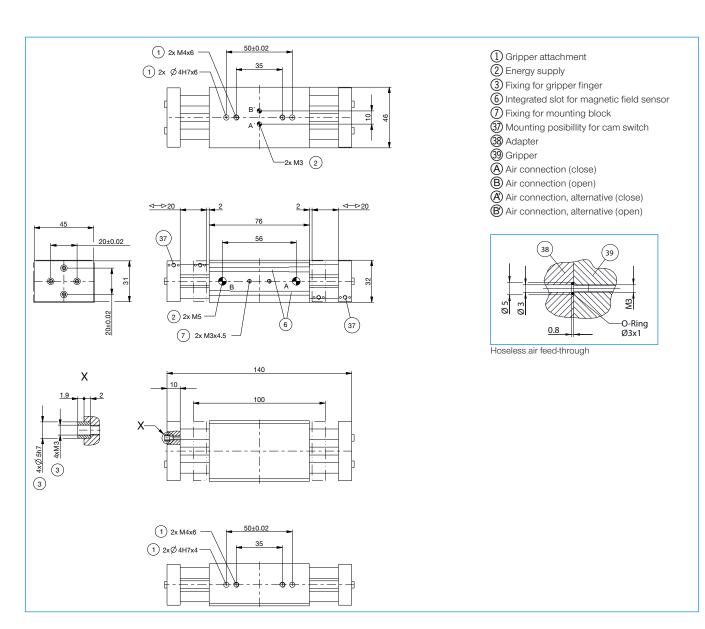
KAW500



Straight Fittings - Quick Connect Style

	► Technical Data*
Order no.	MGH8020
Stroke per jaw [mm]	20
Gripping force in closing [N]	60
Gripping force in opening [N]	90
Closing time [s]	0.09
Opening time [s]	0.05
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	8
Weight [kg]	0.5

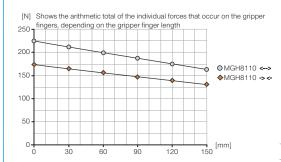
^{*}All data measured at 6 bar



▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	20
Mx [Nm]	20
My [Nm]	18
Fa [N]	435

► INCLUDED IN DELIVERY



Centering Disc

DST40800

RECOMMENDED ACCESSORIES



Attachment Kit for Inductive Proximity Switch

ANS0020



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 5 m



Magnetic field sensor Angled Cable 0,3 m -

MFS103KHC





Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

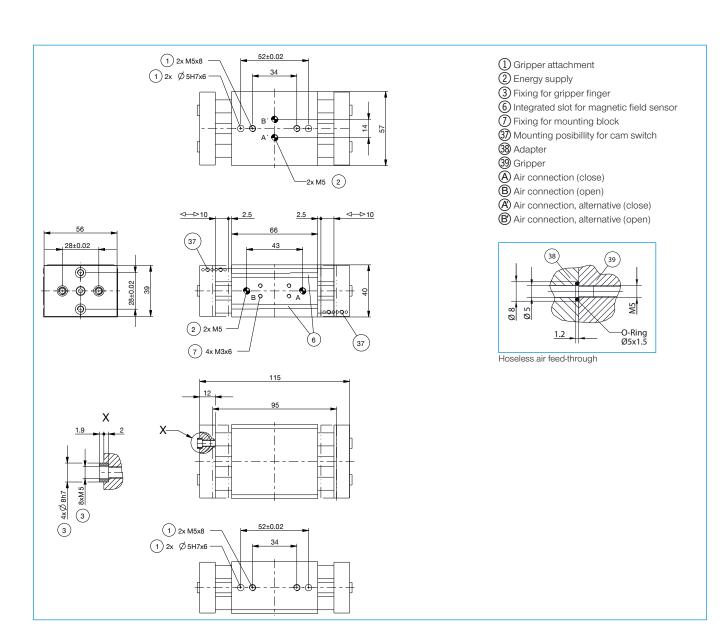
KAW500



Straight Fittings - Quick Connect Style

	► Technical Data*
Order no.	MGH8110
Stroke per jaw [mm]	10
Gripping force in closing [N]	180
Gripping force in opening [N]	220
Closing time [s]	0.08
Opening time [s]	0.04
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	9.2
Weight [kg]	0.7

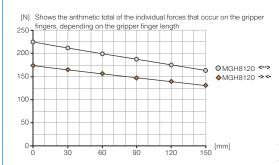
^{*}All data measured at 6 bar



▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	20
Mx [Nm]	20
My [Nm]	18
Fa [N]	435

► INCLUDED IN DELIVERY



Centering Disc

DST40800

RECOMMENDED ACCESSORIES



Attachment Kit for Inductive Proximity Switch

ANS0021



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 5 m



Angled Cable 0,3 m -MFS103SKHC

MFS103KHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

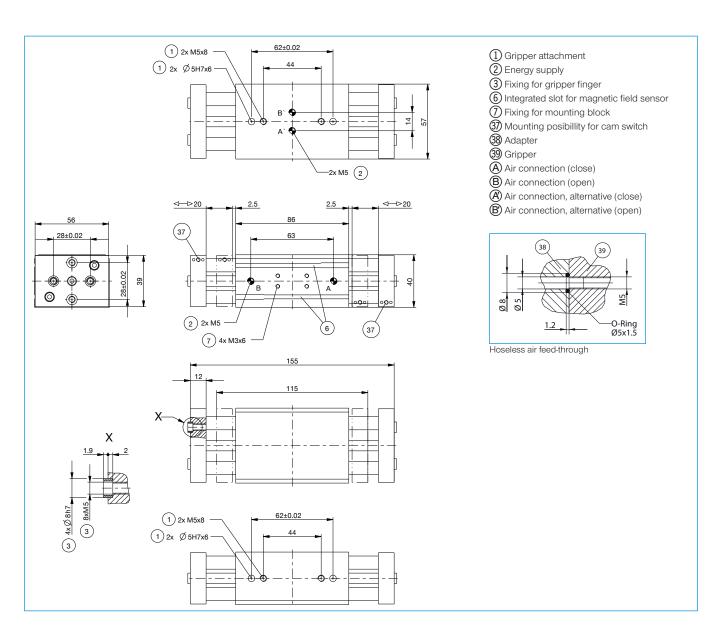
KAW500



Straight Fittings - Quick Connect Style

	► Technical Data*
Order no.	MGH8120
Stroke per jaw [mm]	20
Gripping force in closing [N]	190
Gripping force in opening [N]	220
Closing time [s]	0.1
Opening time [s]	0.06
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	18.4
Weight [kg]	0.85

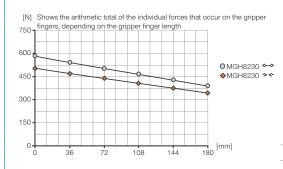
^{*}All data measured at 6 bar



▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



64
64
45
760

► INCLUDED IN DELIVERY



Centering Disc

DST41000

RECOMMENDED ACCESSORIES



Attachment Kit for Inductive Proximity Switch

ANS0022



NJ8-E2

Inductive proximity switch - Cable 5 m



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

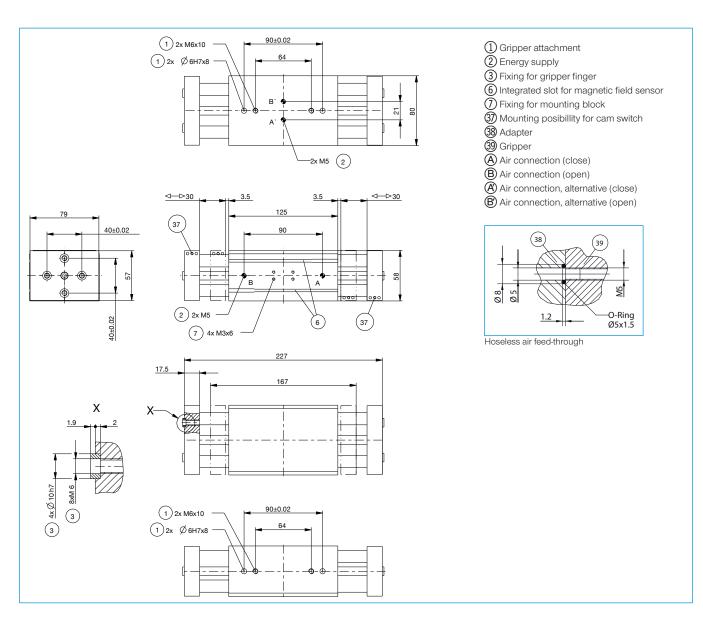
KAW500



Straight Fittings - Quick Connect Style

	► Technical Data*
Order no.	MGH8230
Stroke per jaw [mm]	30
Gripping force in closing [N]	500
Gripping force in opening [N]	570
Closing time [s]	0.14
Opening time [s]	0.1
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	64
Weight [kg]	2.4

^{*}All data measured at 6 bar



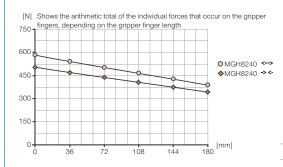
pneumatic / 2-Jaw Parallel Grippers with Long Stroke / Installation size MGH8240 /

2-JAW PARALLEL GRIPPERS WITH LONG STROKE **INSTALLATION SIZE MGH8240**

▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	64
Mx [Nm]	64
My [Nm]	45
Fa [N]	760

► INCLUDED IN DELIVERY



Centering Disc

DST41000

RECOMMENDED ACCESSORIES



Attachment Kit for Inductive Proximity Switch

ANS0023



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8



Magnetic field sensor Angled Cable 5 m



Magnetic field sensor Angled Cable 0,3 m -

MFS103KHC

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500

NJ8-E2S



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500

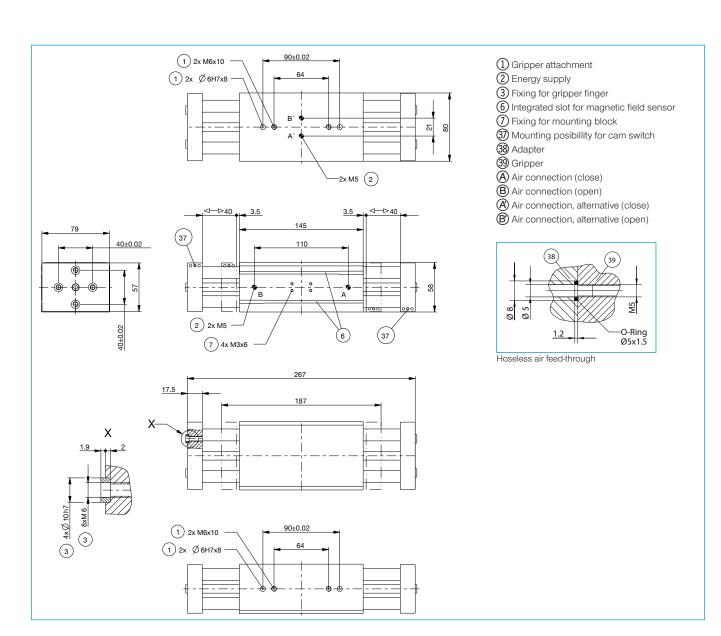


Straight Fittings - Quick Connect Style

GVM5

	► Technical Data*
Order no.	MGH8240
Stroke per jaw [mm]	40
Gripping force in closing [N]	500
Gripping force in opening [N]	570
Closing time [s]	0.18
Opening time [s]	0.14
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	128
Weight [kg]	2.9

^{*}All data measured at 6 bar



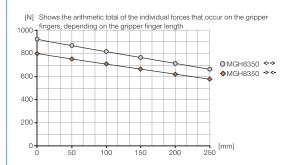
2-JAW PARALLEL GRIPPERS WITH LONG STROKE

INSTALLATION SIZE MGH8350

▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



130
130
98
1300

► INCLUDED IN DELIVERY



Centering Disc

DST41600

RECOMMENDED ACCESSORIES



tive Proximity Switch



ANS0024



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500

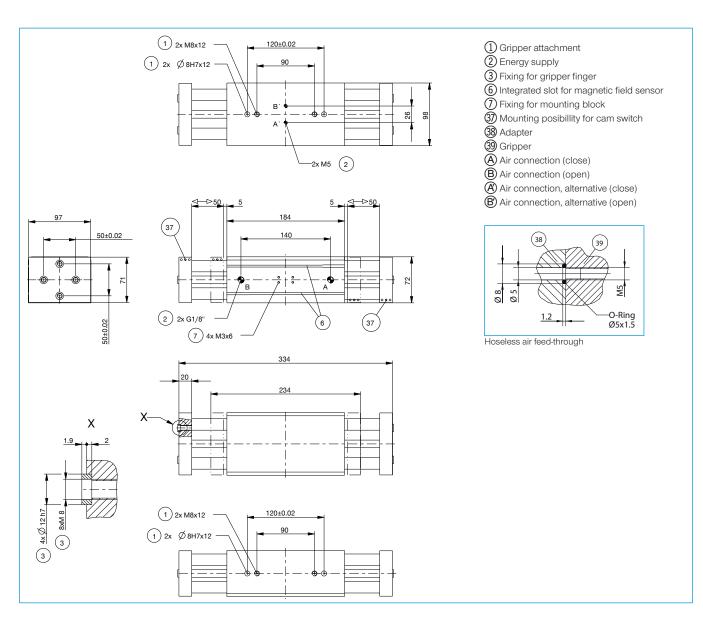


Straight Fittings - Quick Connect Style

GV1-8X6

	► Technical Data*
Order no.	MGH8350
Stroke per jaw [mm]	50
Gripping force in closing [N]	800
Gripping force in opening [N]	910
Closing time [s]	0.3
Opening time [s]	0.25
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	170
Weight [kg]	5.1

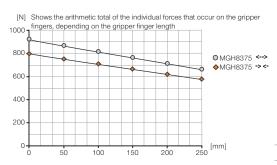
^{*}All data measured at 6 bar



▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



130
130
98
1300

► INCLUDED IN DELIVERY



Centering Disc

DST41600

RECOMMENDED ACCESSORIES



Attachment Kit for Inductive Proximity Switch

ANS0025



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500

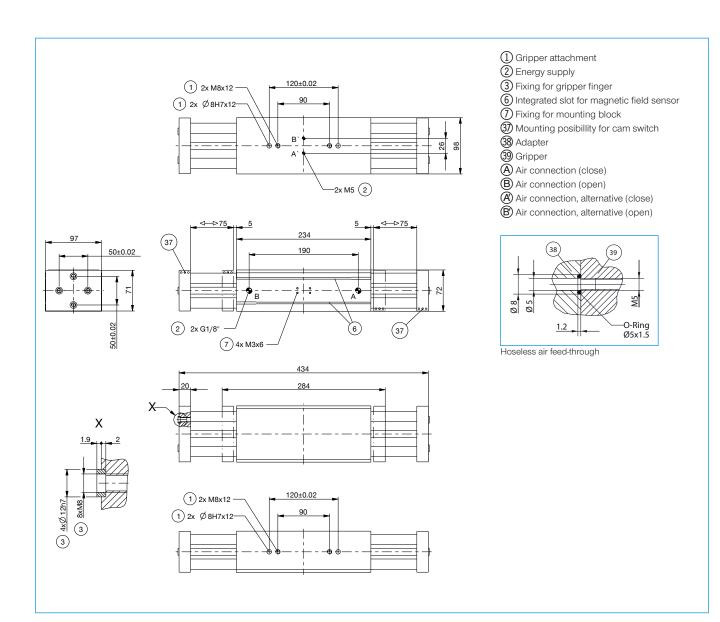


Straight Fittings - Quick Connect Style

GV1-8X6

	► Technical Data*
Order no.	MGH8375
Stroke per jaw [mm]	75
Gripping force in closing [N]	800
Gripping force in opening [N]	910
Closing time [s]	0.4
Opening time [s]	0.35
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	255
Weight [kg]	6.2

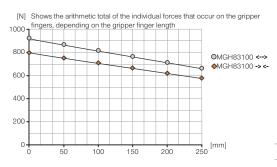
^{*}All data measured at 6 bar



▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	130
Mx [Nm]	130
My [Nm]	98
Fa [N]	1300

► INCLUDED IN DELIVERY



Centering Disc

DST41600

RECOMMENDED ACCESSORIES



Attachment Kit for Inductive Proximity Switch

ANS0026



NJ8-E2

Inductive proximity switch - Cable 5 m



Inductive proximity switch - Connector M8



Magnetic field sensor Angled Cable 5 m



Magnetic field sensor Angled Cable 0,3 m -

MFS103KHC MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500

NJ8-E2S



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500

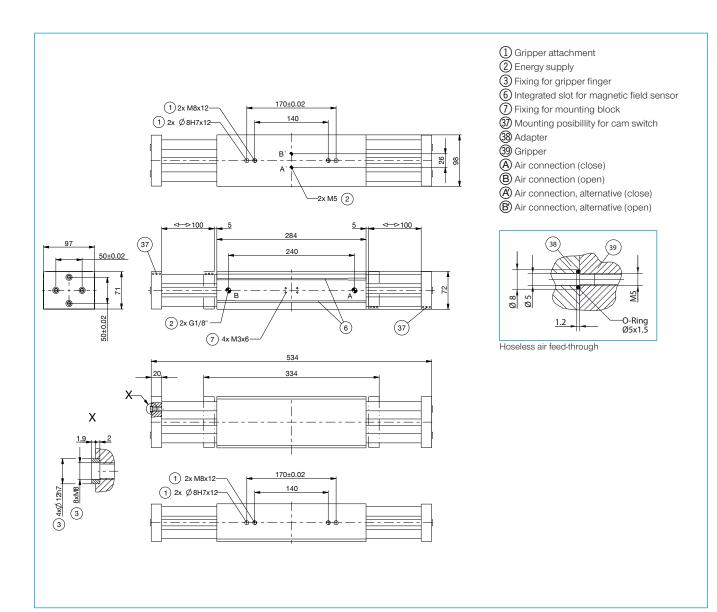


Straight Fittings - Quick Connect Style

GV1-8X6

	► Technical Data*
Order no.	MGH83100
Stroke per jaw [mm]	100
Gripping force in closing [N]	800
Gripping force in opening [N]	910
Closing time [s]	0.5
Opening time [s]	0.4
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	340
Weight [kg]	7.3

^{*}All data measured at 6 bar



2-JAW PARALLEL GRIPPERS WITH LONG STROKE **SERIES GH6000**

PRODUCT ADVANTAGES



"The robust"

► Gripper jaws may be up to 25% longer in comparison to the benchmark

The highest force and torque measurement enables flexible for maximum dynamics

Over 30% more powerful than the benchmark

Optimisation of weight and force reduces your application costs since all components can have a smaller scale

► Failure-free continuous operation

Our uncompromising "Made in Germany" quality guarantees up to 10 million maintenance-free gripping cycles

THE BEST PRODUCT FOR YOUR APPLICATION

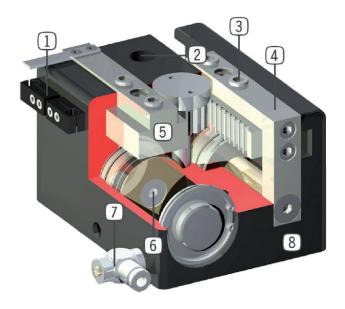


Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com



BENEFITS IN DETAIL



1 Mounting block

- mounting for inductive proximity switch

2 Mounting and positioning

- mounting possible from several sides for versatile positioning

3 Removable centering sleeves

- quick and economical positioning of the gripper fingers

4 Gripper jaw

- individual gripper finger mounting

5 Precise long T-Slot guides

- high forces and moments capacity

6 Drive

- two double-acting pneumatic cylinders
- synchronized by gearwheel

7 Energy supply

- possible from several sides
- CAUTION: always operate long stroke gripper with supplied exhaust air flow control valve (speed regulation)

8 Robust, lightweight housing

- Hard-coated aluminum alloy

> SERIES CHARACTERISTICS



Number of installation sizes	5
Stroke per jaw	20 mm - 200 mm
Gripping force	120 N - 3400 N
Weight	0,3 kg - 23,8 kg
AP class	3



10 million maintenance-free cycles (max.)



Inductive sensor



IP40

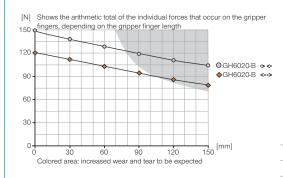


Magnetic field sensor

▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	20
Mx [Nm]	20
My [Nm]	20
Fa [N]	500

► INCLUDED IN DELIVERY



Centering Disc

DST40400



Flow Control Valves - with

DRVM5X4

> RECOMMENDED ACCESSORIES



Universal Jaw Aluminium

UB6000-B



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector customiz able Straight - Connector M8

S8-G-3



Plug-in connector customiz-able Straight - Connector M12

S12-G-3

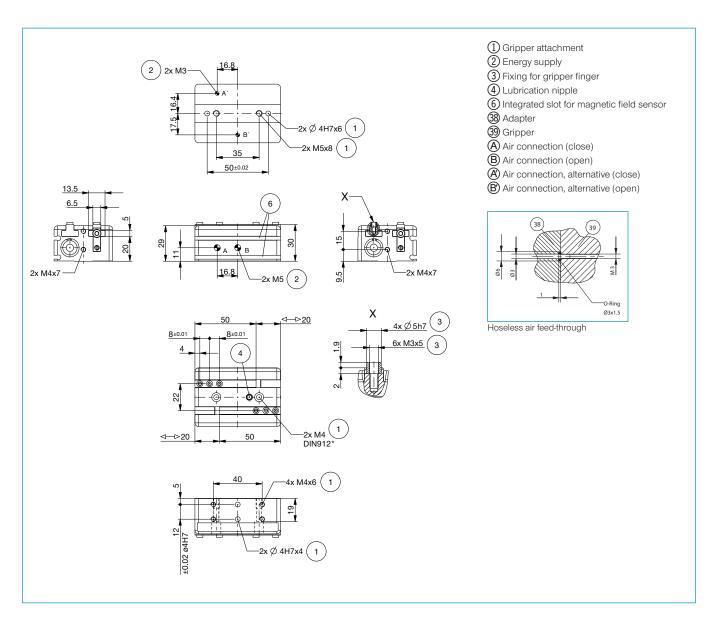


Pressure Safety Valve

DSV1-8

	► Technical Data*
Order no.	GH6020-B
Stroke per jaw [mm]	20
Gripping force in closing [N]	150
Gripping force in opening [N]	120
Closing time [s]	0.1
Opening time [s]	0.1
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	12
Weight [kg]	0.3

^{*}All data measured at 6 bar

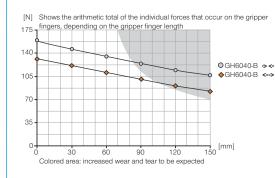


INSTALLATION SIZE GH6040

> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	35
Mx [Nm]	35
My [Nm]	35
Fa [N]	500

► INCLUDED IN DELIVERY



Mounting block

KB6.5-04



Centering Disc

DST40400



Flow Control Valves - with Swivel joint

DRVM5X4

RECOMMENDED ACCESSORIES



Universal Jaw Aluminium



Inductive proximity switch - Cable 5 m

NJ6.5-E2-01



Inductive proximity switch - Connector M8

NJ6.5-E2S



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC

UB6000-B



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Ca-ble 5m - Socket M8 (female)

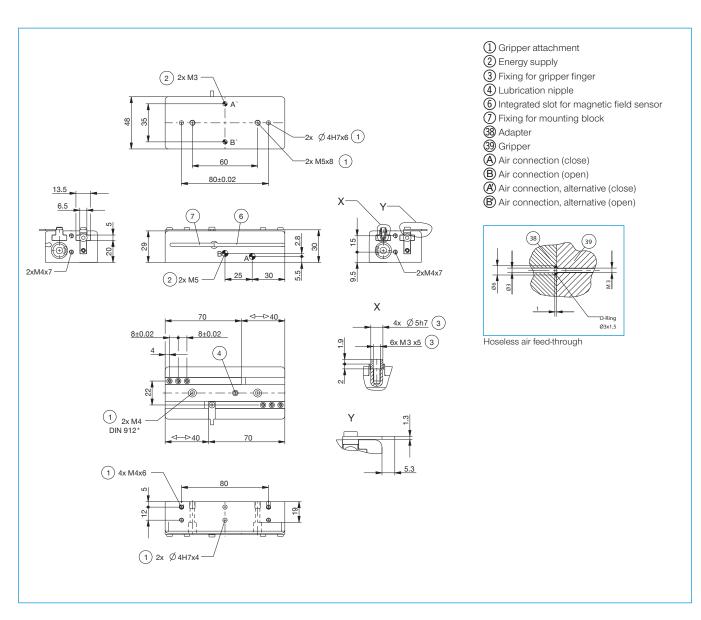
KAW500



Pressure Safety Valve

	► Technical Data*
Order no.	GH6040-B
Stroke per jaw [mm]	40
Gripping force in closing [N]	155
Gripping force in opening [N]	130
Closing time [s]	0.2
Opening time [s]	0.2
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	20
Weight [kg]	0.47

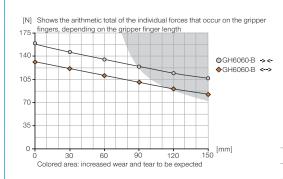
^{*}All data measured at 6 bar



> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	50
Mx [Nm]	50
My [Nm]	50
Fa [N]	500

► INCLUDED IN DELIVERY



Mounting block

KB6.5-04



Centering Disc

DST40400



Flow Control Valves - with Swivel joint

DRVM5X4

RECOMMENDED ACCESSORIES



Universal Jaw Aluminium

UB6000-B



Inductive proximity switch - Cable 5 m

NJ6.5-E2-01



Inductive proximity switch - Connector M8

NJ6.5-E2S



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Ca-ble 5m - Socket M8 (female)

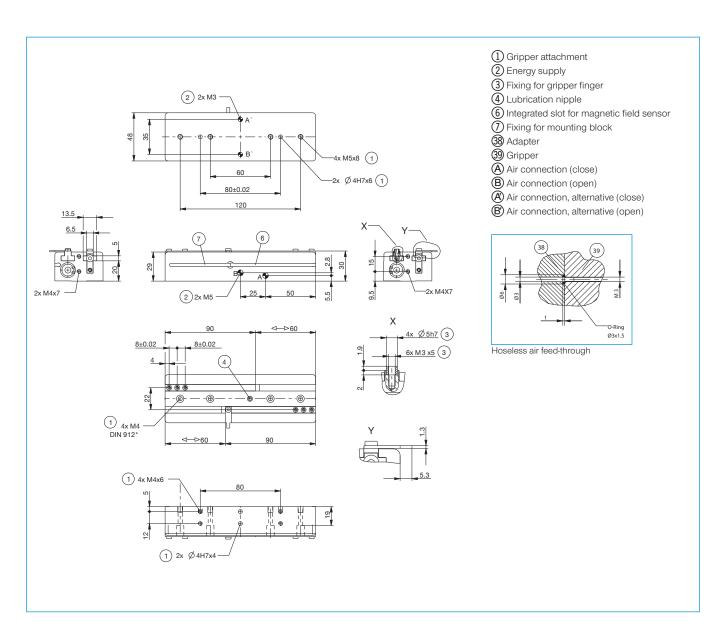
KAW500



Pressure Safety Valve

	► Technical Data*
Order no.	GH6060-B
Stroke per jaw [mm]	60
Gripping force in closing [N]	155
Gripping force in opening [N]	130
Closing time [s]	0.25
Opening time [s]	0.25
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	30
Weight [kg]	0.6

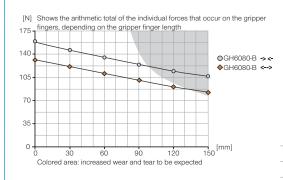
^{*}All data measured at 6 bar



> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	65
Mx [Nm]	65
My [Nm]	65
Fa [N]	500

► INCLUDED IN DELIVERY



Mounting block

KB6.5-04



Centering Disc

DST40400



Flow Control Valves - with Swivel joint

DRVM5X4

RECOMMENDED ACCESSORIES



Universal Jaw Aluminium



Inductive proximity switch - Cable 5 m



NJ6.5-E2-01 NJ6.5-E2S



Inductive proximity switch - Connector M8



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC

UB6000-B



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Ca-ble 5m - Socket M8 (female)

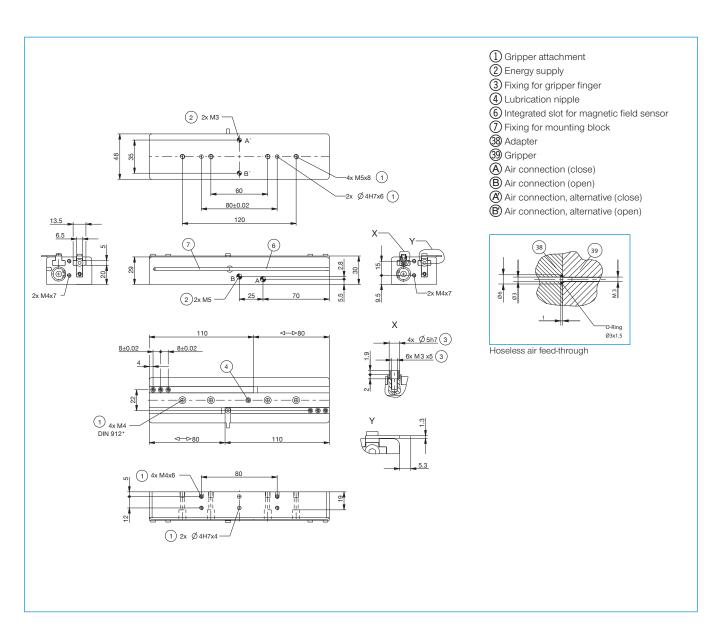
KAW500



Pressure Safety Valve

	► Technical Data*
Order no.	GH6080-B
Stroke per jaw [mm]	80
Gripping force in closing [N]	155
Gripping force in opening [N]	130
Closing time [s]	0.3
Opening time [s]	0.3
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	40
Weight [kg]	0.75

^{*}All data measured at 6 bar

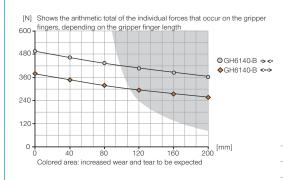


INSTALLATION SIZE GH6140

> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	70
Mx [Nm]	100
My [Nm]	60
Fa [N]	1500

► INCLUDED IN DELIVERY



KB8-27



Centering Disc

DST60800



Flow Control Valves - with Swivel joint

DRV1-8X8

RECOMMENDED ACCESSORIES







bracket

KHA6140-B-8



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)

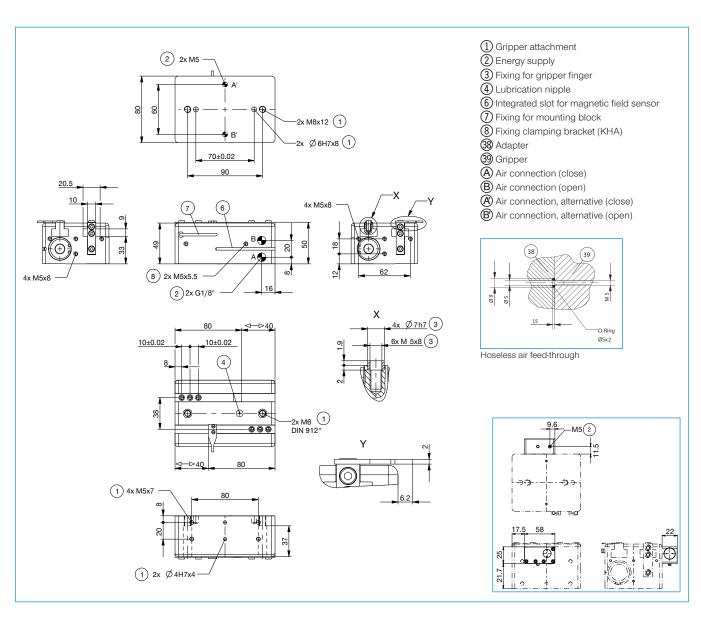
KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

	Technical Data*	
Order no.	GH6140-B	GHK6140
Stroke per jaw [mm]	40	40
Gripping force in closing [N]	490	490
Gripping force in opening [N]	370	370
Retention force in case of drop in pressure [N]		300
Closing time [s]	0.25	0.25
Opening time [s]	0.25	0.25
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	3
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	73	73
Weight [kg]	1.5	1.7

*All data measured at 6 bar GHK series, see page 221

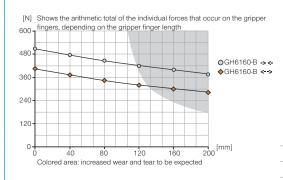


INSTALLATION SIZE GH6160

> PRODUCT SPECIFICATIONS



Gripping force diagram



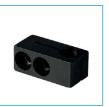
Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	85
Mx [Nm]	120
My [Nm]	75
Fa [N]	1500

► INCLUDED IN DELIVERY



Mounting block

KB8-27



Centering Disc

DST60800



Flow Control Valves - with Swivel joint

DRV1-8X8

RECOMMENDED ACCESSORIES



UB6100-B



Alternate proximity bracket

KHA6160-B-8



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)

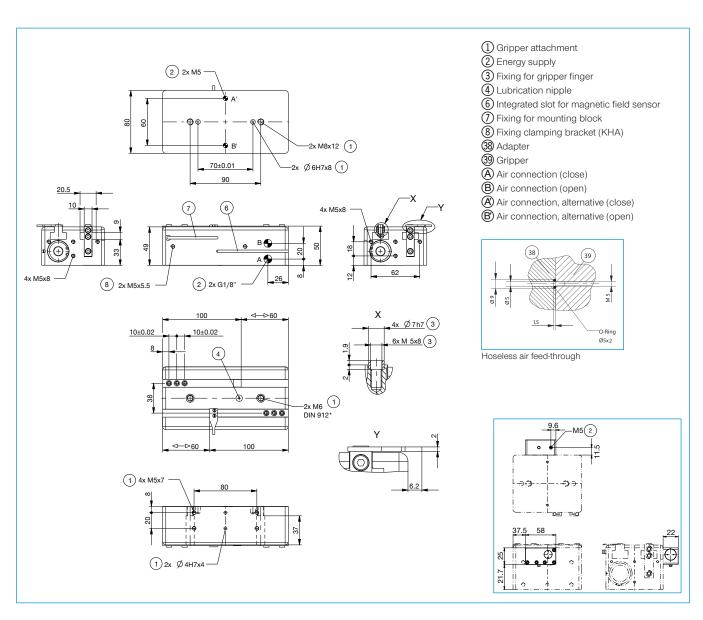
KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

	Technical Data*	
Order no.	GH6160-B	GHK6160
Stroke per jaw [mm]	60	60
Gripping force in closing [N]	510	510
Gripping force in opening [N]	400	400
Retention force in case of drop in pressure [N]		300
Closing time [s]	0.3	0.3
Opening time [s]	0.3	0.3
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	3
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	109	109
Weight [kg]	1.9	2.1

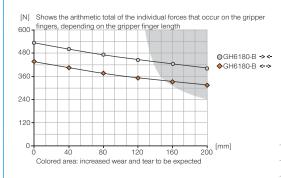
*All data measured at 6 bar GHK series, see page 221



> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	120
Mx [Nm]	140
My [Nm]	90
Fa [N]	1500

► INCLUDED IN DELIVERY



Mounting block

KB8-27



Centering Disc

DST60800



Flow Control Valves - with Swivel joint

DRV1-8X8

RECOMMENDED ACCESSORIES



Universal Jaw Aluminium

UB6100-B



Alternate proximity bracket

KHA6180-B-8



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight

MFS204SKHC



ble 5m - Socket M8 (female)

KAG500

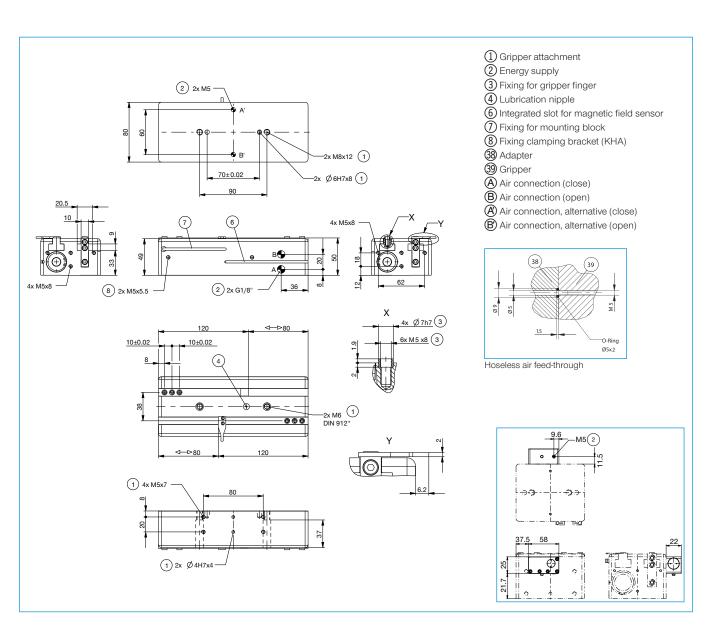


Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500

	Technical Data*	
Order no.	GH6180-B	GHK6180
Stroke per jaw [mm]	80	80
Gripping force in closing [N]	530	530
Gripping force in opening [N]	430	430
Retention force in case of drop in pressure [N]		300
Closing time [s]	0.35	0.35
Opening time [s]	0.35	0.35
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	3
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	145	145
Weight [kg]	2.2	2.4

*All data measured at 6 bar GHK series, see page 221

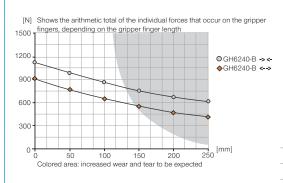


INSTALLATION SIZE GH6240

> PRODUCT SPECIFICATIONS



Gripping force diagram



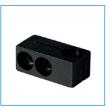
Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	100
Mx [Nm]	125
My [Nm]	80
Fa [N]	3000

► INCLUDED IN DELIVERY



Mounting block

KB8-28



Centering Disc

DST41000



Flow Control Valves - with Swivel joint

DRV1-8X8

RECOMMENDED ACCESSORIES









Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Alternate proximity bracket

KHA6240-B-8



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)

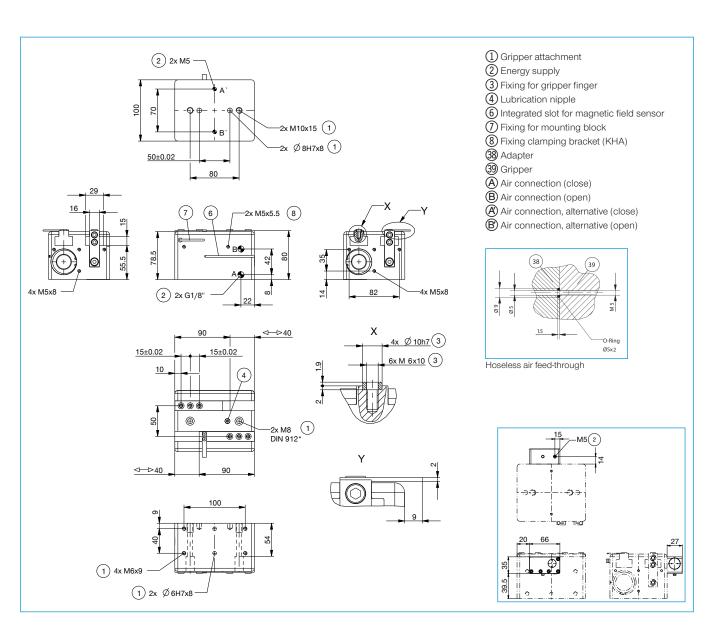
KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

	Technical Data*	
Order no.	GH6240-B	GHK6240
Stroke per jaw [mm]	40	40
Gripping force in closing [N]	1120	1120
Gripping force in opening [N]	900	900
Retention force in case of drop in pressure [N]		640
Closing time [s]	0.3	0.3
Opening time [s]	0.3	0.3
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	3
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	183	183
Weight [kg]	3.3	3.8

*All data measured at 6 bar GHK series, see page 221

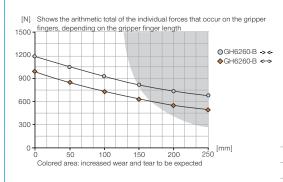


INSTALLATION SIZE GH6260

> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	120
Mx [Nm]	150
My [Nm]	180
Fa [N]	3000

► INCLUDED IN DELIVERY



Mounting block

KB8-28



Centering Disc

DST41000



Flow Control Valves - with Swivel joint

DRV1-8X8

RECOMMENDED ACCESSORIES



Universal Jaw Aluminium

UB6200-B



Alternate proximity bracket

KHA6260-B-8



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)

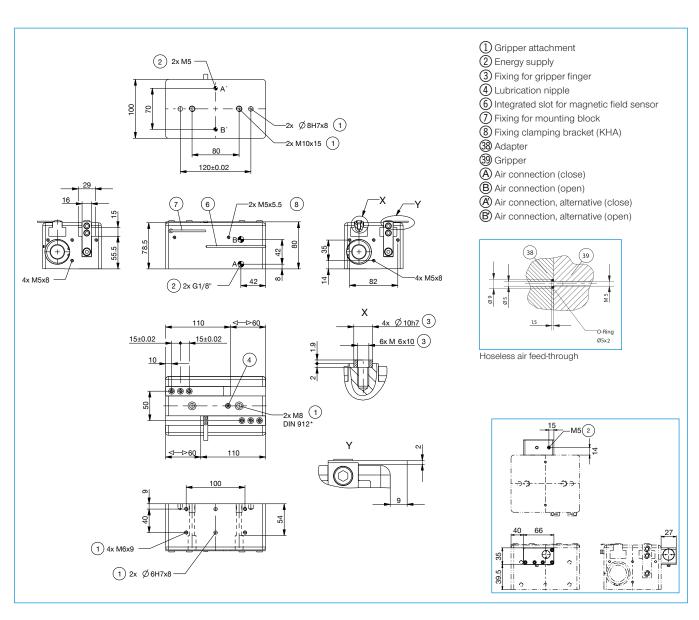
KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

	► Technical Data*	
Order no.	GH6260-B	GHK6260
Stroke per jaw [mm]	60	60
Gripping force in closing [N]	1200	1200
Gripping force in opening [N]	980	980
Retention force in case of drop in pressure [N]		640
Closing time [s]	0.35	0.35
Opening time [s]	0.35	0.35
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	3
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	275	275
Weight [kg]	4.1	4.6

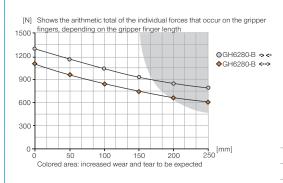
*All data measured at 6 bar GHK series, see page 221



> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	140
Mx [Nm]	175
My [Nm]	120
Fa [N]	3000

► INCLUDED IN DELIVERY



Mounting block

KB8-28



Centering Disc

DST41000



Flow Control Valves - with Swivel joint

DRV1-8X8

RECOMMENDED ACCESSORIES



Universal Jaw Aluminium

UB6200-B



Alternate proximity bracket

KHA6280-B-8



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)

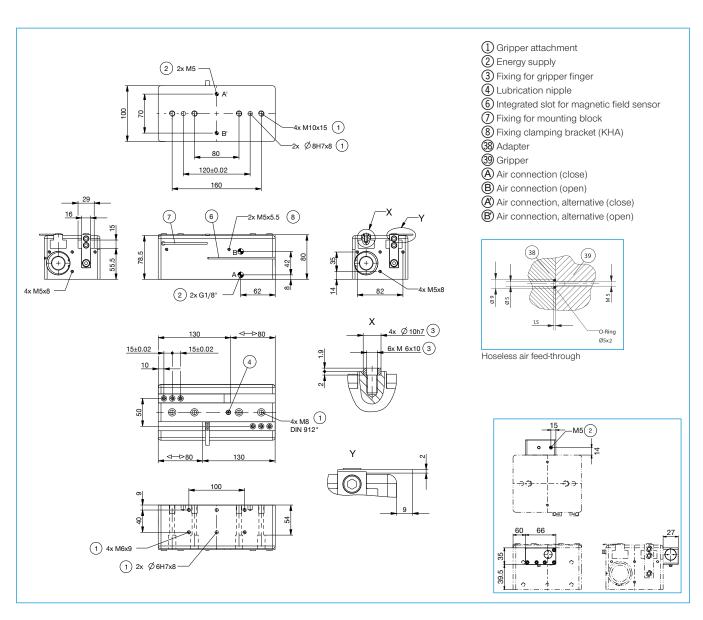
KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

	Technical Data*	
Order no.	GH6280-B	GHK6280
Stroke per jaw [mm]	80	80
Gripping force in closing [N]	1280	1280
Gripping force in opening [N]	1100	1100
Retention force in case of drop in pressure [N]		640
Closing time [s]	0.4	0.4
Opening time [s]	0.4	0.4
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	3
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	367	367
Weight [kg]	4.8	5.3

*All data measured at 6 bar GHK series, see page 221



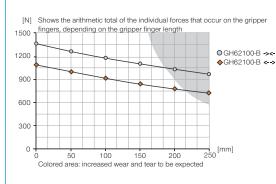
pneumatic 2-Jaw Parallel Grippers with Long Stroke / Installation size GH62100 /

2-JAW PARALLEL GRIPPERS WITH LONG STROKE **INSTALLATION SIZE GH62100**

> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	160
Mx [Nm]	200
My [Nm]	140
Fa [N]	3000

► INCLUDED IN DELIVERY



Mounting block

KB8-28



Centering Disc

DST41000



Flow Control Valves - with Swivel joint

DRV1-8X8

RECOMMENDED ACCESSORIES



Universal Jaw Aluminium

UB6200-B



Alternate proximity bracket

KHA62100-B-8



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500

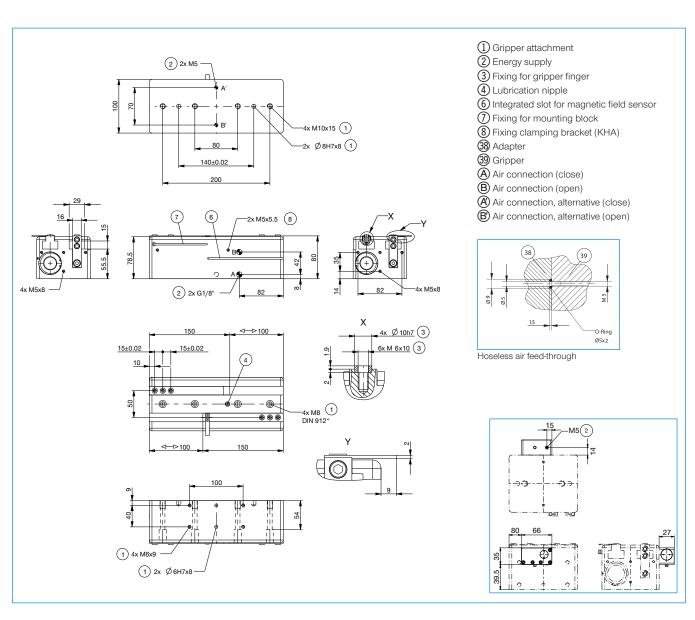


Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500

	► Technical Data*	
Order no.	GH62100-B	GHK62100
Stroke per jaw [mm]	100	100
Gripping force in closing [N]	1350	1350
Gripping force in opening [N]	1100	1100
Retention force in case of drop in pressure [N]		640
Closing time [s]	0.45	0.45
Opening time [s]	0.45	0.45
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	3
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	458	458
Weight [kg]	5.6	6.1

*All data measured at 6 bar GHK series, see page 221

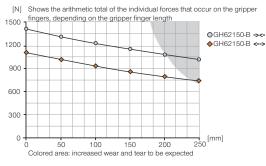


INSTALLATION SIZE GH62150

> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	180
Mx [Nm]	225
My [Nm]	160
Fa [N]	3000

► INCLUDED IN DELIVERY



KB8-28



Centering Disc

DST41000



Flow Control Valves - with Swivel joint

DRV1-8X8

RECOMMENDED ACCESSORIES









Cable 0,3 m - Connector M8

MFS103SKHC



Alternate proximity bracket

KHA62150-B-8



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled

Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)

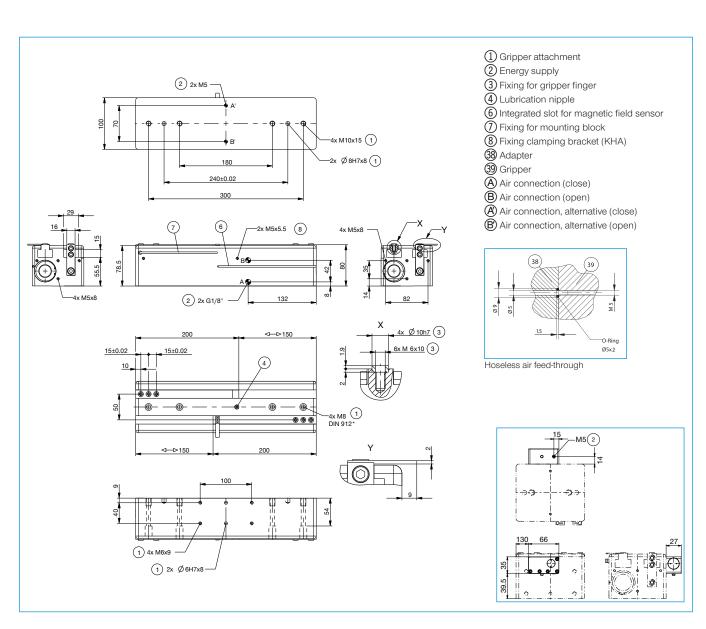
KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

	Technical Data*	
Order no.	GH62150-B	GHK62150
Stroke per jaw [mm]	150	150
Gripping force in closing [N]	1400	1400
Gripping force in opening [N]	1100	1100
Retention force in case of drop in pressure [N]		640
Closing time [s]	0.5	0.5
Opening time [s]	0.5	0.5
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	3
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	687	687
Weight [kg]	7.5	8

*All data measured at 6 bar GHK series, see page 221

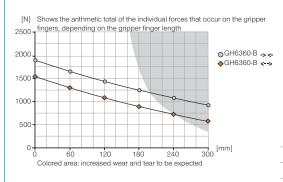


INSTALLATION SIZE GH6360

> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



160
190
130
3800

► INCLUDED IN DELIVERY



KB8-28



Centering Disc

DST41600



Flow Control Valves - with Swivel joint

DRV1-4X8

RECOMMENDED ACCESSORIES



Alternate proximity bracket

KHA6360-B-8



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Angled Ca-ble 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

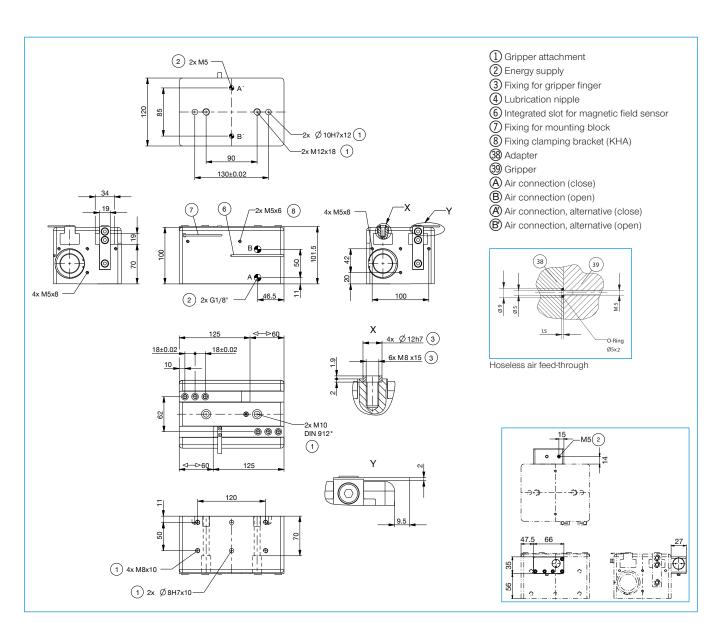
KAG500



Pressure Safety Valve

	Technical Data*	
Order no.	GH6360-B	GHK6360
Stroke per jaw [mm]	60	60
Gripping force in closing [N]	1840	1840
Gripping force in opening [N]	1520	1520
Retention force in case of drop in pressure [N]		640
Closing time [s]	0.4	0.4
Opening time [s]	0.4	0.4
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	3
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	486	486
Weight [kg]	7	7.5

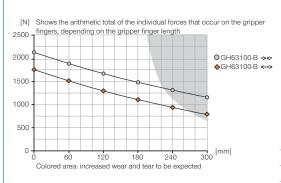
*All data measured at 6 bar GHK series, see page 221



> PRODUCT SPECIFICATIONS



Gripping force diagram



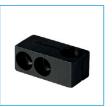
Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	220
Mx [Nm]	260
My [Nm]	180
Fa [N]	3800

► INCLUDED IN DELIVERY



Mounting block

KB8-28



Centering Disc

DST41600



Flow Control Valves - with Swivel joint

DRV1-4X8

RECOMMENDED ACCESSORIES



Alternate proximity bracket

KHA63100-B-8



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Ca-ble 5m - Socket M8 (female)

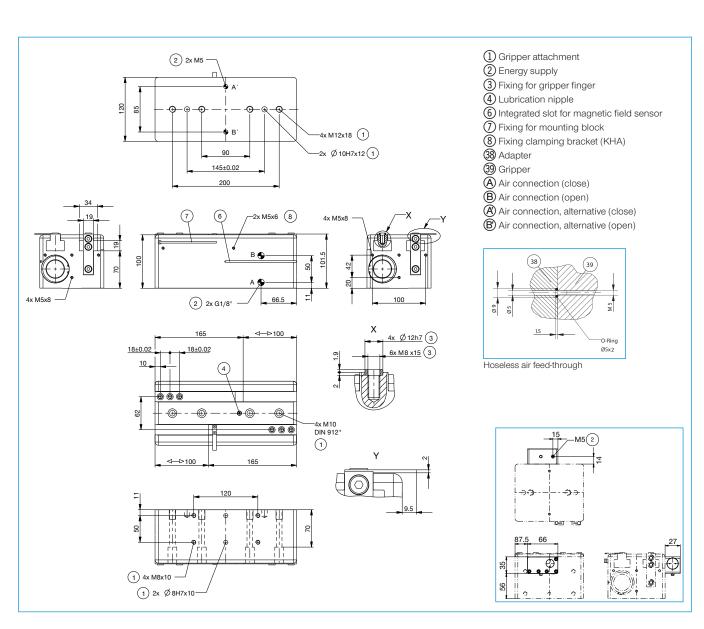
KAW500



Pressure Safety Valve

	► Technical Data*	
Order no.	GH63100-B	GHK63100
Stroke per jaw [mm]	100	100
Gripping force in closing [N]	2100	2100
Gripping force in opening [N]	1700	1700
Retention force in case of drop in pressure [N]		640
Closing time [s]	0.65	0.65
Opening time [s]	0.65	0.65
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	3
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	809	809
Weight [kg]	9.1	9.6

*All data measured at 6 bar GHK series, see page 221

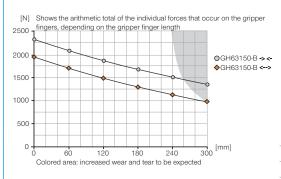


INSTALLATION SIZE GH63150

> PRODUCT SPECIFICATIONS



Gripping force diagram



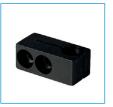
Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	250
Mx [Nm]	290
My [Nm]	220
Fa [N]	3800

► INCLUDED IN DELIVERY



Mounting block

KB8-28



Centering Disc

DST41600



Flow Control Valves - with Swivel joint

DRV1-4X8

RECOMMENDED ACCESSORIES



Alternate proximity bracket

KHA63150-B-8



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Ca-ble 5m - Socket M8 (female)

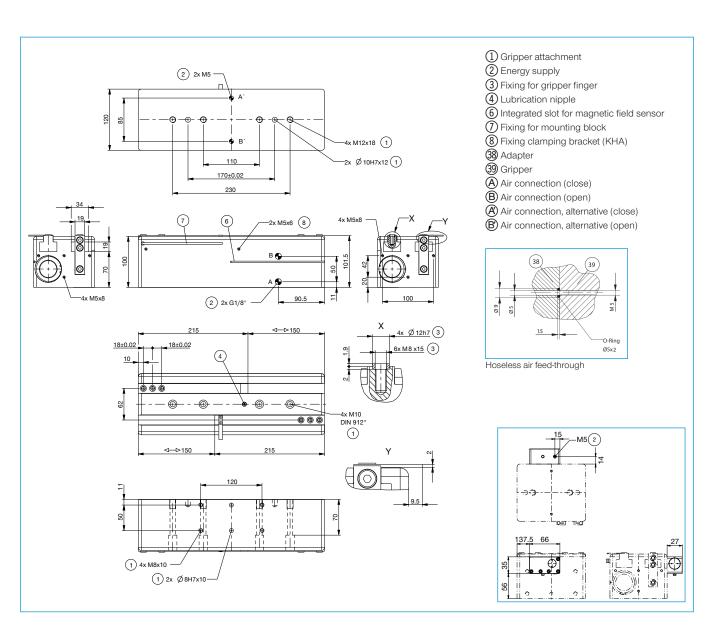
KAW500



Pressure Safety Valve

	► Technical Data*	
Order no.	GH63150-B	GHK63150
Stroke per jaw [mm]	150	150
Gripping force in closing [N]	2270	2270
Gripping force in opening [N]	1900	1900
Retention force in case of drop in pressure [N]		640
Closing time [s]	0.95	0.95
Opening time [s]	0.95	0.95
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	3
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	1215	1215
Weight [kg]	10.5	11

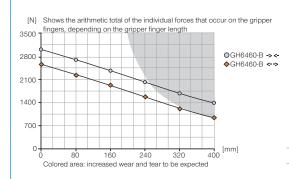
*All data measured at 6 bar GHK series, see page 221



> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	250
Mx [Nm]	300
My [Nm]	200
Fa [N]	9000

► INCLUDED IN DELIVERY



KB8-28



Centering Disc

DST42000



Flow Control Valves - with Swivel joint

DRV1-4X8

RECOMMENDED ACCESSORIES



Alternate proximity bracket

KHA6460-B-8



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Ca-ble 5m - Socket M8 (female)

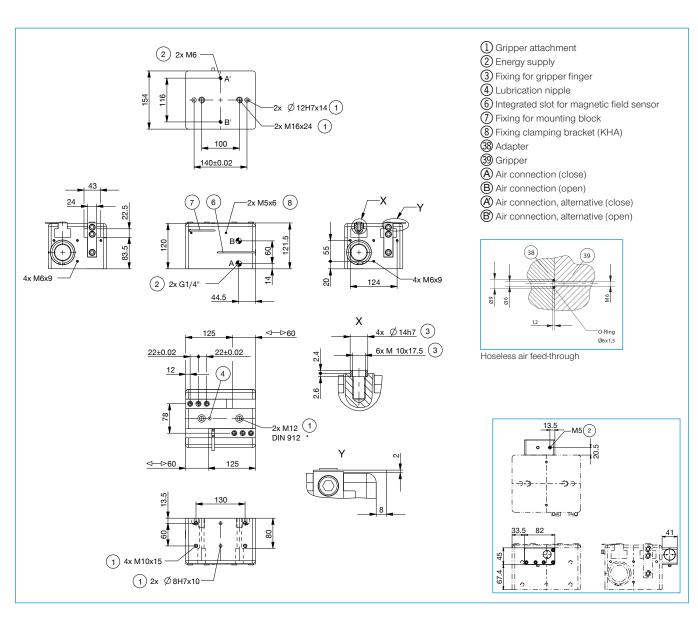
KAW500



Pressure Safety Valve

	► Technical Data*	
Order no.	GH6460-B	GHK6460
Stroke per jaw [mm]	60	60
Gripping force in closing [N]	3000	3000
Gripping force in opening [N]	2600	2600
Retention force in case of drop in pressure [N]		1050
Closing time [s]	0.4	0.4
Opening time [s]	0.4	0.4
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	3
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	710	710
Weight [kg]	10.4	11.5

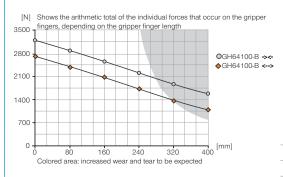
*All data measured at 6 bar GHK series, see page 221



> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



300
350
250
9000

► INCLUDED IN DELIVERY



KB8-28



Centering Disc

DST42000



Flow Control Valves - with Swivel joint

DRV1-4X8

> RECOMMENDED ACCESSORIES



Alternate proximity bracket

KHA64100-B-8



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Ca-ble 5m - Socket M8 (female)

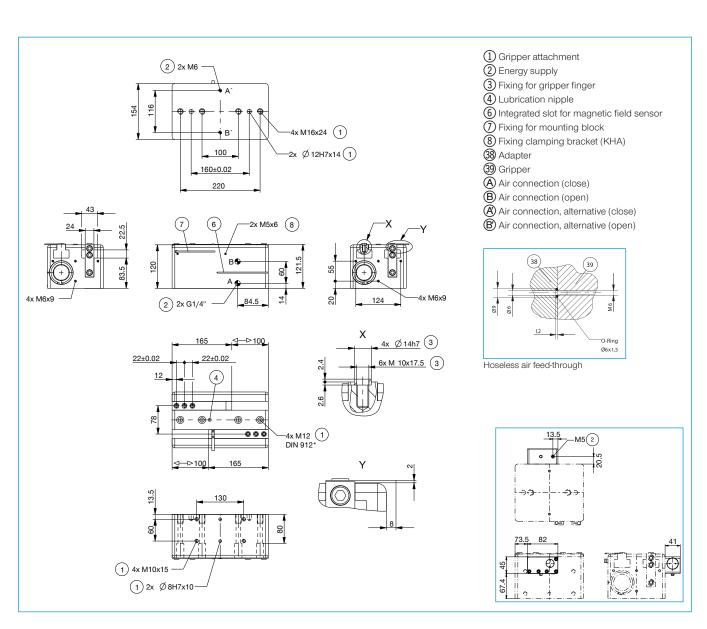
KAW500



Pressure Safety Valve

	► Technical Data*	
Order no.	GH64100-B	GHK64100
Stroke per jaw [mm]	100	100
Gripping force in closing [N]	3200	3200
Gripping force in opening [N]	2700	2700
Retention force in case of drop in pressure [N]		1050
Closing time [s]	0.7	0.7
Opening time [s]	0.7	0.7
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	3
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	1185	1185
Weight [kg]	13.7	14.8

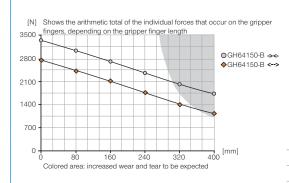
*All data measured at 6 bar GHK series, see page 221



> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	350
Mx [Nm]	400
My [Nm]	300
Fa [N]	9000

► INCLUDED IN DELIVERY



Mounting block

KB8-28



Centering Disc

DST42000



Flow Control Valves - with Swivel joint

DRV1-4X8

> RECOMMENDED ACCESSORIES



Alternate proximity bracket

KHA64150-B-8



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Ca-ble 5m - Socket M8 (female)

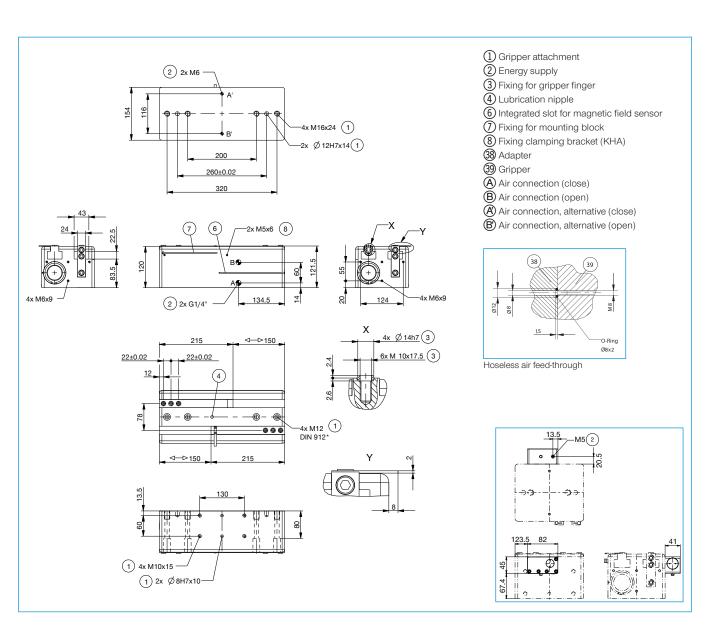
KAW500



Pressure Safety Valve

	Technical Data*	
Order no.	GH64150-B	GHK64150
Stroke per jaw [mm]	150	150
Gripping force in closing [N]	3300	3300
Gripping force in opening [N]	2780	2780
Retention force in case of drop in pressure [N]		1050
Closing time [s]	1	1
Opening time [s]	1	1
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	3
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	1775	1775
Weight [kg]	18.3	19.4

*All data measured at 6 bar GHK series, see page 221

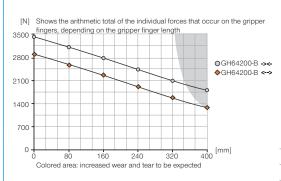


INSTALLATION SIZE GH64200

> PRODUCT SPECIFICATIONS



Gripping force diagram



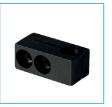
Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	400
Mx [Nm]	450
My [Nm]	350
Fa [N]	9000

► INCLUDED IN DELIVERY



Mounting block

KB8-28



Centering Disc

DST42000



Flow Control Valves - with Swivel joint

DRV1-4X8

> RECOMMENDED ACCESSORIES



Alternate proximity bracket

KHA64200-B-8



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Ca-ble 5m - Socket M8 (female)

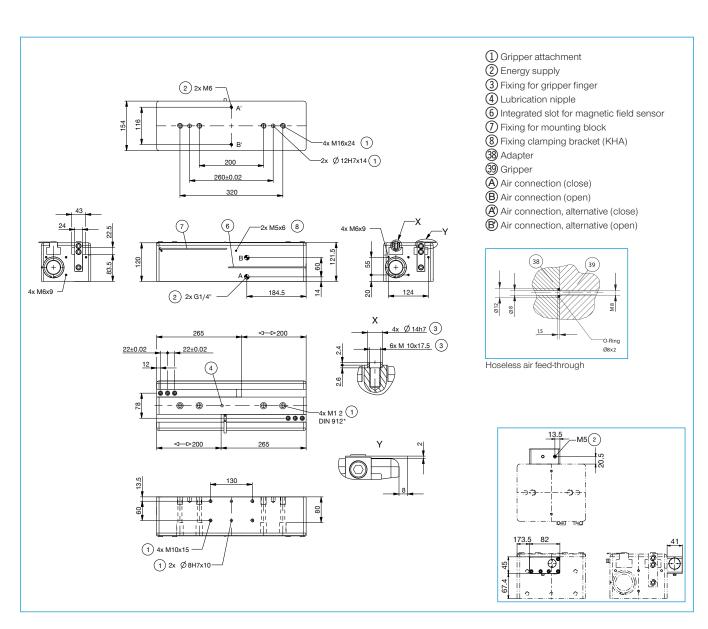
KAW500



Pressure Safety Valve

	► Technical Data*	
Order no.	GH64200-B	GHK64200
Stroke per jaw [mm]	200	200
Gripping force in closing [N]	3400	3400
Gripping force in opening [N]	2900	2900
Retention force in case of drop in pressure [N]		1050
Closing time [s]	1.5	1.5
Opening time [s]	1.5	1.5
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	3
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	2370	2370
Weight [kg]	22.7	23.8

*All data measured at 6 bar GHK series, see page 221



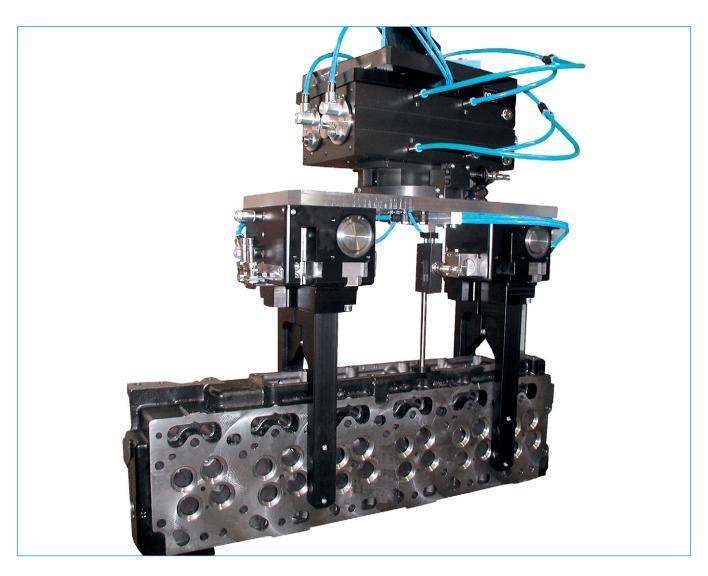
2-JAW PARALLEL GRIPPERS WITH LONG STROKE **SERIES GHK6000**

▶ PRODUCT ADVANTAGES

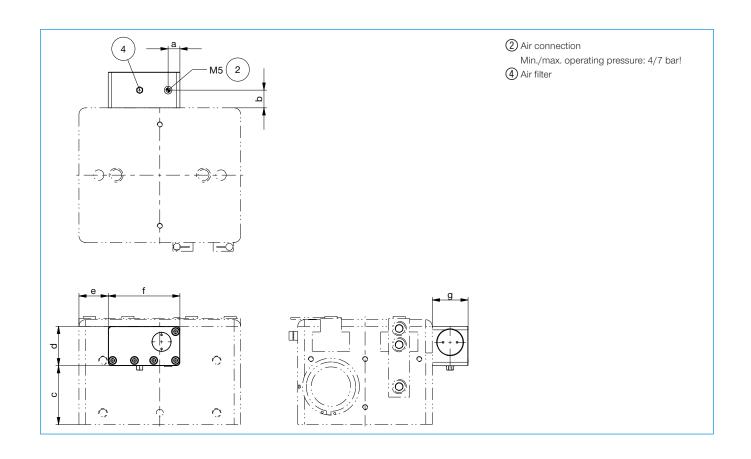


"The robust"

- Securing the workpiece in case of drop in pressure above clamping element on the condition of a positive gripper jaw design
- ▶ Dimensions based on GH6000 series standard grip-
- Long stroke, up to 200 mm per jaw
- ► Stable T-slot guide, guided completely along the entire length of the housing
- For gripper fingers with a length of up to 600 mm
- Compact design, through stacked cylinder and guide

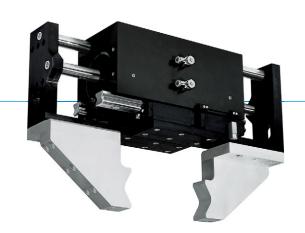


	► Technical Data							
	Retention force in case of drop in pressure	А	В	С	D	Е	F	G
Order no.	[N]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
GHK6140	300	9.6	11.5	21.7	25	17.5	58	22
GHK6160	300	9.6	11.5	21.7	25	37.5	58	22
GHK6180	300	9.6	11.5	21.7	25	37.5	58	22
GHK6240	640	15	14	39.5	35	20	66	27
GHK6260	640	15	14	39.5	35	40	66	27
GHK6280	640	15	14	39.5	35	60	66	27
GHK62100	640	15	14	39.5	35	80	66	27
GHK62150	640	15	14	39.5	35	130	66	27
GHK6360	640	15	14	56	35	47.5	66	27
GHK63100	640	15	14	56	35	87.5	66	27
GHK63150	640	15	14	56	35	137.5	66	27
GHK6460	1050	13.5	20.5	67.4	45	33.5	82	41
GHK64100	1050	13.5	20.5	67.4	45	73.5	82	41
GHK64150	1050	13.5	20.5	67.4	45	123.5	82	41
GHK64200	1050	13.5	20.5	67.4	45	173.5	82	41



2-JAW PARALLEL GRIPPERS WITH LONG STROKE **SERIES GH7000**

PRODUCT ADVANTAGES



"The strong"

High gripping force

The high gripping force allows you to handle the heaviest workpieces in your application reliably

► High moment load

The heavy-duty linear guide provides the highest possible durability for your application

► Failure-free continuous operation

Our uncompromising "Made in Germany" quality guarantees up to 10 million maintenance-free gripping cycles

THE BEST PRODUCT FOR YOUR APPLICATION

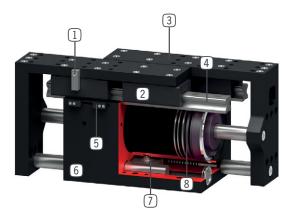


Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com



BENEFITS IN DETAIL



- 1 Switch cam
 - for position sensing

2 Carriage with wiper

- for use under extreme conditions
- (3) Gripper jaw
 - individual gripper finger mounting
- 4 Precise linear guide
 - ideal for highest transverse forces and loads
 - double secured against twisting
- 5 Mounting block adjustable
 - direct sensing of the gripper jaw position
- 6 Robust, lightweight housing
 - Hard-coated aluminum alloy
- 7 Synchronization
 - via rack and pinion
- 8 Drive
 - two double-acting pneumatic cylinders

> SERIES CHARACTERISTICS



mm - 100 mm
00 N - 8500 N
kg - 36 kg
(



10 million maintenance-free cycles (max.)



Inductive sensor



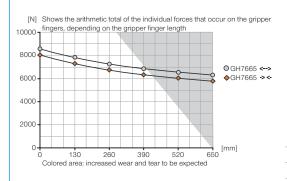
IP64

2-JAW PARALLEL GRIPPERS WITH LONG STROKE **INSTALLATION SIZE GH7665**

> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	2000
Mx [Nm]	2000
My [Nm]	1500
Fa [N]	4000

► INCLUDED IN DELIVERY



Mounting block

KB8-28



Flow Control Valves - with

DRV1-4X8

RECOMMENDED ACCESSORIES



Alternate proximity bracket

KHA7665-8



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector Angled Cable 5m - Socket M8

KAW500



Plug-in connector customiz-able Straight - Connector M8

S8-G-3



Plug-in connector customiz able Straight - Connector M12

S12-G-3

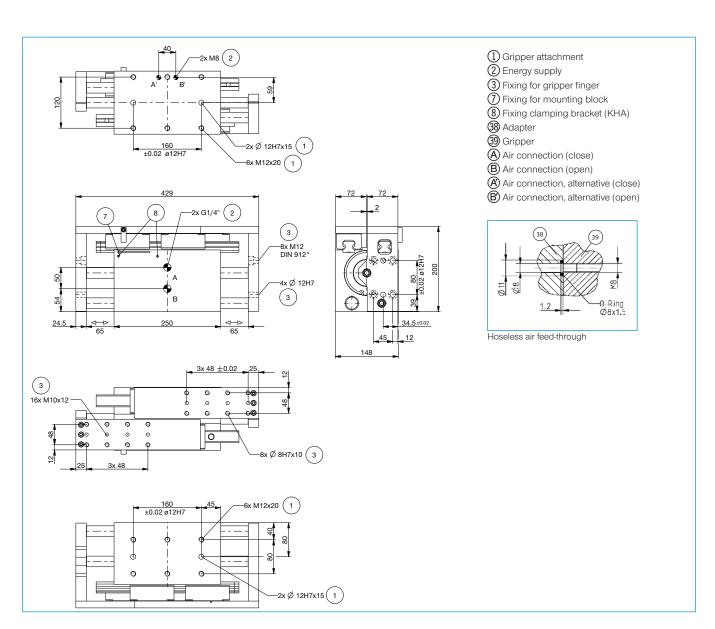


Pressure Safety Valve

DSV1-8

	► Technical Data*
Order no.	GH7665
Stroke per jaw [mm]	65
Gripping force in closing [N]	8000
Gripping force in opening [N]	8500
Closing time [s]	1.1
Opening time [s]	1.1
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	1985
Weight [kg]	31

^{*}All data measured at 6 bar

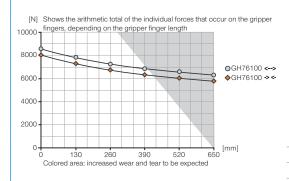


2-JAW PARALLEL GRIPPERS WITH LONG STROKE **INSTALLATION SIZE GH76100**

> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	2000
Mx [Nm]	2000
My [Nm]	1500
Fa [N]	4000

► INCLUDED IN DELIVERY



Mounting block

KB8-28



Flow Control Valves - with

DRV1-4X8

RECOMMENDED ACCESSORIES



Alternate proximity bracket

KHA76100-8



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector Angled Cable 5m - Socket M8

KAW500



Plug-in connector customiz-able Straight - Connector M8

S8-G-3



Plug-in connector customiz able Straight - Connector M12

S12-G-3

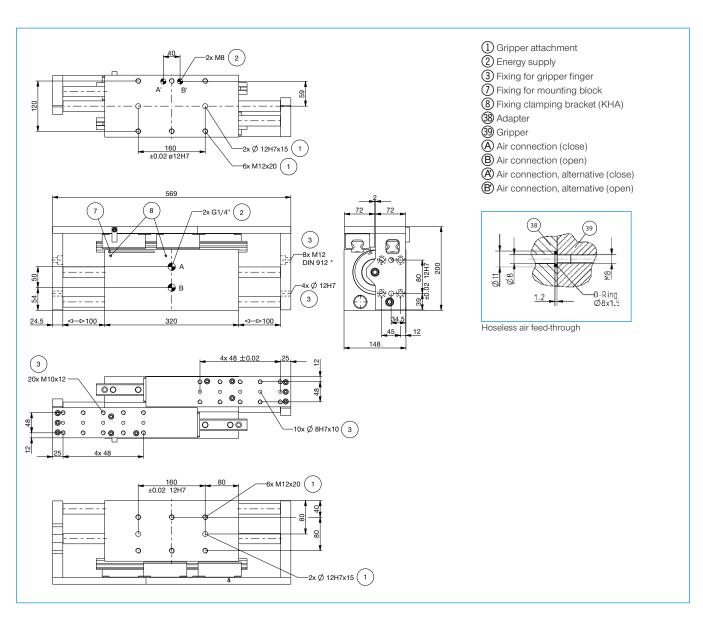


Pressure Safety Valve

DSV1-8

	► Technical Data*
Order no.	GH76100
Stroke per jaw [mm]	100
Gripping force in closing [N]	8000
Gripping force in opening [N]	8500
Closing time [s]	1.5
Opening time [s]	1.5
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	3040
Weight [kg]	36

^{*}All data measured at 6 bar



2-JAW PARALLEL GRIPPERS WITH LONG STROKE **OVERVIEW OF SERIES**



ELECTRICAL Series GEH6000IL 230 240 Series GEH8000

2-JAW PARALLEL GRIPPERS **SERIES GEH6000IL**

PRODUCT ADVANTAGES



"Highest performance"

- ▶ 5 million maintenance-free cycles
- Integrated sensing via IO-Link
- Self locking mechanism
- ► The highest power density on the market

A superior proportion of gripping force to mass, volume and price enables you to have the maximum level of process reliability and cost optimization in the smallest amount of space

Servo drive with integrated controller

Brushless drive technology, position, speed and force control in combination with a self locking mechanism guarantee the highest amount of functionality

IO-Link on board

In addition to the unshielded single-cable solution, the future-proof, hot-pluggable activation provides you with a wide variety of travel profiles for easy implementation into your control system

▶ THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com

HOW TO ORDER **CORRECTLY**

The product order numbers are arranged according to this diagram:

Order no.	GEH6060		-	-A
IO-Link control		IL		
Positionable			03	



BENEFITS IN DETAIL



1 Precise T-Slot guide

- high forces and moments capacity

2 Drive

- Brushless DC servomotor

3 Rack and pinion gear

- synchronized the movement of the gripper jaws
- high force transfer

4 Robust, lightweight housing

- Hard-coated aluminum alloy

5 Helical gear - worm gear

- self locking mechanism in case of power drop

6 Removable centering sleeves

- quick and economical positioning of the gripper fingers

7 Mounting and positioning

- mounting possible from several sides for versatile positioning

8 Energy supply

- standardized connector

> SERIES CHARACTERISTICS



Number of installation sizes	2
Stroke per jaw, adjustable	up to 80 mm
Gripping force, adjustable	60 N - 2400 N
Weight	0,76 kg - 2,6 kg
AP class	3



5 million maintenance-free cycles (max.)



Integrated sensing



IP40 / IP54



Self locking mechanism

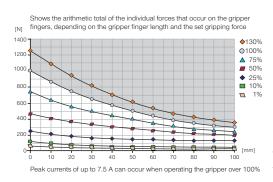
2-JAW PARALLEL GRIPPERS **INSTALLATION SIZE GEH6060IL**

> PRODUCT SPECIFICATIONS





Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	35
Mx [Nm]	35
My [Nm]	35
Fa [N]	500

► INCLUDED IN DELIVERY



Centering Disc

DST40400

> RECOMMENDED ACCESSORIES



Universal Jaw Aluminium

UB6000-B



Plug-in connector straight 5m - plug / socket M12

KAG500IL



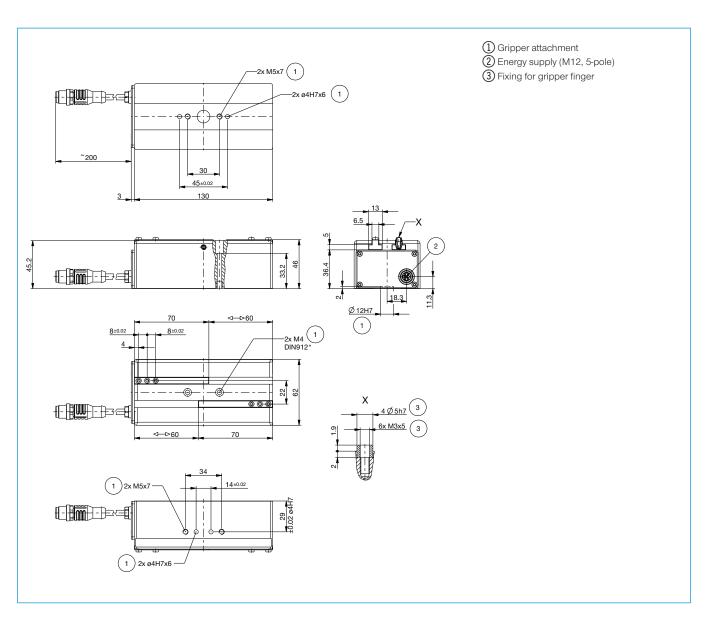
Y-Plug-in Connector

B12-Y-5IL

	► Technical Data
Order no.	GEH6060IL-03-A
Drive	BLDC motor
Stroke per jaw, adjustable [mm]	60
Nominal gripping force [N]*	1000
Gripping force min. [N]	60
Gripping force max. [N] * *	1250
Self locking mechanism	mechanical
Permissible weight per jaw max [kg]	0.3
Length of the gripper fingers max. [mm]	100
Max. movement speed per gripper finger [mm/s]	60
Repetition accuracy +/- [mm]	0.05
Operating temperature min. [°C]	+5
Operating temperature max. [°C]	+50
Protection to IEC 60529	IP40
Weight [kg]	0.9

^{*}Max. peak current ≤ 5 A

^{* *} Max. peak current ≤ 7.5 A

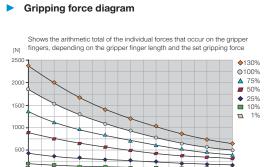


2-JAW PARALLEL GRIPPERS **INSTALLATION SIZE GEH6140IL**

> PRODUCT SPECIFICATIONS

IO-Link





Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	70
Mx [Nm]	80
My [Nm]	60
Fa [N]	1500

► INCLUDED IN DELIVERY



Centering Disc

DST70000

> RECOMMENDED ACCESSORIES



Universal Jaw Aluminium

UB6100-B



Plug-in connector straight 5m - plug / socket M12

KAG500IL



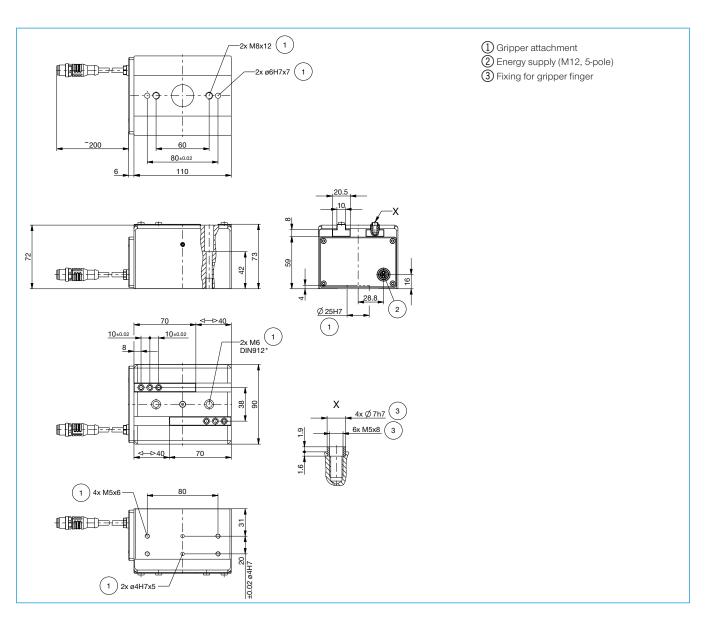
Y-Plug-in Connector

B12-Y-5IL

	► Technical Data
Order no.	GEH6140IL-03-A
Drive	BLDC motor
Stroke per jaw, adjustable [mm]	40
Nominal gripping force [N]*	1800
Gripping force min. [N]	100
Gripping force max. [N]**	2400
Self locking mechanism	mechanical
Permissible weight per jaw max [kg]	1
Length of the gripper fingers max. [mm]	160
Max. movement speed per gripper finger [mm/s]	50
Repetition accuracy +/- [mm]	0.05
Operating temperature min. [°C]	+5
Operating temperature max. [°C]	+50
Protection to IEC 60529	IP54
Weight [kg]	1.9

^{*}Max. peak current ≤ 5 A

^{* *}Max. peak current ≤ 7.5 A

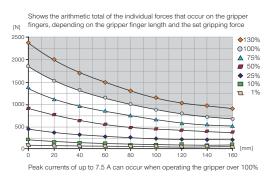


2-JAW PARALLEL GRIPPERS **INSTALLATION SIZE GEH6180IL**

> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	100
Mx [Nm]	140
My [Nm]	90
Fa [N]	1500

► INCLUDED IN DELIVERY



Centering Disc

DST70000

> RECOMMENDED ACCESSORIES



Universal Jaw Aluminium

UB6100-B



Plug-in connector straight 5m - plug / socket M12 KAG500IL



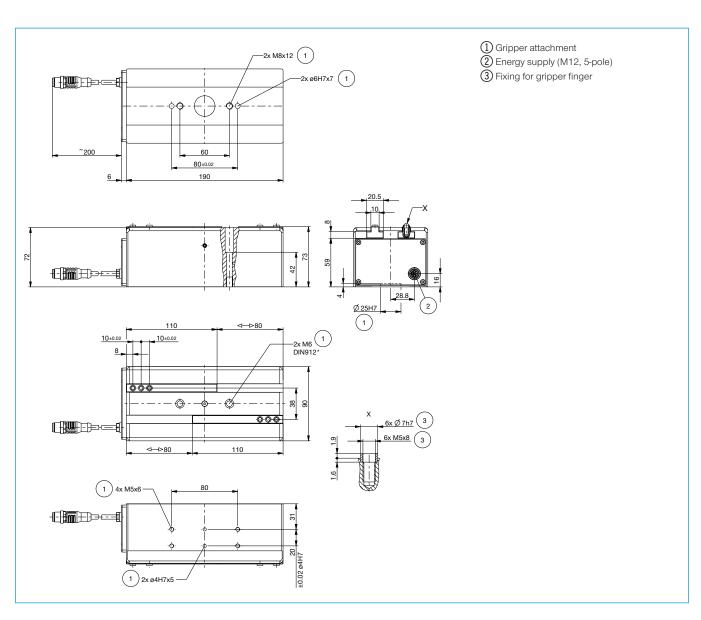
Y-Plug-in Connector

B12-Y-5IL

	► Technical Data
Order no.	GEH6180IL-03-A
Drive	BLDC motor
Stroke per jaw, adjustable [mm]	80
Nominal gripping force [N]*	1800
Gripping force min. [N]	100
Gripping force max. [N]**	2400
Self locking mechanism	mechanical
Permissible weight per jaw max [kg]	1
Length of the gripper fingers max. [mm]	160
Max. movement speed per gripper finger [mm/s]	50
Repetition accuracy +/- [mm]	0.05
Operating temperature min. [°C]	+5
Operating temperature max. [°C]	+50
Protection to IEC 60529	IP54
Weight [kg]	2.6

^{*}Max. peak current ≤ 5 A

^{* *}Max. peak current ≤ 7.5 A



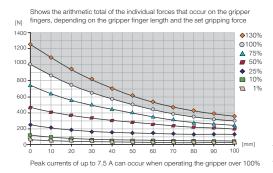
2-JAW PARALLEL GRIPPERS INSTALLATION SIZE GEH6040IL

▶ PRODUCT SPECIFICATIONS





Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	25
Mx [Nm]	25
My [Nm]	25
Fa [N]	500

► TECHNICAL DATA

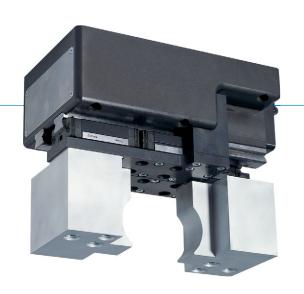
	► Technical Data
Order no.	GEH6040IL-03-A
Drive	BLDC motor
Stroke per jaw, adjustable [mm]	40
Nominal gripping force [N]*	1000
Gripping force min. [N]	60
Gripping force max. [N]**	1250
Self locking mechanism	mechanical
Permissible weight per jaw max [kg]	0.3
Length of the gripper fingers max. [mm]	100
Max. movement speed per gripper finger [mm/s]	60
Repetition accuracy +/- [mm]	0.05
Operating temperature min. [°C]	+5
Operating temperature max. [°C]	+50
Protection to IEC 60529	IP40
Weight [kg]	0.76

^{*}Max. peak current ≤ 5 A

^{* *} Max. peak current ≤ 7.5 A

2-JAW PARALLEL GRIPPERS WITH LONG STROKE **SERIES GEH8000**

PRODUCT ADVANTAGES



"The strong"

High gripping force

Using the high gripping force, you can safely handle even the heaviest workpieces

Servo drive

Position, speed and force control in combination with a mechanical self locking mechanism guarantee the highest functionality

Multibus

How you stay flexible: PROFIBUS, SERCOS III, PROF-INET IO, EtherNet/IP or EtherCat - You decide what harmonises best with your system

▶ THE BEST PRODUCT FOR YOUR APPLICATION

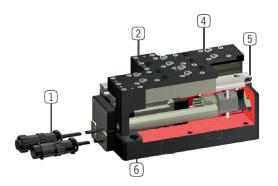


Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com



BENEFITS IN DETAIL



1 Energy supply

- motor cable, female
- encoder cable, male

2 Removable centering sleeves

- quick and economical positioning of the gripper fingers

(3) Drive

- AC servo motor

4 Gripper jaw

- hardened steel
- individual gripper finger mounting

5 Precise linear guide

- high forces and moments capacity
- guide wagon with wiper for harsh environments

6 Mounting and positioning

7 Robust, lightweight housing

- Hard-coated aluminum alloy

8 Synchronization

- via rack and pinion

> SERIES CHARACTERISTICS



Number of installation sizes	1
Stroke per jaw	max. 60mm
Holding force	max. 3200N
Weight	10kg
AP class	3



10 million maintenance-free cycles (max.)



Integrated sensing



IP54



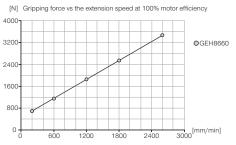
Self locking mechanism

2-JAW PARALLEL GRIPPERS WITH LONG STROKE **SERIES GEH8000**

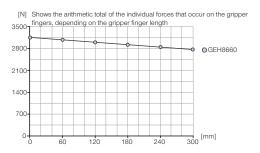
PRODUCT SPECIFICATIONS



Gripping force diagram



Gripping force diagram



INCLUDED IN DELIVERY





Commissioning USB

052650



Centering Disc

DST41600

Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr	220
Mx	220
My	950

RECOMMENDED ACCESSORIES



Indra Works Drive Start Up CD

ZUBHCSS



ZUBHCS



Drive control unit SER-COS III, PROFINET IO, EtherNet/IP, EtherCAT

ZUBHCSME



Programming cable

Power cable 5 m

ZUBHCSKAP01





Power cable 10 m

ZUBHCSKAL10



Power cable 25 m

ZUBHCSKAL25



Encoder cable 5 m

ZUBHCSKAG05



Encoder cable 10 m

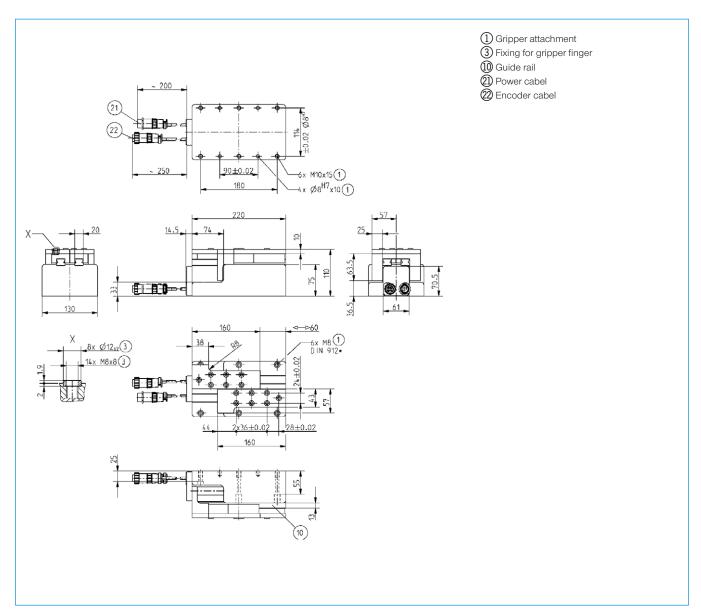
ZUBHCSKAG10



Encoder cable 25 m

ZUBHCSKAG25

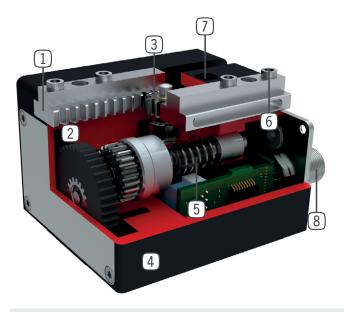
	► Technical Data	
Order no.	GEH8660	
Drive	AC-Servomotor	
Stroke per jaw [mm]	60	
Max. retention force (at 100% opening usage) [N]	3200	
Retention force min. [N]	200	
Self locking mechanism	gear rack / worm drive	
Power transfer	Rack / worm gear	
Closing time / Opening time at maximum stroke [s]	1.5	
Repetition accuracy +/- [mm]	0.05	
Operating temperature min. [°C]	5	
Operating temperature max. [°C]	+80	
Protection to IEC 60529	IP54	
Weight [kg]	10	
Ditte		
Drive		
Load gear output revolution	49	
Load gear input revolution	375	
Feed constant [mm/rev]	3.1415	



2-JAW PARALLEL GRIPPERS **SERIES GEH6000**

still available

BENEFITS IN DETAIL



1 Precise T-Slot guide

- high forces and moments capacity
- 2 Drive
 - DC-Motor with encoder
- 3 Rack and pinion gear
 - synchronized the movement of the gripper jaws
 - high force transfer
- 4 Robust, lightweight housing
 - Hard-coated aluminum alloy
- (5) Helical gear worm gear - self locking mechanism in case of power drop
- (6) Removable centering sleeves - quick and economical positioning of the gripper fingers
- (7) Mounting and positioning
 - mounting possible from several sides for versatile positioning
- 8 Energy supply
 - standardized connector

▶ TECHNICAL DATA*



Number of installation sizes	2
Stroke per jaw	30 mm - 80 mm
Holding force	1000 N - 2000 N
Weight	0,7 kg - 2,6 kg

► FOR NEW DESIGNS, USE THE SUCCESSOR SERIES, THE GEH6000IL



"Highest performance"

- 5 million maintenance-free cycles
- Integrated sensing via IO-Link
- Self locking mechanism
- The highest power density on the market

A superior proportion of gripping force to mass, volume and price enables you to have the maximum level of process reliability and cost optimization in the smallest amount of space

Servo drive with integrated controller

Brushless drive technology, position, speed and force control in combination with a self locking mechanism guarantee the highest amount of functionality

IO-Link on board

In addition to the unshielded single-cable solution, the future-proof, hot-pluggable activation provides you with a wide variety of travel profiles for easy implementation into your control system

^{*}further information is available online

3-JAW CONCENTRIC GRIPPERS OVERVIEW OF SERIES



► PNEUMATIC		
	Series MGD800	248
	Series GD	266
	Series GD300	274
	Series GPD5000	294

3-JAW CONCENTRIC GRIPPERS

SERIES MGD800

PRODUCT ADVANTAGES



"The superior"

Gripper jaws may be almost 100% longer in comparison to the benchmark

The highest force and torque measurement enables flexible for maximum dynamics

Best price/performance ratio

Reduces your investment costs and speeds the ROI for your application

► Failure-free continuous operation

Our uncompromising "Made in Germany" quality guarantees up to 10 million maintenance-free gripping cycles

> THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com

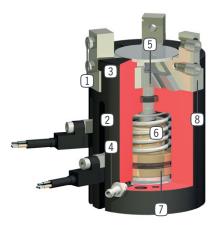
HOW TO ORDER CORRECTLY

The product order numbers are arranged according to this diagram:

Order no.	MGD803N		
For external gripping, self-locking, spring closing		С	



BENEFITS IN DETAIL



1 Removable centering sleeves

- quick and economical positioning of the gripper fingers

2 Sensing slot

- mounting and positioning of magnetic field sensors

3 Robust, lightweight housing

- Hard-coated aluminum alloy

4 Energy supply

- possible from several sides

5 Wedge hook mechanism

- synchronized the movement of the gripper jaws

6 Integrated gripping force safety device

spring integrated into cylinder as energy storage (from size 803 upwards)

7 Position sensing

- permanent magnet for direct monitoring of piston movement

8 Precise T-Slot guide

- high forces and moments capacity

> SERIES CHARACTERISTICS



Number of installation sizes	8
Stroke per jaw	1 mm - 12 mm
Gripping force	30 N - 1420 N
Weight	0,025 kg - 2 kg
AP class	2



10 million maintenance-free cycles (max.)



Spring closing C



IP40



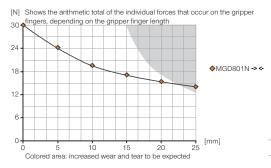
Magnetic field sensor

3-JAW CONCENTRIC GRIPPERS INSTALLATION SIZE MGD801

▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



2
2
4
58

► INCLUDED IN DELIVERY



Centering Disc

DST80200

> RECOMMENDED ACCESSORIES



Straight Fittings - Barb Style Connection GVM3



Angled Fittings - Barb Style Connection WVM3



Quick Exhaust Valve

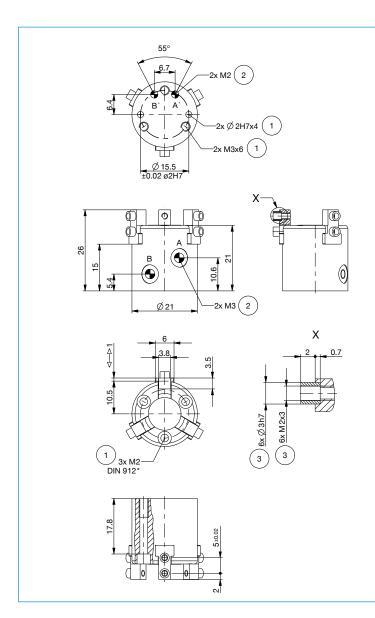
DEV04



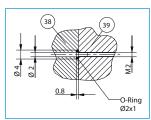
Pressure Safety Valve

	► Technical Data*
Order no.	MGD801N
Stroke per jaw [mm]	1
Gripping force in closing [N]	30
Gripping force in opening [N]	34
Closing time [s]	0.01
Opening time [s]	0.01
Repetition accuracy +/- [mm]	0.02
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	0.2
Weight [kg]	0.025

^{*}All data measured at 6 bar



- 1 Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 38 Adapter
- 39 Gripper
- Air connection (close)
- B Air connection (open)
 Air connection, alternative (close)
- Air connection, alternative (open)



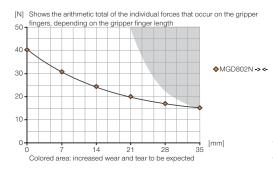
Hoseless air feed-through

3-JAW CONCENTRIC GRIPPERS INSTALLATION SIZE MGD802

▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	4
Mx [Nm]	4
My [Nm]	6
Fa [N]	100

► INCLUDED IN DELIVERY



Centering Disc

DST80200

> RECOMMENDED ACCESSORIES



Straight Fittings - Barb Style Connection GVM3



Angled Fittings - Barb Style Connection WVM3



Quick Exhaust Valve

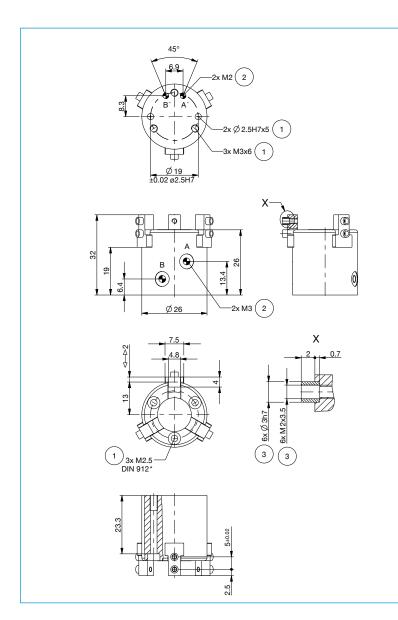


DEV04

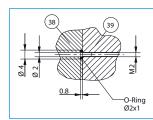
DSV1-8

	► Technical Data*
Order no.	MGD802N
Stroke per jaw [mm]	2
Gripping force in closing [N]	40
Gripping force in opening [N]	45
Closing time [s]	0.02
Opening time [s]	0.02
Repetition accuracy +/- [mm]	0.02
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	0.3
Weight [kg]	0.05

^{*}All data measured at 6 bar



- 1 Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 38 Adapter
- 39 Gripper
- Air connection (close)
- B Air connection (open)
 Air connection, alternative (close)
- (open)



Hoseless air feed-through

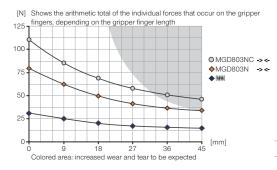
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE MGD803

▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	5
Mx [Nm]	5
My [Nm]	8
Fa [N]	155

► INCLUDED IN DELIVERY



Centering Disc

DST80320

> RECOMMENDED ACCESSORIES



Magnetic field sensor Angled Cable 0,3 m -MFS103SKHC

Magnetic field sensor

Straight Cable 0,3 m -

MFS204SKHC



Straight Fittings - Barb Style Connection

GVM3



Angled Fittings - Barb Style Connection

WVM3



Quick Exhaust Valve

DEV04

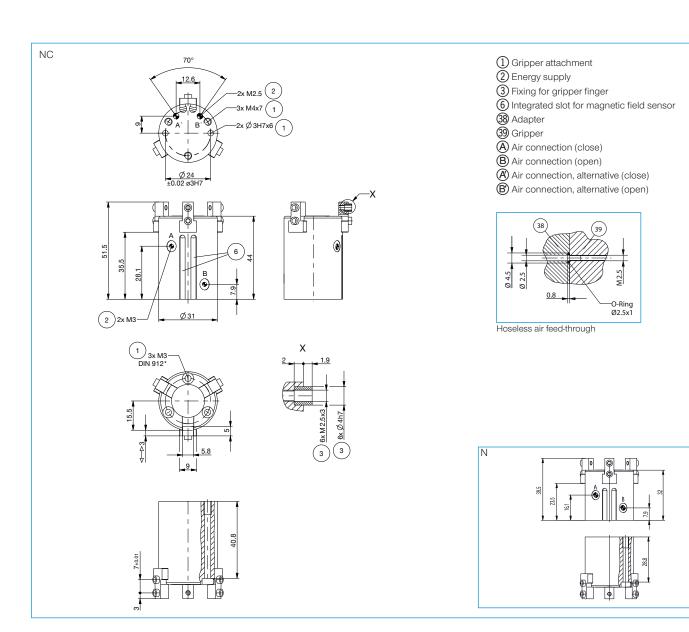


Pressure Safety Valve

DSV1-8

	► Technical Data*	
Order no.	MGD803N	MGD803NC
Stroke per jaw [mm]	3	3
Gripping force in closing [N]	78	110
Gripping force in opening [N]	87	
Gripping force secured by spring min. [N]		32
Closing time [s]	0.02	0.02
Opening time [s]	0.02	0.03
Repetition accuracy +/- [mm]	0.02	0.02
Operating pressure min. [bar]	3	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	1.5	2.4
Weight [kg]	0.08	0.115

^{*}All data measured at 6 bar



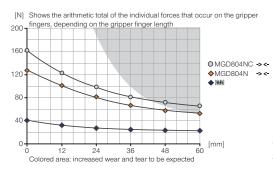
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE MGD804

▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	8
Mx [Nm]	8
My [Nm]	12
Fa [N]	250

► INCLUDED IN DELIVERY



Centering Disc

DST06510

> RECOMMENDED ACCESSORIES



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Straight Fittings - Barb Style Connection

GVM3



Angled Fittings - Barb Style Connection

WVM3



Quick Exhaust Valve

DEV04

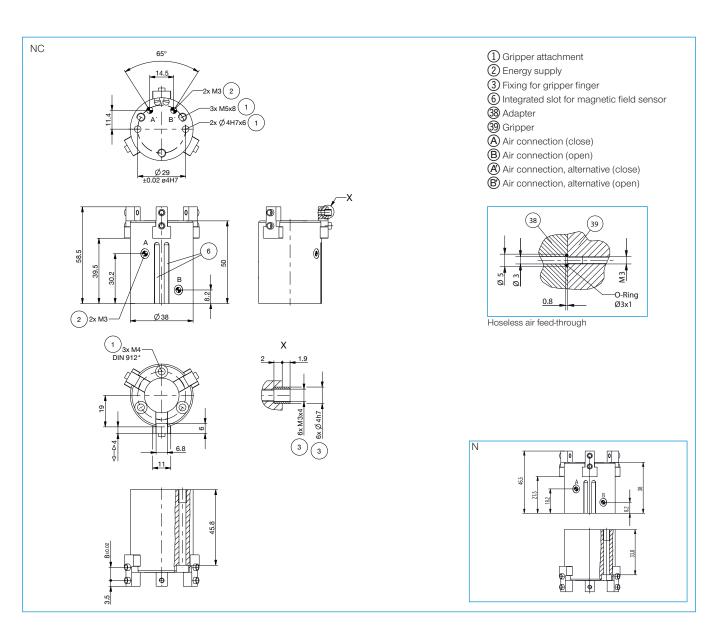


Pressure Safety Valve

DSV1-8

	► Technical Data*	
Order no.	MGD804N	MGD804NC
Stroke per jaw [mm]	4	4
Gripping force in closing [N]	125	160
Gripping force in opening [N]	140	
Gripping force secured by spring min. [N]		35
Closing time [s]	0.02	0.02
Opening time [s]	0.02	0.03
Repetition accuracy +/- [mm]	0.02	0.02
Operating pressure min. [bar]	3	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	2.9	4.5
Weight [kg]	0.14	0.18

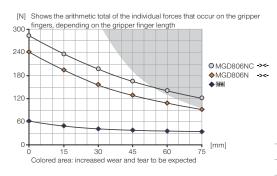
^{*}All data measured at 6 bar



▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



12
12
18
420

► INCLUDED IN DELIVERY



Centering Disc

DST40400

> RECOMMENDED ACCESSORIES



Magnetic field sensor Angled Cable 0,3 m -MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Straight Fittings - Quick Connect Style

GVM5



Quick Exhaust Valve

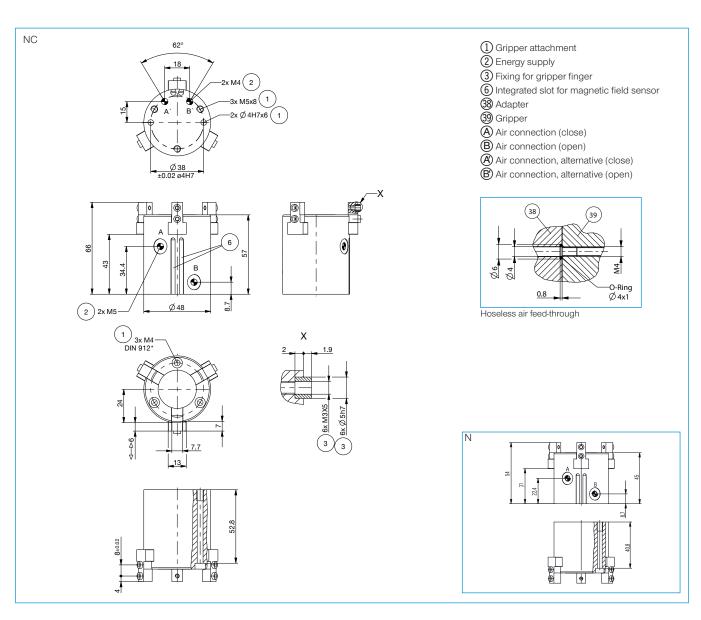
DEV04



Pressure Safety Valve

	► Technical Data*	
Order no.	MGD806N	MGD806NC
Stroke per jaw [mm]	6	6
Gripping force in closing [N]	240	295
Gripping force in opening [N]	265	
Gripping force secured by spring min. [N]		55
Closing time [s]	0.04	0.04
Opening time [s]	0.04	0.06
Repetition accuracy +/- [mm]	0.02	0.02
Operating pressure min. [bar]	3	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	8	11
Weight [kg]	0.26	0.35

^{*}All data measured at 6 bar



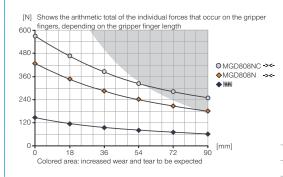
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE MGD808

▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



18
19
29
660

► INCLUDED IN DELIVERY



Centering Disc

DST40600

> RECOMMENDED ACCESSORIES



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Straight Fittings - Quick Connect Style

GVM5



Quick Exhaust Valve

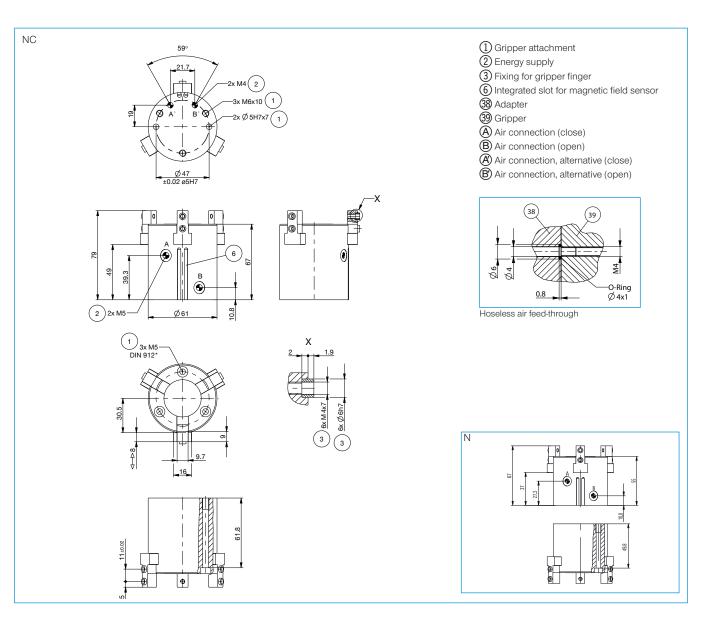
DEV04



Pressure Safety Valve

	► Technical Data*	
Order no.	MGD808N	MGD808NC
Stroke per jaw [mm]	8	8
Gripping force in closing [N]	415	560
Gripping force in opening [N]	450	
Gripping force secured by spring min. [N]		145
Closing time [s]	0.09	0.08
Opening time [s]	0.09	0.13
Repetition accuracy +/- [mm]	0.02	0.02
Operating pressure min. [bar]	3	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	18	26
Weight [kg]	0.47	0.65

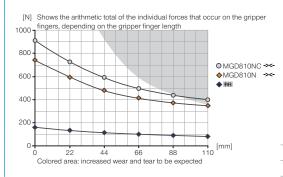
^{*}All data measured at 6 bar



▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	27
Mx [Nm]	29
My [Nm]	43
Fa [N]	960

► INCLUDED IN DELIVERY



Centering Disc

DST07540

► RECOMMENDED ACCESSORIES



Magnetic field sensor Angled Cable 0,3 m -MFS103SKHC



Straight Cable 0,3 m -MFS204SKHC

Magnetic field sensor



Straight Fittings - Quick Connect Style

GVM5



Quick Exhaust Valve

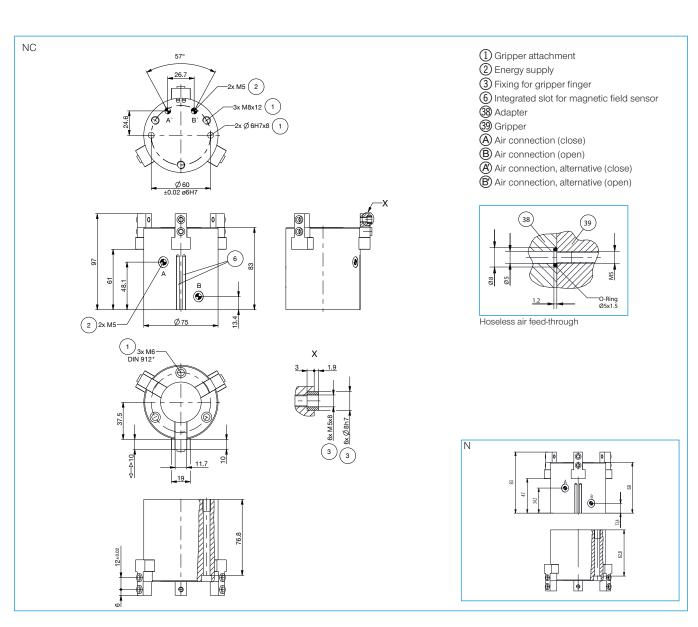
DEV04



Pressure Safety Valve

	► Technical Data*	
Order no.	MGD810N	MGD810NC
Stroke per jaw [mm]	10	10
Gripping force in closing [N]	740	920
Gripping force in opening [N]	790	
Gripping force secured by spring min. [N]		180
Closing time [s]	0.1	0.1
Opening time [s]	0.1	0.15
Repetition accuracy +/- [mm]	0.02	0.02
Operating pressure min. [bar]	3	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	37	50
Weight [kg]	0.98	1.16

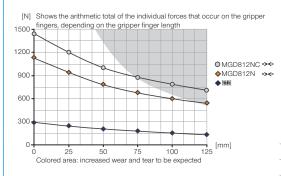
^{*}All data measured at 6 bar



▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	41
Mx [Nm]	45
My [Nm]	65
Fa [N]	1500

► INCLUDED IN DELIVERY



Centering Disc

DST41000

> RECOMMENDED ACCESSORIES



Magnetic field sensor Angled Cable 0,3 m -MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Straight Fittings - Quick Connect Style

GV1-8X6



Quick Exhaust Valve

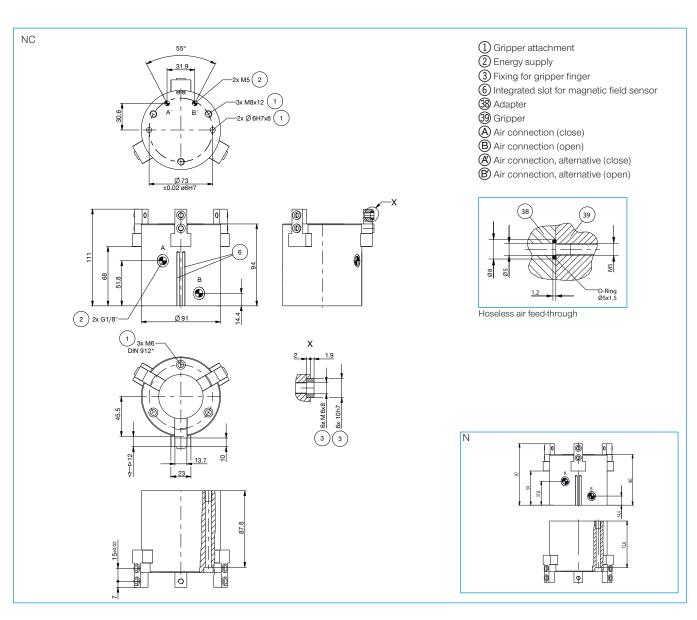
DEV06



Pressure Safety Valve

	► Technical Data*	
Order no.	MGD812N	MGD812NC
Stroke per jaw [mm]	12	12
Gripping force in closing [N]	1130	1420
Gripping force in opening [N]	1200	
Gripping force secured by spring min. [N]		290
Closing time [s]	0.12	0.12
Opening time [s]	0.12	0.17
Repetition accuracy +/- [mm]	0.02	0.02
Operating pressure min. [bar]	3	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	69	97
Weight [kg]	1.67	2

^{*}All data measured at 6 bar



3-JAW CONCENTRIC GRIPPERS SERIES GD

PRODUCT ADVANTAGES



"The flexible"

Largest stroke in small installation space

You can cover numerous application variants with just one gripper type

Gripper jaws included in the delivery

Reduces your design effort, manufacturing costs and setup time

Smooth stroke configuration

Using the optionally available stroke limit, you can customise the stroke to your application, even stroke sensing is possible

► THE BEST PRODUCT FOR YOUR APPLICATION

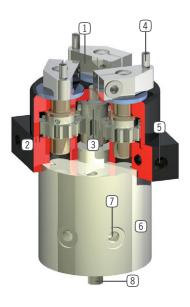


Our products love the challenge!

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BENEFITS IN DETAIL



- 1 Gripping movement on rotation
 - for various workpiece diameters
- 2 Robust, lightweight housing
 - Hard-coated aluminum alloy
- 3 Planetary transmission
 - synchronized the movement of the gripper jaws
- 4 Standard pins serve as gripper jaw
- (5) Mounting and positioning
 - mounting possible from several sides for versatile positioning
- 6 Drive
 - double-acting pneumatic cylinder
- 7 Energy supply
 - possible radial and axial
- 8 Shaft projection
 - for accessory assembly e.g. sensors

> SERIES CHARACTERISTICS



Number of installation sizes	3
Stroke per jaw	120° - 180°
Gripping force	24 N - 530 N
Weight	0,08 kg - 2 kg
AP class	2



10 million maintenance-free cycles (max.)



Inductive sensor



IP40

▶ PRODUCT SPECIFICATIONS



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	0.1	
Mx [Nm]	0.1	
My [Nm]	0.1	
Fa [N]	10	

► RECOMMENDED ACCESSORIES



Rotation limiter

DB1-B



Straight Fittings - Quick Connect Style GVM5



Quick Exhaust Valve

DEV04



Pressure Safety Valve

DSV1-8

RECOMMENDED ACCESSORY ROTATION LIMITER



Inductive proximity switch - Cable 5 m

NJ3-E2-02



Plug-in connector customizable Straight -Connector M8

S8-G-3

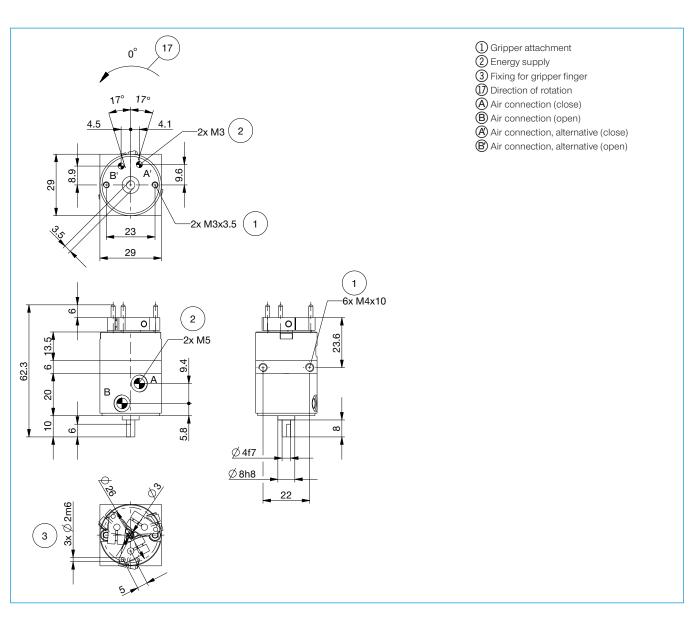


Plug-in connector customizable Straight -Connector M12

S12-G-3

	► Technical Data*
Order no.	GD1-B
Stroke per jaw [°]	130
Grip diameter in closing min. [mm]	3
Grip diameter in closing max. [mm]	22
Grip diameter in opening min. [mm]	7
Grip diameter in opening max. [mm]	26
Gripping moment in closing [Nm]	0.12
Gripping moment in opening [Nm]	0.12
Closing time [s]	0.02
Opening time [s]	0.02
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+60
Air volume per cycle [cm³]	2.8
Weight [kg]	0.08

*All data measured at 6 bar



▶ PRODUCT SPECIFICATIONS



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	1	
Mx [Nm]	1	
My [Nm]	0.5	
Fa [N]	30	

► RECOMMENDED ACCESSORIES



Rotation limiter

DB10



Straight Fittings - Quick Connect Style

GVM5



Quick Exhaust Valve

DEV04



Pressure Safety Valve

DSV1-8

RECOMMENDED ACCESSORY ROTATION LIMITER



Stop Stroke Adjustment Screws

AI-M8X1-38



Stop Stroke Adjustment Screws

AI-M8X1-53



Inductive proximity switch - Cable 5 m

NJ12-E2



Inductive proximity switch - Connector M8

NJ12-E2S

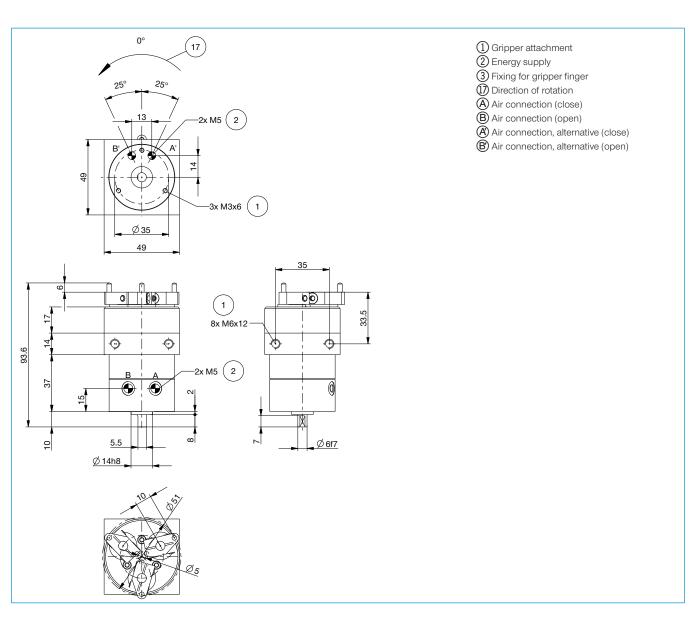


Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500

	► Technical Data*
Order no.	GD10
Stroke per jaw [°]	180
Grip diameter in closing min. [mm]	5
Grip diameter in closing max. [mm]	45
Grip diameter in opening min. [mm]	11
Grip diameter in opening max. [mm]	51
Gripping moment in closing [Nm]	1
Gripping moment in opening [Nm]	1
Closing time [s]	0.07
Opening time [s]	0.07
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+60
Air volume per cycle [cm³]	20
Weight [kg]	0.35

^{*}All data measured at 6 bar



▶ PRODUCT SPECIFICATIONS



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	5
Mx [Nm]	5
My [Nm]	4
Fa [N]	100

RECOMMENDED ACCESSORIES



Rotation limiter

DB50



Inquiry for interim position

GF50



Straight Fittings - Quick Connect Style

GV1-8X8



Quick Exhaust Valve

DEV08

► RECOMMENDED ACCESSORY DB50



Stop Stroke Adjustment Screws

AI-M8X1-38



Stop Stroke Adjustment Screws

AI-M8X1-53



Inductive proximity switch - Cable 5 m

NJ12-E2



Inductive proximity switch - Connector M8

NJ12-E2S



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500

RECOMMENDED ACCESSORY GF50



Inductive proximity switch - Cable 5 m

NJ12-E2



Inductive proximity switch - Connector M8

NJ12-E2S

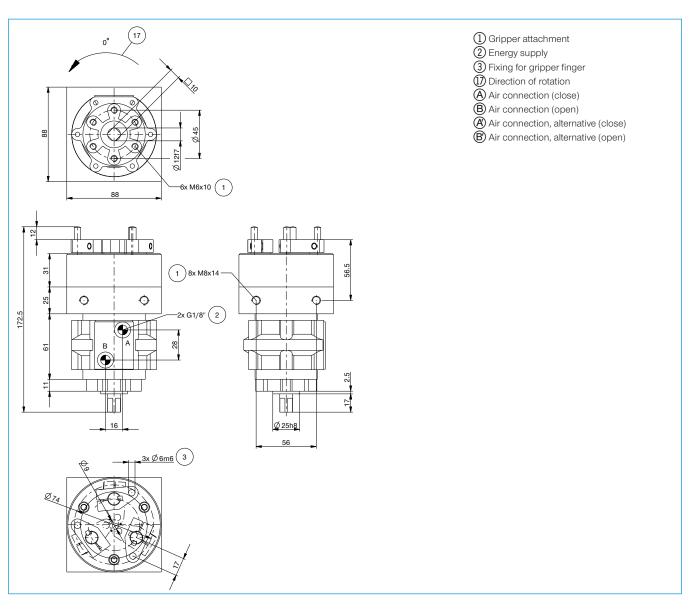


Plug-in connector Straight Cable 5m - Socket M8

KAG500

	► Technical Data*
Order no.	GD50
Stroke per jaw [°]	120
Grip diameter in closing min. [mm]	9
Grip diameter in closing max. [mm]	62
Grip diameter in opening min. [mm]	21
Grip diameter in opening max. [mm]	74
Gripping moment in closing [Nm]	9
Gripping moment in opening [Nm]	9
Closing time [s]	0.09
Opening time [s]	0.09
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+60
Air volume per cycle [cm³]	102
Weight [kg]	2

^{*}All data measured at 6 bar



3-JAW CONCENTRIC GRIPPERS SERIES GD300

PRODUCT ADVANTAGES



"The economical"

Concentration on the essentials

The most economic type of gripping: This is how you reduce your production costs

Proven T slot guide

This established and proven guiding technology stands for the highest process reliability like no other

Compact structure

Reduces the interference contours for your application

> THE BEST PRODUCT FOR YOUR APPLICATION



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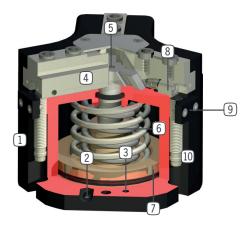
HOW TO ORDER CORRECTLY

The product order numbers are arranged according to this diagram:

Order no.	GD304			-C	
Long stroke		N			
High force		S			
For external gripping, self-locking, spring closing			С		
For internal gripping, self-locking, spring opening			0		



BENEFITS IN DETAIL



- 1 Robust, lightweight housing
 - Hard-coated aluminum alloy
- 2 Energy supply
 - possible from several sides
- 3 Mounting and positioning
 - mounting possible from several sides for versatile positioning
- 4 Gripper jaw
 - individual gripper finger mounting
- 5 Wedge hook mechanism
 - synchronized the movement of the gripper jaws
 - high force transfer
- 6 Integrated gripping force safety device
 - spring integrated into cylinder as energy storage
- 7 Position sensing
 - permanent magnet for direct monitoring of piston movement
- 8 Integrated, adjustable switch cam
 - for direct position sensing of the gripper jaw
- 9 Mounting block
 - mounting for inductive proximity switch (10)

> SERIES CHARACTERISTICS



Number of installation sizes	9
Stroke per jaw	3 mm - 30 mm
Gripping force	200 N - 34700 N
Weight	0,13 kg - 24 kg
AP class	3



10 million maintenance-free cycles (max.)



High-strength S



Magnetic field sensor



Spring closing C



Inductive sensor



Purged air



Spring opening O

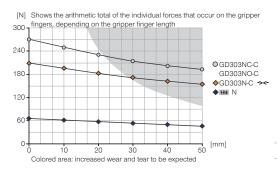


IP40

▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	6
Mx [Nm]	9
My [Nm]	12
Fa [N]	500

► INCLUDED IN DELIVERY



Mounting block

Centering Disc

KB3-07

DST40400

RECOMMENDED ACCESSORIES



Universal Jaw Aluminium



Universal Jaw Steel

UB303ST



Inductive Proximity Switch Cable 0,3 m - Connector

NJ3-E2SK



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500

UB303



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Straight Fittings - Quick Connect Style

GVM5



Angled Fittings - Quick Connect Style

WVM5

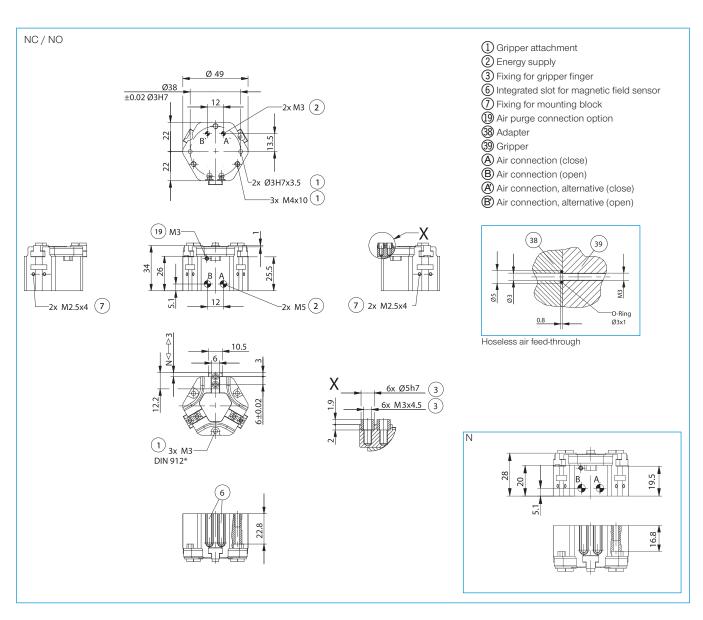


Pressure Safety Valve

DSV1-8

	Technical Data*		
Order no.	GD303N-C	GD303NC-C	GD303NO-C
Stroke per jaw [mm]	3	3	3
Gripping force in closing [N]	200	270	
Gripping force in opening [N]	230		300
Gripping force secured by spring min. [N]		70	70
Closing time [s]	0.02	0.02	0.03
Opening time [s]	0.02	0.03	0.02
Repetition accuracy +/- [mm]	0.05	0.05	0.05
Operating pressure min. [bar]	2	4	4
Operating pressure max. [bar]	8	8	8
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+80	+80	+80
Air volume per cycle [cm³]	3.5	6.7	6.7
Weight [kg]	0.13	0.16	0.16

^{*}All data measured at 6 bar



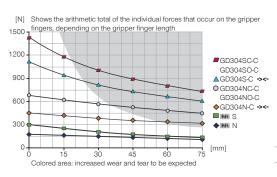
Installation size GD304 / 3-Jaw Concentric Grippers / pneumatic /

3-JAW CONCENTRIC GRIPPERS INSTALLATION SIZE GD304

▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	8
Mx [Nm]	15
My [Nm]	15
Fa [N]	700

► INCLUDED IN DELIVERY



Mounting block

KB3-08



Centering Disc

DST40400

RECOMMENDED ACCESSORIES



Universal Jaw Aluminium

UB304



Universal Jaw Steel

UB304ST



Pressure piece N / S

ADS304N-S



Pressure piece NC / NO / SC / SO

ADS304C-O



Inductive Proximity Switch Cable 0,3 m -Connector M8

NJ3-E2SK



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Straight Fittings - Quick Connect Style

GVM5



Angled Fittings - Quick Connect Style

WVM5

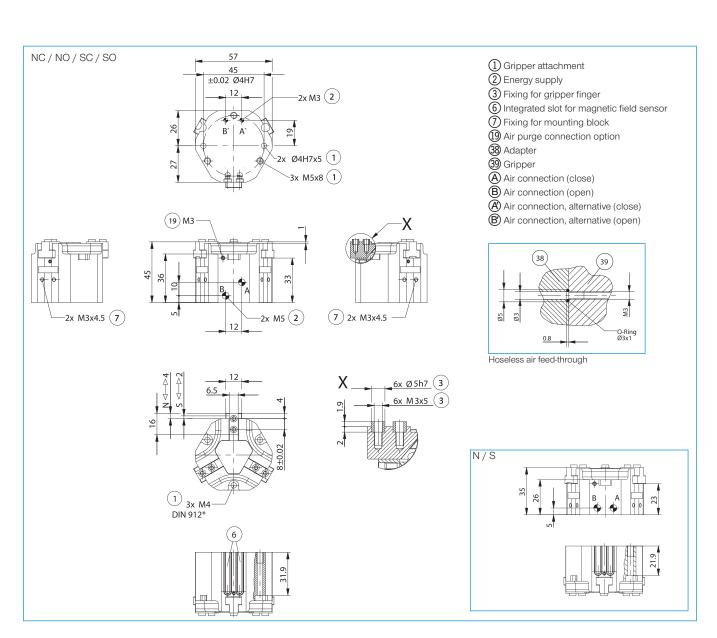


Pressure Safety Valve

DSV1-8

	Technical	Data*				
Order no.	GD304N-C	GD304NC-C	GD304NO-C	GD304S-C	GD304SC-C	GD304SO-C
Stroke per jaw [mm]	4	4	4	2	2	2
Gripping force in closing [N]	450	650		1000	1400	
Gripping force in opening [N]	500		700	1100		1500
Gripping force secured by spring min. [N]		200	200		400	400
Closing time [s]	0.025	0.02	0.03	0.025	0.02	0.03
Opening time [s]	0.025	0.03	0.02	0.025	0.03	0.02
Repetition accuracy +/- [mm]	0.05	0.05	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	2	4	4	2	4	4
Operating pressure max. [bar]	8	8	8	8	8	8
Operating temperature min. [°C]	5	5	5	5	5	5
Operating temperature max. [°C]	+80	+80	+80	+80	+80	+80
Air volume per cycle [cm³]	9.2	19.2	19.2	9.2	19.2	19.2
Weight [kg]	0.22	0.28	0.28	0.22	0.28	0.28

^{*}All data measured at 6 bar



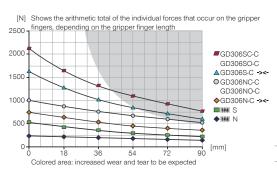
Installation size GD306 / 3-Jaw Concentric Grippers / pneumatic /

3-JAW CONCENTRIC GRIPPERS INSTALLATION SIZE GD306

▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	35
Mx [Nm]	50
My [Nm]	45
Fa [N]	1200

► INCLUDED IN DELIVERY



Mounting block

KB3-39



Centering Disc

DST40600

RECOMMENDED ACCESSORIES





Universal Jaw Aluminium





Universal Jaw Steel

UB306ST



Pressure piece N / S

ADS306N-S



Pressure piece NC / NO / SC / SO

ADS306C-O



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled

MFS103SKHC



Magnetic field sensor Straight

MFS204SKHC



Straight Fittings - Quick Connect Style

GVM5



Angled Fittings - Quick

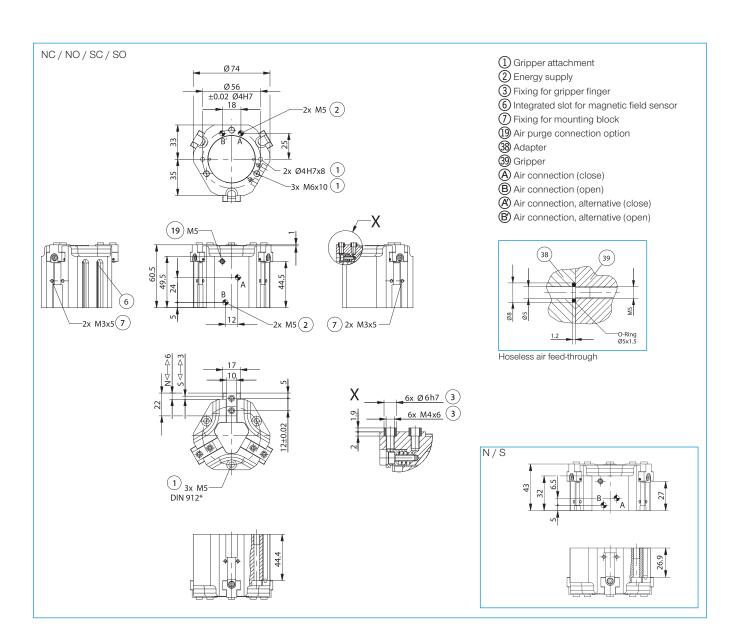
WVM5



Pressure Safety Valve

	Technical	Data*				
Order no.	GD306N-C	GD306NC-C	GD306NO-C	GD306S-C	GD306SC-C	GD306SO-C
Stroke per jaw [mm]	6	6	6	3	3	3
Gripping force in closing [N]	750	1000		1600	2150	
Gripping force in opening [N]	800		1050	1750		2300
Gripping force secured by spring min. [N]		250	250		550	550
Closing time [s]	0.03	0.03	0.05	0.03	0.03	0.05
Opening time [s]	0.03	0.05	0.03	0.03	0.05	0.03
Repetition accuracy +/- [mm]	0.05	0.05	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	2	4	4	2	4	4
Operating pressure max. [bar]	8	8	8	8	8	8
Operating temperature min. [°C]	5	5	5	5	5	5
Operating temperature max. [°C]	+80	+80	+80	+80	+80	+80
Air volume per cycle [cm³]	21.5	48	48	21.5	48	48
Weight [kg]	0.5	0.65	0.65	0.5	0.65	0.65

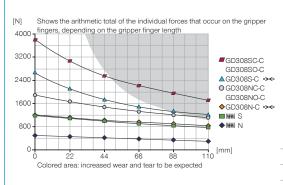
^{*}All data measured at 6 bar



▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	50
Mx [Nm]	80
My [Nm]	60
Fa [N]	1800

► INCLUDED IN DELIVERY



Mounting block

KB8-30



Centering Disc

DST40800

RECOMMENDED ACCESSORIES







Universal Jaw Steel

UB308ST



Pressure piece N / S

ADS308N-S



Pressure piece NC / NO / SC / SO

ADS308C-O



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled

MFS103SKHC



Magnetic field sensor Straight

MFS204SKHC



Straight Fittings - Quick

GV1-8X6



Angled Fittings - Quick

WV1-8X6

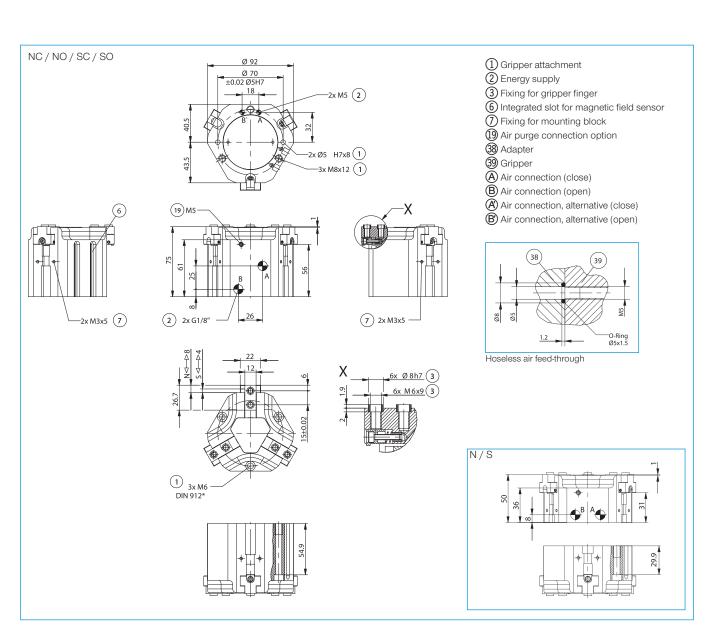


Pressure Safety Valve

DSV1-8

	► Technical Data*					
Order no.	GD308N-C	GD308NC-C	GD308NO-C	GD308S-C	GD308SC-C	GD308SO-C
Stroke per jaw [mm]	8	8	8	4	4	4
Gripping force in closing [N]	1200	1800		2600	3800	
Gripping force in opening [N]	1300		1900	2800		4000
Gripping force secured by spring min. [N]		600	600		1200	1200
Closing time [s]	0.05	0.03	0.06	0.05	0.03	0.06
Opening time [s]	0.05	0.06	0.03	0.05	0.06	0.03
Repetition accuracy +/- [mm]	0.05	0.05	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	2	4	4	2	4	4
Operating pressure max. [bar]	8	8	8	8	8	8
Operating temperature min. [°C]	5	5	5	5	5	5
Operating temperature max. [°C]	+80	+80	+80	+80	+80	+80
Air volume per cycle [cm³]	47	108	108	47	108	108
Weight [kg]	0.85	1.2	1.2	0.85	1.2	1.2

^{*}All data measured at 6 bar



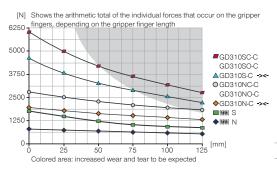
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GD310

▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	75
Mx [Nm]	100
My [Nm]	90
Fa [N]	2500

► INCLUDED IN DELIVERY



Centering Disc

DST41000

RECOMMENDED ACCESSORIES



Universal Jaw Aluminium

UB310



UB310ST

Universal Jaw Steel



Pressure piece N / S

ADS310N-S



Pressure piece NC / NO / SC / SO



bracket





Inductive proximity switch

NJ8-E2S



Magnetic field sensor Angled

MFS103SKHC



Magnetic field sensor Straight

MFS204SKHC



Straight Fittings - Quick

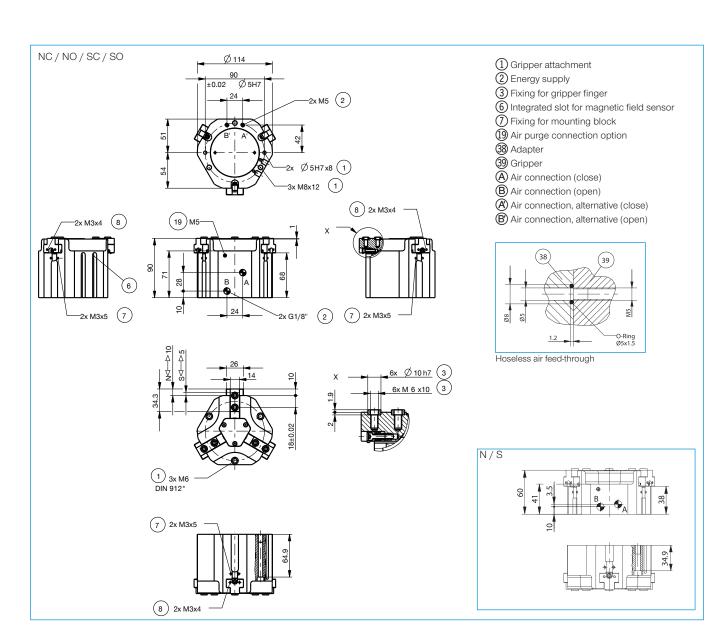
GV1-8X6



Pressure Safety Valve

	Technical	Data*				
Order no.	GD310N-C	GD310NC-C	GD310NO-C	GD310S-C	GD310SC-C	GD310SO-C
Stroke per jaw [mm]	10	10	10	5	5	5
Gripping force in closing [N]	2000	2800		4400	6200	
Gripping force in opening [N]	2100		2900	4600		6400
Gripping force secured by spring min. [N]		800	800		1800	1800
Closing time [s]	0.1	0.07	0.2	0.1	0.07	0.2
Opening time [s]	0.1	0.2	0.07	0.1	0.2	0.07
Repetition accuracy +/- [mm]	0.05	0.05	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	2	4	4	2	4	4
Operating pressure max. [bar]	8	8	8	8	8	8
Operating temperature min. [°C]	5	5	5	5	5	5
Operating temperature max. [°C]	+80	+80	+80	+80	+80	+80
Air volume per cycle [cm³]	100	220	220	100	220	220
Weight [kg]	1.6	2.2	2.2	1.6	2.2	2.2

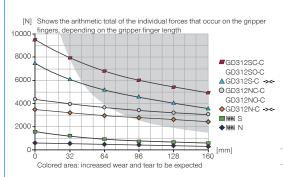
^{*}All data measured at 6 bar



▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	100
Mx [Nm]	120
My [Nm]	120
Fa [N]	3200

► INCLUDED IN DELIVERY



Mounting block

Centering Disc

KB8-32

DST41000

RECOMMENDED ACCESSORIES



UB312



Universal Jaw Steel

UB312ST



Pressure piece N / S

ADS312N-S



Pressure piece NC / NO / SC / SO

ADS312C-O



bracket

KHA312-B-8



Inductive proximity switch

NJ8-E2S



Magnetic field sensor Angled

MFS103SKHC



Magnetic field sensor Straight

MFS204SKHC



Straight Fittings - Quick

GV1-8X6

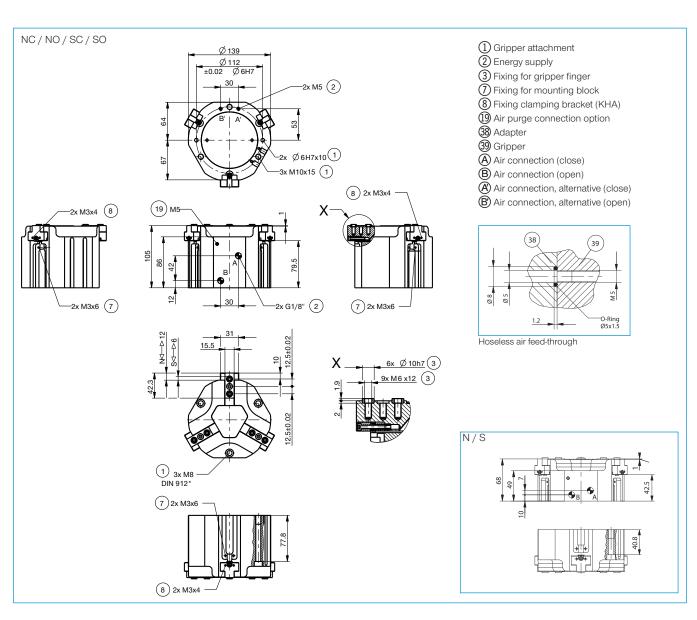


Pressure Safety Valve

DSV1-8

	Technical	Data*				
Order no.	GD312N-C	GD312NC-C	GD312NO-C	GD312S-C	GD312SC-C	GD312SO-C
Stroke per jaw [mm]	12	12	12	6	6	6
Gripping force in closing [N]	3500	4150		7600	9000	
Gripping force in opening [N]	3600		4250	7850		9250
Gripping force secured by spring min. [N]		650	650		1400	1400
Closing time [s]	0.2	0.15	0.35	0.2	0.15	0.35
Opening time [s]	0.2	0.35	0.15	0.2	0.35	0.15
Repetition accuracy +/- [mm]	0.05	0.05	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	2	4	4	2	4	4
Operating pressure max. [bar]	8	8	8	8	8	8
Operating temperature min. [°C]	5	5	5	5	5	5
Operating temperature max. [°C]	+80	+80	+80	+80	+80	+80
Air volume per cycle [cm³]	190	420	420	190	420	420
Weight [kg]	2.7	3.8	3.8	2.7	3.8	3.8

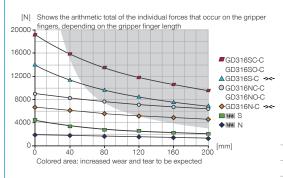
^{*}All data measured at 6 bar



▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	140
Mx [Nm]	160
My [Nm]	180
Fa [N]	5000

► INCLUDED IN DELIVERY



Mounting block

KB8-33



Centering Disc

DST41600

RECOMMENDED ACCESSORIES



Universal Jaw Aluminium





Universal Jaw Steel

UB316ST



Pressure piece N / S

ADS316N-S



Pressure piece NC / NO / SC / SO

ADS316C-O



Alternate proximity bracket

KHA316-B-8



Inductive proximity switch

NJ8-E2S



Magnetic field sensor Angled

MFS103SKHC



Magnetic field sensor Straight

MFS204SKHC



Straight Fittings - Quick

GV1-8X6

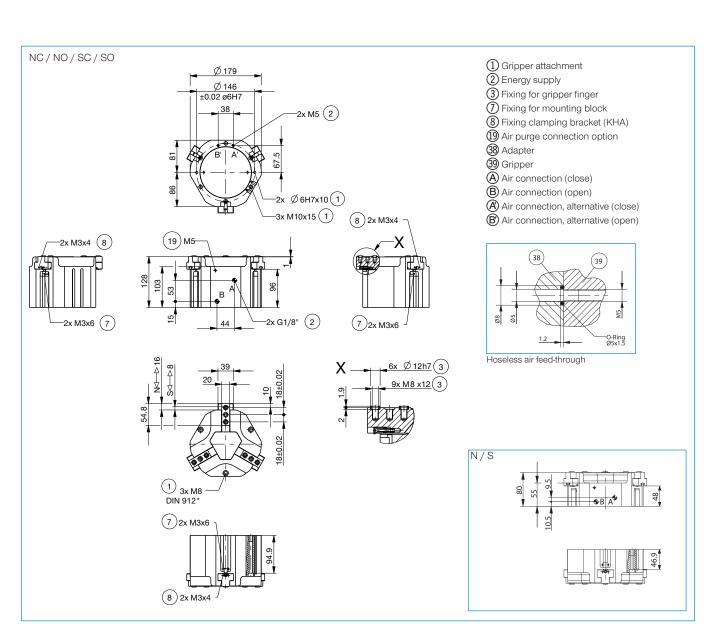


Pressure Safety Valve

DSV1-8

	Technical	Data*				
Order no.	GD316N-C	GD316NC-C	GD316NO-C	GD316S-C	GD316SC-C	GD316SO-C
Stroke per jaw [mm]	16	16	16	8	8	8
Gripping force in closing [N]	6500	8600		14000	18700	
Gripping force in opening [N]	6600		8700	14400		19100
Gripping force secured by spring min. [N]		2100	2100		4700	4700
Closing time [s]	0.25	0.2	0.4	0.25	0.2	0.4
Opening time [s]	0.25	0.4	0.2	0.25	0.4	0.2
Repetition accuracy +/- [mm]	0.05	0.05	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	2	4	4	2	4	4
Operating pressure max. [bar]	8	8	8	8	8	8
Operating temperature min. [°C]	5	5	5	5	5	5
Operating temperature max. [°C]	+80	+80	+80	+80	+80	+80
Air volume per cycle [cm³]	470	960	960	470	960	960
Weight [kg]	5.1	8	8	5.1	8	8

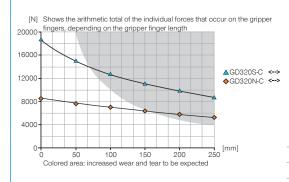
^{*}All data measured at 6 bar



▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	170
Mx [Nm]	180
My [Nm]	220
Fa [N]	7000

► INCLUDED IN DELIVERY



Mounting block

Centering Disc

KB8-34 DST42000

RECOMMENDED ACCESSORIES



Universal Jaw Aluminium

UB320



Universal Jaw Steel

UB320ST



Pressure piece N / S

ADS320N-S



Pressure piece NC / NO / SC / SO

ADS320C-O



Alternate proximity bracket

KHA320-B-8



Inductive proximity switch

NJ8-E2S



Magnetic field sensor Angled

MFS103SKHC



Magnetic field sensor Straight

MFS204SKHC



Straight Fittings - Quick

GV1-4X8

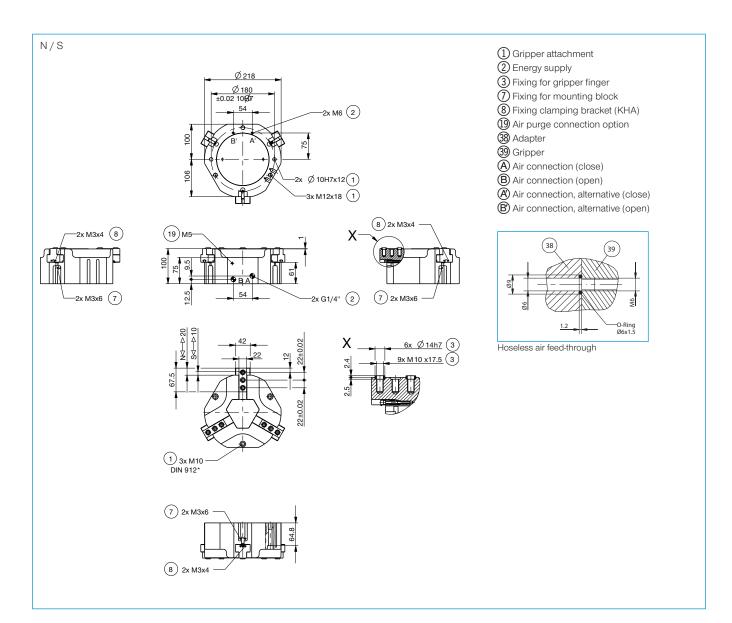


Pressure Safety Valve

DSV1-8

	► Technical Data*	
Order no.	GD320N-C	GD320S-C
Stroke per jaw [mm]	20	10
Gripping force in closing [N]	8200	18150
Gripping force in opening [N]	8450	18700
Gripping force secured by spring min. [N]		
Closing time [s]	0.35	0.35
Opening time [s]	0.35	0.35
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	2	2
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	825	825
Weight [kg]	9.6	9.6

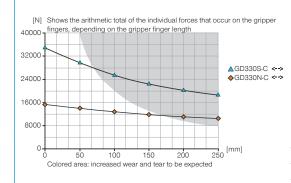
^{*}All data measured at 6 bar



▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	200
Mx [Nm]	275
My [Nm]	300
Fa [N]	9000

► INCLUDED IN DELIVERY



Mounting block

Centering Disc

KB8-34

DST43000

> RECOMMENDED ACCESSORIES



Universal Jaw Aluminium

UB330



Universal Jaw Steel

UB330ST



Alternate proximity bracket

KHA330-B-8



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Straight Fittings - Quick Connect Style

GV1-4X8



Angled Fittings - Quick Connect Style

WV1-4X8

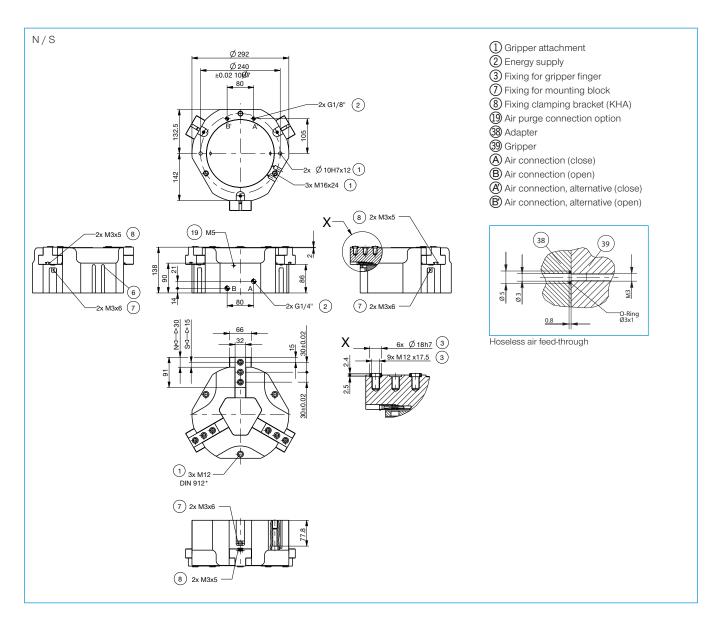


Pressure Safety Valve

DSV1-8

	Technical Data*	
Order no.	GD330N-C	GD330S-C
Stroke per jaw [mm]	30	15
Gripping force in closing [N]	15300	34150
Gripping force in opening [N]	15550	34700
Gripping force secured by spring min. [N]		
Closing time [s]	0.8	0.8
Opening time [s]	0.8	0.8
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	2	2
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	2270	2270
Weight [kg]	24	24

^{*}All data measured at 6 bar



3-JAW CONCENTRIC GRIPPERS SERIES GPD5000

▶ PRODUCT ADVANTAGES



"The Universal One"

- ▶ Up to 30% more gripping force than the benchmark
- ▶ 10% more static forces and moments than the benchmark
- Gripper fingers up to 10% longer than the benchmark
- Gripper fingers weight up to 15% higher than the benchmark
- Sealed guide IP64 / Protector version IP67 (with purged air)
- Protected against corrosion
- ▶ Up to 30 million cycles without maintenance

► THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com

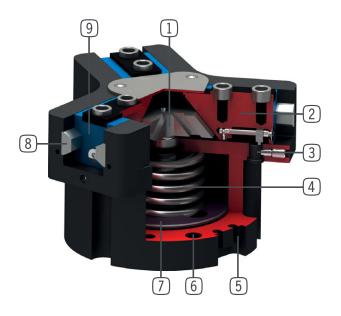
HOW TO ORDER CORRECTLY

 The product order numbers are arranged according to this diagram:

Order no.	GPD5010			-	-A
Basis version	Basis version N				
High force		S			
For external gripping, self-locking, spring closing			С		
For internal gripping, self-locking, spring opening			0		
temperature-resistant version to 130 °C				20	
Protector version IP67 for use in adverse environments (with purged air)				21	
temperature-resistant protector version IP67 for use in add (with purged air)to 130 °C	verse environmer	nts		24	



BENEFITS IN DETAIL



1 Wedge hook mechanism

- high forces and moments capacity
- Synchronized gripper jaw movement

2 Gripper jaw

- Gripper fingers mounted using removable centring sleeves
- Lubricated for life via incorporated lubrication slots

3 Mounting block

- mounting for inductive proximity switch

(4) Integrated gripping force safety device

- Spring built into cylinder chamber as an energy store

5 Sensing slot

- mounting and positioning of magnetic field sensors

6 Mounting and positioning

- Alternatively, on several sides for customized mounting
- Pneumatic and electrical versions identical apart from height

7 Drive

- Double-acting pneumatic rotor cylinder

8 Steel Linear Guide

- Steel in steel guide
- Enables use of extremely long gripper fingers

9 Dual lip seal

- IP64 and up to IP67 (with purged air) for Protector version
- Prevents grease from being squeezed out, increasing service life

SERIES CHARACTERISTICS



Number of installation sizes	11
Stroke per jaw	2,5 mm - 45 mm
Gripping force	310 N - 72500 N
Weight	0,14 kg - 88 kg
AP class	5



30 million maintenance-free cycles (max.)



High-strength S



IP67



Temperature-resistant



Spring closing C



Inductive sensor



Corrosion resistance



Purged air



Spring opening O



IP64

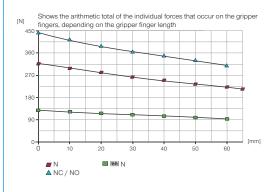


Magnetic field sensor

> PRODUCT SPECIFICATIONS

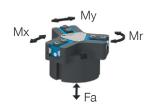


Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	7
Mx [Nm]	14
My [Nm]	13
Fa [N]	550

► TECHNICAL DATA

	Technical Data*		
Order no.	GPD5003N-00-A	GPD5003NC-00-A	GPD5003NO-00-A
Stroke per jaw [mm]	2.5	2.5	2.5
Gripping force in closing [N]	310	440	
Gripping force in opening [N]	335		465
Gripping force secured by spring min. [N]		130	130
Closing time [s]	0.015	0.01	0.02
Opening time [s]	0.015	0.02	0.01
Permissible weight per jaw max [kg]	0.12	0.12	0.12
Length of the gripper fingers max. [mm]	65	60	60
Repetition accuracy +/- [mm]	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4
Operating pressure max. [bar]	8	7	7
Operating temperature [°C]	-10 +90	-10 +90	10 +90
Air volume per cycle [cm³]	4.2	9.5	9.5
Protection to IEC 60529	IP64	IP64	IP64
Weight [kg]	0.14	0.18	0.18

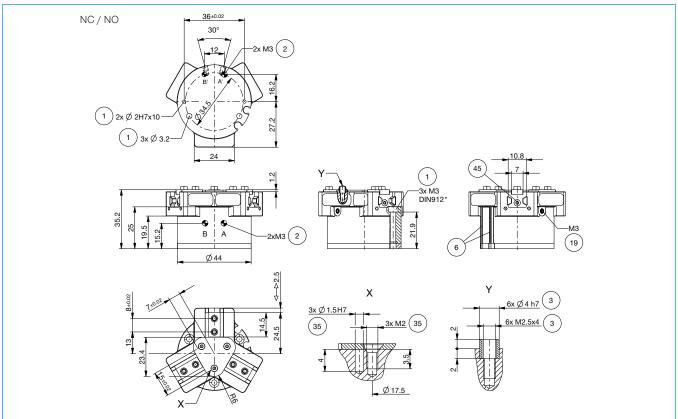
	Technical Data - High Temperature Version			
Order no.	GPD5003N-20-A	GPD5003NC-20-A	GPD5003NO-20-A	
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	

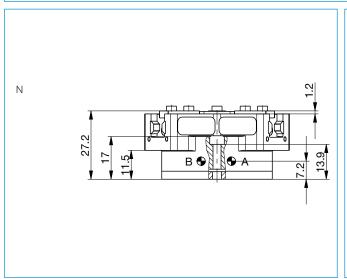
	► Technical Data - Protector Version				
Order no.	GPD5003N-21-A GPD5003NC-21-A GPD5003NO-21-A				
Protection to IEC 60529	IP67**	IP67**	IP67**		
Weight [kg]	0.18	0.22	0.22		

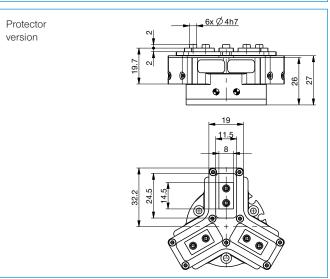
	► Technical Data - High Temperature Protector Version			
Order no.	GPD5003N-24-A	GPD5003NC-24-A	GPD5003NO-24-A	
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	
Protection to IEC 60529	IP67**	IP67**	IP67**	
Weight [kg]	0.18	0.22	0.22	

^{*}All data measured at 6 bar

^{* *} with purged air (max. 0,5 bar)

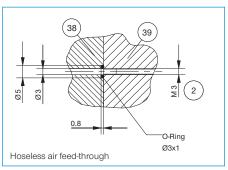


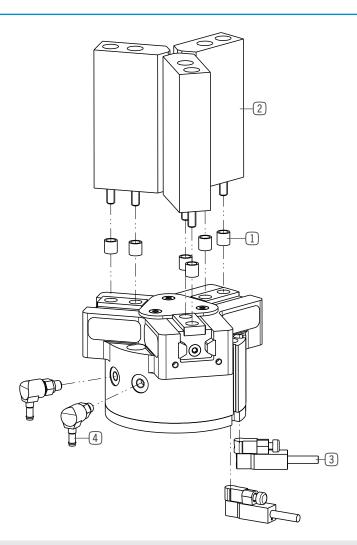




- ① Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- 19 Air purge connection option
- 35 Attachment option for customer-specific fittings
- 38 Adapter

- 39 Gripper
- 45 Switch cam adjustment
- Air connection (close)
- B Air connection (open)
- Air connection, alternative (close)
- (open) Air connection, alternative (open)





► INCLUDED IN DELIVERY



Centering Disc

DST06510

► RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5003AL



Universal Jaw Ste

UB5003ST



Rubber Coated Tape Knobbed

KF50N



Aluminum adjustment jak

EB5003AL



Steel adjustment jaw

EB5003ST



Pressure piece N / S

ADS5003-01



Pressure piece NC / NO / SC / SO

ADS5003-02



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector customizable Straight - Connector M12

S12-G-3



Straight Fittings - Barb Style Connection

GVM3



Angled Fittings - Barb Style Connection

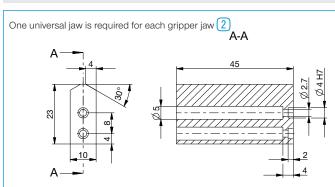
WVM3

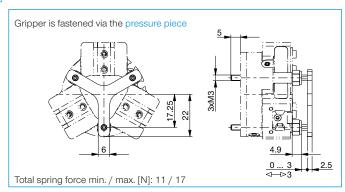


Pressure Safety Valve

DSV1-8

► TECHNICAL DRAWINGS ACCESSORIES

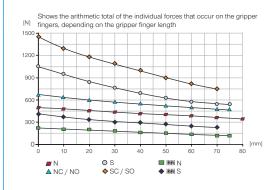




▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	14
Mx [Nm]	29
My [Nm]	23
Fa [N]	750

► TECHNICAL DATA

	► Technical Data*					
Order no.	GPD5004N-00-A	GPD5004NC-00-A	GPD5004NO-00-A	GPD5004S-00-A	GPD5004SC-00-A	GPD5004SO-00-A
Stroke per jaw [mm]	4	4	4	2	2	2
Gripping force in closing [N]	460	650		1010	1430	
Gripping force in opening [N]	500		690	1100		1520
Gripping force secured by spring min. [N]		190	190		420	420
Closing time [s]	0.025	0.018	0.028	0.025	0.018	0.028
Opening time [s]	0.025	0.028	0.018	0.025	0.028	0.018
Permissible weight per jaw max [kg]	0.2	0.2	0.2	0.2	0.2	0.2
Length of the gripper fingers max. [mm]	80	75	75	75	70	70
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90
Air volume per cycle [cm³]	11	21	21	11	21	21
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	0.27	0.33	0.33	0.27	0.33	0.33

Technical Data - High Temperature Version Order no. Operating to

	GPD5004N-20-A	GPD5004NC-20-A	GPD5004NO-20-A	GPD5004S-20-A	GPD5004SC-20-A	GPD5004SO-20-A
temperature [°C]	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130
	Technical	Data - Protector	Version			

Technical Data - High Temperature Protector Version

	Iecnnica
Order no.	GPD5004N-21-A
Protection to IEC 60529	IP67**
Weight [kg]	0.35

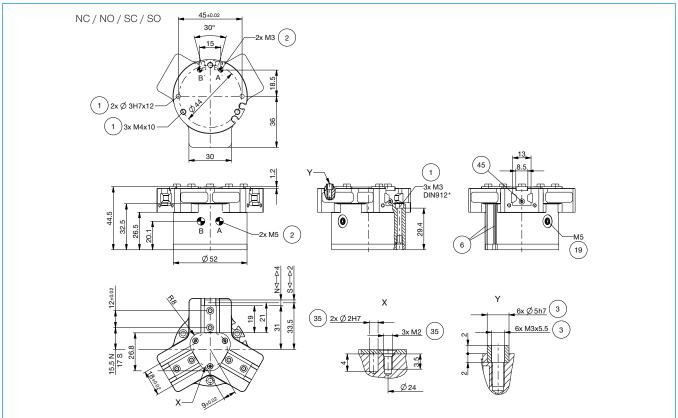
lechnical Data - Protector Version								
GPD5004N-21-A	GPD5004NC-21-A	GPD5004NO-21-A	GPD5004S-21-A	GPD5004SC-21-A	GPD5004SO-21-A			
IP67**	IP67**	IP67**	IP67**	IP67**	IP67**			
0.35	0.41	0.41	0.35	0.41	0.41			

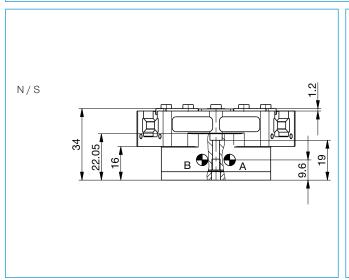
Order no.	
Operating temperature [°C]	
Protection to IEC 60529	
Weight [kg]	

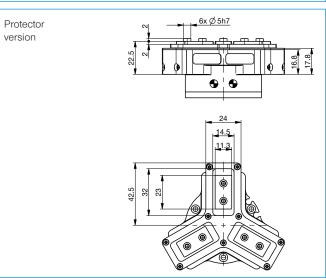
GPD5004N-24-A	GPD5004NC-24-A	GPD5004NO-24-A	GPD5004S-24-A	GPD5004SC-24-A	GPD5004SO-24-A
-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130
IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
0.35	0.41	0.41	0.35	0.41	0.41

^{*}All data measured at 6 bar

^{* *} with purged air (max. 0,5 bar)

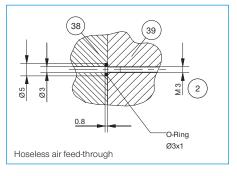


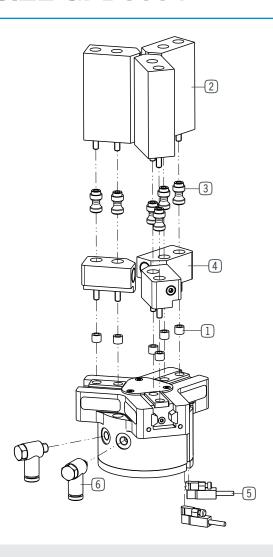




- (1) Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- 19 Air purge connection option
- 35 Attachment option for customer-specific fittings
- 38 Adapter

- 39 Gripper
- 45 Switch cam adjustment
- Air connection (close)
- B Air connection (open)
- Air connection, alternative (close)
- B Air connection, alternative (open)





► INCLUDED IN DELIVERY



Centering Disc

▶ RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5004AL



UB5004ST



Aluminum adjustment jaw

EB5004AL



Steel adjustment jaw

EB5004ST



Pressure piece N / S

ADS5004-01



Pressure piece NC / NO /

ADS5004-02



Changeable jaw, loose-

WB5004L



Changeable jaw, fix-part

WB5004F



Magnetic field sensor Angled

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500



Straight Fittings - Quick Connect Style

GVM5



Angled Fittings - Quick Connect Style

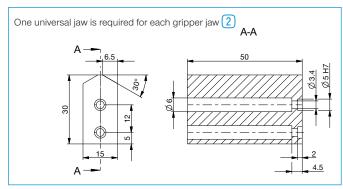
WVM5

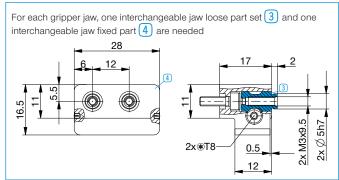


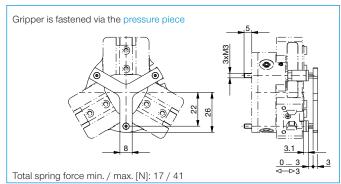
Pressure Safety Valve

DSV1-8

TECHNICAL DRAWINGS ACCESSORIES



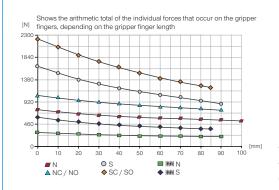




▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	43
Mx [Nm]	70
My [Nm]	46
Fa [N]	1250

► TECHNICAL DATA

	Technical	Data*				
Order no.	GPD5006N-00-A	GPD5006NC-00-A	GPD5006NO-00-A	GPD5006S-00-A	GPD5006SC-00-A	GPD5006SO-00-A
Stroke per jaw [mm]	6	6	6	3	3	3
Gripping force in closing [N]	740	1020		1620	2240	
Gripping force in opening [N]	800		1080	1750		2370
Gripping force secured by spring min. [N]		280	280		620	620
Closing time [s]	0.028	0.018	0.038	0.028	0.018	0.038
Opening time [s]	0.028	0.038	0.018	0.028	0.038	0.018
Permissible weight per jaw max [kg]	0.4	0.4	0.4	0.4	0.4	0.4
Length of the gripper fingers max. [mm]	100	90	90	90	85	85
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90
Air volume per cycle [cm³]	22	43	43	22	43	43
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	0.48	0.58	0.58	0.48	0.58	0.58

	Tec
Order no.	GPD50061
Operating temperature [°C]	-10 +13

Technical	Data - High Temı	oerature Version			
GPD5006N-20-A	GPD5006NC-20-A	GPD5006NO-20-A	GPD5006S-20-A	GPD5006SC-20-A	GPD5006SO-20-A
-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130

Protection to IEC 60529
Weight [kg]

Technical	Data - Protector	Version			
GPD5006N-21-A	GPD5006NC-21-A	GPD5006NO-21-A	GPD5006S-21-A	GPD5006SC-21-A	GPD5006SO-21-A
IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
0.61	0.71	0.71	0.61	0.71	0.71

GPD5006N-24-A GPD5006NC-24-A GPD5006NO-24-A GPD5006S-24-A GPD5006SC-24-A GPD5006SO-24-A

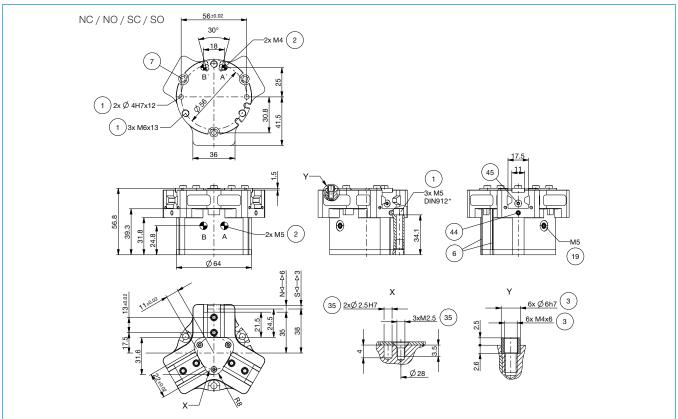
Order no.	
Operating temperature [°C]	
Protection to IEC 60529	
Weight [kg]	

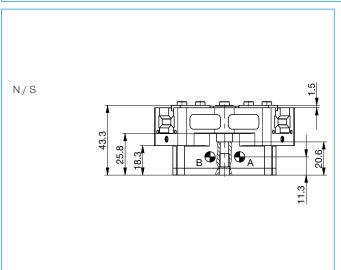
perating temperature [°C]	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130
rotection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Veight [kg]	0.61	0.71	0.71	0.61	0.71	0.71

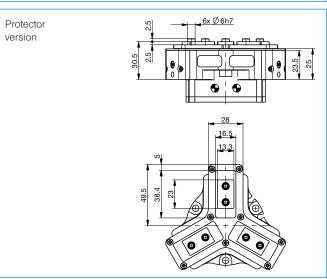
► Technical Data - High Temperature Protector Version

^{*}All data measured at 6 bar

^{* *} with purged air (max. 0,5 bar)

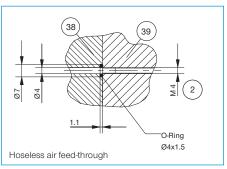


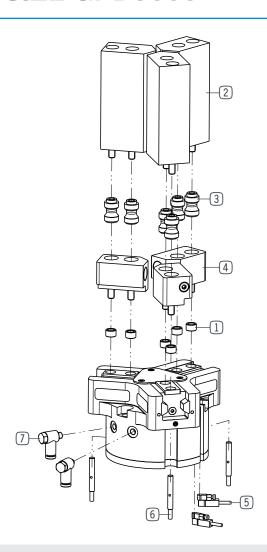




- ① Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- 7 Mounting block
- 19 Air purge connection option
- 35 Attachment option for customer-specific fittings
- 38 Adapter

- 39 Gripper
- Clamp for sensor
- 45 Switch cam adjustment
- Air connection (close)
- B Air connection (open)
- Air connection, alternative (close)
- B Air connection, alternative (open)





► INCLUDED IN DELIVERY



Centering Disc

► RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5006AL



UB5006ST



Aluminum adjustment jaw

EB5006AL



Steel adjustment jaw

EB5006ST



Changeable jaw, loose part-set





Changeable jaw, fix-part



Pressure piece N / S

ADS5006-01



Pressure piece NC / NO /

ADS5006-02



Inductive Proximity Switch

NJ4-E2SK-01



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC

WB5006F

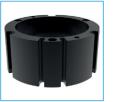
(5)



2-Position-Sensor Cable 0,3 m - Connector M8



Angled Fittings - Quick Connect Style



Compensation module



Compensation module NC / NO / SC / SO

Cable 0,3 m - Connector M8 MFS204SKHC

Magnetic field sensor Straight

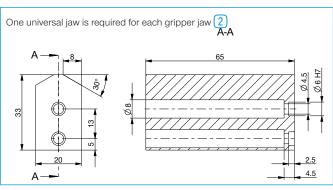
MFSP2SKHC-02

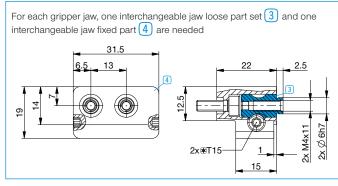
WVM5

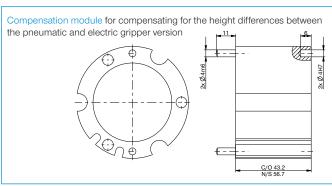
ZUB5006DNS

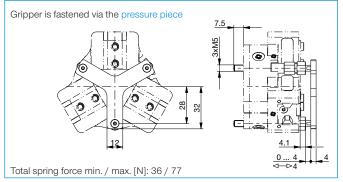
ZUB5006DCO

TECHNICAL DRAWINGS ACCESSORIES





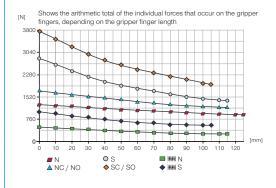




▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	60
Mx [Nm]	105
My [Nm]	65
Fa [N]	1900

► TECHNICAL DATA

	Technical	Data*				
Order no.	GPD5008N-00-A	GPD5008NC-00-A	GPD5008NO-00-A	GPD5008S-00-A	GPD5008SC-00-A	GPD5008SO-00-A
Stroke per jaw [mm]	8	8	8	4	4	4
Gripping force in closing [N]	1260	1690		2780	3730	
Gripping force in opening [N]	1340		1770	2960		3910
Gripping force secured by spring min. [N]		430	430		950	950
Closing time [s]	0.048	0.035	0.055	0.048	0.035	0.055
Opening time [s]	0.048	0.055	0.035	0.048	0.055	0.035
Permissible weight per jaw max [kg]	0.7	0.7	0.7	0.7	0.7	0.7
Length of the gripper fingers max. [mm]	125	115	115	115	105	105
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90
Air volume per cycle [cm³]	51	90	90	51	90	90
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	0.83	1	1	0.83	1	1

Order no. Operating temperature [°C]

rechnical Data - night temperature version									
GPD5008N-20-A	GPD5008NC-20-A	GPD5008NO-20-A	GPD5008S-20-A	GPD5008SC-20-A	GPD5008SO-20-A				
-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130				

Order no.
Protection to IEC 60529
Weight [kg]

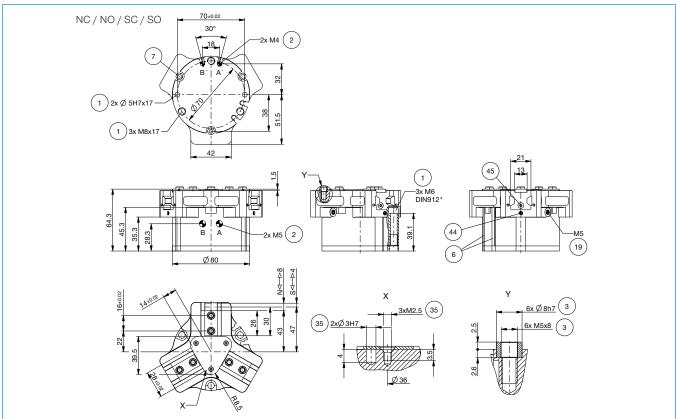
► Technical Data - Protector Version									
GPD5008N-21-A	GPD5008NC-21-A	GPD5008NO-21-A	GPD5008S-21-A	GPD5008SC-21-A	GPD5008SO-21-A				
IP67**	IP67**	IP67**	IP67**	IP67**	IP67**				
1.03	1.2	1.2	1.03	1.2	1.2				

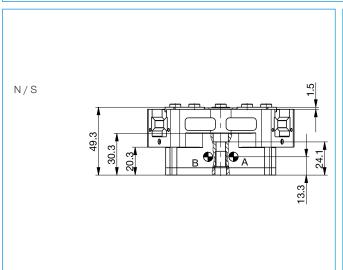
Order no.
Operating temperature [°C]
Protection to IEC 60529
Weight [kg]

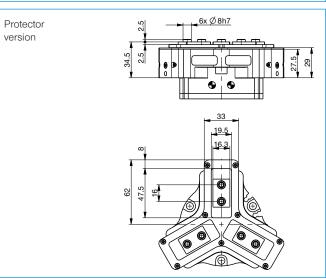
► Technical Data - High Temperature Protector Version									
GPD5008N-24-A	GPD5008SC-24-A	GPD5008SO-24-A							
-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130				
IP67**	IP67**	IP67**	IP67**	IP67**	IP67**				
1.03	1.2	1.2	1.03	1.2	1.2				

^{*}All data measured at 6 bar

^{* *} with purged air (max. 0,5 bar)

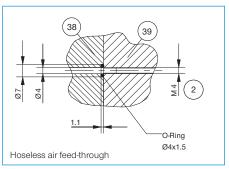


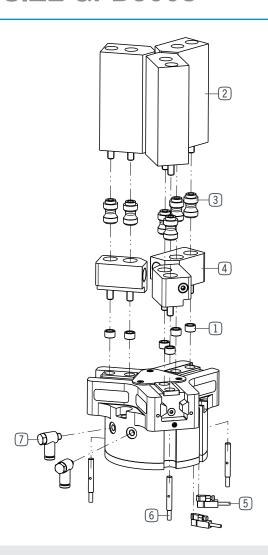




- ① Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- 7 Mounting block
- 19 Air purge connection option
- 35 Attachment option for customer-specific fittings
- 38 Adapter

- 39 Gripper
- (4) Clamp for sensor
- 45 Switch cam adjustment
- Air connection (close)
- (open)
- Air connection, alternative (close)
- B Air connection, alternative (open)





► INCLUDED IN DELIVERY



Centering Disc

► RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5008AL



Universal jaw steel

UB5008ST



Aluminum adjustment jaw

EB5008AL



Steel adjustment jaw

EB5008ST



Changeable jaw, loose part-set

WB5008L



Changeable jaw, fix-part



Pressure piece N / S

ADS5008-01



Pressure piece NC / NO / SC / SO

ADS5008-02



Inductive Proximity Switch
Cable 0.3 m - Connector M8

NJ4-E2SK-01



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC

WB5008F

(5)



2-Position-Sensor Cable 0,3 m - Connector M8



Angled Fittings - Quick Connect Style



Compensation module N / S



Compensation module NC / NO / SC / SO

MFS204SKHC

Magnetic field sensor Straight

Cable 0,3 m - Connector M8

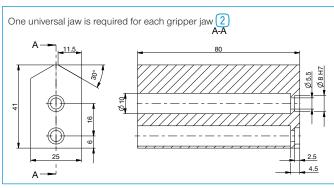
MFSP2SKHC-02

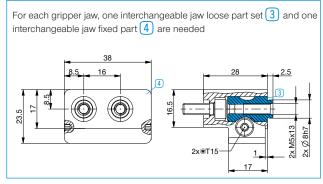
WVM5

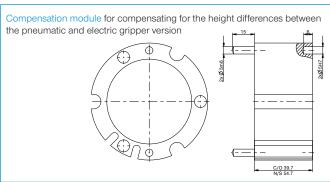
ZUB5008DNS

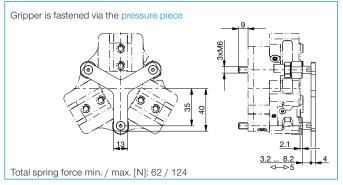
ZUB5008DCO

TECHNICAL DRAWINGS ACCESSORIES





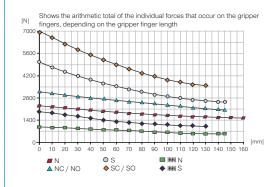




▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	75
Mx [Nm]	125
My [Nm]	95
Fa [N]	2700

► TECHNICAL DATA

	► Technical Data*					
Order no.	GPD5010N-00-A	GPD5010NC-00-A	GPD5010NO-00-A	GPD5010S-00-A	GPD5010SC-00-A	GPD5010SO-00-A
Stroke per jaw [mm]	10	10	10	5	5	5
Gripping force in closing [N]	2290	3140		5050	6930	
Gripping force in opening [N]	2400		3250	5280		7160
Gripping force secured by spring min. [N]		850	850		1880	1880
Closing time [s]	0.095	0.095	0.19	0.095	0.095	0.19
Opening time [s]	0.095	0.19	0.095	0.095	0.19	0.095
Permissible weight per jaw max [kg]	1.3	1.3	1.3	1.3	1.3	1.3
Length of the gripper fingers max. [mm]	160	145	145	145	130	130
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90
Air volume per cycle [cm³]	100	200	200	100	200	200
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	1.45	1.9	1.9	1.45	1.9	1.9

Order no.
Operating temperature [°C]

► Technical Data - High Temperature Version									
GPD5010N-20-A	GPD5010NC-20-A	GPD5010NO-20-A	GPD5010S-20-A	GPD5010SC-20-A	GPD5010SO-20-A				
-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130				

Order no.
Protection to IEC 60529
Weight [kg]

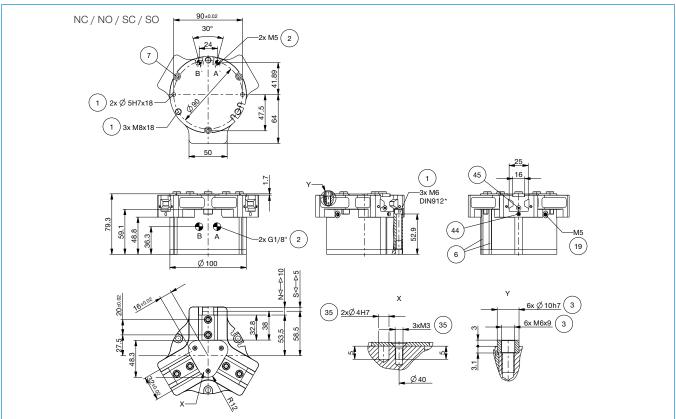
Technical Data - Protector Version									
GPD5010N-21-A	GPD5010NC-21-A	GPD5010NO-21-A	GPD5010S-21-A	GPD5010SC-21-A	GPD5010SO-21-A				
IP67**	IP67**	IP67**	IP67**	IP67**	IP67**				
1.8	2.23	2.23	1.8	2.23	2.23				

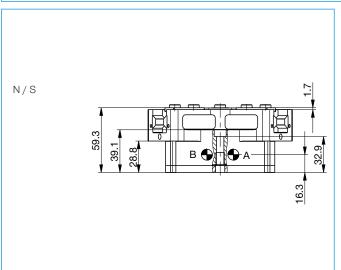
Order no.
Operating temperature [°C]
Protection to IEC 60529
Weight [kg]

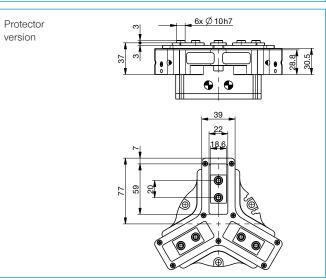
lecnnical Data - High Temperature Protector Version										
GPD5010N-24-A	GPD5010NC-24-A	GPD5010NO-24-A	GPD5010S-24-A	GPD5010SC-24-A	GPD5010SO-24-A					
-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +90					
IP67**	IP67**	IP67**	IP67**	IP67**	IP67**					
1.8	2.23	2.23	1.8	2.23	2.23					

^{*}All data measured at 6 bar

^{* *} with purged air (max. 0,5 bar)

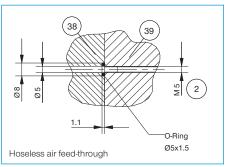


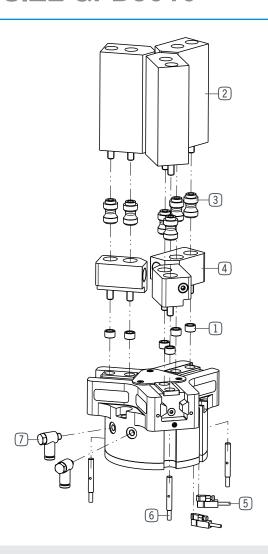




- ① Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- 7 Mounting block
- 19 Air purge connection option
- 35 Attachment option for customer-specific fittings
- 38 Adapter

- 39 Gripper
- Clamp for sensor
- 45 Switch cam adjustment
- Air connection (close)
- B Air connection (open)
- Air connection, alternative (close)
- B Air connection, alternative (open)





► INCLUDED IN DELIVERY



Centering Disc

► RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5010AL



Universal jaw steel

UB5010ST



Aluminum adjustment jaw

EB5010AL



Steel adjustment jaw

EB5010ST



Changeable jaw, loose part-set





Changeable jaw, fix-part

WB5010F



Pressure piece N / S

ADS5010-01



Pressure piece NC / NO / SC / SO

ADS5010-02



Inductive Proximity Switch







Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8 MFSP2SKHC-02



Angled Fittings - Quick Connect Style WV1-8X6



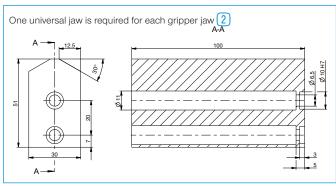
Compensation module

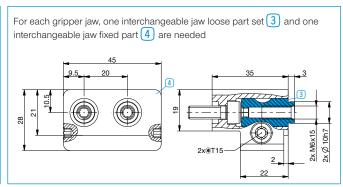


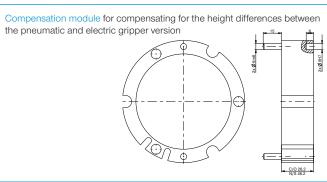
Compensation module NC / NO / SC / SO ZUB5010DCO

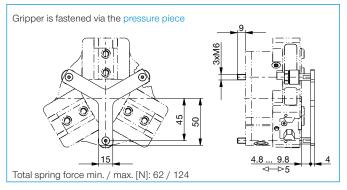
ZUB5010DNS

TECHNICAL DRAWINGS ACCESSORIES





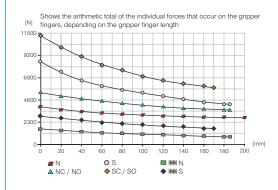




▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	110
Mx [Nm]	150
My [Nm]	130
Fa [N]	3300

► TECHNICAL DATA

	► Technical Data*					
Order no.	GPD5013N-00-A	GPD5013NC-00-A	GPD5013NO-00-A	GPD5013S-00-A	GPD5013SC-00-A	GPD5013SO-00-A
Stroke per jaw [mm]	13	13	13	6	6	6
Gripping force in closing [N]	3770	5060		8310	11160	
Gripping force in opening [N]	3910		5200	8600		11450
Gripping force secured by spring min. [N]		1290	1290		2850	2850
Closing time [s]	0.19	0.15	0.25	0.19	0.15	0.25
Opening time [s]	0.19	0.25	0.15	0.19	0.25	0.15
Permissible weight per jaw max [kg]	2.4	2.4	2.4	2.4	2.4	2.4
Length of the gripper fingers max. [mm]	200	185	185	185	170	170
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90
Air volume per cycle [cm³]	230	415	415	230	415	415
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	2.6	3.7	3.7	2.6	3.7	3.7

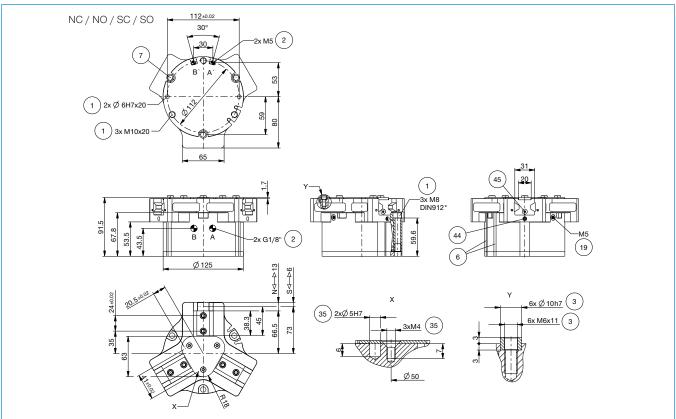
Technical Data - High Temperature Version GPD5013N-20-A GPD5013NC-20-A GPD5013NO-20-A GPD5013S-20-A GPD5013SC-20-A GPD5013SO-20-A Order no. Operating temperature [°C] -10 ... +130 -10 ... +130 -10 ... +130 -10 ... +130 -10 ... +130 -10 ... +130

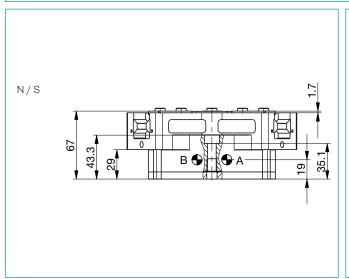
	► Technical Data - Protector Version						
Order no.	GPD5013N-21-A	GPD5013NC-21-A	GPD5013NO-21-A	GPD5013S-21-A	GPD5013SC-21-A	GPD5013SO-21-A	
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**	
Weight [kg]	3.15	4.3	4.3	3.15	4.3	4.3	

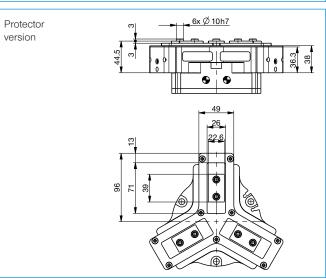
110.9.1. [1.9]	00			00		
	Technical	Data - High Tem	perature Protect	or Version		
Order no.	GPD5013N-24-A	GPD5013NC-24-A	GPD5013NO-24-A	GPD5013S-24-A	GPD5013SC-24-A	GPD5013SO-24-A
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	3.15	4.3	4.3	3.15	4.3	4.3

^{*}All data measured at 6 bar

^{* *} with purged air (max. 0,5 bar)

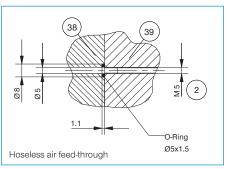


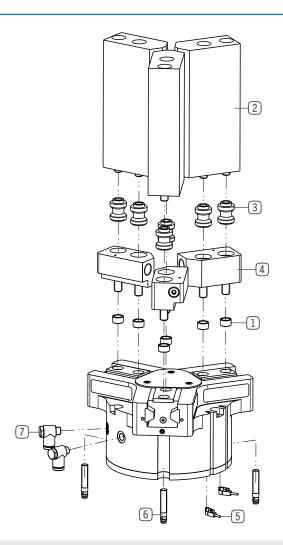




- ① Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- 7 Mounting block
- 19 Air purge connection option
- 35 Attachment option for customer-specific fittings
- 38 Adapter

- 39 Gripper
- (4) Clamp for sensor
- 45 Switch cam adjustment
- Air connection (close)
- B Air connection (open)
- Air connection, alternative (close)
- B Air connection, alternative (open)





► INCLUDED IN DELIVERY



Centering Disc

► RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5013AL



Universal jaw steel

UB5013ST



Aluminum adjustment jaw

EB5013AL



Steel adjustment jaw

EB5013ST



Changeable jaw, loose part-set

WB5013L



Changeable jaw, fix-part

WB5013F



Pressure piece N / S

ADS5013-01



Pressure piece NC / NO / SC / SO

ADS5013-02



Inductive proximity switch

NJ8-E2S



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8 MFSP2SKHC-02



Plug-in connector Straight Cable 5m - Socket M8 (female) KAG500



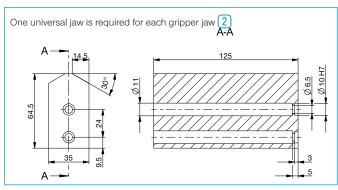
Angled Fittings - Quick Connect Style WV1-8X6

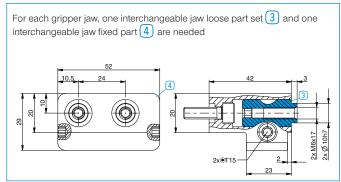


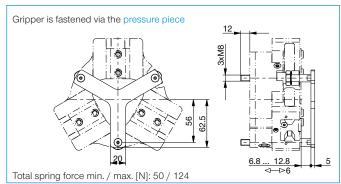
Pressure Safety Valve

DSV1-8

TECHNICAL DRAWINGS ACCESSORIES



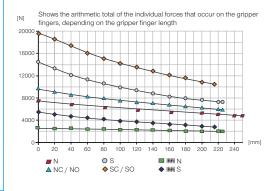




▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	145	
Mx [Nm]	195	
My [Nm]	185	
Fa [N]	5200	

► TECHNICAL DATA

	► Technical Data*					
Order no.	GPD5016N-00-A	GPD5016NC-00-A	GPD5016NO-00-A	GPD5016S-00-A	GPD5016SC-00-A	GPD5016SO-00-A
Stroke per jaw [mm]	16	16	16	8	8	8
Gripping force in closing [N]	6870	9240		14700	19780	
Gripping force in opening [N]	7120		9490	15250		20330
Gripping force secured by spring min. [N]		2370	2370		5080	5080
Closing time [s]	0.4	0.3	0.5	0.4	0.3	0.5
Opening time [s]	0.4	0.5	0.3	0.4	0.5	0.3
Permissible weight per jaw max [kg]	3.8	3.8	3.8	3.8	3.8	3.8
Length of the gripper fingers max. [mm]	245	225	225	225	215	215
Repetition accuracy +/- [mm]	0.02	0.02	0.02	0.02	0.02	0.02
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90
Air volume per cycle [cm³]	525	925	925	525	925	925
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	6.3	8.1	8.1	6.3	8.1	8.1

Technical Data - High Temperature Protector Version

Order no.	
Operating temperature [°C]	

rechnical Data - High Temperature Version									
GPD5016N-20-A	GPD5016NC-20-A	GPD5016NO-20-A	GPD5016S-20-A	GPD5016SC-20-A	GPD5016SO-20-A				
-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130				

Order no.	
Protection to IEC 60529	
Weight [kg]	

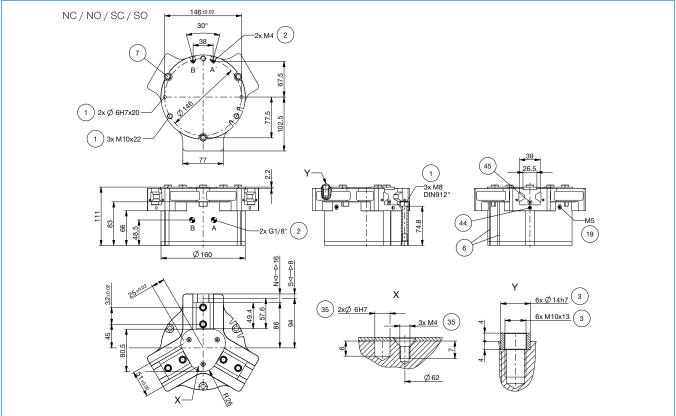
► Technical Data - Protector Version								
GPD5016N-21-	A GPD5016NC-21-A	GPD5016NO-21-A	GPD5016S-21-A	GPD5016SC-21-A	GPD5016SO-21-A			
IP67**	IP67**	IP67**	IP67**	IP67**	IP67**			
7.4	9.2	9.2	7.4	9.2	9.2			

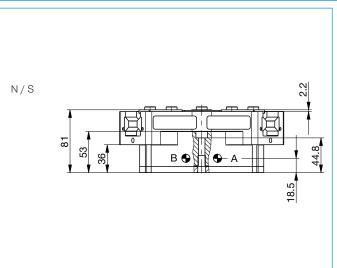
Order no.
Operating temperature [°C]
Protection to IEC 60529
Weight [kg]

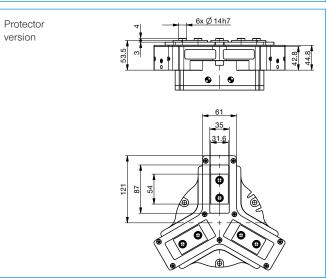
,	,							
GPD5016N-24-A	GPD5016NC-24-A	GPD5016NO-24-A	GPD5016S-24-A	GPD5016SC-24-A	GPD5016SO-24-A			
-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130			
IP67**	IP67**	IP67**	IP67**	IP67**	IP67**			
7.4	9.2	9.2	7.4	9.2	9.2			

^{*}All data measured at 6 bar

^{* *} with purged air (max. 0,5 bar)

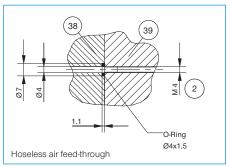


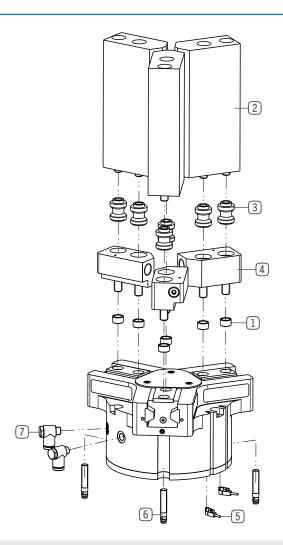




- ① Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- 7 Mounting block
- 19 Air purge connection option
- 35 Attachment option for customer-specific fittings
- 38 Adapter

- 39 Gripper
- (4) Clamp for sensor
- 45 Switch cam adjustment
- Air connection (close)
- B Air connection (open)
- Air connection, alternative (close)
- B Air connection, alternative (open)





► INCLUDED IN DELIVERY



Centering Disc

► RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5016AL



Universal jaw steel

UB5016ST



Aluminum adjustment jaw

EB5016AL



Steel adjustment jaw

EB5016ST



Changeable jaw, loose part-set

WB5016L



Changeable jaw, fix-part

WB5016F



Pressure piece N / S

ADS5016-01



Pressure piece NC / NO / SC / SO

ADS5016-02



Inductive proximity switch

NJ8-E2S





Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8 MFSP2SKHC-02



Plug-in connector Straight Cable 5m - Socket M8 (female) KAG500



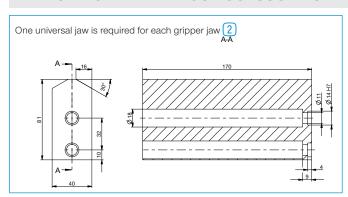
Angled Fittings - Quick Connect Style WV1-8X8

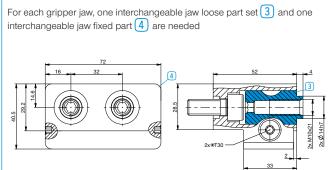


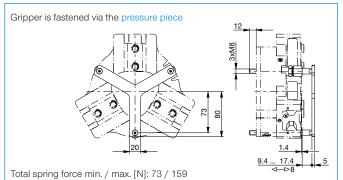
Pressure Safety Valve

DSV1-8

TECHNICAL DRAWINGS ACCESSORIES



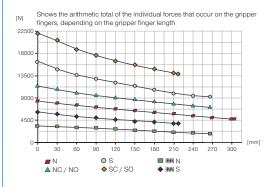




▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	180
Mx [Nm]	205
My [Nm]	225
Fa [N]	7500

► TECHNICAL DATA

	Technical	Data*				
Order no.	GPD5025N-00-A	GPD5025NC-00-A	GPD5025NO-00-A	GPD5025S-00-A	GPD5025SC-00-A	GPD5025SO-00-A
Stroke per jaw [mm]	25	25	25	14	14	14
Gripping force in closing [N]	8430	11560		16240	22270	
Gripping force in opening [N]	8730		11860	16820		22850
Gripping force secured by spring min. [N]		3130	3130		6030	6030
Closing time [s]	0.6	0.6	1.0	0.6	0.6	1.0
Opening time [s]	0.6	1.0	0.6	0.6	1.0	0.6
Permissible weight per jaw max [kg]	7	7	7	7	7	7
Length of the gripper fingers max. [mm]	310	265	265	265	220	220
Repetition accuracy +/- [mm]	0.05	0.05	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90
Air volume per cycle [cm³]	1025	1750	1750	1025	1750	1750
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	11.8	15.4	15.4	11.8	15.4	15.4

Order no.	
Operating temperature [°C]	

lechnical Data - High Temperature Version								
GPD5025N-20-A	GPD5025NC-20-A	GPD5025NO-20-A	GPD5025S-20-A	GPD5025SC-20-A	GPD5025SO-20-A			
-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130			

Order no.
Protection to IEC 60529
Weight [kg]

	► Technical Data - Protector Version								
GPI	D5025N-21-A	GPD5025NC-21-A	GPD5025NO-21-A	GPD5025S-21-A	GPD5025SC-21-A	GPD5025SO-21-A			
IP6	7**	IP67**	IP67**	IP67**	IP67**	IP67**			
14		17.6	17.6	14	17.6	17.6			

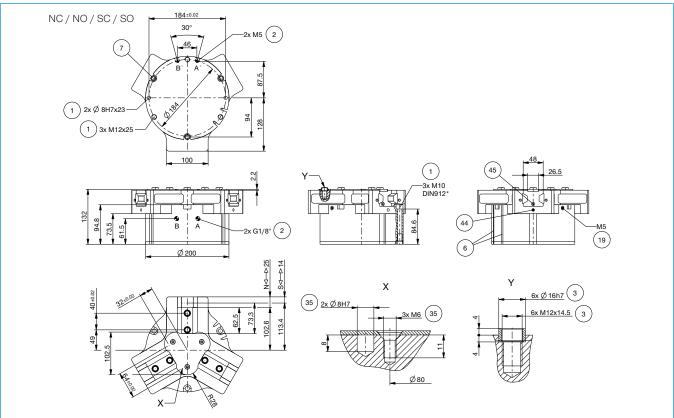
Order no.	
Operating temperature [°C]	
Protection to IEC 60529	
Weight [kg]	

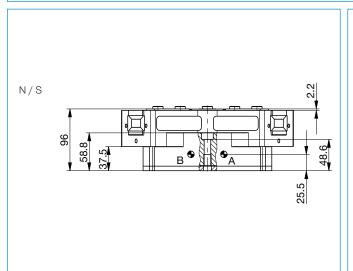
GPD5025N-24-A	GPD5025NC-24-A	GPD5025NO-24-A	GPD5025S-24-A	GPD5025SC-24-A	GPD5025SO-24-A
-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130
IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
14	17.6	17.6	14	17.6	17.6

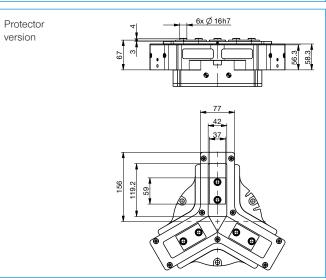
Technical Data - High Temperature Protector Version

^{*}All data measured at 6 bar

^{* *} with purged air (max. 0,5 bar)

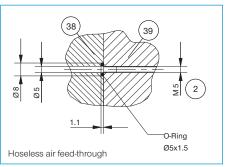


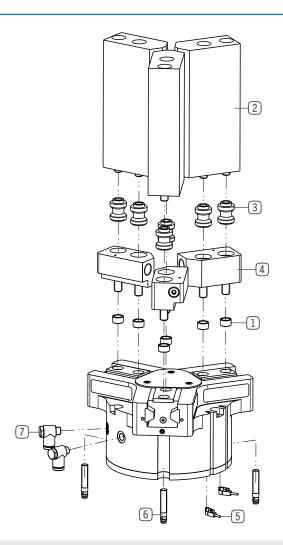




- ① Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- 7 Mounting block
- 19 Air purge connection option
- 35 Attachment option for customer-specific fittings
- 38 Adapter

- 39 Gripper
- (4) Clamp for sensor
- 45 Switch cam adjustment
- Air connection (close)
- B Air connection (open)
- Air connection, alternative (close)
- B Air connection, alternative (open)





► INCLUDED IN DELIVERY



Centering Disc

► RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5025AL



Universal jaw steel

UB5025ST



Aluminum adjustment jaw

EB5025AL



Steel adjustment jaw

EB5025ST



Changeable jaw, loose part-set





Changeable jaw, fix-part

WB5025F



Pressure piece N / S

ADS5025-01



Pressure piece NC / NO / SC / SO

ADS5025-02



Inductive proximity switch

NJ8-E2S





Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Cable 5m - Socket M8 (female) KAG500



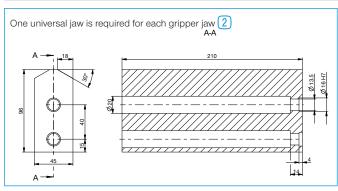
Angled Fittings - Quick Connect Style WV1-8X8

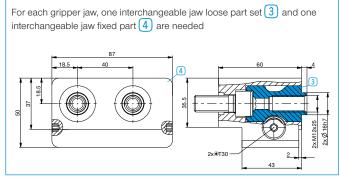


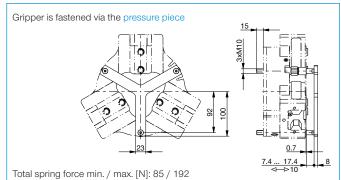
Pressure Safety Valve

DSV1-8

TECHNICAL DRAWINGS ACCESSORIES



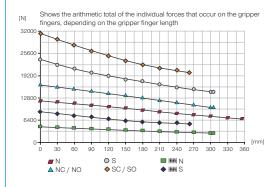




▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	210
Mx [Nm]	290
My [Nm]	310
Fa [N]	9500

► TECHNICAL DATA

	► Technical Data*					
Order no.	GPD5030N-00-A	GPD5030NC-00-A	GPD5030NO-00-A	GPD5030S-00-A	GPD5030SC-00-A	GPD5030SO-00-A
Stroke per jaw [mm]	30	30	30	17	17	17
Gripping force in closing [N]	12130	16560		23150	31620	
Gripping force in opening [N]	12540		16970	23930		32400
Gripping force secured by spring min. [N]		4430	4430		8470	8470
Closing time [s]	1.13	1.0	1.9	1.13	1.0	1.9
Opening time [s]	1.13	1.9	1.0	1.13	1.9	1.0
Permissible weight per jaw max [kg]	9.5	9.5	9.5	9.5	9.5	9.5
Length of the gripper fingers max. [mm]	355	305	305	305	260	260
Repetition accuracy +/- [mm]	0.05	0.05	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90
Air volume per cycle [cm³]	1780	3000	3000	1780	3000	3000
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	21	27.5	27.5	21	27.5	27.5

	Technical Data - High Temperature Version				
Order no.	GPD5030N-20-A	GPD5030NC-20-A	GPD5030NO-20-A		
Operating temperature [°C]	-10 +130	-10 +130	-10 +130		

Order no.	GPD5030N-20-A	GPD5030NC-20-A	GPD5030NO-20-A	GPD5030S-20-A	GPD5030SC-20-A	GPD5030SO-20-A
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130
	► Technical Data - Protector Version					

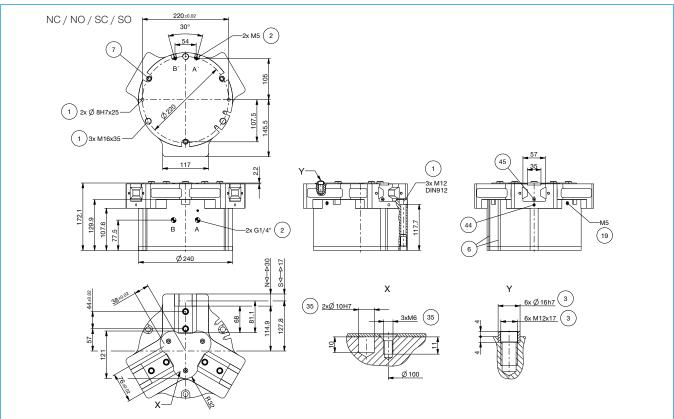
Technical Data - Protector Version						
Order no.	GPD5030N-21-A	GPD5030NC-21-A	GPD5030NO-21-A	GPD5030S-21-A	GPD5030SC-21-A	GPD5030SO-21-A
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	24	30.5	30.5	24	30.5	30.5
N. Tarakada I Bata - Wali Tarana anakan Barata dan Mandara						

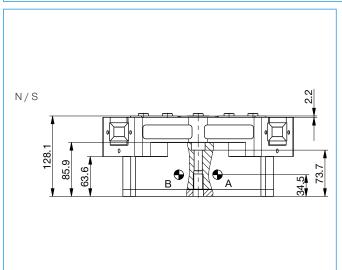
	Technical Data - High Temperature Protector Version					
Order no.	GPD5030N-24-A	GPD5030NC-24-A	GPD5030NO-24-A	GPD5030S-24-A	GPD5030SC-24-A	GPD5030SO-24-A
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	24	30.5	30.5	24	30.5	30.5

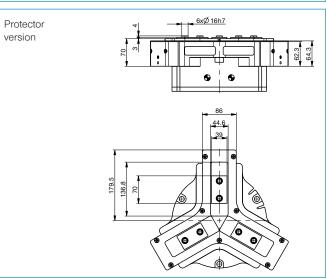
^{*}All data measured at 6 bar

^{* *} with purged air (max. 0,5 bar)

TECHNICAL DRAWINGS

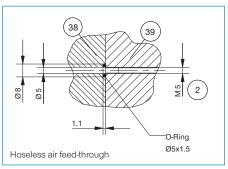


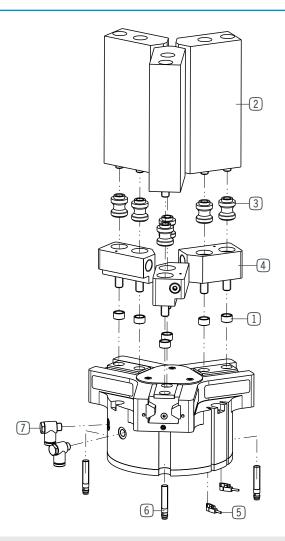




- ① Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- 7 Mounting block
- 19 Air purge connection option
- 35 Attachment option for customer-specific fittings
- 38 Adapter

- 39 Gripper
- (4) Clamp for sensor
- 45 Switch cam adjustment
- Air connection (close)
- (open)
- Air connection, alternative (close)
- B Air connection, alternative (open)





► INCLUDED IN DELIVERY



Centering Disc

030529

▶ RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5030AL



Universal jaw steel

UB5030ST



Aluminum adjustment jaw

EB5030AL



Steel adjustment jaw

EB5030ST



Changeable jaw, loose part-set

WB5030L



Changeable jaw, fix-part

WB5030F



Pressure piece N / S

ADS5030-01



Pressure piece NC / NO / SC / SO

ADS5030-02



Inductive proximity switch

NJ8-E2S



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Angled Fittings - Quick Connect Style

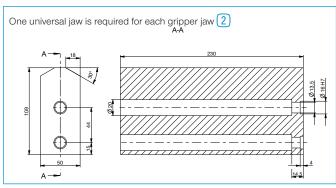
WV1-4X8

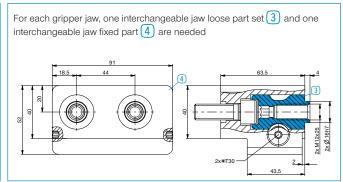


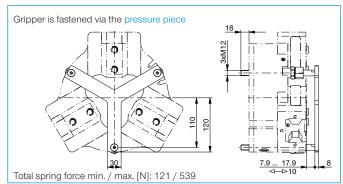
Pressure Safety Valve

DSV1-8

TECHNICAL DRAWINGS ACCESSORIES







▶ PRODUCT SPECIFICATIONS





Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	260
Mx [Nm]	430
My [Nm]	450
Fa [N]	10400

► TECHNICAL DATA

	Technical	Data*				
Order no.	GPD5035N-00-A	GPD5035NC-00-A	GPD5035NO-00-A	GPD5035S-00-A	GPD5035SC-00-A	GPD5035SO-00-A
Stroke per jaw [mm]	35	35	35	20	20	20
Gripping force in closing [N]	16600	23300		31500	44200	
Gripping force in opening [N]	17100		23800	32500		45200
Gripping force secured by spring min. [N]		6700	6700		12700	12700
Closing time [s]	1.2	1.1	2.3	1.2	1.1	2.3
Opening time [s]	1.2	2.3	1.2	1.2	2.3	1.2
Permissible weight per jaw max [kg]	12.5	12.5	12.5	12.5	12.5	12.5
Length of the gripper fingers max. [mm]	250	225	225	225	200	200
Repetition accuracy +/- [mm]	0.05	0.05	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	6.5	6.5	8	6.5	6.5
Operating temperature [°C]	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90
Air volume per cycle [cm³]	2904	5477	5477	2904	5477	5477
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	37.8	42	42	37.8	42	42
	Technical	Data - High Tem	perature Version			
Order no.	GPD5035N-20-A	GPD5035NC-20-A	GPD5035NO-20-A	GPD5035S-20-A	GPD5035SC-20-A	GPD5035SO-20-A
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130
	Technical	Data - Protector	Version			
Order no.	GPD5035N-21-A	GPD5035NC-21-A	GPD5035NO-21-A	GPD5035S-21-A	GPD5035SC-21-A	GPD5035SO-21-A
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	43.8	48	48	43.8	48	48
	Technical	Data - High Tem	perature Protect	or Version		
Order no.	GPD5035N-24-A	GPD5035NC-24-A	GPD5035NO-24-A	GPD5035S-24-A	GPD5035SC-24-A	GPD5035SO-24-A
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	43.8	48	48	43.8	48	48

^{*}All data measured at 6 bar

^{* *} with purged air (max. 0,5 bar)

▶ PRODUCT SPECIFICATIONS





Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	390
Mx [Nm]	580
My [Nm]	600
Fa [N]	11500

► TECHNICAL DATA

	► Technical Data*					
Order no.	GPD5045N-00-A	GPD5045NC-00-A	GPD5045NO-00-A	GPD5045S-00-A	GPD5045SC-00-A	GPD5045SO-00-A
Stroke per jaw [mm]	45	45	45	26	26	26
Gripping force in closing [N]	27900	36900		53500	70600	
Gripping force in opening [N]	28850		37850	55400		72500
Gripping force secured by spring min. [N]		9000	9000		17100	17100
Closing time [s]	2.0	1.7	2.8	2.0	1.7	2.8
Opening time [s]	2.0	2.8	1.7	2.0	2.8	1.7
Permissible weight per jaw max [kg]	12.5	12.5	12.5	12.5	12.5	12.5
Length of the gripper fingers max. [mm]	250	225	225	225	200	200
Repetition accuracy +/- [mm]	0.05	0.05	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	6.5	6.5	8	6.5	6.5
Operating temperature [°C]	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90
Air volume per cycle [cm³]	6500	12400	12400	6500	12400	12400
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	78.6	86.5	86.5	80	88	88
	Technical	Data - High Tem	perature Version			
Order no.	GPD5045N-20-A	GPD5045NC-20-A	GPD5045NO-20-A	GPD5045S-20-A	GPD5045SC-20-A	GPD5045SO-20-A
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130
	► Technical	Data - Protector	Version			
Order no.	GPD5045N-21-A	GPD5045NC-21-A	GPD5045NO-21-A	GPD5045S-21-A	GPD5045SC-21-A	GPD5045SO-21-A
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	90.5	98.4	98.4	91.9	99.9	99.9
	Technical	Data - High Tem	perature Protect	or Version		
Order no.	GPD5045N-24-A	GPD5045NC-24-A	GPD5045NO-24-A	GPD5045S-24-A	GPD5045SC-24-A	GPD5045SO-24-A
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	90.5	98.4	98.4	91.9	99.9	99.9

^{*}All data measured at 6 bar

^{* *} with purged air (max. 0,5 bar)

3-JAW CONCENTRIC GRIPPERS OVERVIEW OF SERIES



ELECTRICAL Series GED1300 336 342 Series GED5000

3-JAW CONCENTRIC GRIPPERS SERIES GED1300

PRODUCT ADVANTAGES



"The robust"

Proven T slot guide

This established and proven guiding technology stands for the highest process reliability like no other

Integrated position sensing

You can detect the gripper status safely via the motor current using your control system

▶ The simplest activation

The included control unit is controlled easily via plus and minus buttons, while you can optionally adjust the gripping force using the potentiometer

► THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com



BENEFITS IN DETAIL



1 Removable centering sleeves

- quick and economical positioning of the gripper fingers

2 Gripper jaw

- hardened steel
- individual gripper finger mounting

3 Positively driven curve disc

- synchronized the movement of the gripper jaws
- high force transfer
- rapid stroke and force stroke (version with 6 mm stroke per jaw)

4 Drive

- electric drive by 24 VDC step motor

5 Guide

- precise T-Slot guide for high forces and moments capacity

6 Position sensing

- measured at the end of stroke via power increase on the motor

7 Energy supply

- standardized interface M8 round plug connection signal control line (use only cable without diode)

8 Robust, lightweight housing

- Hard-coated aluminum alloy

> SERIES CHARACTERISTICS



Number of installation sizes	2
Stroke per jaw	2 mm - 6 mm
Gripping force	140 N - 350 N
Weight	0,25 mm - 1,7 mm
AP class	3



5 million maintenance-free cycles (max.)

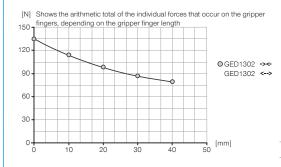
IP 40

IP40

> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	5
Mx [Nm]	5
My [Nm]	4
Fa [N]	120

► INCLUDED IN DELIVERY







Control

DST02900

ELEGR01

► RECOMMENDED ACCESSORIES



Plug-in connector Straight Cable 5m - Socket M8

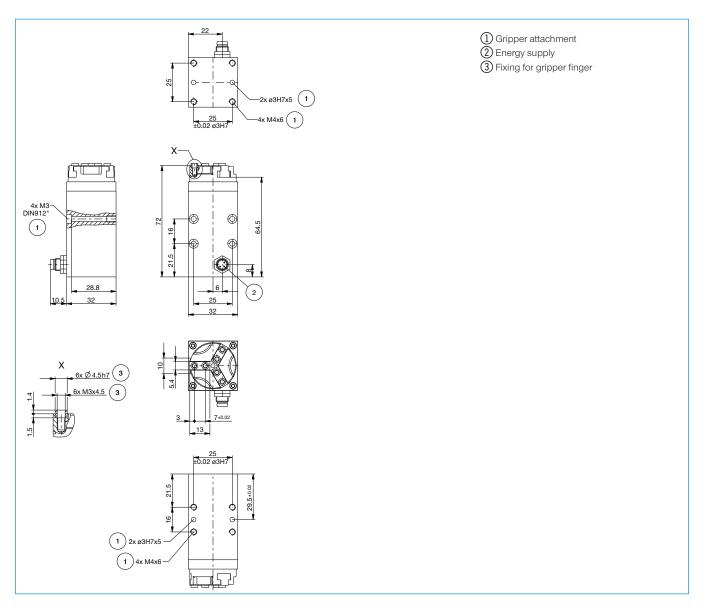
KAG500



Plug-in connector Angled Cable 5m - Socket M8

KAW500

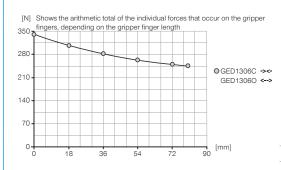
	► Technical Data
Order no.	GED1302
Stroke per jaw [mm]	2
Gripping force in closing (adjustable) max. [N]	140
Gripping force in opening (adjustable) max. [N]	140
Closing time [s]	0.2
Opening time [s]	0.2
Repetition accuracy +/- [mm]	0.1
Voltage [V]	24
Max. current regulable by potentiometer [mA]	140
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Protection to IEC 60529	IP40
Weight [kg]	0.25



> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	30
Mx [Nm]	25
My [Nm]	20
Fa [N]	800

► INCLUDED IN DELIVERY







Control

DST40800

ELEGR04

RECOMMENDED ACCESSORIES



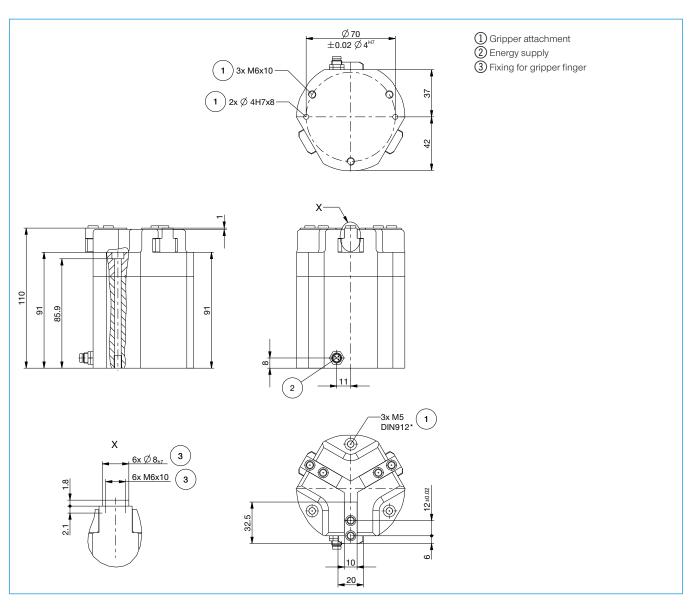
Plug-in connector Straight Cable 5m - Socket M8 KAG500



Plug-in connector Angled Cable 5m - Socket M8

KAW500

	Technical Data	
Order no.	GED1306C	GED1306O
Stroke per jaw [mm]	6	6
Gripping force in closing (adjustable) max. [N]	350	
Gripping force in opening (adjustable) max. [N]		350
Closing time [s]	0.4	0.4
Opening time [s]	0.4	0.4
Repetition accuracy +/- [mm]	0.02	0.02
Voltage [V]	24	24
Max. current regulable by potentiometer [mA]	210	210
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Protection to IEC 60529	IP40	IP40
Weight [kg]	1.7	1.7



3-JAW CONCENTRIC GRIPPERS SERIES GED5000

PRODUCT ADVANTAGES



"ALL in ONE"

- Approximately the same gripping force as a comparable pneumatic gripper
- Self locking mechanism in case of power drop
- Same connection hole patterns as a comparable pneumatic gripper
- Plug and play single-cable solution, supports incredibly easy control using I/O signals or IO-Link
- Integrated ACM control module option of configuring gripping force, travel time and switching points
- Protected from corrosion and sealed in accordance with IP64
- ▶ Brushless DC motor up to 30 million cycles without maintenance

► THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com

HOW TO ORDER CORRECTLY

The product order numbers are arranged according to this diagram:

Order no.	GED5008		-00	-A
Digital control		Ю		
IO-Link control		IL		



BENEFITS IN DETAIL



1 Wedge hook mechanism

- high forces and moments capacity
- Synchronized gripper jaw movement

2 Gripper jaw

- Gripper fingers mounted using removable centring sleeves
- Lubricated for life via incorporated lubrication slots

3 Dual lip seal

- Enables IP64
- Prevents grease from being squeezed out, increasing service life

4 Steel Linear Guide

- Steel in steel quide
- Enables use of extremely long gripper fingers

5 Mounting and positioning

- Alternatively, on several sides for customized mounting
- Pneumatic and electrical versions identical apart from height

6 BLDC motor

- Wear-resistant brushless DC motor

7 Advanced control module

- Integrated control module with single-cable solution
- Gripping force, travel time and query programmable via the control panel on the housing

8 Drive train

- Combination of trapezoidal spindle and gear
- Durable and robust

> SERIES CHARACTERISTICS



3
6 mm - 10 mm
540 N - 1900 N
1,09 kg - 2,33 kg
5



30 million maintenance-free cycles (max.)



Corrosion resistance



Integrated sensing



Self locking mechanism



IP64

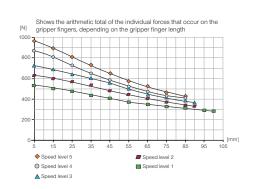


Purged air

▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	43	
Mx [Nm]	70	
My [Nm]	46	
Fa [N]	1250	

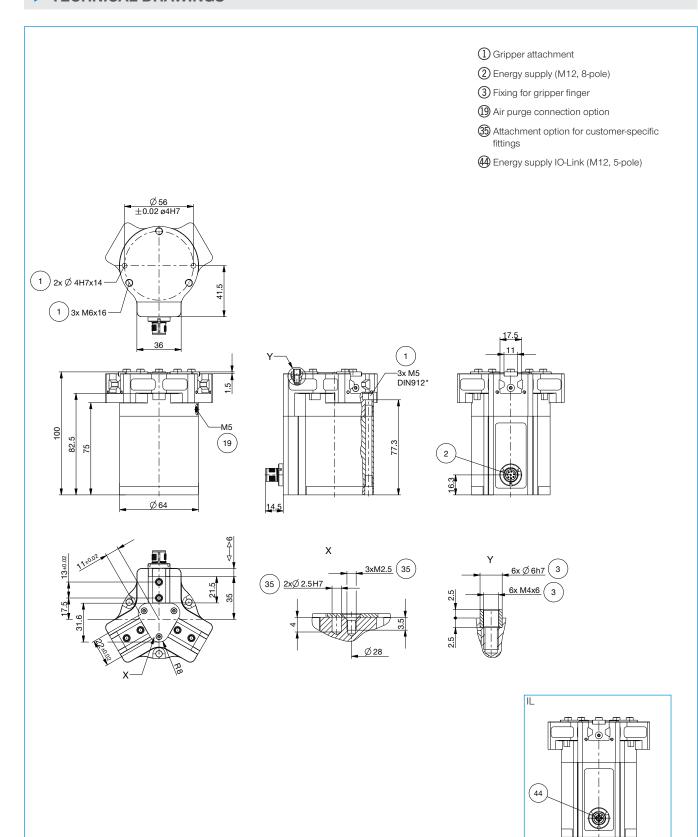
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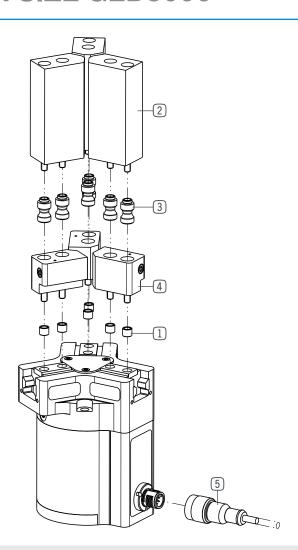
	► Technical Data	
Order no.	GED5006IO-00-A	GED5006IL-00-A
Control	Ю	Q IO -Link
Stroke per jaw [mm]	6	6
Drive	BLDC motor	BLDC motor
Self locking mechanism	mechanical	mechanical
Control time [s]	0.035	0.035
Permissible weight per jaw max [kg]	0.4	0.4
Length of the gripper fingers max. [mm]	100	100
Repetition accuracy +/- [mm]	0.01	0.01
Voltage [V]	24	24
Current consumption max. [A]	5	5
Operating temperature [°C]	5 50	5 50
Protection to IEC 60529	IP64	IP64
Weight [kg]	1.09	1.09

TECHNICAL DATA - MODES

Technical data - N mode	
GED5006IO-00-A	GED5006IL-00-A
540 / 960	540 / 960
540 / 960	540 / 960
0,15 / 0,22	0,15 / 0,22
0,15 / 0,22	0,15 / 0,22
Technical data - NC mode	
GED5006IO-00-A	GED5006IL-00-A
540 / 960	540 / 960
-	-
0,15 / 0,22	0,15 / 0,22
0,13	0,13
Technical data - NO mode	
	4-7-
GED5006IO-00-A	GED5006IL-00-A
-	-
540 / 960	540 / 960
0,13	0,13
0,15 / 0,22	0,15 / 0,22
	GED5006IO-00-A 540 / 960 540 / 960 0,15 / 0,22 0,15 / 0,22 ► Technical data - NC mode GED5006IO-00-A 540 / 960 - 0,15 / 0,22 0,13 ► Technical data - NO mode GED5006IO-00-A - 540 / 960 0,13

TECHNICAL DRAWINGS





► INCLUDED IN DELIVERY



Centering Disc

024230

► RECOMMENDED ACCESSORIES



Universal jaw aluminium



Universal jaw steel



Steel adjustment jaw



Changeable jaw, loose part-set





Changeable jaw, fix-part

UB5006ST



Pressure piece ADS5006-05

EB5006AL



Plug-in Connector Straight Cable 10 m - Female M12 KAG1000B8

EB5006ST



Plug-in Connector Angled Cable 10 m - Female M12 KAW1000B8

WB5006L



Plug-in connector straight 5m - plug / socket M12 KAG500IL

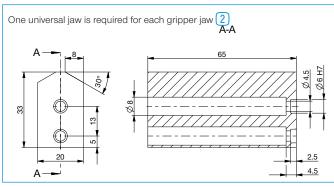
WB5006F

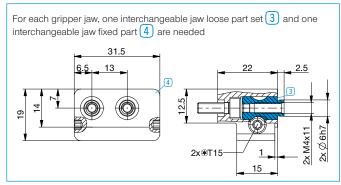


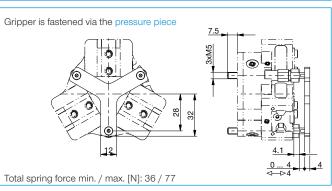
Y-Plug-in Connector

B12-Y-5IL

> TECHNICAL DRAWINGS ACCESSORIES



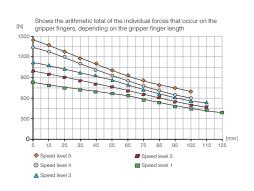




▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	60
Mx [Nm]	105
My [Nm]	65
Fa [N]	1900

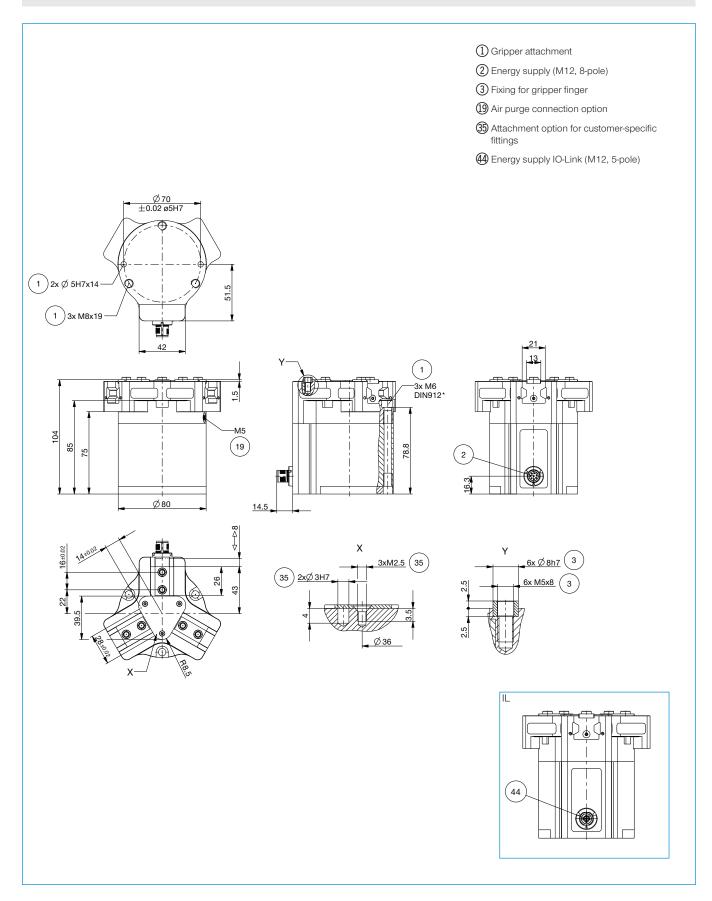
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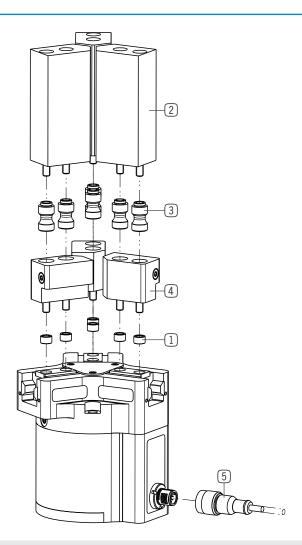
	► Technical Data	
Order no.	GED5008IO-00-A	GED5008IL-00-A
Control	IO	② IO -Link
Stroke per jaw [mm]	8	8
Drive	BLDC motor	BLDC motor
Self locking mechanism	mechanical	mechanical
Control time [s]	0.035	0.035
Permissible weight per jaw max [kg]	0.7	0.7
Length of the gripper fingers max. [mm]	125	125
Repetition accuracy +/- [mm]	0.01	0.01
Voltage [V]	24	24
Current consumption max. [A]	5	5
Operating temperature [°C]	5 50	5 50
Protection to IEC 60529	IP64	IP64
Weight [kg]	1.66	1.66

TECHNICAL DATA - MODES

	► Technical data - N mode	
Order no.	GED5008IO-00-A	GED5008IL-00-A
Gripping force → ← min. / max. [N]	800 / 1450	800 / 1450
Gripping force ←→ min. / max. [N]	800 / 1450	800 / 1450
Travel time → ← min. / max. [s]	0,18 / 0,29	0,18 / 0,29
Travel time ← min. / max. [s]	0,18 / 0,29	0,18 / 0,29
	► Technical data - NC mode	
Owleans		OFDEGOOD OO A
Order no.	GED5008IO-00-A	GED5008IL-00-A
Gripping force → ← min. / max. [N]	800 / 1450	800 / 1450
Gripping force ← → min. / max. [N]	-	-
Travel time → ← min. / max. [s]	0,18 / 0,29	0,18 / 0,29
Travel time ← → min. / max. [s]	0,15	0,15
	► Technical data - NO mode	
Order no.	GED5008IO-00-A	GED5008IL-00-A
Gripping force → ← min. / max. [N]	-	-
Gripping force ← → min. / max. [N]	800 / 1450	800 / 1450
Travel time → ← min. / max. [s]	0,15	0,15
Travel time ← min. / max. [s]	0,18 / 0,29	0,18 / 0,29

TECHNICAL DRAWINGS





► INCLUDED IN DELIVERY



Centering Disc

024231

► RECOMMENDED ACCESSORIES



Universal jaw aluminium



Universal jaw steel



Steel adjustment jaw



Changeable jaw, loose part-set

UB5008AL



Changeable jaw, fix-part

UB5008ST



Pressure piece ADS5008-05

EB5008AL



Aluminum adjustment jaw

Plug-in Connector Straight Cable 10 m - Female M12 KAG1000B8

EB5008ST



Plug-in Connector Angled Cable 10 m - Female M12 KAW1000B8

WB5008L



Plug-in connector straight 5m - plug / socket M12 KAG500IL

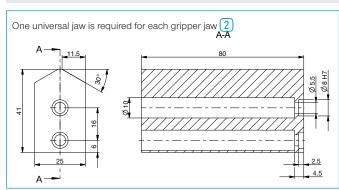
WB5008F

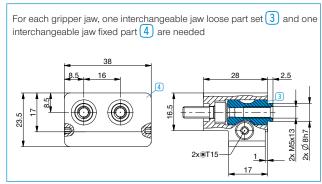


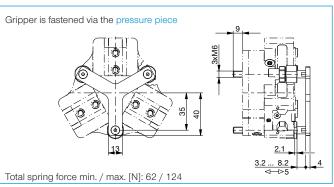
Y-Plug-in Connector

B12-Y-5IL

> TECHNICAL DRAWINGS ACCESSORIES



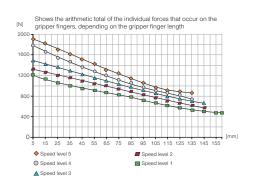




▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	75
Mx [Nm]	125
My [Nm]	95
Fa [N]	2700

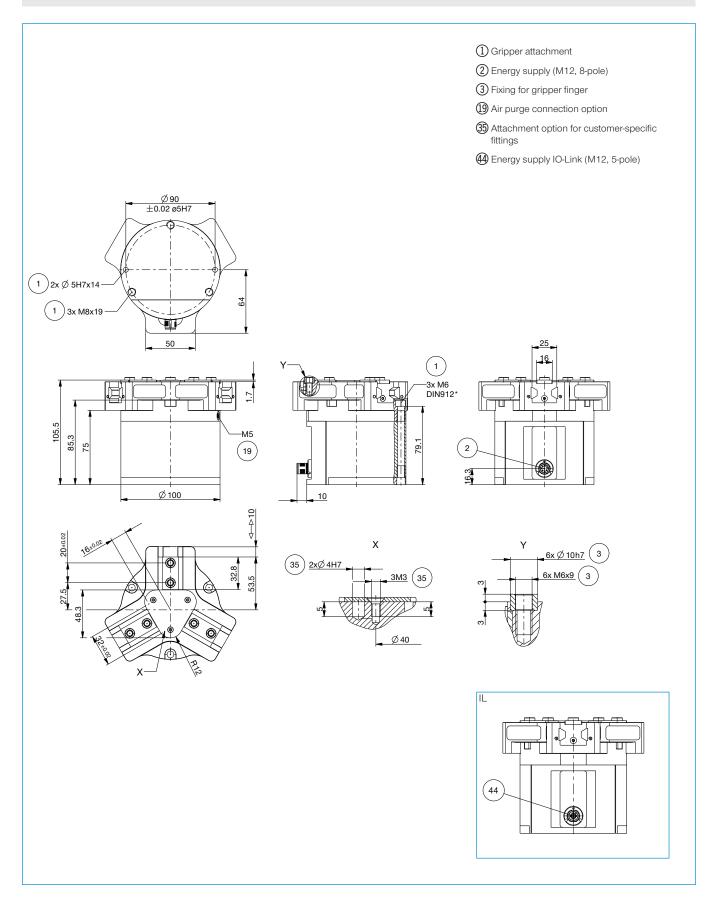
▶ TECHNICAL DATA - BASIC VERSION

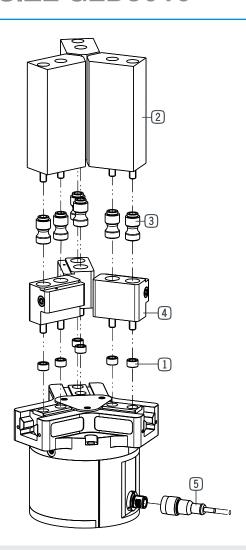
	► Technical Data	
Order no.	GED5010IO-00-A	GED5010IL-00-A
Control	IO	⊘ IO -Link
Stroke per jaw [mm]	10	10
Drive	BLDC motor	BLDC motor
Self locking mechanism	mechanical	mechanical
Control time [s]	0.035	0.035
Permissible weight per jaw max [kg]	1.3	1.3
Length of the gripper fingers max. [mm]	160	160
Repetition accuracy +/- [mm]	0.01	0.01
Voltage [V]	24	24
Current consumption max. [A]	5	5
Operating temperature [°C]	5 50	5 50
Protection to IEC 60529	IP64	IP64
Weight [kg]	2.33	2.33

► TECHNICAL DATA - MODES

	► Technical data - N mode	
Order no.	GED5010IO-00-A	GED5010IL-00-A
Gripping force → ← min. / max. [N]	1200 / 1900	1200 / 1900
Gripping force ← → min. / max. [N]	1200 / 1900	1200 / 1900
Travel time → ← min. / max. [s]	0,21 / 0,32	0,21 / 0,32
Travel time ← → min. / max. [s]	0,21 / 0,32	0,21 / 0,32
	► Technical data - NC mode	
Order no.	GED5010IO-00-A	GED5010IL-00-A
Gripping force → ← min. / max. [N]	1200 / 1900	1200 / 1900
Gripping force ← → min. / max. [N]	-	-
Travel time → ← min. / max. [s]	0,21 / 0,32	0,21 / 0,32
Travel time ← → min. / max. [s]	0,16	0,16
	► Technical data - NO mode	
Order no.	GED5010IO-00-A	GED5010IL-00-A
Gripping force → ← min. / max. [N]	-	-
Gripping force ← → min. / max. [N]	1200 / 1900	1200 / 1900
Travel time → ← min. / max. [s]	0,16	0,16
Travel time ← → min. / max. [s]	0,21 / 0,32	0,21 / 0,32

TECHNICAL DRAWINGS





► INCLUDED IN DELIVERY



Centering Disc

018187

► RECOMMENDED ACCESSORIES



Universal jaw aluminium



Universal jaw steel



Aluminum adjustment jaw Steel adjustment jaw



Changeable jaw, loos part-set

WB5010L

UB5010AL



Changeable jaw, fix-part

UB5010ST



Pressure piece

ADS5010-05

EB5010AL



Plug-in Connector Straight Cable 10 m - Female M12 KAG1000B8

EB5010ST



Plug-in Connector Angled Cable 10 m - Female M12 **KAW1000B8**

⊘ IO-Link

Plug-in connector straight 5m - plug / socket M12 KAG500IL

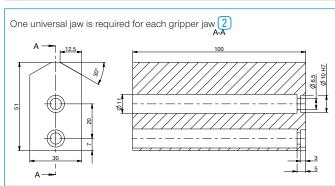
WB5010F

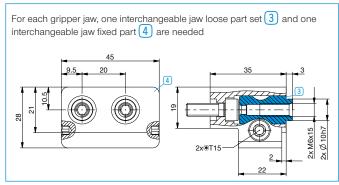


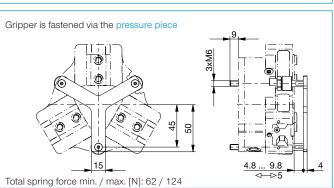
Y-Plug-in Connector

B12-Y-5IL

TECHNICAL DRAWINGS ACCESSORIES







3-JAW CONCENTRIC GRIPPERS WITH LONG STROKE **OVERVIEW OF SERIES**



PNEUMATIC



Series GD500

358

3-JAW CONCENTRIC GRIPPERS WITH LONG STROKE **SERIES GD500**

PRODUCT ADVANTAGES



"The flat"

Reduced installation height due to horizontal drive Reduces the interference contours for your application

Proven T slot guide

This established and proven guiding technology stands for the highest process reliability like no other

► Failure-free continuous operation

Our uncompromising "Made in Germany" quality guarantees up to 10 million maintenance-free gripping cycles

► THE BEST PRODUCT FOR YOUR APPLICATION

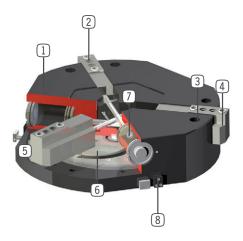


Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com



BENEFITS IN DETAIL



- 1 Robust, lightweight housing
 - Hard-coated aluminum alloy
- 2 Removable centering sleeves
 - quick and economical positioning of the gripper fingers
- 3 Mounting and positioning
- 4 Gripper jaw
 - ground, hardened steel
 - individual gripper finger mounting
- 5 Precise T-Slot guide
 - high forces and moments capacity
- 6 Cam
 - synchronized jaw movement
- 7 Drive
 - three double-acting pneumatic cylinders
- 8 Mounting block
 - mounting for inductive proximity switch

> SERIES CHARACTERISTICS



Number of installation sizes	3
Stroke per jaw	30 mm - 60 mm
Gripping force	1300 N - 2480 N
Weight	7,4 kg - 29 kg
AP class	3



10 million maintenance-free cycles (max.)



Inductive sensor



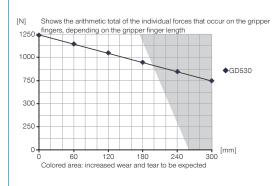
IP40

3-JAW CONCENTRIC GRIPPERS WITH LONG STROKE **INSTALLATION SIZE GD530**

> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	300
Mx [Nm]	200
My [Nm]	300
Fa [N]	8000

► INCLUDED IN DELIVERY



Mounting block



KB8K



Centering Disc

DST41600

> RECOMMENDED ACCESSORIES



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch

NJ8-E2S



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector Angled Cable 5m - Socket M8

KAW500



Straight Fittings - Quick Connect Style

GV1-4X8



Angled Fittings - Quick Connect Style

WV1-4X8



Quick Exhaust Valve

DEV08



Pressure Safety Valve

DSV1-8



Plug-in connector customiz-able Straight - Connector M8

S8-G-3

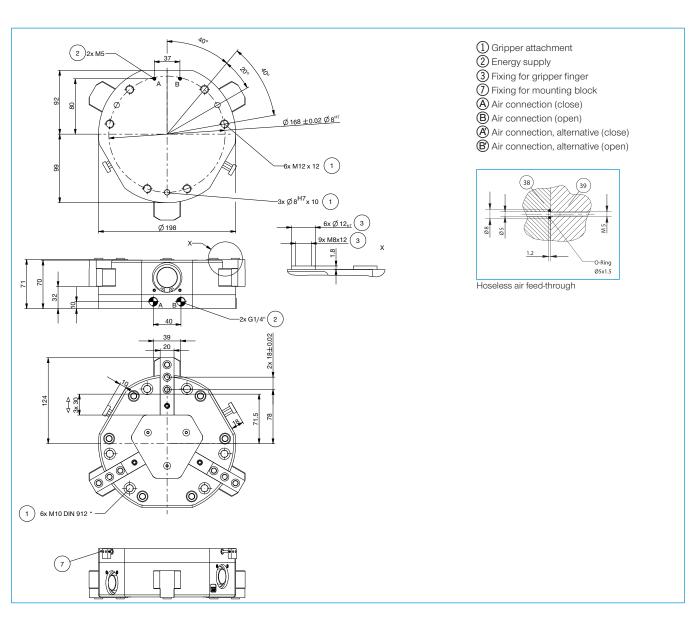


Plug-in connector customiz-able Straight - Connector M12

S12-G-3

	► Technical Data*
Order no.	GD530
Stroke per jaw [mm]	30
Gripping force in closing [N]	1300
Gripping force in opening [N]	1300
Closing time [s]	0.3
Opening time [s]	0.3
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	170
Weight [kg]	7.4

^{*}All data measured at 6 bar

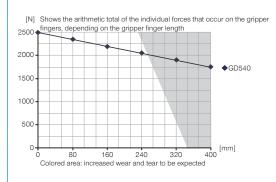


3-JAW CONCENTRIC GRIPPERS WITH LONG STROKE **INSTALLATION SIZE GD540**

▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	300
Mx [Nm]	200
My [Nm]	300
Fa [N]	8000

► INCLUDED IN DELIVERY



Mounting block



Centering Disc

KB8K

DST42000

> RECOMMENDED ACCESSORIES



Inductive proximity switch - Cable 5 m



Inductive proximity switch

NJ8-E2S



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector Angled Cable 5m - Socket M8

KAW500



Straight Fittings - Quick Connect Style

GV1-4X8



Angled Fittings - Quick Connect Style

WV1-4X8

NJ8-E2



Quick Exhaust Valve

DEV08



Pressure Safety Valve

DSV1-8



Plug-in connector customiz-able Straight - Connector M8

S8-G-3

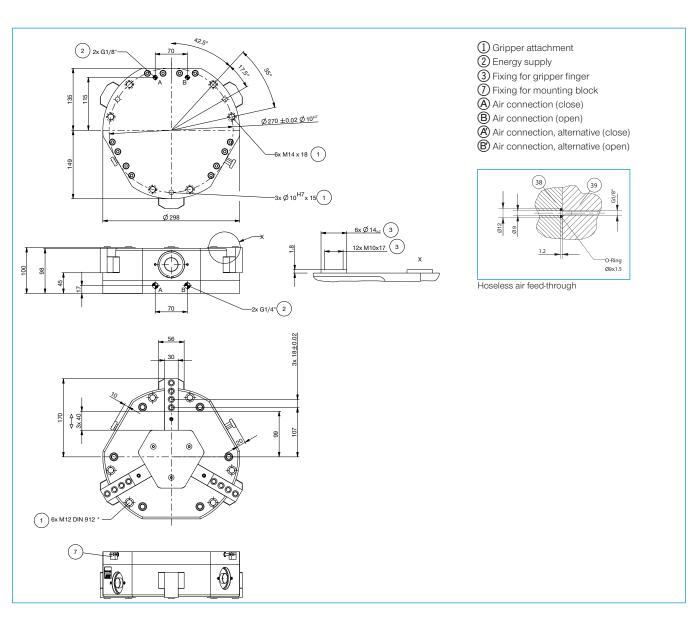


Plug-in connector customiz-able Straight - Connector M12

S12-G-3

	► Technical Data*
Order no.	GD540
Stroke per jaw [mm]	40
Gripping force in closing [N]	2480
Gripping force in opening [N]	2480
Closing time [s]	0.35
Opening time [s]	0.35
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	440
Weight [kg]	19

^{*}All data measured at 6 bar

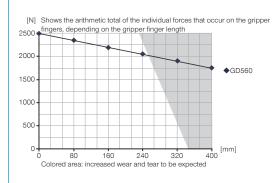


3-JAW CONCENTRIC GRIPPERS WITH LONG STROKE **INSTALLATION SIZE GD560**

> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	300
Mx [Nm]	200
My [Nm]	300
Fa [N]	8000

► INCLUDED IN DELIVERY



Mounting block

KB8K



Centering Disc

DST42000

> RECOMMENDED ACCESSORIES



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch

NJ8-E2S



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector Angled Cable 5m - Socket M8

KAW500



Straight Fittings - Quick Connect Style

GV1-4X8



Angled Fittings - Quick Connect Style

WV1-4X8



Quick Exhaust Valve

DEV08



Pressure Safety Valve

DSV1-8



Plug-in connector customiz-able Straight - Connector M8

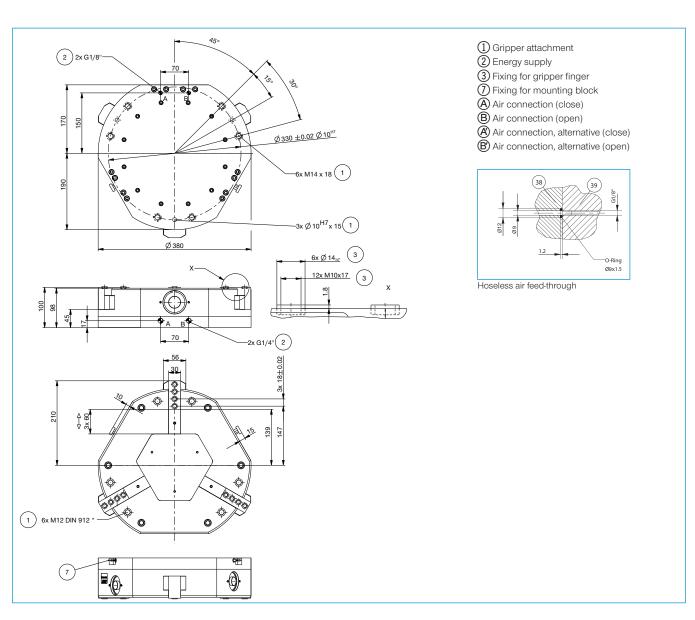
S8-G-3



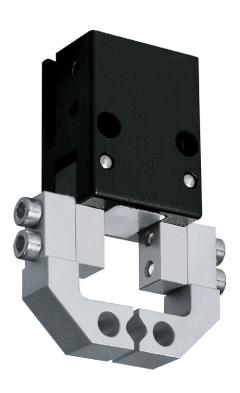
Plug-in connector customiz-able Straight - Connector M12

	► Technical Data*
Order no.	GD560
Stroke per jaw [mm]	60
Gripping force in closing [N]	2480
Gripping force in opening [N]	2480
Closing time [s]	0.45
Opening time [s]	0.45
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	650
Weight [kg]	29

^{*}All data measured at 6 bar



2-JAW ANGULAR GRIPPERS **OVERVIEW OF SERIES**



► PNEUMA	TIC	
†	Series GZ1000	368
	Series MGW800	376
	Series GG1000	394
	Series GPW5000	404

2-JAW ANGULAR GRIPPERS **SERIES GZ1000**

PRODUCT ADVANTAGES



"The top of the line"

Unique quality meets functionality

This is one of the best angular grippers on the market, enabling you to make your application more cost-effective and functional

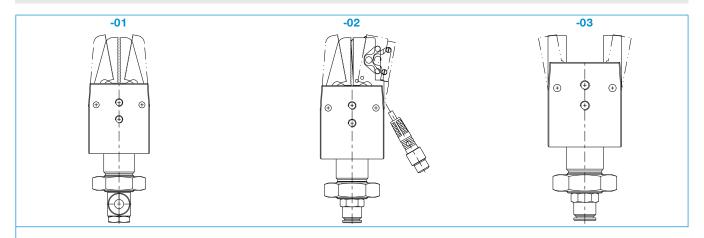
Variable attachment

Decide for yourself whether you want use screws, locknuts or a toolkit clamping system for fastening

Sensing with process reliability

Unlike many other established products on the market, you can even differentiate between "Component present" and "Component not present"

VERSIONS



HOW TO ORDER CORRECTLY

The product order numbers are arranged according to this diagram:

Order no.	GZ1030		
Saw tooth jaw without query		-01	
Saw tooth jaw with query		-02	
Version for attaching customer-specific gripper fingers		-03	



BENEFITS IN DETAIL



- 1 Gripper jaw
 - available in different versions
- 2 Position sensing
 - via inductive proximity switch
- 3 Return spring
 - to open the gripper jaws
- 4 Mounting and positioning
 - via thread / through-hole
- 5 Drive
 - single-acting pneumatic cylinder
- 6 Housing
 - hard coated surface for increased durability
- (7) Mounting and positioning
 - via fit, thread and lock nut
- 8 Energy supply

SERIES CHARACTERISTICS



Number of installation sizes	3
Stroke per jaw	8° - 10°
Gripping force	62 N - 315 N
Weight	0,015 kg - 0,125 kg
AP class	1



10 million maintenance-free cycles (max.)



Inductive sensor

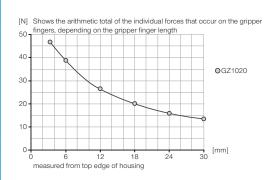


IP30

> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	1
My [Nm]	0.6
Fa [N]	60

► INCLUDED IN DELIVERY



Locking nut

C093610009

► RECOMMENDED ACCESSORIES



Plug-in connector Straight Cable 5m - Socket M8 KAG500



Straight Fittings - Quick Connect Style

GVM5



Plug-in connector customizable Straight -Connector M8

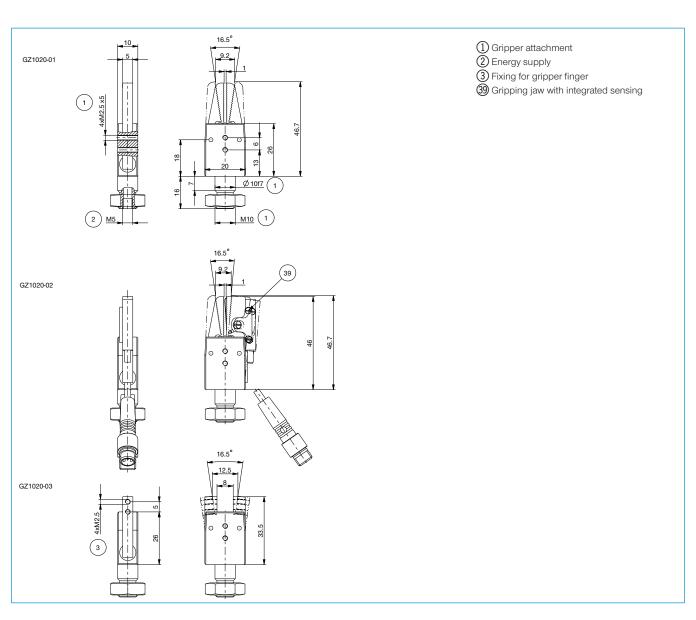
S8-G-3



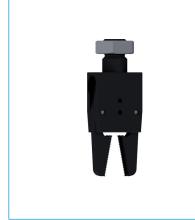
Plua-in connector customizable Straight -Connector M12

	► Technical Data*		
Order no.	GZ1020-01	GZ1020-02	GZ1020-03
Stroke per jaw [°]	8	8	8
Gripping force in closing [N]	62	62	62
Closing moment [Nm]	0.5	0.5	0.5
Closing time [s]	0.01	0.01	0.01
Opening time [s]	0.02	0.02	0.02
Operating pressure min. [bar]	2	2	2
Operating pressure max. [bar]	6	6	6
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+80	+80	+80
Air volume per cycle [cm³]	0.25	0.25	0.25
Gripper finger with integrated sensor	No	Yes	No
Weight [kg]	0.017	0.03	0.015

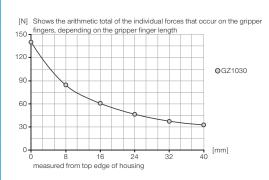
^{*}All data measured at 6 bar



> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	1.5
My [Nm]	1
Fa [N]	110

► INCLUDED IN DELIVERY



Locking nut

C093614159

► RECOMMENDED ACCESSORIES



Plug-in connector Straight Cable 5m - Socket M8 KAG500



Straight Fittings - Quick Connect Style

GVM5



Plug-in connector customizable Straight -Connector M8

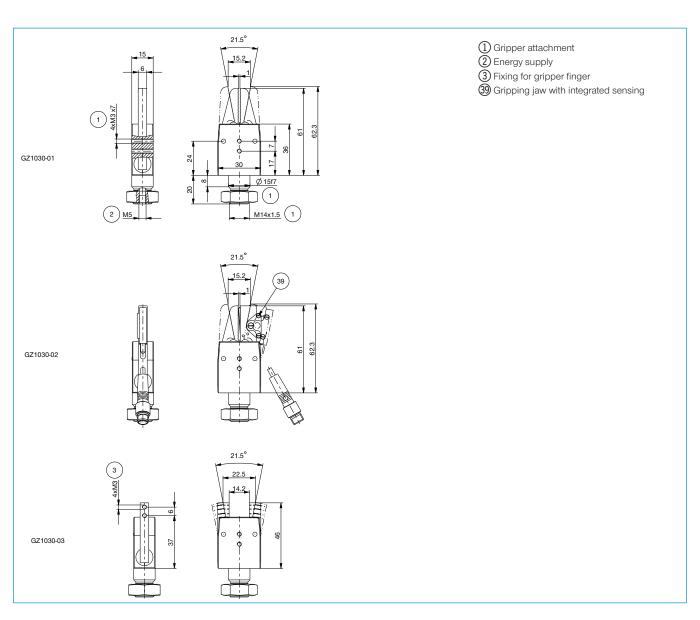
S8-G-3



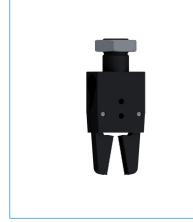
Plua-in connector customizable Straight -Connector M12

	Technical Data*		
Order no.	GZ1030-01	GZ1030-02	GZ1030-03
Stroke per jaw [°]	11	11	11
Gripping force in closing [N]	130	130	130
Closing moment [Nm]	1.6	1.6	1.6
Closing time [s]	0.02	0.02	0.02
Opening time [s]	0.03	0.03	0.03
Operating pressure min. [bar]	2	2	2
Operating pressure max. [bar]	6	6	6
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+80	+80	+80
Air volume per cycle [cm³]	0.9	0.9	0.9
Gripper finger with integrated sensor	No	Yes	No
Weight [kg]	0.05	0.063	0.046

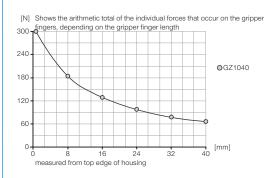
^{*}All data measured at 6 bar



> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	2.5
My [Nm]	2
Fa [N]	200

► INCLUDED IN DELIVERY



Locking nut

C093620159

► RECOMMENDED ACCESSORIES



Plug-in connector Straight Cable 5m - Socket M8 KAG500



Straight Fittings - Quick Connect Style

GV1-8X6



Plug-in connector customizable Straight -Connector M8

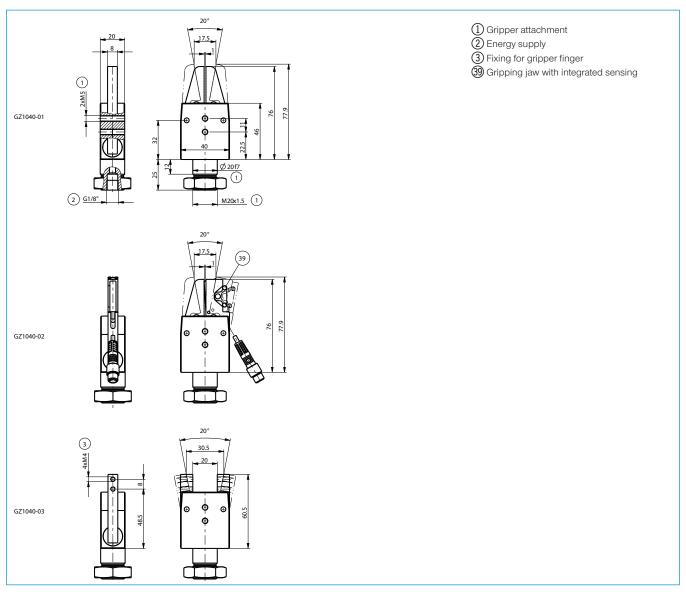
S8-G-3



Plua-in connector customizable Straight -Connector M12

	► Technical Data*		
Order no.	GZ1040-01	GZ1040-02	GZ1040-03
Stroke per jaw [°]	10	10	10
Gripping force in closing [N]	315	315	315
Closing moment [Nm]	4.4	4.4	4.4
Closing time [s]	0.02	0.02	0.02
Opening time [s]	0.04	0.04	0.04
Operating pressure min. [bar]	2	2	2
Operating pressure max. [bar]	6	6	6
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+80	+80	+80
Air volume per cycle [cm³]	2	2	2
Gripper finger with integrated sensor	No	Yes	No
Weight [kg]	0.11	0.125	0.105

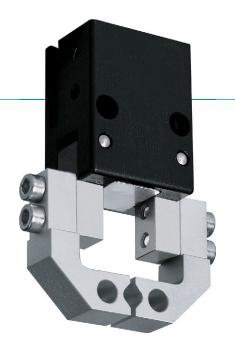
^{*}All data measured at 6 bar



2-JAW ANGULAR GRIPPERS

SERIES MGW800

PRODUCT ADVANTAGES



"The economical"

Concentration on the essentials

The most economic type of gripping: This is how you reduce your production costs

High moment load

The optimally designed angular gear box provides the highest durability for your application

► Failure-free continuous operation

Our uncompromising "Made in Germany" quality guarantees up to 10 million maintenance-free gripping cycles

> THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com

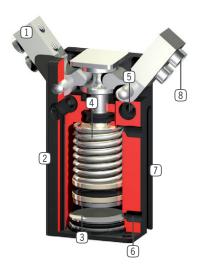
HOW TO ORDER CORRECTLY

The product order numbers are arranged according to this diagram:

Order no.	MGW803N		
For external gripping, self-locking, spring closing		С	



BENEFITS IN DETAIL



1 Gripper jaw

- individual gripper finger mounting

2 Robust, lightweight housing

- Hard-coated aluminum alloy

(3) Position sensing

- permanent magnet for direct monitoring of piston movement

4 Integrated gripping force safety device

- spring integrated into cylinder as energy storage (from size 803 upwards)

5 Mounting and positioning

- mounting possible from several sides for versatile positioning

6 Energy supply

- possible from several sides

7 Sensing slot

- mounting and positioning of magnetic field sensors

8 Removable centering sleeves

- quick and economical positioning of the gripper fingers

> SERIES CHARACTERISTICS



Number of installation sizes	8
Stroke per jaw	37,5°
Gripping force	5 N - 325 N
Weight	0,01 kg - 0,45 kg
AP class	2



10 million maintenance-free cycles (max.)



Spring closing C



IP30

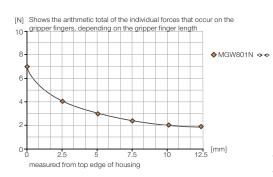


Magnetic field sensor

> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	0.2
My [Nm]	0.2
Fa [N]	37

► INCLUDED IN DELIVERY



Centering Disc

DST80100

► RECOMMENDED ACCESSORIES



Straight Fittings - Barb Style Connection

GVM3



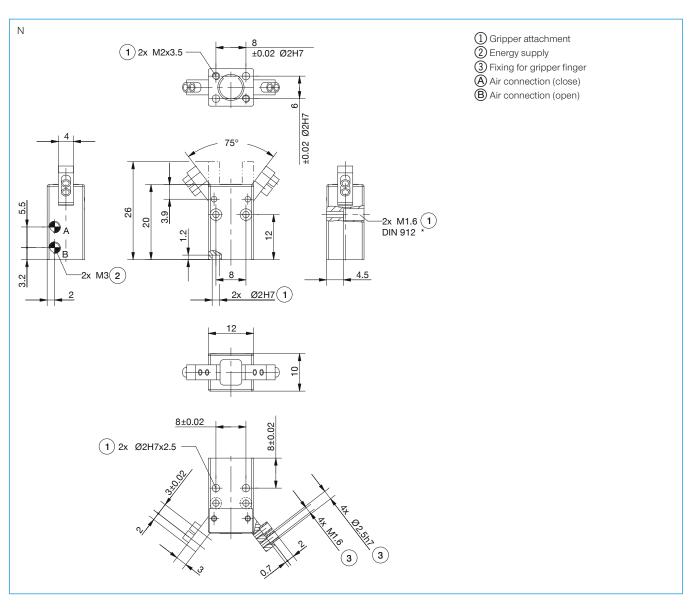
Angled Fittings - Barb Style Connection WVM3



Quick Exhaust Valve

	► Technical Data*
Order no.	MGW801N
Stroke per jaw [°]	37.5
Gripping moment in closing [Nm]	0.025
Gripping moment in opening [Nm]	0.03
Gripping moment secured by spring min. [Nm]	
Gripping force in closing [N]	5
Gripping force in opening [N]	7.5
Closing time [s]	0.01
Opening time [s]	0.01
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	0.14
Weight [kg]	0.01

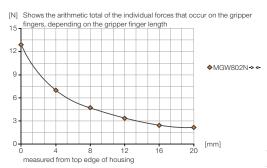
*All data measured at 6 bar



> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	0.3
My [Nm]	0.3
Fa [N]	60

► INCLUDED IN DELIVERY



Centering Disc

DST80200

► RECOMMENDED ACCESSORIES



Straight Fittings - Barb Style Connection

GVM3



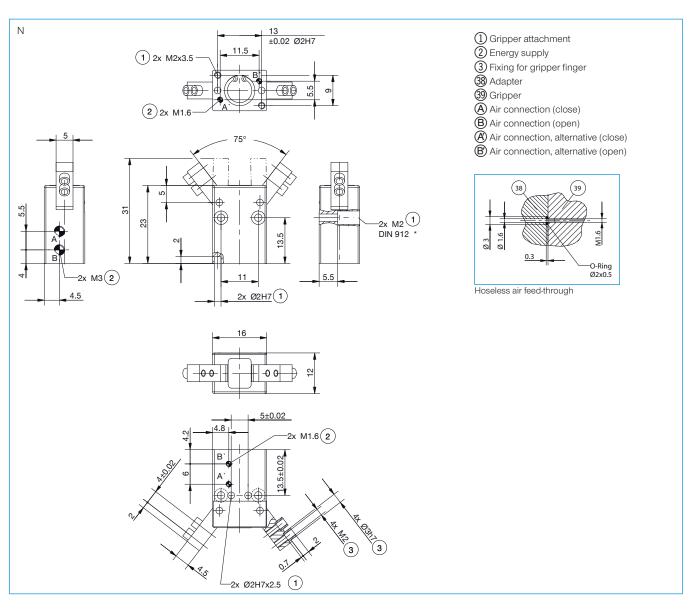
Angled Fittings - Barb Style Connection WVM3



Quick Exhaust Valve

	► Technical Data*
Order no.	MGW802N
Stroke per jaw [°]	37.5
Gripping moment in closing [Nm]	0.045
Gripping moment in opening [Nm]	0.05
Gripping moment secured by spring min. [Nm]	
Gripping force in closing [N]	9
Gripping force in opening [N]	10
Closing time [s]	0.01
Opening time [s]	0.01
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	0.22
Weight [kg]	0.015

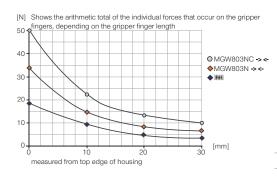
*All data measured at 6 bar



> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	0.4
My [Nm]	0.4
Fa [N]	90

► INCLUDED IN DELIVERY



Centering Disc

DST80320

► RECOMMENDED ACCESSORIES



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Straight Fittings - Barb Style Connection

GVM3



Angled Fittings - Barb

WVM3

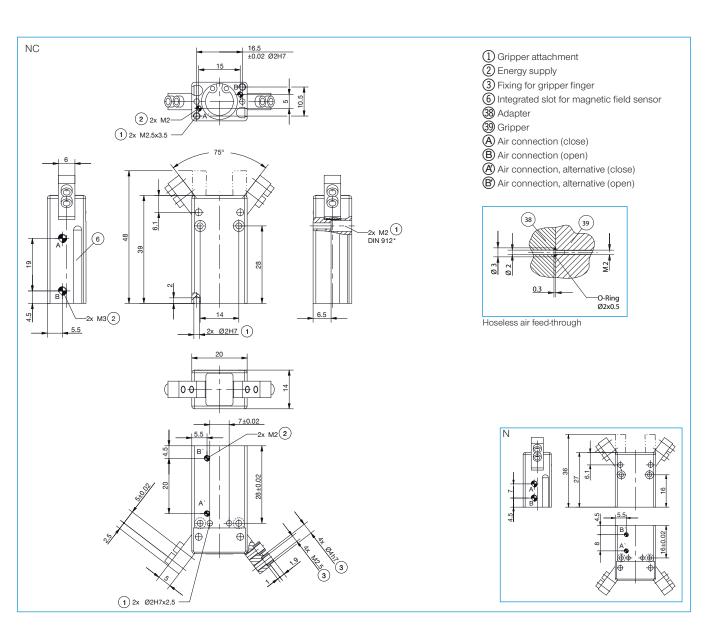


Quick Exhaust Valve

DEV04

	► Technical Data*	
Order no.	MGW803N	MGW803NC
Stroke per jaw [°]	37.5	37.5
Gripping moment in closing [Nm]	0.2	0.3
Gripping moment in opening [Nm]	0.23	
Gripping moment secured by spring min. [Nm]		0.1
Gripping force in closing [N]	33	49
Gripping force in opening [N]	38	
Closing time [s]	0.01	0.01
Opening time [s]	0.01	0.02
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	0.64	1
Weight [kg]	0.025	0.04

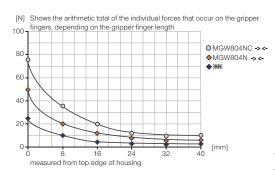
^{*}All data measured at 6 bar



▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	0.5
My [Nm]	0.5
Fa [N]	150

► INCLUDED IN DELIVERY



Centering Disc

DST40400

► RECOMMENDED ACCESSORIES



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Straight Fittings - Barb Style Connection

GVM3



Angled Fittings - Barb

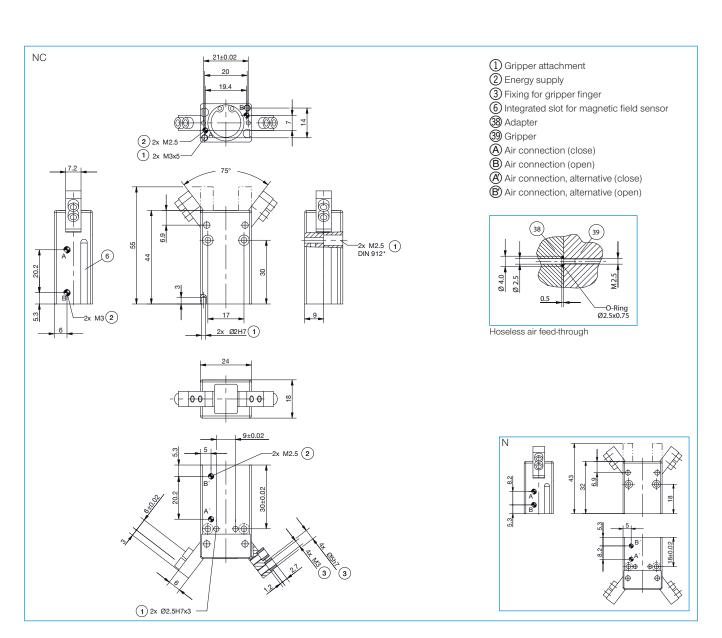
WVM3



Quick Exhaust Valve

	Technical Data*	
Order no.	MGW804N	MGW804NC
Stroke per jaw [°]	37.5	37.5
Gripping moment in closing [Nm]	0.35	0.5
Gripping moment in opening [Nm]	0.41	
Gripping moment secured by spring min. [Nm]		
Gripping force in closing [N]	51	72
Gripping force in opening [N]	59	
Closing time [s]	0.02	0.02
Opening time [s]	0.02	0.03
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	1.4	2
Weight [kg]	0.05	0.08

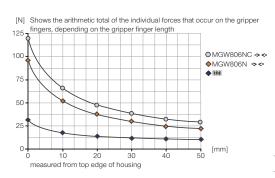
^{*}All data measured at 6 bar



▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	0.7
My [Nm]	0.7
Fa [N]	260

► INCLUDED IN DELIVERY



Centering Disc

DST40600

► RECOMMENDED ACCESSORIES



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Straight Fittings - Barb Style Connection

GVM3



Angled Fittings - Barb

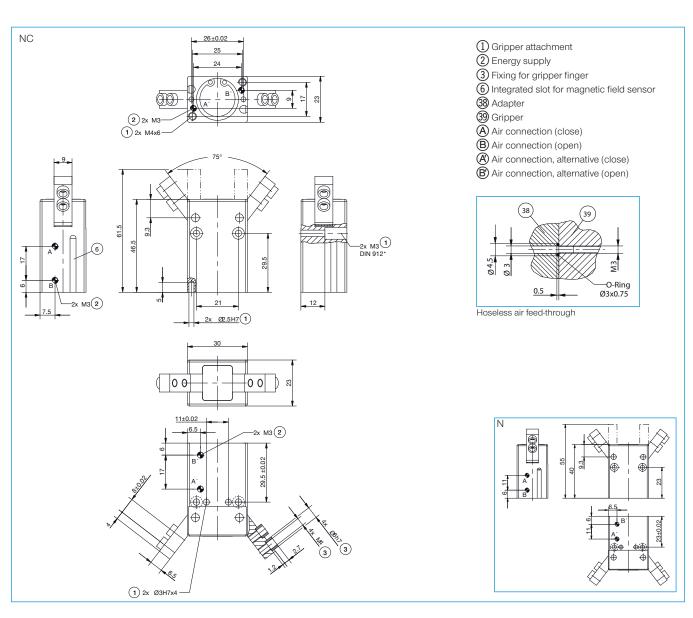
WVM3



Quick Exhaust Valve

	► Technical Data*	
Order no.	MGW806N	MGW806NC
Stroke per jaw [°]	37.5	37.5
Gripping moment in closing [Nm]	0.85	1.1
Gripping moment in opening [Nm]	1.02	
Gripping moment secured by spring min. [Nm]		0.25
Gripping force in closing [N]	91	118
Gripping force in opening [N]	110	
Closing time [s]	0.02	0.02
Opening time [s]	0.02	0.04
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	2.4	3.4
Weight [kg]	0.1	0.12

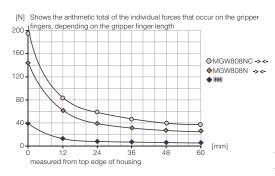
^{*}All data measured at 6 bar



▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	1.3
My [Nm]	1.3
Fa [N]	430

► INCLUDED IN DELIVERY



Centering Disc

DST40600

► RECOMMENDED ACCESSORIES



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Straight Fittings - Barb Style Connection

GVM3



Angled Fittings - Barb

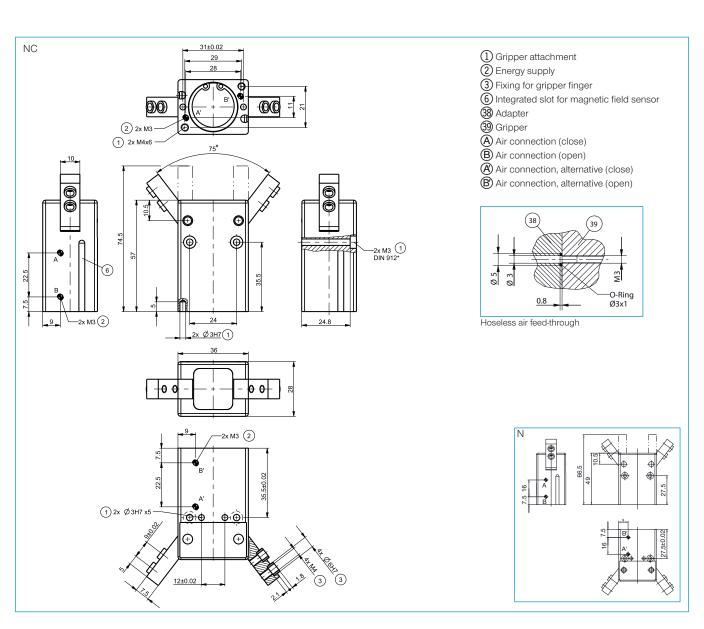
WVM3



Quick Exhaust Valve

	► Technical Data*	
Order no.	MGW808N	MGW808NC
Stroke per jaw [°]	37.5	37.5
Gripping moment in closing [Nm]	1.55	2
Gripping moment in opening [Nm]	1.76	
Gripping moment secured by spring min. [Nm]		0.45
Gripping force in closing [N]	148	190
Gripping force in opening [N]	168	
Closing time [s]	0.02	0.02
Opening time [s]	0.02	0.04
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	8.1	10.5
Weight [kg]	0.18	0.19

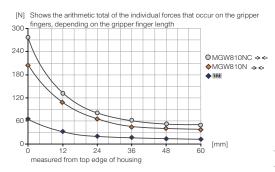
^{*}All data measured at 6 bar



▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	1.6	
My [Nm]	1.6	
Fa [N]	500	

► INCLUDED IN DELIVERY



Centering Disc

DST07540

► RECOMMENDED ACCESSORIES



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Straight Fittings - Quick Connect Style

GVM5



Angled Fittings - Quick Connect Style

WVM5



Quick Exhaust Valve

DEV04

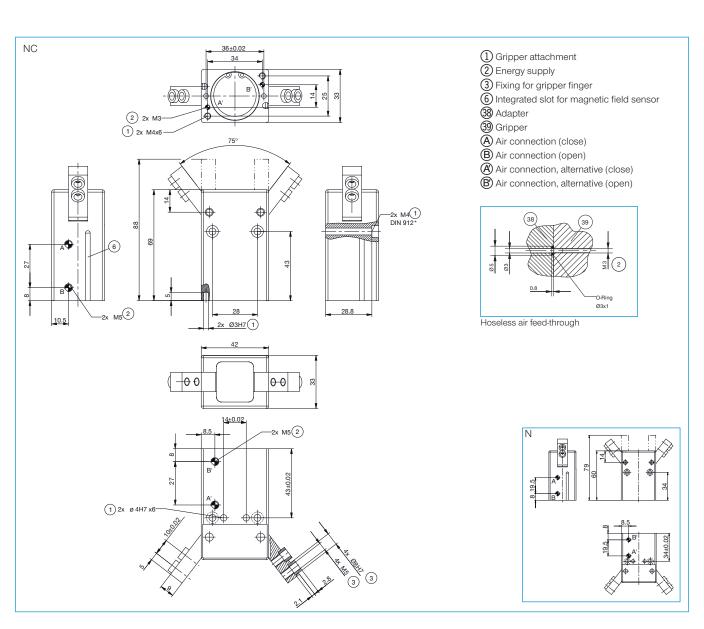


Pressure Safety Valve

DSV1-8

	► Technical Data*	
Order no.	MGW810N	MGW810NC
Stroke per jaw [°]	37.5	37.5
Gripping moment in closing [Nm]	2.9	3.8
Gripping moment in opening [Nm]	3.3	
Gripping moment secured by spring min. [Nm]		0.9
Gripping force in closing [N]	205	270
Gripping force in opening [N]	235	
Closing time [s]	0.03	0.03
Opening time [s]	0.03	0.06
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	14.1	18.4
Weight [kg]	0.28	0.31

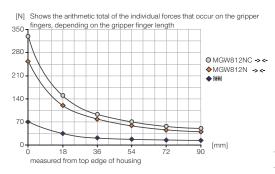
^{*}All data measured at 6 bar



▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	2.3
My [Nm]	2.3
Fa [N]	720

► INCLUDED IN DELIVERY



Centering Disc

DST07540

► RECOMMENDED ACCESSORIES



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Straight Fittings - Quick Connect Style

GVM5



Angled Fittings - Quick Connect Style

WVM5



Quick Exhaust Valve

DEV04

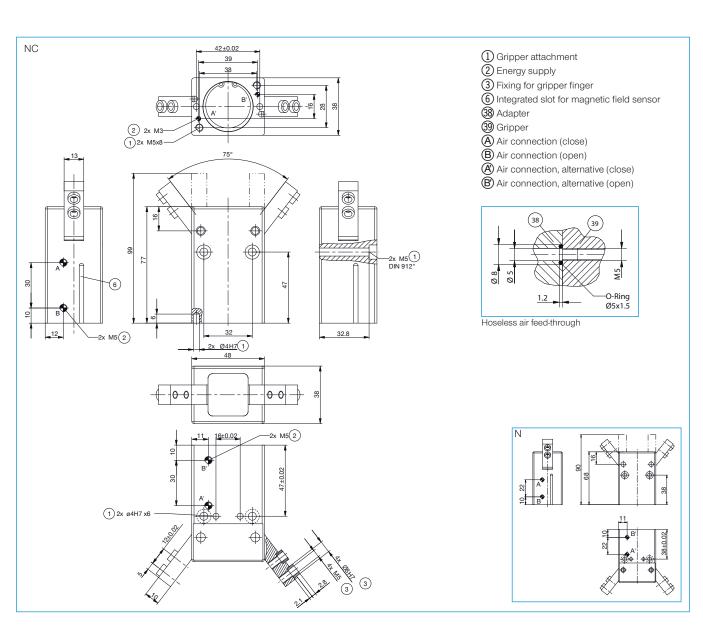


Pressure Safety Valve

DSV1-8

	► Technical Data*	
Order no.	MGW812N	MGW812NC
Stroke per jaw [°]	37.5	37.5
Gripping moment in closing [Nm]	4.1	5.2
Gripping moment in opening [Nm]	4.55	
Gripping moment secured by spring min. [Nm]		1.1
Gripping force in closing [N]	255	325
Gripping force in opening [N]	285	
Closing time [s]	0.03	0.03
Opening time [s]	0.03	0.06
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	22.1	27.6
Weight [kg]	0.4	0.45

^{*}All data measured at 6 bar



2-JAW ANGULAR GRIPPERS **SERIES GG1000**

PRODUCT ADVANTAGES



"The strong"

High gripping force

Using the high gripping force, you can safely handle even the heaviest workpieces

High moment load

The generously scaled angular gear box provides the highest possible durability for your application

► Failure-free continuous operation

Our uncompromising "Made in Germany" quality guarantees up to 10 million maintenance-free gripping cycles

> THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com

HOW TO ORDER CORRECTLY

The product order numbers are arranged according to this diagram:

Order no.	GG1065		NC	
Gripper jaws with mounting possibility on the side		F		



BENEFITS IN DETAIL



1 Cam-switch and mounting block

- for position sensing

2 Robust, lightweight housing

- Hard-coated aluminum alloy

3 Sensing slot

- groove for positioning of the magnetic field sensor

4 Permanent magnet

- sensing of the piston setting position via magnetic field sensors

5 Positively driven lever mechanism

- synchronized the movement of the gripper jaws

6 Integrated gripping force safety device

- spring integrated into cylinder as energy storage

7 Drive

- double-acting pneumatic cylinder

8 Removable centering sleeves

- quick and economical positioning of the gripper fingers

> SERIES CHARACTERISTICS



Number of installation sizes	4
Stroke per jaw	20°
Gripping force	2910 N - 29110 N
Weight	1,3 kg - 13 kg
AP class	3



10 million maintenance-free cycles (max.)



IP40



Spring closing C



Magnetic field sensor



Inductive sensor

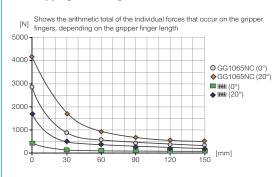


Purged air

▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	20
My [Nm]	20
Fa [N]	330

► INCLUDED IN DELIVERY



Centering Disc

DST40800

► RECOMMENDED ACCESSORIES



Stroke adjustment screw

HES0009



Mounting block

KB8-43



Alternate proximity bracket

KHA1065-8



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



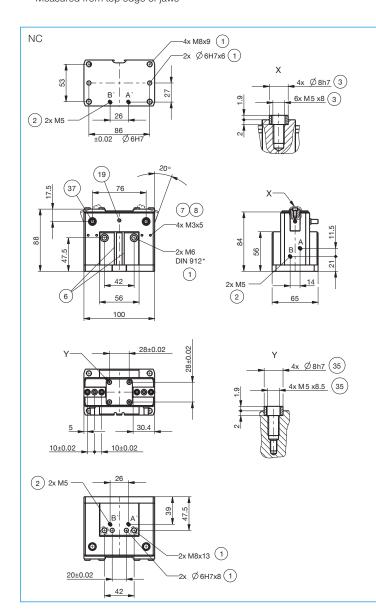
Straight Fittings - Quick

GVM5

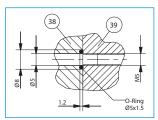
	► Technical Data*	
Order no.	GG1065NC	GG1065FNC
Stroke per jaw [°]	20	20
Gripping moment in closing max. [Nm]	39	39
Gripping moment secured by spring min. [Nm]	6.5	6.5
Gripping force in closing max. (at 0°) [N]**	2910	2910
Gripping force in closing max. (at 20°) [N]**	4160	4160
Gripping force secured by spring (at 0°) [N]	490	490
Gripping force secured by spring (at 20°) [N]	1745	1745
Closing time [s]	0.04	0.04
Opening time [s]	0.07	0.07
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	4	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	68	68
Weight [kg]	1.3	1.4

^{*}All data measured at 6 bar

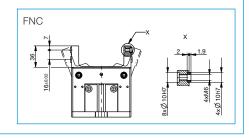
 $^{^{\}ast}\,^{\ast}\text{Measured}$ from top edge of jaws



- ① Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- Tixing for mounting block
- 8 Fixing clamping bracket (KHA)
- (19) Air purge connection option
- 35 Mounting posibillity for stroke adjustment screwe
- 3 Mounting posibillity for cam switch
- 38 Adapter
- 39 Gripper
- Air connection (close)
- B Air connection (open)
- Air connection, alternative (close)
- B Air connection, alternative (open)



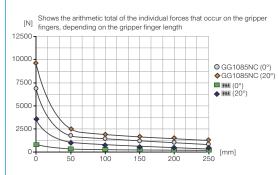
Hoseless air feed-through



▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	40
My [Nm]	50
Fa [N]	600

► INCLUDED IN DELIVERY



Centering Disc

DST41000

► RECOMMENDED ACCESSORIES



Stroke adjustment screw

HES0006



Mounting block

KB8-43



Alternate proximity bracket

KHA1085-8



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



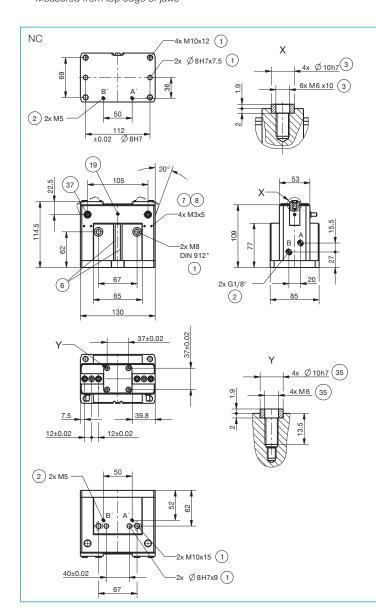
Straight Fittings - Quick Connect Style

GV1-8X6

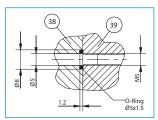
	► Technical Data*	
Order no.	GG1085NC	GG1085FNC
Stroke per jaw [°]	20	20
Gripping moment in closing max. [Nm]	120	120
Gripping moment secured by spring min. [Nm]	18	18
Gripping force in closing max. (at 0°) [N]**	7120	7120
Gripping force in closing max. (at 20°) [N] * *	9670	9670
Gripping force secured by spring (at 0°) [N]	1040	1040
Gripping force secured by spring (at 20°) [N]	3600	3600
Closing time [s]	0.05	0.05
Opening time [s]	0.1	0.1
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	4	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	145	145
Weight [kg]	2.8	3.2

^{*}All data measured at 6 bar

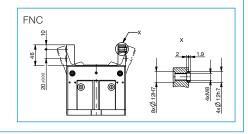
 $^{^{\}ast}\,^{\ast}\text{Measured}$ from top edge of jaws



- ① Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- 7 Fixing for mounting block
- 8 Fixing clamping bracket (KHA)
- 19 Air purge connection option
- 35 Mounting posibillity for stroke adjustment
- 3 Mounting posibillity for cam switch
- 38 Adapter
- 39 Gripper
- Air connection (close)
- B Air connection (open)
- Air connection, alternative (close)
- (open) B Air connection, alternative (open)



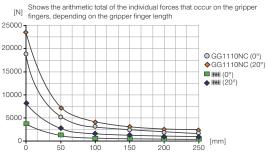
Hoseless air feed-through



▶ PRODUCT SPECIFICATIONS



Gripping force diagram fingers, depending on the gripper finger length



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	60
My [Nm]	65
Fa [N]	1000

► INCLUDED IN DELIVERY



Centering Disc

DST41600

► RECOMMENDED ACCESSORIES



Stroke adjustment screw



Mounting block

KB8-43



Alternate proximity bracket

KHA1110-8



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC





Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



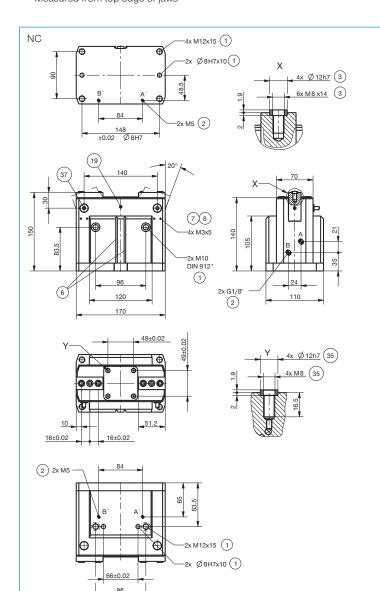
Straight Fittings - Quick Connect Style

GV1-8X6

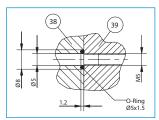
	► Technical Data*	
Order no.	GG1110NC	GG1110FNC
Stroke per jaw [°]	20	20
Gripping moment in closing max. [Nm]	370	370
Gripping moment secured by spring min. [Nm]	75	75
Gripping force in closing max. (at 0°) [N]**	18665	18665
Gripping force in closing max. (at 20°) [N] * *	23240	23240
Gripping force secured by spring (at 0°) [N]	3760	3760
Gripping force secured by spring (at 20°) [N]	8340	8340
Closing time [s]	0.16	0.16
Opening time [s]	0.27	0.27
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	4	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	455	455
Weight [kg]	6.3	6.7

^{*}All data measured at 6 bar

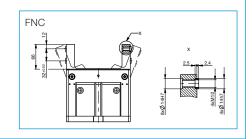
^{* *} Measured from top edge of jaws



- ① Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- 7 Fixing for mounting block
- 8 Fixing clamping bracket (KHA)
- 19 Air purge connection option
- 35 Mounting posibillity for stroke adjustment
- 3 Mounting posibillity for cam switch
- 38 Adapter
- 39 Gripper
- Air connection (close)
- B Air connection (open)
- Air connection, alternative (close)
- (open) B Air connection, alternative (open)



Hoseless air feed-through



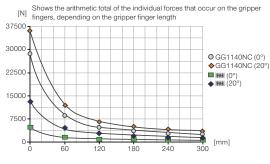
2-Jaw Angular Grippers / Installation size GG1140 /

2-JAW ANGULAR GRIPPERS **INSTALLATION SIZE GG1140**

▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	110
My [Nm]	120
Fa [N]	1500

► INCLUDED IN DELIVERY



Centering Disc

DST42000

► RECOMMENDED ACCESSORIES



Stroke adjustment screw

HES0008



Mounting block

KB8-43



Alternate proximity bracket

KHA1140-8



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



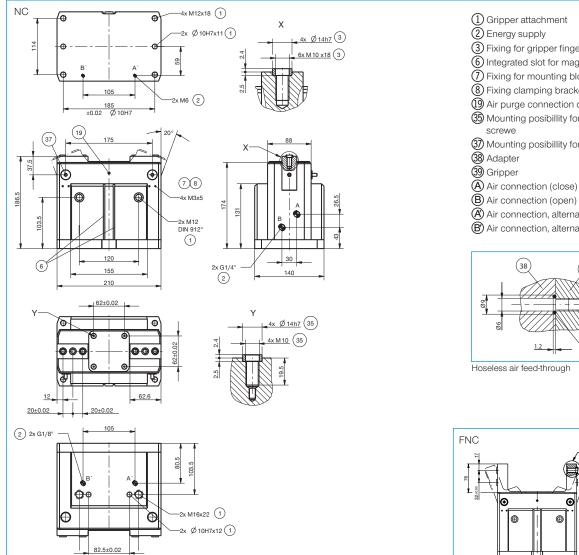
Straight Fittings - Quick

GV1-4X8

	► Technical Data*	
Order no.	GG1140NC	GG1140FNC
Stroke per jaw [°]	20	20
Gripping moment in closing max. [Nm]	725	725
Gripping moment secured by spring min. [Nm]	143	143
Gripping force in closing max. (at 0°) [N]**	29110	29110
Gripping force in closing max. (at 20°) [N] * *	36470	36470
Gripping force secured by spring (at 0°) [N]	5740	5740
Gripping force secured by spring (at 20°) [N]	13110	13110
Closing time [s]	0.25	0.25
Opening time [s]	0.5	0.5
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	4	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	760	760
Weight [kg]	12.4	13

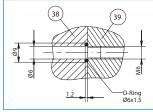
^{*}All data measured at 6 bar

^{* *} Measured from top edge of jaws

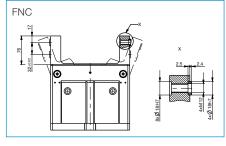


- ① Gripper attachment
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- Tixing for mounting block
- 8 Fixing clamping bracket (KHA)
- 19 Air purge connection option
- 35 Mounting posibillity for stroke adjustment
- 37 Mounting posibillity for cam switch

- Air connection, alternative (close)
- (open) B Air connection, alternative (open)



Hoseless air feed-through



2-JAW ANGULAR GRIPPERS SERIES GPW5000

▶ PRODUCT ADVANTAGES



"The Universal One"

► Highest performance with the smallest dimensions

Features a one-of-a-kind ratio of net mass to gripper finger length and gripping moment. The performance of your machine is increased as a result.

Versatile applicability

Thanks to standard functionality such as IP64 and corrosion protection, you are able to use these grippers in almost any of your applications. Even the toughest environments are no problem.

► Robust and process-reliable

Thanks to a maintenance-free design up to 30 million cycles and the most solid force transmission possible, process assurance is maximized.

▶ THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com

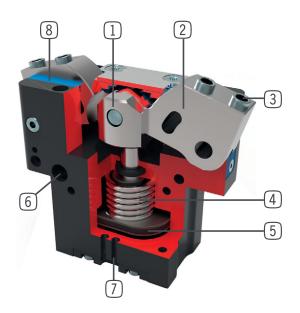
HOW TO ORDER CORRECTLY

► The product order numbers are arranged according to this diagram:

Order no.	GPW5013			-	-A
Basis version		N			
For external gripping, self-locking, spring closing			С		
Temperature-resistant version up to 130°C				20	



BENEFITS IN DETAIL



1 Positively driven lever mechanism

- synchronized the movement of the gripper jaws

2 Gripper jaw

- Gripper fingers mounted using removable centring sleeves

3 Removable centering sleeves

- quick and economical positioning of the gripper fingers

4 Integrated gripping force safety device

- Spring built into cylinder chamber as an energy store

5 Drive

- Double-acting pneumatic rotor cylinder

6 Mounting and positioning

- Alternatively, on several sides for customized mounting

(7) Sensing slot

- mounting and positioning of magnetic field sensors

8 Dual lip seal

- IP64

- Prevents grease from being squeezed out, increasing service life

> SERIES CHARACTERISTICS



Number of installation sizes	3
Stroke per jaw	+15° / -2°
Gripping force	1330 N - 14500 N
Weight	0,9 kg - 12,1 kg
AP class	5



30 million maintenance-free cycles (max.)



IP64



Temperature-resistant



Spring closing C



Corrosion resistance



Purged air



Inductive sensor

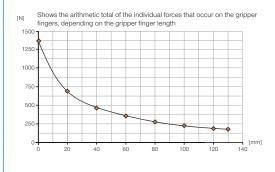


Magnetic field sensor

▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	65
My [Nm]	60
Fa [N]	1900

► TECHNICAL DATA

	► Technical Data*
Order no.	GPW5008NC-00-A
Stroke per jaw [°]	+15/-2
Gripping moment in closing max. [Nm]	33
Gripping moment secured by spring min. [Nm]	7.5
Gripping force in closing max. (at 0°) [N]*	1450
Length of the gripper fingers max. [mm]	115
Permissible weight per jaw max [kg]	0.7
Closing time [s]	0.1
Opening time [s]	0.17
Repetition accuracy +/- [mm]	0.01
Operating pressure [bar]	48
Operating temperature [°C]	-10 +90
Air volume per cycle [cm³]	35
Protection to IEC 60529	IP64
Weight [kg]	0.9

Order no. Operating temperature [°C]

Technical Data - High Temperature Version

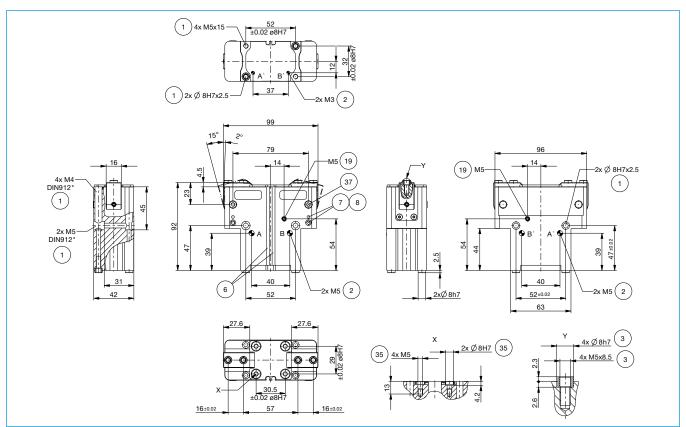
GPW5008NC-20-A

-10 ... +130

^{*}All data measured at 6 bar

 $^{^{\}star\,\star}$ Measured from top edge of housing

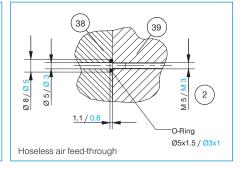
TECHNICAL DRAWINGS

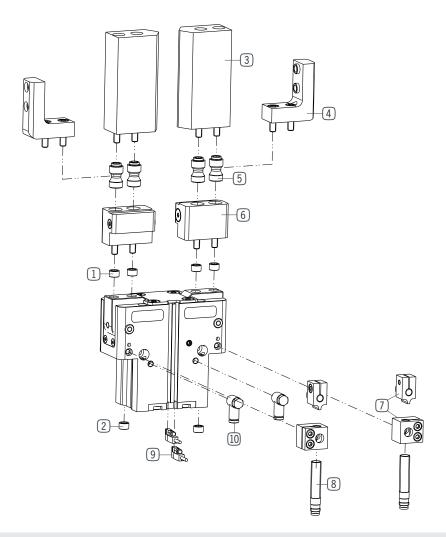


- 1 Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- 7 Fixing for mounting block
- 8 Fixing clamping bracket (KHA)
- 19 Air purge connection option
- 35 Mounting posibillity for stroke adjustment

screwe

- 3 Mounting posibillity for cam switch
- 38 Adapter
- 39 Gripper
- Air connection (close)
- (B) Air connection (open)
- Air connection, alternative (close)
- B Air connection, alternative (open)





► INCLUDED IN DELIVERY



Centering Disc

024231

► RECOMMENDED ACCESSORIES



Universal jaw aluminium



Universal jaw steel



L-jaw



Changeable jaw, loose part-set

WB5008L



Changeable jaw, fix-part

WB5008F







Inductive proximity switch

LB5008



Magnetic field sensor Straight Cable 0,3 m - Connector M8



2-Position-Sensor Cable 0,3 m - Connector M8 MFSP2SKHC-02

ANS0084



NJ8-E2S









Attachment Kit for Induc-

Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500



Angled Fittings - Quick Connect Style

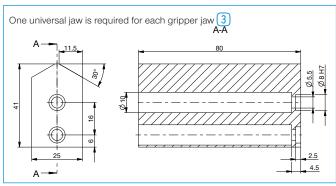
WVM5

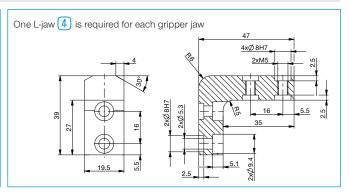


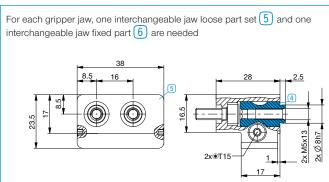
Pressure Safety Valve

DSV1-8

TECHNICAL DRAWINGS ACCESSORIES



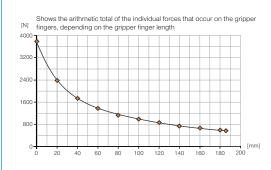




▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	110
My [Nm]	130
Fa [N]	3300

► TECHNICAL DATA

	lecnnical Data *
Order no.	GPW5013NC-00-A
Stroke per jaw [°]	+15/-2
Gripping moment in closing max. [Nm]	130
Gripping moment secured by spring min. [Nm]	39.5
Gripping force in closing max. (at 0°) [N]	4200
Length of the gripper fingers max. [mm]	185
Permissible weight per jaw max [kg]	2.4
Closing time [s]	0.08
Opening time [s]	0.12
Repetition accuracy +/- [mm]	0.01
Operating pressure [bar]	4 8
Operating temperature [°C]	-10 +90
Air volume per cycle [cm³]	160
Protection to IEC 60529	IP64
Weight [kg]	3
	-

Order no.

Operating temperature [°C]

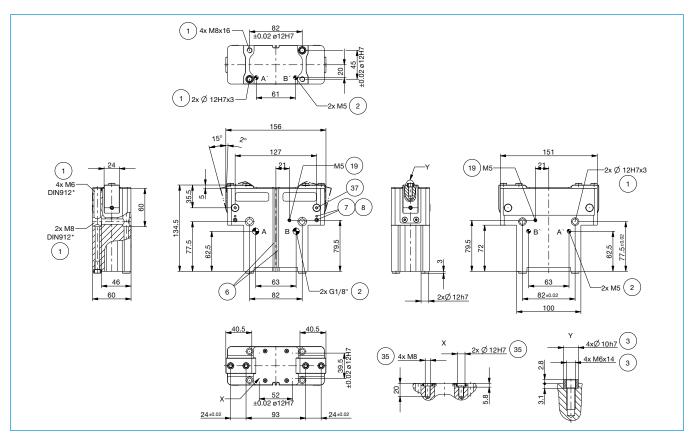
Technical Data - High Temperature Version

GPW5013NC-20-A

-10 ... +130

- *All data measured at 6 bar
- $^{\star\,\star}$ Measured from top edge of housing

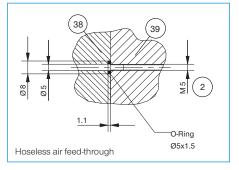
TECHNICAL DRAWINGS

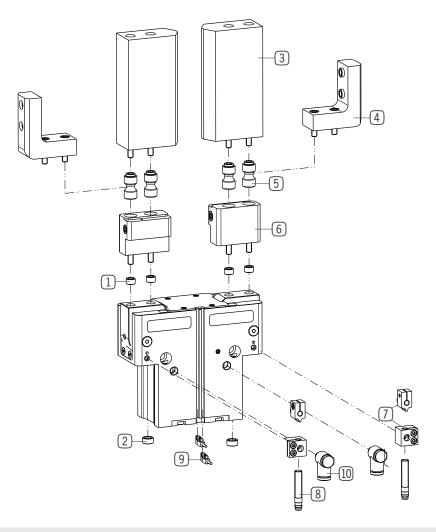


- 1 Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- 7 Fixing for mounting block
- 8 Fixing clamping bracket (KHA)
- 19 Air purge connection option
- 35 Mounting posibillity for stroke adjustment

screwe

- 3 Mounting posibillity for cam switch
- 38 Adapter
- 39 Gripper
- Air connection (close)
- (B) Air connection (open)
- Air connection, alternative (close)
- B Air connection, alternative (open)





► INCLUDED IN DELIVERY



Centering Disc



018187

019280

► RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5013AL



Universal jaw steel

UB5013ST

4

L-jaw LB5013



Changeable jaw, loose part-set

WB5013L



Changeable jaw, fix-part

WB5013F



Attachment Kit for Inductive Proximity Switch

ANS0084



Inductive proximity switch

NJ8-E2S



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Angled Fittings - Quick Connect Style

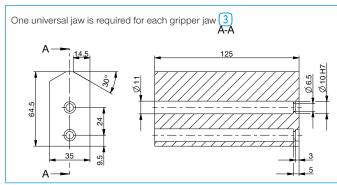
WV1-8X6

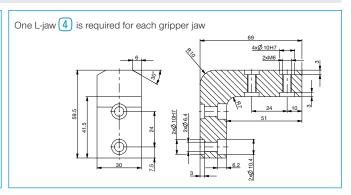


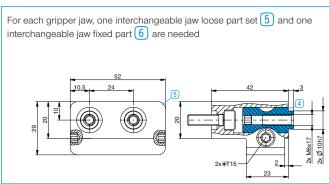
Pressure Safety Valve

DSV1-8

TECHNICAL DRAWINGS ACCESSORIES



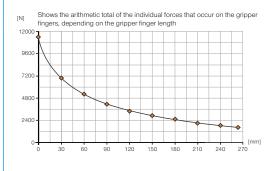




> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	180
My [Nm]	225
Fa [N]	7500

► TECHNICAL DATA

	► Technical Data*
Order no.	GPW5025NC-00-A
Stroke per jaw [°]	+15/-2
Gripping moment in closing max. [Nm]	620
Gripping moment secured by spring min. [Nm]	150
Gripping force in closing max. (at 0°) [N]	14500
Length of the gripper fingers max. [mm]	265
Permissible weight per jaw max [kg]	7
Closing time [s]	0.155
Opening time [s]	0.30
Repetition accuracy +/- [mm]	0.01
Operating pressure [bar]	4 8
Operating temperature [°C]	-10 +90
Air volume per cycle [cm³]	780
Protection to IEC 60529	IP64
Weight [kg]	12.1

Order no.

Operating temperature [°C]

Technical Data - High Temperature Version

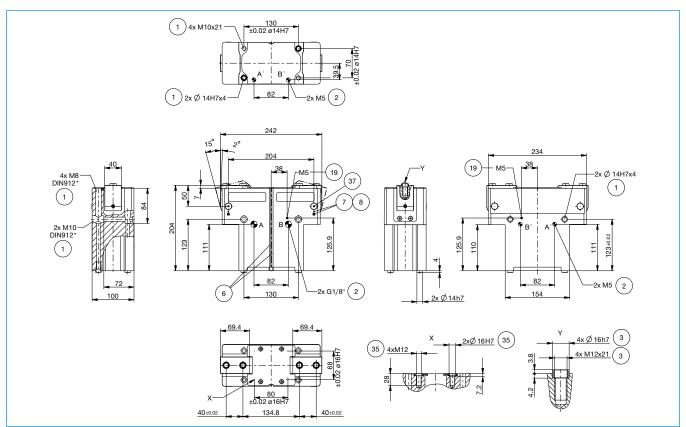
GPW5025NC-20-A

-10 ... +130

^{*}All data measured at 6 bar

 $^{^{\}star\,\star}$ Measured from top edge of housing

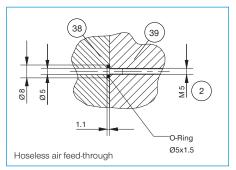
TECHNICAL DRAWINGS

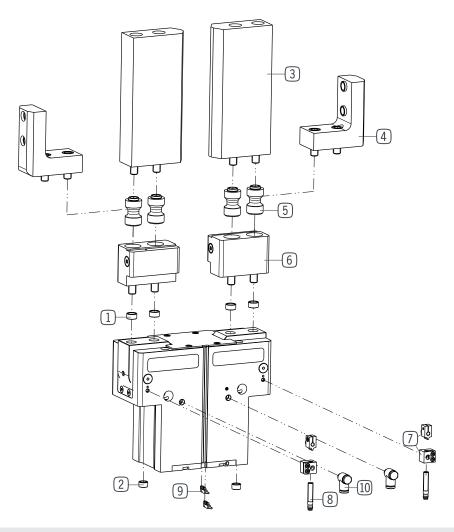


- 1 Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- 7 Fixing for mounting block
- 8 Fixing clamping bracket (KHA)
- 19 Air purge connection option
- 35 Mounting posibillity for stroke adjustment

screwe

- 3 Mounting posibillity for cam switch
- 38 Adapter
- 39 Gripper
- Air connection (close)
- (B) Air connection (open)
- Air connection, alternative (close)
- B Air connection, alternative (open)





► INCLUDED IN DELIVERY



Centering Disc



Centering Disc

030529

019387

► RECOMMENDED ACCESSORIES



Universal jaw aluminium

•

UB5025AL



Universal jaw steel

UB5025ST

4

L-jaw LB5025



Changeable jaw, loose part-set

WB5025L



Changeable jaw, fix-part

WB5025F



Attachment Kit for Inductive Proximity Switch

ANS0084



Inductive proximity switch

NJ8-E2S



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Angled Fittings - Quick Connect Style

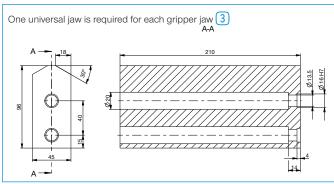
WV1-8X8

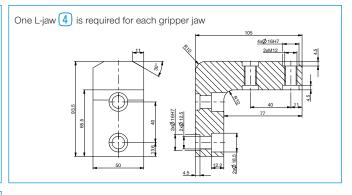


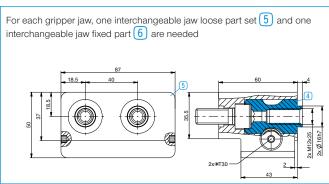
Pressure Safety Valve

DSV1-8

TECHNICAL DRAWINGS ACCESSORIES







2-JAW RADIAL GRIPPER THE SERIES AT A GLANCE



► PNEUMATIC		
	Series GK	420
	Series GG4000	434

2-JAW RADIAL GRIPPER **SERIES GK**

PRODUCT ADVANTAGES



"The compact"

Proven technology

We have more than 20 years of proven reliability, which ensures uninterrupted production for you

Best force/installation space ratio

Force transmission using the toggle lever enables high gripping force while optimally utilizing the installation space

Smooth stroke configuration

You can adjust the 180° opening angle to be unique to your application using an adjusting screw

> THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com

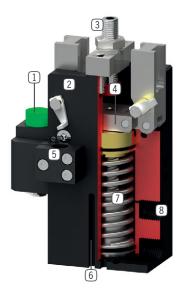
HOW TO ORDER CORRECTLY

The product order numbers are arranged according to this diagram:

Order no.	GK15N		-В	
External gripping, self locking mechanism at 0° opening at spring closing	ngle and	С		



BENEFITS IN DETAIL



1 Buffer stop

- absorption of kinetic energy for heavy and long gripper fingers

2 Robust, lightweight housing

- Hard-coated aluminum alloy

3 Stroke adjustment screw

- Infinitely adjustable opening stroke

4 Guided toggle lever mechanism

- synchronized the movement of the gripper jaws
- mechanically self-locking

5 Mounting block

- mounting for inductive proximity switch

6 Sensing slot

- mounting and positioning of magnetic field sensors

7 Integrated gripping force safety device

- spring integrated into cylinder as energy storage

8 Energy supply

- possible from several sides

> SERIES CHARACTERISTICS



Number of installation sizes	6
Stroke per jaw	0° - 90°
Gripping force	70 N - 4250 N
Weight	0,1 kg - 4,1 kg
AP class	2



10 million maintenance-free cycles (max.)



IP20



Spring closing C



Magnetic field sensor

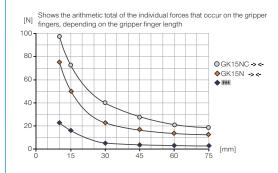


Inductive sensor

▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	0.4
My [Nm]	0.4
Fa [N]	75

> RECOMMENDED ACCESSORIES



Centering Disc



Mounting block

кв3



Buffer stop

PB15N



Inductive proximity switch - Cable 5 m



Inductive Proximity
Switch Cable 0,3 m -Connector M8 NJ3-E2SK

NJ3-E2





Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Ca-ble 5m - Socket M8 (female)

KAW500



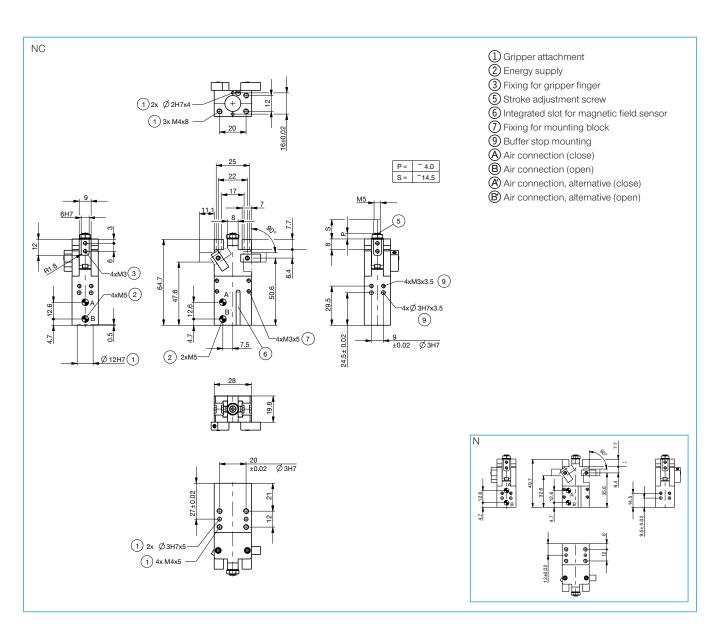
Straight Fittings - Quick Connect Style

GVM5

	► Technical Data*	
Order no.	GK15N-B	GK15NC-B
Stroke per jaw [°]	90	90
Gripping moment in closing [Nm]	1.2	1.6
Gripping moment secured by spring min. [Nm]		0.4
Gripping force in closing [N]**	70	100
Closing time [s]	0.1	0.2
Opening time [s]	0.1	0.2
Repetition accuracy +/- [mm]	0.06	0.06
Operating pressure min. [bar]	3	5
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	2	2.4
Weight [kg]	0.1	0.12

^{*}All data measured at 6 bar

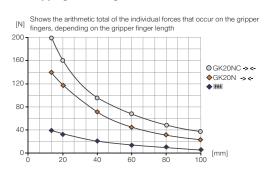
 $^{^{\}star\,\star}\text{Measured}$ from top edge of housing



▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	0.8
My [Nm]	1
Fa [N]	150

► INCLUDED IN DELIVERY



Mounting block

KB8K

► RECOMMENDED ACCESSORIES



Centering Disc

ZE20H7X4



Buffer stop

PB20N



Inductive proximity switch - Cable 5 m



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500

NJ8-E2



Straight Fittings - Quick Connect Style

GVM5

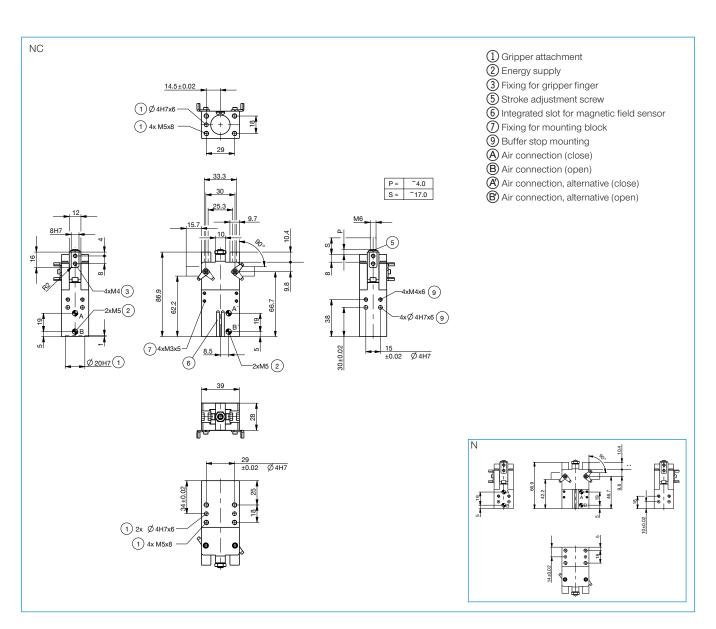


Flow Control Valves - with

	► Technical Data*	
Order no.	GK20N-B	GK20NC-B
Stroke per jaw [°]	90	90
Gripping moment in closing [Nm]	3	4.2
Gripping moment secured by spring min. [Nm]		1.2
Gripping force in closing [N]**	150	210
Closing time [s]	0.1	0.2
Opening time [s]	0.1	0.2
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	5
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	9	11
Weight [kg]	0.23	0.3

^{*}All data measured at 6 bar

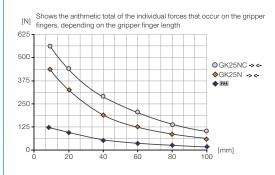
 $^{^{\}star\,\star}\text{Measured}$ from top edge of housing



▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	2.5
My [Nm]	4
Fa [N]	250

► INCLUDED IN DELIVERY



Mounting block

KB8K

► RECOMMENDED ACCESSORIES



Centering Disc

ZE20H7X4



Buffer stop

PB25N



Inductive proximity switch - Cable 5 m



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500

NJ8-E2



Straight Fittings - Quick Connect Style

GVM5

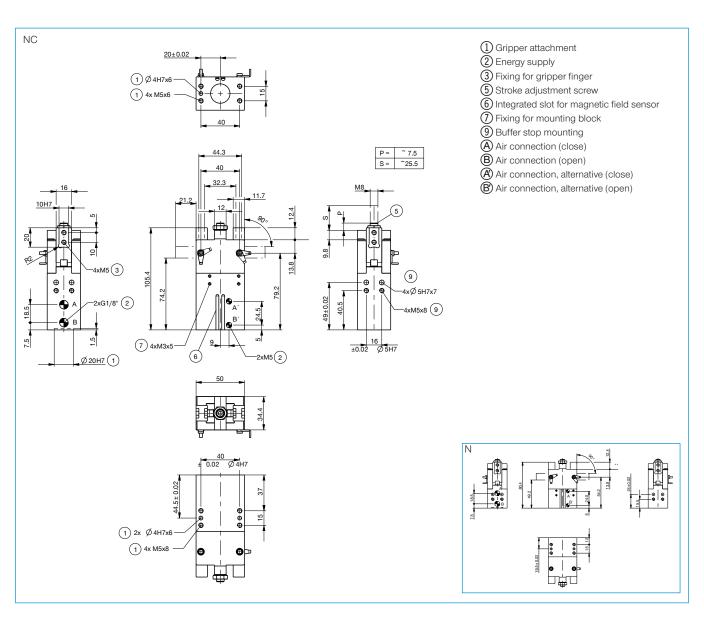


Flow Control Valves - with

	Technical Data*	
Order no.	GK25N-B	GK25NC-B
Stroke per jaw [°]	90	90
Gripping moment in closing [Nm]	10.5	14.5
Gripping moment secured by spring min. [Nm]		4
Gripping force in closing [N]**	440	610
Closing time [s]	0.15	0.25
Opening time [s]	0.15	0.25
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	5
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	18	21
Weight [kg]	0.42	0.58

^{*}All data measured at 6 bar

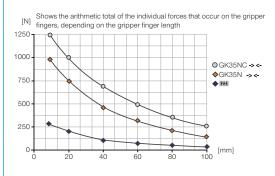
 $^{^{\}star\,\star}\text{Measured}$ from top edge of housing



▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	12
My [Nm]	20
Fa [N]	400

► INCLUDED IN DELIVERY



Mounting block

KB8K

► RECOMMENDED ACCESSORIES



Centering Disc

ZE25H7X6



Buffer stop

PB35N



Inductive proximity switch - Cable 5 m



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500

NJ8-E2



Straight Fittings - Quick Connect Style

GVM5

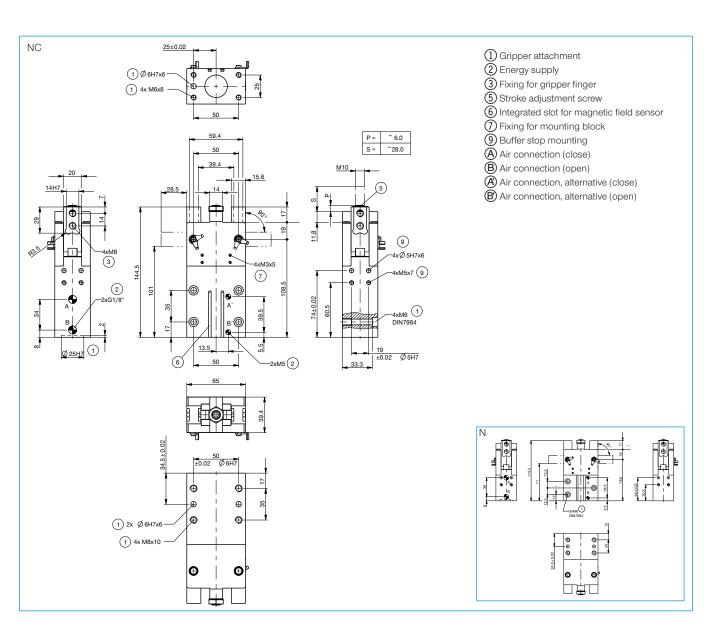


Flow Control Valves - with

	► Technical Data*	
Order no.	GK35N-B	GK35NC-B
Stroke per jaw [°]	90	90
Gripping moment in closing [Nm]	27.5	36.5
Gripping moment secured by spring min. [Nm]		9
Gripping force in closing [N]**	950	1250
Closing time [s]	0.25	0.35
Opening time [s]	0.25	0.35
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	5
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	43	50
Weight [kg]	0.9	1.2

^{*}All data measured at 6 bar

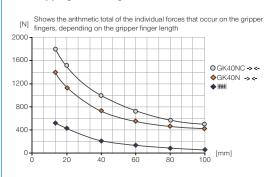
 $^{^{\}star\,\star}\text{Measured}$ from top edge of housing



> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	17
My [Nm]	30
Fa [N]	600

► INCLUDED IN DELIVERY



Mounting block

KB8K

► RECOMMENDED ACCESSORIES



Centering Disc

ZE30H7X4



Buffer stop

PB40N



Inductive proximity switch - Cable 5 m



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500

NJ8-E2



Straight Fittings - Quick Connect Style

GVM5

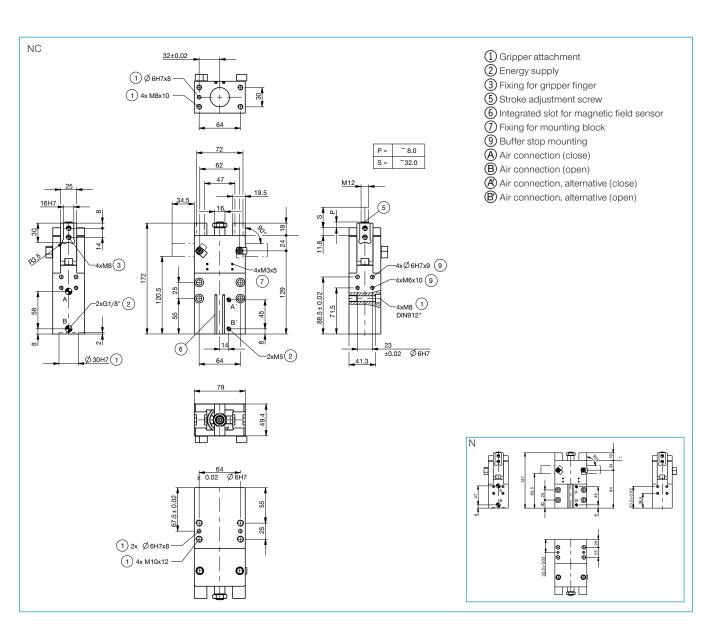


Flow Control Valves - with

	► Technical Data*	
Order no.	GK40N-B	GK40NC-B
Stroke per jaw [°]	90	90
Gripping moment in closing [Nm]	47	62
Gripping moment secured by spring min. [Nm]		15
Gripping force in closing [N]**	1400	1820
Closing time [s]	0.25	0.35
Opening time [s]	0.25	0.35
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	5
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	78	90
Weight [kg]	1.7	2.2

^{*}All data measured at 6 bar

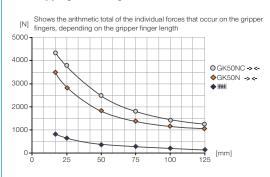
^{* *} Measured from top edge of housing



> PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	28
My [Nm]	40
Fa [N]	800

► INCLUDED IN DELIVERY



Mounting block

KB8K

► RECOMMENDED ACCESSORIES



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Plug-in connector Angled Cable 5m - Socket M8

KAW500



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Straight Fittings - Quick Connect Style

GV1-8X6



Centering Disc

ZE30H7X6



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Flow Control Valves - with Swivel joint

DRV1-8X6



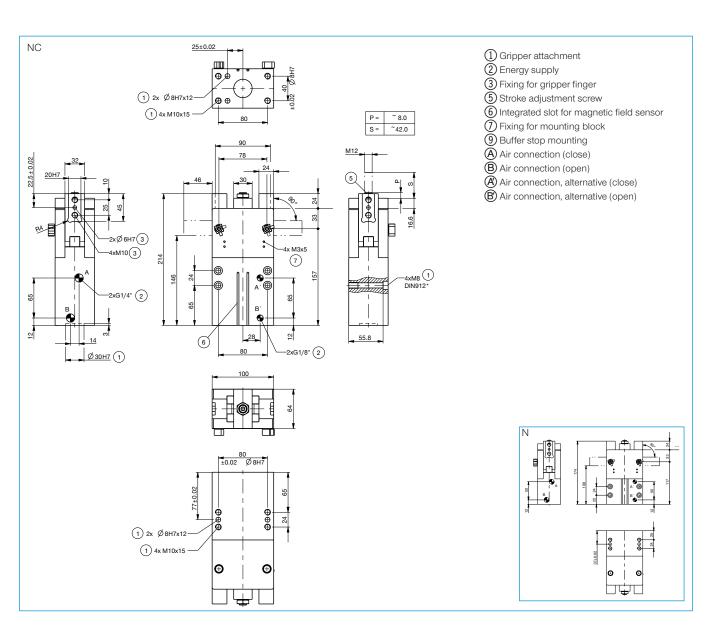
Plug-in connector customizable Straight - Connector M8

S8-G-3

	► Technical Data*	
Order no.	GK50N-B	GK50NC-B
Stroke per jaw [°]	90	90
Gripping moment in closing [Nm]	150	183
Gripping moment secured by spring min. [Nm]		33
Gripping force in closing [N]**	3500	4250
Closing time [s]	0.4	0.5
Opening time [s]	0.4	0.5
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	5
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	160	200
Weight [kg]	3.5	4.1

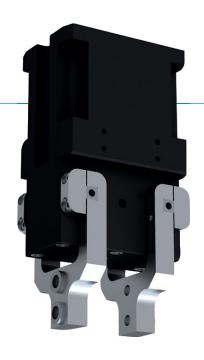
^{*}All data measured at 6 bar

 $^{^{\}star\,\star}\text{Measured}$ from top edge of housing



2-JAW RADIAL GRIPPER **SERIES GG4000**

PRODUCT ADVANTAGES



"The sealed"

Suitable for use under extreme conditions

The sealed rotation axis guarantees process reliability even under the harshest conditions

Smooth stroke configuration

You can adjust the 180° opening angle to be unique to your application using an adjusting screw

► Failure-free continuous operation

Our uncompromising "Made in Germany" quality guarantees up to 10 million maintenance-free gripping cycles

► THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com

HOW TO ORDER **CORRECTLY**

The product order numbers are arranged according to this diagram:

Order no.	GG4032		С	
Stroke per jaw 90°		N		
Stroke per jaw 20°		S		



BENEFITS IN DETAIL



- 1 Stroke adjustment screw
 - Infinitely adjustable opening stroke
- 2 Removable centering sleeves
 - individual gripper finger mounting
- 3 Robust, lightweight housing
 - Hard-coated aluminum alloy
- 4 Sensing slot
 - mounting and positioning of magnetic field sensors
- 5 Mounting and positioning
 - mounting possible from several sides for versatile positioning
- 6 Integrated gripping force safety device
 - spring integrated into cylinder as energy storage
- 7 Position sensing
 - permanent magnet for direct monitoring of piston movement
- 8 Mounting block
 - mounting for inductive proximity switch
- 9 Sealed rotation point
 - for use under extreme conditions

> SERIES CHARACTERISTICS



Number of installation sizes	6
Stroke per jaw	0° - 90°
Gripping force	430 N - 4000 N
Weight	0,25 kg - 4,5 kg
AP class	3



10 million maintenance-free cycles (max.)



Inductive sensor



Purged air



Spring closing C



IP64

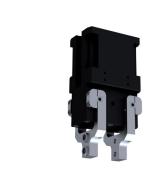


High-strength S

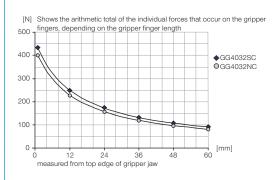


Magnetic field sensor

▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	8.5
My [Nm]	8.5
Fa [N]	180

► INCLUDED IN DELIVERY



Stroke adjustment screw

DST40600

HES0014

► RECOMMENDED ACCESSORIES



Mounting block

KB4-06



Inductive proximity switch - Cable 5 m

NJ4-E2-01



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Straight Fittings - Quick

GVM5



Pressure Safety Valve

DSV1-8

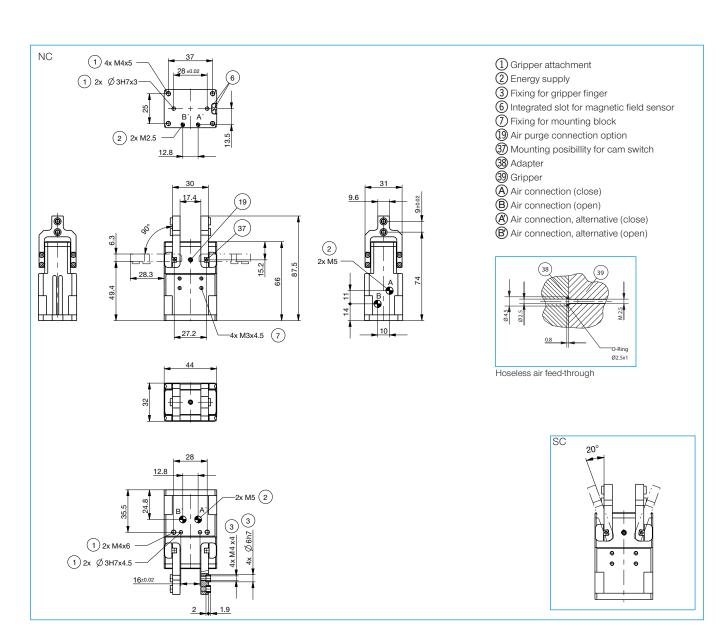


Plug-in connector customiz-

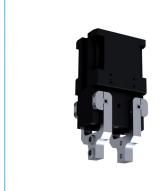
S8-G-3

	► Technical Data*	
Order no.	GG4032NC	GG4032SC
Stroke per jaw [°]	90	20
Gripping moment in closing at 0° [Nm]	6.5	7
Gripping moment secured by spring min. [Nm]	1	1.5
Gripping force in closing [N]	430	460
Length of the gripper fingers max. [mm]	65	65
Permissible weight per jaw max [kg]	0.055	0.055
Closing time [s]	0.055	0.02
Opening time [s]	0.08	0.03
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	4	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	13	10
Weight [kg]	0.25	0.25

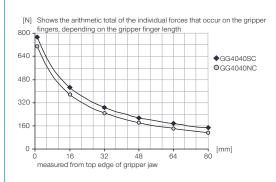
^{*}All data measured at 6 bar



▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	19
My [Nm]	19
Fa [N]	180

► INCLUDED IN DELIVERY



Centering Disc

Stroke adjustment screw

DST40800

HES0015

► RECOMMENDED ACCESSORIES



Mounting block

Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Straight Fittings - Quick

GVM5



Pressure Safety Valve

DSV1-8

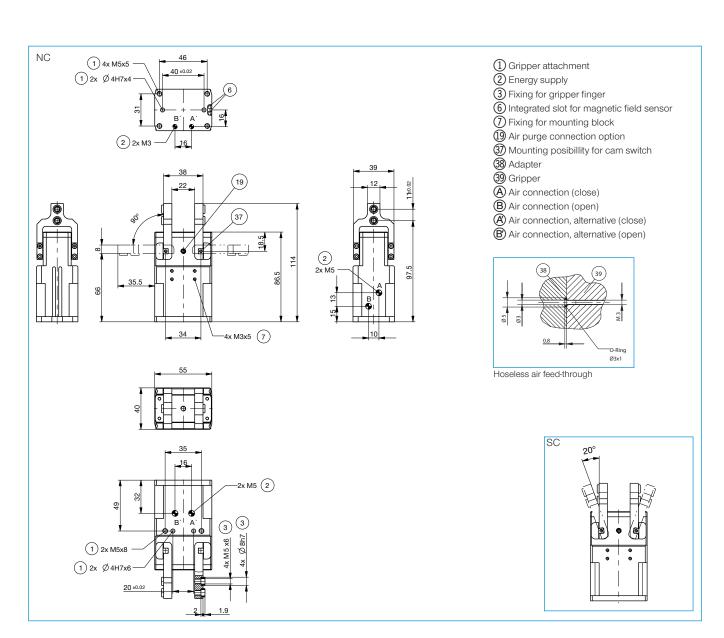


Plug-in connector customiz-

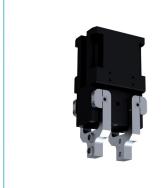
S8-G-3

	► Technical Data*	
Order no.	GG4040NC	GG4040SC
Stroke per jaw [°]	90	20
Gripping moment in closing at 0° [Nm]	13	15
Gripping moment secured by spring min. [Nm]	6	8.5
Gripping force in closing [N]	700	800
Length of the gripper fingers max. [mm]	85	85
Permissible weight per jaw max [kg]	0.12	0.12
Closing time [s]	0.060	0.02
Opening time [s]	0.11	0.06
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	4	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	24	18
Weight [kg]	0.5	0.5

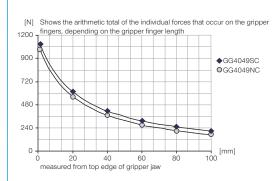
^{*}All data measured at 6 bar



▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	22
My [Nm]	22
Fa [N]	475

► INCLUDED IN DELIVERY



Centering Disc

Stroke adjustment screw

DST41000

HES0016

► RECOMMENDED ACCESSORIES



Mounting block

Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Straight Fittings - Quick

GVM5



Pressure Safety Valve

DSV1-8

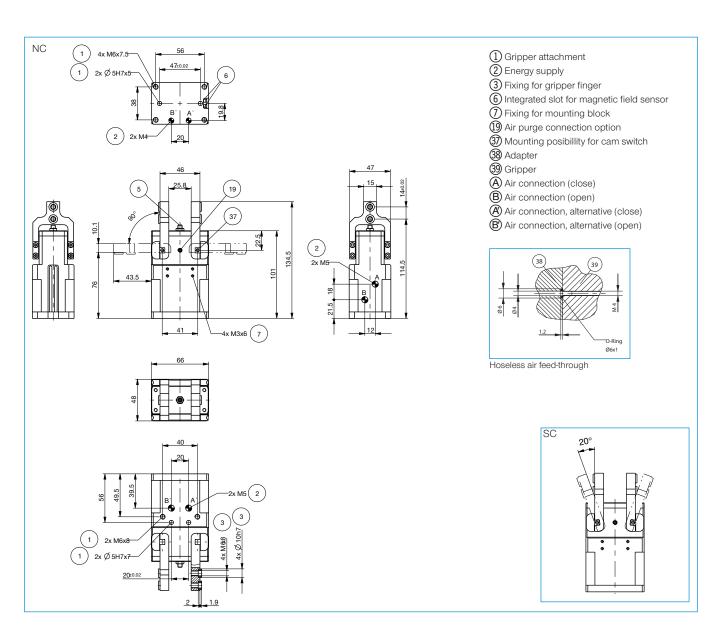


Plug-in connector customiz-

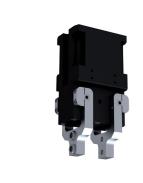
S8-G-3

	► Technical Data*	
Order no.	GG4049NC	GG4049SC
Stroke per jaw [°]	90	20
Gripping moment in closing at 0° [Nm]	23	26
Gripping moment secured by spring min. [Nm]	4.2	7.2
Gripping force in closing [N]	1000	1150
Length of the gripper fingers max. [mm]	100	100
Permissible weight per jaw max [kg]	0.2	0.2
Closing time [s]	0.11	0.05
Opening time [s]	0.17	0.09
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	4	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	44	33
Weight [kg]	0.85	0.85

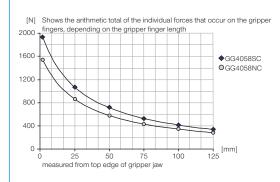
^{*}All data measured at 6 bar



▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	33
My [Nm]	33
Fa [N]	720

► INCLUDED IN DELIVERY



Centering Disc



Stroke adjustment screw

DST11500

HES0017

► RECOMMENDED ACCESSORIES



Mounting block



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Straight Fittings - Quick

GVM5



Pressure Safety Valve

DSV1-8

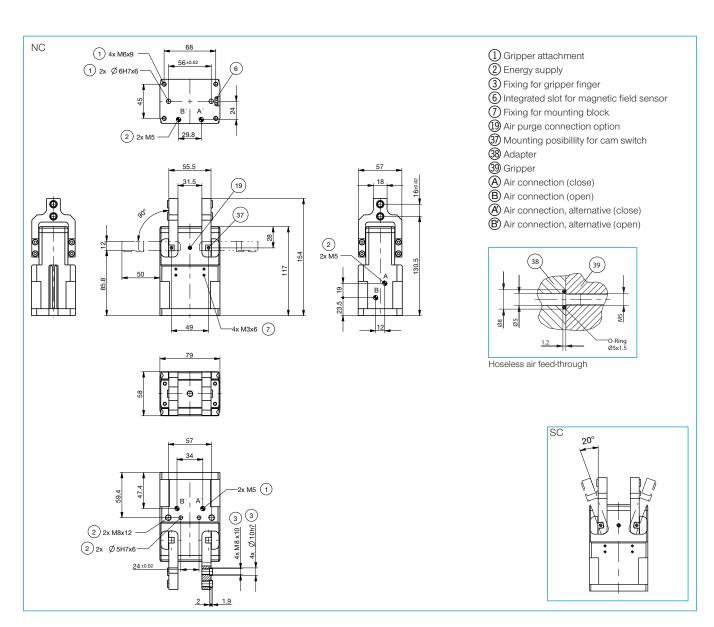


Plug-in connector customizable Straight - Connector M8

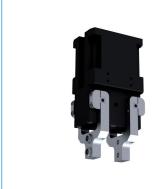
S8-G-3

	► Technical Data*	
Order no.	GG4058NC	GG4058SC
Stroke per jaw [°]	90	20
Gripping moment in closing at 0° [Nm]	46	53.5
Gripping moment secured by spring min. [Nm]	5.7	14.5
Gripping force in closing [N]	1650	1900
Length of the gripper fingers max. [mm]	120	120
Permissible weight per jaw max [kg]	0.36	0.36
Closing time [s]	0.16	0.14
Opening time [s]	0.28	0.17
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	4	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	86	65
Weight [kg]	1.4	1.4

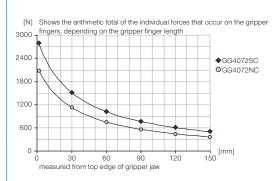
^{*}All data measured at 6 bar



▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	41
My [Nm]	41
Fa [N]	1100

► INCLUDED IN DELIVERY



Centering Disc



Stroke adjustment screw

DST42000

HES0018

► RECOMMENDED ACCESSORIES



Mounting block

KB8-49

Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 0,3 m -





Magnetic field sensor Straight Cable 0,3 m -MFS204SKHC





2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Straight Fittings - Quick

GV1-8X6



Pressure Safety Valve

DSV1-8

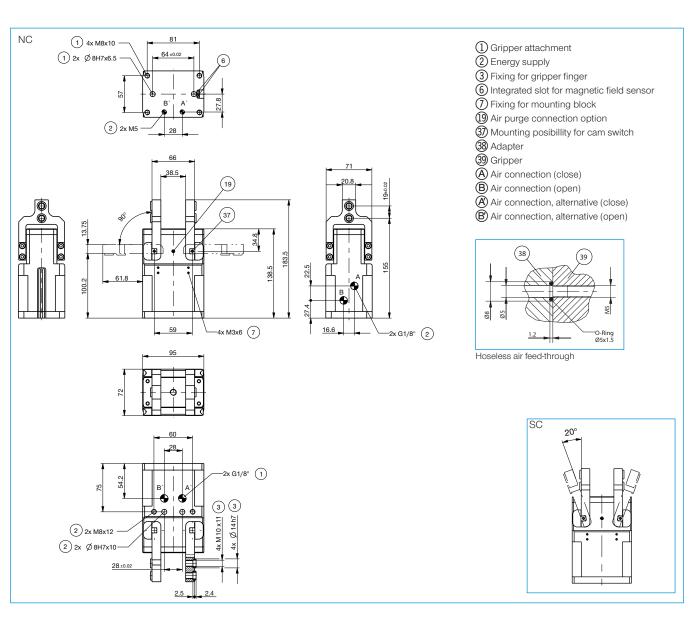


Plug-in connector customizable Straight - Connector M8

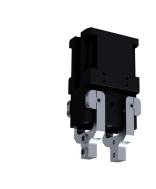
S8-G-3

	Technical Data*	
Order no.	GG4072NC	GG4072SC
Stroke per jaw [°]	90	20
Gripping moment in closing at 0° [Nm]	69	94
Gripping moment secured by spring min. [Nm]	10	21
Gripping force in closing [N]	1950	2700
Length of the gripper fingers max. [mm]	145	145
Permissible weight per jaw max [kg]	0.65	0.65
Closing time [s]	0.21	0.06
Opening time [s]	0.34	0.175
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	4	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	130	100
Weight [kg]	2.45	2.45

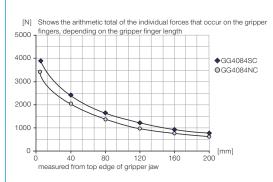
^{*}All data measured at 6 bar



▶ PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	60
My [Nm]	60
Fa [N]	1800

► INCLUDED IN DELIVERY



Centering Disc



Stroke adjustment screw

DST43000

HES0019

► RECOMMENDED ACCESSORIES



Mounting block



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Straight Fittings - Quick

GV1-8X6



Pressure Safety Valve

DSV1-8

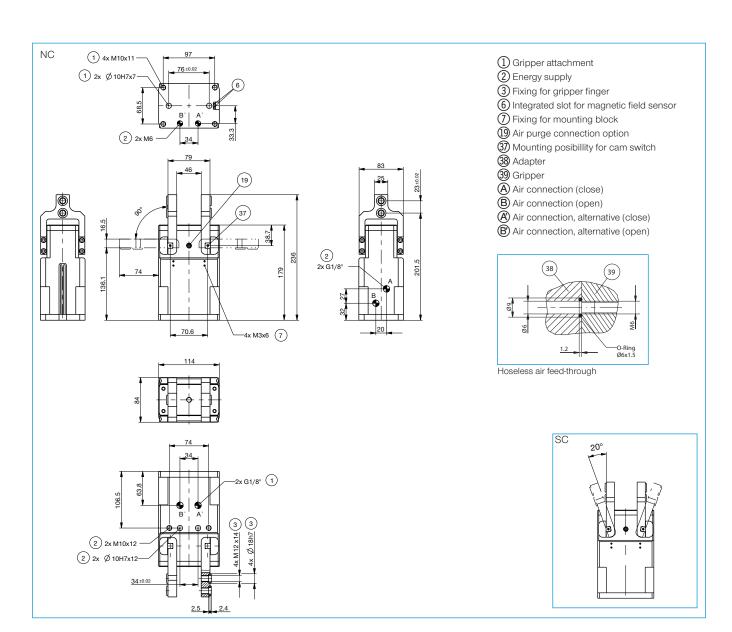


Plug-in connector customizable Straight - Connector M8

S8-G-3

	► Technical Data*	
Order no.	GG4084NC	GG4084SC
Stroke per jaw [°]	90	20
Gripping moment in closing at 0° [Nm]	135	156
Gripping moment secured by spring min. [Nm]	80	115
Gripping force in closing [N]	3500	4000
Length of the gripper fingers max. [mm]	175	175
Permissible weight per jaw max [kg]	1	1
Closing time [s]	0.27	0.11
Opening time [s]	0.48	0.250
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	4	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	220	170
Weight [kg]	4.5	4.5

^{*}All data measured at 6 bar



GRIPPERS FOR SPECIFIC TASKS OVERVIEW OF SERIES



► PNEUMAT	'IC	
Â	Series LGS	450
	Series LG1000	458
0	Series LGG	468
	Series RG	474
	Series ST	480
	Series SCH	486
	Series GS	492
	Series GSI	500
	Series HM1000	504

INTERNAL GRIPPER SERIES LGS

PRODUCT ADVANTAGES



Concentration on the essentials

The most economic type of gripping: This is how you reduce your production costs

Individually machinable clamping jaws

You have never adjusted a gripper to your application this quickly and easily

Direct drive

The control system with only one pneumatic line reduces installation effort and interference contours

► THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com

HOW TO ORDER CORRECTLY

The product order numbers are arranged according to this diagram:

Order no.	LG4-20		
extended collet chuck		V	



BENEFITS IN DETAIL



- 1 Energy supply
 - axial and radial possible
- 2 Protective membrane
 - between collet chuck and function membrane
- 3 Direct drive with membrane
 - only one pneumatic line required
- 4 Stroke limit
 - prevents damage by overstretching with empty strokes
- 5 Collet chuck
 - for individual machining
- (6) Steel protective cover
 - protects the membrane against puncturing
- 7 O-ring for backstroke
 - gripper close movement after venting

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information

All information just a click away at: www.zimmer-group.com Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.



PRODUCT SPECIFICATIONS



► INCLUDED IN DELIVERY



Collet Chuck



Collet chuck V-version

DST04200

DST04201

► RECOMMENDED ACCESSORIES

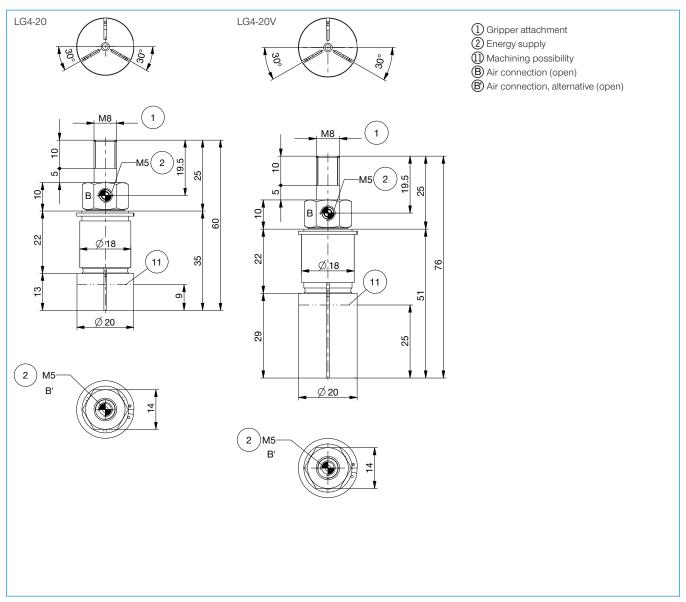


Straight Fittings - Quick Connect Style

GVM5

	► Technical Data*	
Order no.	LG4-20	LG4-20V
Total stroke in Ø [mm]	1	1
Grip diameter min. [mm]	4	4
Gripping moment in opening [Nm]	0.5	0.5
Closing time [s]	0.1	0.1
Opening time [s]	0.1	0.1
Operating pressure min. [bar]	4	4
Operating pressure max. [bar]	6	6
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+60	+60
Air volume per cycle [cm³]	1	1
Weight [kg]	0.075	0.115
Machining length of the collet max. [mm]	9	25

^{*}All data measured at 6 bar



PRODUCT SPECIFICATIONS



► INCLUDED IN DELIVERY



Collet Chuck



Collet chuck V-version

DST20300

DST20301

► RECOMMENDED ACCESSORIES

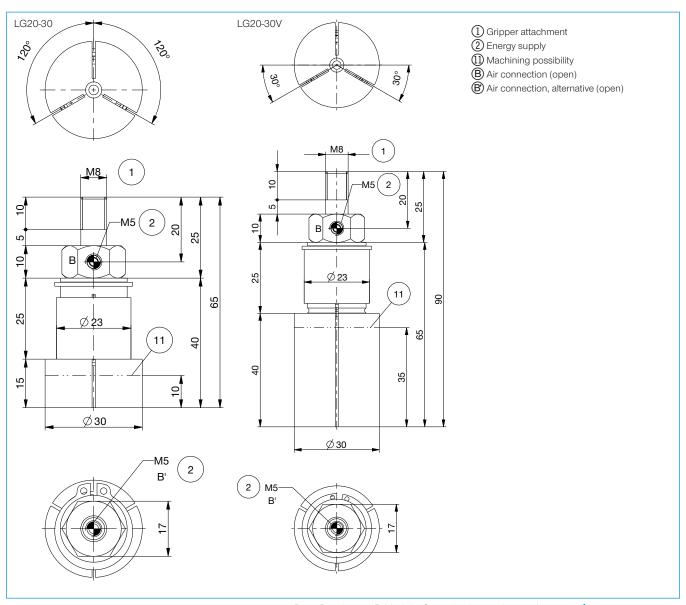


Straight Fittings - Quick Connect Style

GVM5

	► Technical Data*	
Order no.	LG20-30	LG20-30V
Total stroke in Ø [mm]	1	1
Grip diameter min. [mm]	5	5
Gripping moment in opening [Nm]	2	2
Closing time [s]	0.1	0.1
Opening time [s]	0.1	0.1
Operating pressure min. [bar]	4	4
Operating pressure max. [bar]	6	6
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+60	+60
Air volume per cycle [cm³]	3	3
Weight [kg]	0.16	0.29
Machining length of the collet max. [mm]	10	35

^{*}All data measured at 6 bar



PRODUCT SPECIFICATIONS



► INCLUDED IN DELIVERY



Collet Chuck

DST30500

► RECOMMENDED ACCESSORIES

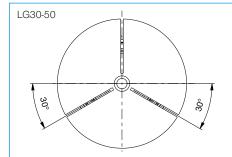


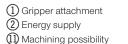
Straight Fittings - Quick Connect Style

GVM5

	► Technical Data*
Order no.	LG30-50
Total stroke in Ø [mm]	1
Grip diameter min. [mm]	6
Gripping moment in opening [Nm]	3
Closing time [s]	0.1
Opening time [s]	0.1
Operating pressure min. [bar]	4
Operating pressure max. [bar]	6
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+60
Air volume per cycle [cm³]	5
Weight [kg]	0.46
Machining length of the collet max. [mm]	11

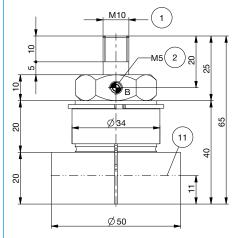
^{*}All data measured at 6 bar

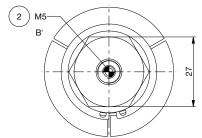




- Machining possibility

 B Air connection (open)
- (open)





INTERNAL GRIPPER SERIES LG1000

PRODUCT ADVANTAGES



Individually adjustable

The design of the gripper enables you to grip not only cylindrical gripping surfaces, but also conical and square ones with process reliability

Integrated air or vacuum feedthrough

Use this option for applications such as leak tests, purging or vacuuming your part

Surface protection provided by silicone membrane

In addition to covering a vast range of gripper hole diameters, the membrane provides ideal protection from damage

> THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com

HOW TO ORDER CORRECTLY

The product order numbers are arranged according to this diagram:

Order no.	LG1008		SI	
Axial energy supply		-01		
Radial energy supply, through-hole		-02		
Silicone rubber membrane				



BENEFITS IN DETAIL

Version-01



1 Energy supply

- Axial (version-01) or radial (version-02)
- 2 Mounting and positioning
 - via fit, thread and lock nut
- 3 Robust, lightweight housing
 - Hard-coated aluminum alloy
- 4 Direct gripping with rubber membrane
 - High holding force due to high friction value
 - reset when venting

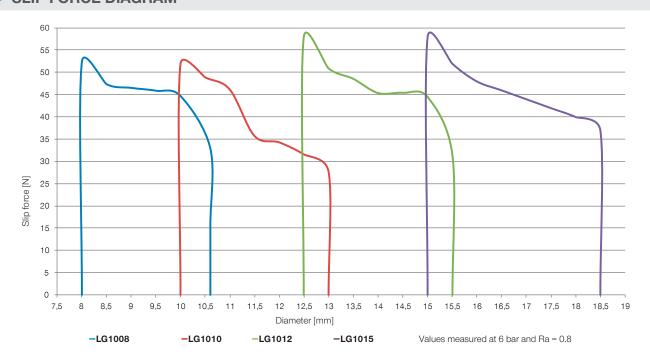
5 Through-hole

- Compressed air or vacuum connection for cooling the workpieces or testing them for leaks (version-02)

Version-02



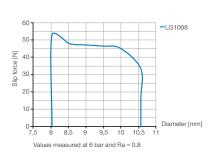
SLIP FORCE DIAGRAM



PRODUCT SPECIFICATIONS



Slip force diagram



▶ RECOMMENDED ACCESSORIES



Centering cone

DAL02350



Straight Fittings - Barb Style Connection

GVM3



Straight Fittings - Quick Connect Style

GVM5



Angled Fittings - Barb Style Connection

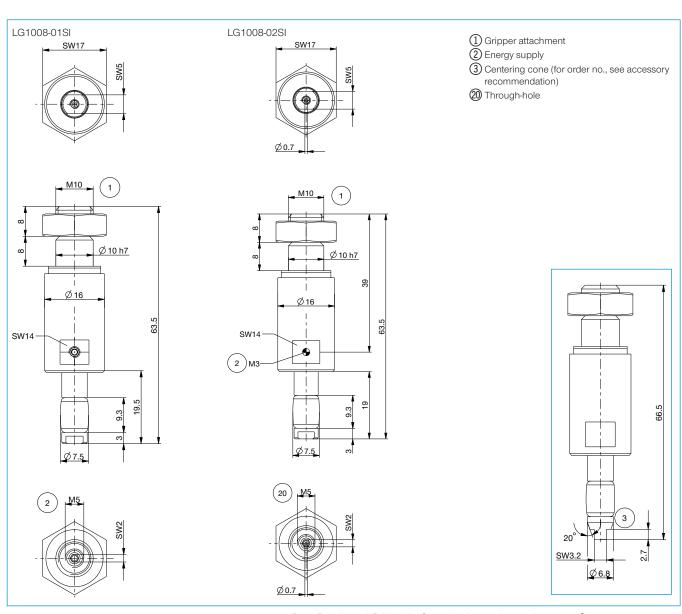
WVM3



Angled Fittings - Quick Connect Style

	► Technical Data*	
Order no.	LG1008-01SI	LG1008-02SI
Operating temperature [°C]	5 +80	5 +80
Retract time / Extend time [s]	0.2	0.2
Grip diameter max. [mm]	10.5	10.5
Grip diameter min. [mm]	8	8
Total stroke in Ø [mm]	2.5	2.5
Max. slip force [N]	53	53
Operating pressure min. [bar]	4	4
Operating pressure max. [bar]	6	6
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	0.7	0.7
Weight [kg]	0.032	0.028

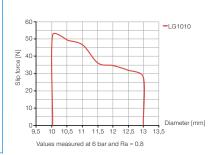
^{*}All data measured at 6 bar



PRODUCT SPECIFICATIONS



Slip force diagram



▶ RECOMMENDED ACCESSORIES



Centering cone

DAL02360



Straight Fittings - Barb Style Connection

GVM3



Straight Fittings - Quick Connect Style

GVM5



Angled Fittings - Barb Style Connection

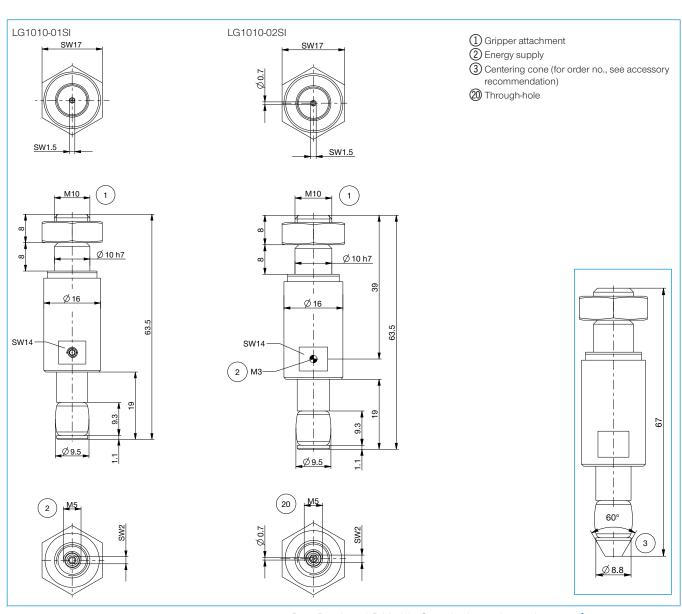
WVM3



Angled Fittings - Quick Connect Style

	► Technical Data*	
Order no.	LG1010-01SI	LG1010-02SI
Operating temperature [°C]	5 +80	5 +80
Retract time / Extend time [s]	0.2	0.2
Grip diameter max. [mm]	13	13
Grip diameter min. [mm]	10	10
Total stroke in Ø [mm]	3	3
Max. slip force [N]	53	53
Operating pressure min. [bar]	4	4
Operating pressure max. [bar]	6	6
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	0.7	0.7
Weight [kg]	0.033	0.029

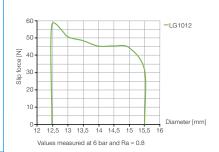
^{*}All data measured at 6 bar



PRODUCT SPECIFICATIONS



Slip force diagram



▶ RECOMMENDED ACCESSORIES



Centering cone

DAL02370



Straight Fittings - Barb Style Connection

GVM3



Straight Fittings - Quick Connect Style

GVM5



Angled Fittings - Barb Style Connection

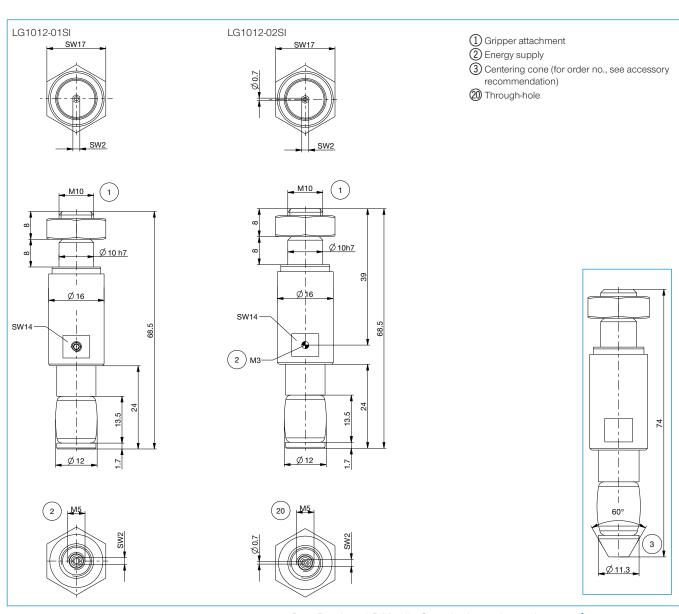
WVM3



Angled Fittings - Quick Connect Style

	► Technical Data*	
Order no.	LG1012-01SI	LG1012-02SI
Operating temperature [°C]	5 +80	5 +80
Retract time / Extend time [s]	0.2	0.2
Grip diameter max. [mm]	15.5	15.5
Grip diameter min. [mm]	12.5	12.5
Total stroke in Ø [mm]	3	3
Max. slip force [N]	58	58
Operating pressure min. [bar]	4	4
Operating pressure max. [bar]	6	6
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	0.7	0.7
Weight [kg]	0.036	0.034

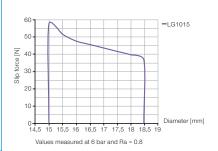
^{*}All data measured at 6 bar



PRODUCT SPECIFICATIONS



Slip force diagram



▶ RECOMMENDED ACCESSORIES



Centering cone

DAL02380



Straight Fittings - Barb Style Connection

GVM3



Straight Fittings - Quick Connect Style

GVM5



Angled Fittings - Barb Style Connection

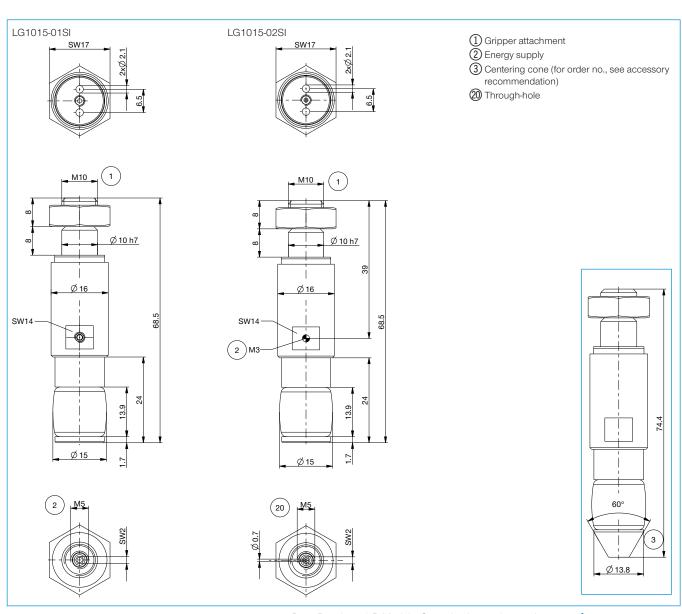
WVM3



Angled Fittings - Quick Connect Style

	► Technical Data*	
Order no.	LG1015-01SI	LG1015-02SI
Operating temperature [°C]	5 +80	5 +80
Retract time / Extend time [s]	0.2	0.2
Grip diameter max. [mm]	18.5	18.5
Grip diameter min. [mm]	15	15
Total stroke in Ø [mm]	3.5	3.5
Max. slip force [N]	58	58
Operating pressure min. [bar]	4	4
Operating pressure max. [bar]	6	6
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	0.7	0.7
Weight [kg]	0.041	0.037

^{*}All data measured at 6 bar



INTERNAL GRIPPER SERIES LGG

► PRODUCT ADVANTAGES



Surface protection with rubber knobs

Continuously protect the surface of your workpieces and minimise rejections in the process

Secure hold

The coefficient of friction ensures your workpiece stays held reliably, even under high dynamics

Direct drive

The control system with only one pneumatic line reduces installation effort and interference contours

► THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com



BENEFITS IN DETAIL



1 Energy supply

- radial
- axial and radial from LG35-39

(2) Fixing

- by fit, thread and locknut

3 Robust, lightweight housing

- Hard-coated aluminum alloy
- no overstretching of the rubber membrane at empty stroke

4 Direct gripping with rubber knops

- high retention force due to good friction value, approx. 0.5 with

5 Gripping with single-acting rubber membranes

- low actuate effort
- reset when venting
- adjustable force with operating pressure (2 6 bar)

6 Inner core

- saves air volume and cycle time (from LG35-39)

► FURTHER INFORMATION IS AVAILABLE ONLINE



Technical Information

All information just a click away at: www.zimmer-group.com Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.

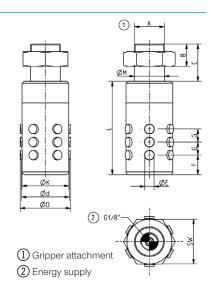


INTERNAL GRIPPER

SERIES LGG

PRODUCT SPECIFICATIONS





RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style GV1-8X6



Quick Exhaust Valve

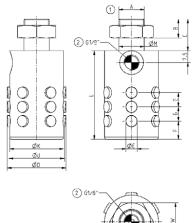
DEV06

	► Technical Data	k .			
Order no.	LG15-18	LG18-22	LG22-26	LG26-30	LG30-35
Total stroke in Ø [mm]	2.5	4	4	4	5
Clamping diameter d min. [mm]	15	17.5	21.5	25.5	29.5
Clamping diameter D max. [mm]	17.5	21.5	25.5	29.5	34.5
Gripping force in extraction [N]	100	100	150	150	200
Retract time / Extend time [s]	0.2	0.2	0.2	0.2	0.2
Repetition accuracy +/- [mm]	0.05	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	2	2	2	2	2
Operating pressure max. [bar]	6	6	6	6	6
Air volume per cycle [cm3]	1	1	1	2	3
Operating temperature min. [°C]	5	5	5	5	5
Operating temperature max. [°C]	+80	+80	+80	+80	+80
A	M14X1.5	M14X1.5	M14X1.5	M16X1	M16X1
C [mm]	18	18	20	20	20
EØ[mm]	5	5	5	6	7
F [mm]	10.5	10.5	11.5	10.5	11.5
G [mm]	7	7	7	7	8
KØ[mm]	14.5	17	21	25	29
L [mm]	42	42	50	50	52
MØ[mm]	14h7	14h7	14h7	16h7	16h7
Weight [kg]	0.031	0.035	0.051	0.071	0.09

^{*}All data measured at 6 bar

► PRODUCT SPECIFICATIONS







► RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style GV1-8X6



Quick Exhaust Valve

DEV06

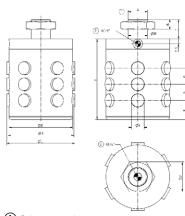
	► Tech	nical Data	ŧ.							
Order no.	LG35-39	LG40-45	LG46-51	LG51-56	LG56-62	LG63-70	LG71-80	LG76-84	LG81-90	LG91-100
Total stroke in Ø [mm]	4.5	6.5	6	7	7.5	8	10.5	8.5	11	10
Clamping diameter d min. [mm]	34.5	39.5	45.5	50.5	55.5	62.5	70.5	75.5	80.5	90.5
Clamping diameter D max. [mm]	39	46	51.5	57.5	63	70.5	81	84	91.5	100.5
Gripping force in extraction [N]	300	400	500	750	900	1100	1500	1700	2000	2500
Retract time / Extend time [s]	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4
Repetition accuracy +/- [mm]	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	2	2	2	2	2	2	2	2	2	2
Operating pressure max. [bar]	6	6	6	6	6	6	6	6	6	6
Air volume per cycle [cm³]	5	8	13	17	25	33	42	53	67	117
Operating temperature min. [°C]	5	5	5	5	5	5	5	5	5	5
Operating temperature max. [°C]	+80	+80	+80	+80	+80	+80	+80	+80	+80	+80
A	M16X1	M16X1	M16X1	M16X1	M16X1	M20X1.5	M20X1.5	M20X1.5	M20X1.5	M20X1.5
C [mm]	20	20	20	20	20	15	15	15	15	15
EØ[mm]	7	8	9	10	11	12.5	15	15.5	16	18
F [mm]	11.5	14	15.5	17	19	21.5	21.5	22.7	24.5	26.5
G [mm]	9	11	12	13	14.5	15.5	18	19	20	22.5
KØ[mm]	34	39	45	50	50	62	70	75	80	90
L [mm]	56	62	68	74	80	86	92	96	100	110
MØ [mm]	16h7	16h7	16h7	16h7	16h7	20h7	20h7	20h7	20h7	20h7
Weight [kg]	0.13	0.178	0.26	0.37	0.373	0.53	0.69	0.8	1	1.3

^{*}All data measured at 6 bar

INTERNAL GRIPPER SERIES LGG

PRODUCT SPECIFICATIONS





- ① Gripper attachment
- 2 Energy supply

► RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style GV1-8X6



Quick Exhaust Valve

DEV06

	► Technical Data*		
Order no.	LG100-110	LG110-120	LG120-135
Total stroke in Ø [mm]	11	11	16
Clamping diameter d min. [mm]	99.5	109.5	119.5
Clamping diameter D max. [mm]	110.5	120.5	135.5
Gripping force in extraction [N]	2800	3500	3500
Retract time / Extend time [s]	0.4	0.4	0.4
Repetition accuracy +/- [mm]	0.05	0.05	0.05
Operating pressure min. [bar]	2	2	2
Operating pressure max. [bar]	6	6	6
Air volume per cycle [cm3]	150	200	250
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+80	+80	+80
A	M30X1.5	M30X1.5	M30X1.5
C [mm]	30	30	30
EØ[mm]	20	22	22
F [mm]	30	31	37
G [mm]	25	25	28
KØ[mm]	99	109	119
L [mm]	120	130	145
MØ [mm]	30h7	30h7	30h7
Weight [kg]	1.9	2.3	2.7

^{*}All data measured at 6 bar





EXTERNAL GRIPPER SERIES RG

► PRODUCT ADVANTAGES



Surface protection with rubber knobs

Continuously protect the surface of your workpieces and minimise rejections in the process

Secure hold

The coefficient of friction ensures your workpiece stays held reliably, even under high dynamics

Direct drive

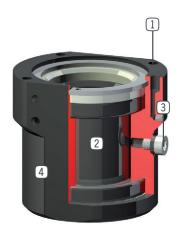
The control system with only one pneumatic line reduces installation effort and interference contours

► THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!





- 1 Mounting and positioning
- 2 Drive
 - direct via rubber membrane
- 3 Energy supply
 - possible from several sides
- 4 Robust, lightweight housing
 - Hard-coated aluminum alloy

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information



EXTERNAL GRIPPER INSTALLATION SIZE RG0-30

PRODUCT SPECIFICATIONS



► RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style GVM5

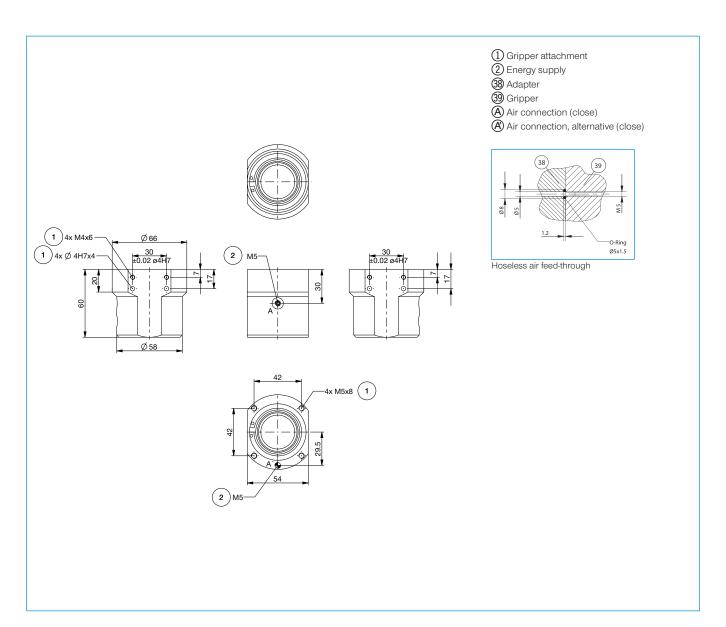


Quick Exhaust Valve

DEV04

	► Technical Data*
Order no.	RG0-30
Grip diameter min. [mm]	0
Grip diameter max. [mm]	28
Gripping force in closing [N]	350
Closing time [s]	0.1
Opening time [s]	0.1
Operating pressure min. [bar]	1
Operating pressure max. [bar]	3
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	5
Weight [kg]	0.28

^{*}All data measured at 3 bar



EXTERNAL GRIPPER INSTALLATION SIZE RG10-60

PRODUCT SPECIFICATIONS



► RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style GVM5

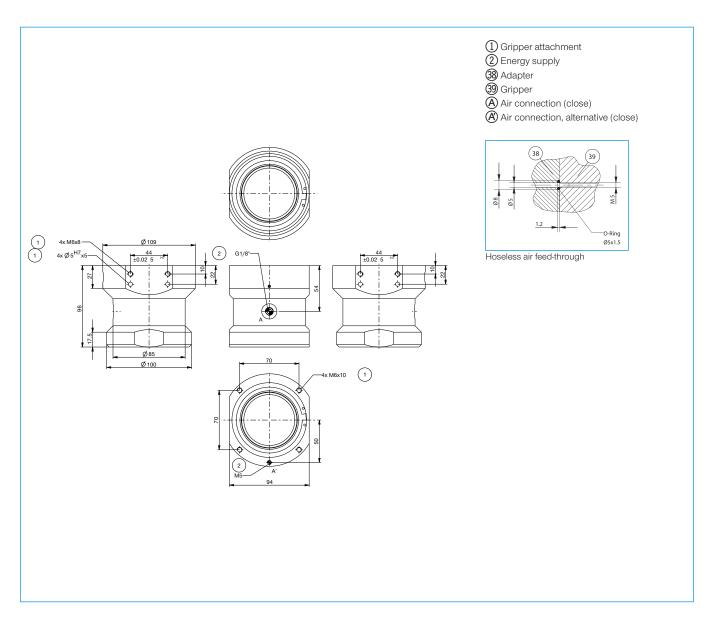


Quick Exhaust Valve

DEV04

	► Technical Data*
Order no.	RG10-60
Grip diameter min. [mm]	10
Grip diameter max. [mm]	58
Gripping force in closing [N]	1000
Closing time [s]	0.1
Opening time [s]	0.1
Operating pressure min. [bar]	1
Operating pressure max. [bar]	3
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	33
Weight [kg]	0.85

^{*}All data measured at 3 bar



NEEDLE GRIPPER SERIES ST

PRODUCT ADVANTAGES



Smooth stroke configuration

Customise the stroke for your application with infinitely variable adjustment using an adjusting dial

Workpiece drain function

This function guarantees the quick and reliable deposit of the workpiece and prevents disruptions to the process sequence

Query about magnetic field sensor technology

Detecting the end position allows you to have shorter cycle times and an integrated control system

► THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!





- 1 Extending needles
 - gripping by penetration
- 2 Force transfer
 - via hardened steel taper pin
- 3 Needle wiper
 - helps wiping the workpiece
- 4 Stroke adjustment
 - adjustment of the needle stroke
- 5 Integrated spring
 - for return
- 6 Blow off air connection
 - to reject the workpiece with air
- 7 Energy supply
 - possible from several sides (size ST40)
- 8 Drive
 - single-acting pneumatic cylinder with spring return
- 9 Sensing slot
 - mounting and positioning of magnetic field sensors

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information



NEEDLE GRIPPER INSTALLATION SIZE ST36

PRODUCT SPECIFICATIONS



► RECOMMENDED ACCESSORIES



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m -Connector M8

MFS103SKHC



Straight Fittings - Quick Connect Style

GVM5



Plug-in connector customizable Straight -Connector M8

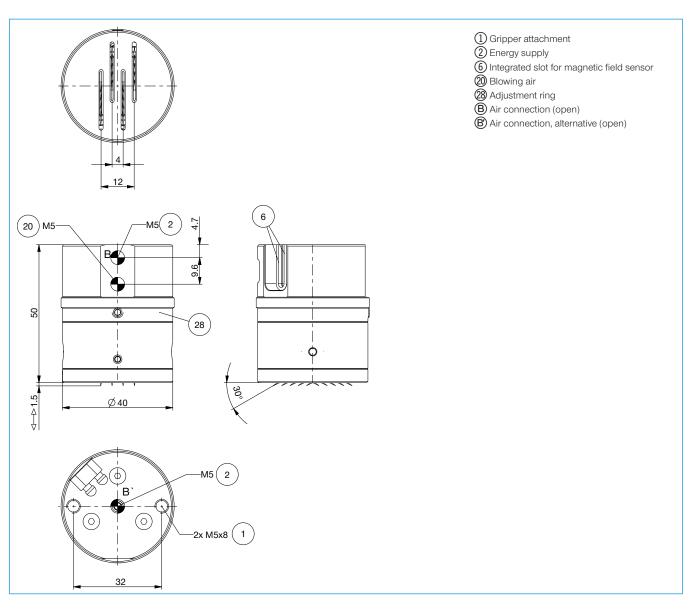
S8-G-3



Plug-in connector customizable Straight -Connector M12

	► Technical Data*
Order no.	ST36-B
Needle stroke adjustable min. [mm]	0
Needle stroke adjustable max. [mm]	1.5
Number of needles [Pice]	20
Needle diameter [mm]	0.7
Retract time / Extend time [s]	0.03
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	4
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	1
Weight [kg]	0.21

^{*}All data measured at 6 bar



NEEDLE GRIPPER INSTALLATION SIZE ST40

PRODUCT SPECIFICATIONS



► RECOMMENDED ACCESSORIES



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Straight Fittings - Quick Connect Style

GVM5



Plug-in connector customizable Straight -Connector M8

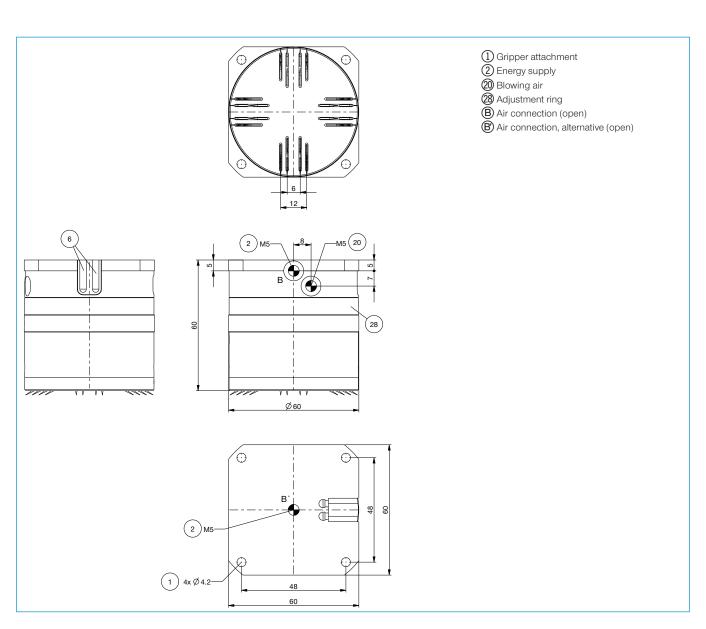
S8-G-3



Plug-in connector customizable Straight -Connector M12

	► Technical Data*
Order no.	ST40-B
Needle stroke adjustable min. [mm]	0
Needle stroke adjustable max. [mm]	2
Number of needles [Pice]	40
Needle diameter [mm]	0.7
Retract time / Extend time [s]	0.03
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	4
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	3
Weight [kg]	0.49

^{*}All data measured at 6 bar



NEEDLE GRIPPER SERIES SCH

▶ PRODUCT ADVANTAGES



Smooth stroke configuration

Adjust the needle stroke individually and smoothly via the direct needle setting

Flat structure

Due to its compact design, you save precious space in your machine

Query about magnetic field sensor technology

Detecting the end position allows you to have faster cycle times and an integrated control system

► THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!





- 1 Extending needles
 - gripping by penetration
- 2 Robust, lightweight housing
 - Hard-coated aluminum alloy
- 3 Stroke adjustment
 - by shifting in an elongated hole
- - two double-acting pneumatic cylinders
- 5 Energy supply
- 6 Mounting and positioning
- 7 Sensing slot
 - mounting and positioning of magnetic field sensors

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information



NEEDLE GRIPPER

INSTALLATION SIZE SCH20

PRODUCT SPECIFICATIONS



► INCLUDED IN DELIVERY



Spare needle



Pneumatic face hose

CNAD00200

PYA

► RECOMMENDED ACCESSORIES



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female) KAW500



Plug-in connector customizable Straight -Connector M8

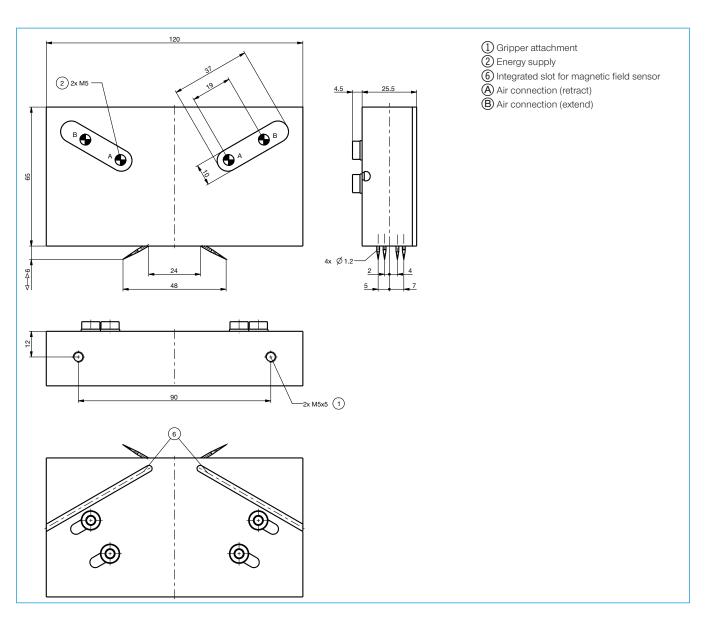
S8-G-3



Plug-in connector customiz-able Straight - Connector M12

	► Technical Data*
Order no.	SCH20-B
Needle stroke adjustable min. [mm]	0
Needle stroke adjustable max. [mm]	6
Number of needles [Pice]	4
Needle diameter [mm]	1.2
Retract time / Extend time [s]	0.02
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	4
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	5
Weight [kg]	0.35

^{*}All data measured at 6 bar



NEEDLE GRIPPER

INSTALLATION SIZE SCH23

PRODUCT SPECIFICATIONS



► INCLUDED IN DELIVERY



Spare needle



Pneumatic face hose

CNAD00230

PYA

► RECOMMENDED ACCESSORIES



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female) KAW500



Plug-in connector customizable Straight -Connector M8

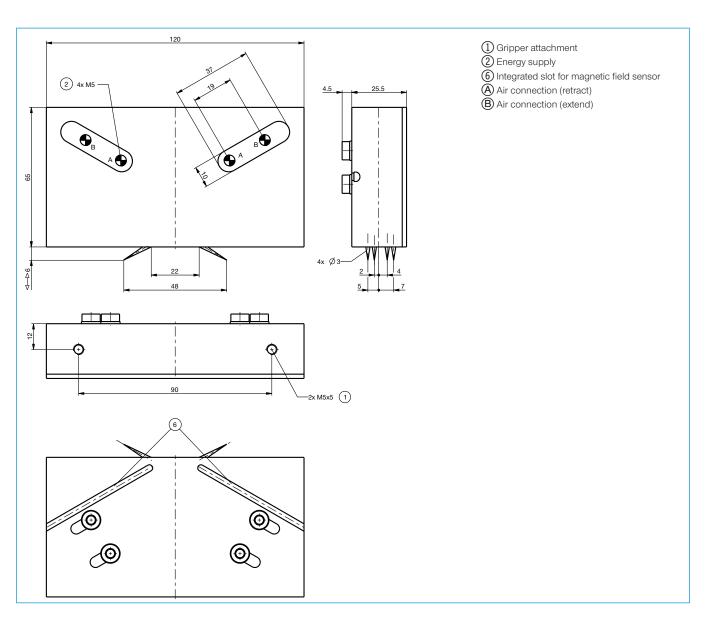
S8-G-3



Plug-in connector customiz-able Straight - Connector M12

	► Technical Data*
Order no.	SCH23-B
Needle stroke adjustable min. [mm]	0
Needle stroke adjustable max. [mm]	6
Number of needles [Pice]	4
Needle diameter [mm]	3
Retract time / Extend time [s]	0.2
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	4
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	5
Weight [kg]	0.37

^{*}All data measured at 6 bar



O-RING ASSEMBLY GRIPPER, OUTER **SERIES GS**

PRODUCT ADVANTAGES



Proven technology

We have more than 20 years of proven reliability, which ensures uninterrupted production for you

Adjustable expanding stroke

Prevents the O-ring from overexpanding and ensures consistent production quality

Query about magnetic field sensor technology

Detecting the end position allows you to have shorter cycle times and an integrated control system

> THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!





- 1 Ejector jaw
 - to shift off the O-ring
- 2 Stroke adjustment
 - for adjustment of the spread stroke
- (3) Energy supply
 - possible from several sides
- 4 Drive
 - two single-acting pneumatic cylinders
- 5 Force transfer
 - direct via taper
- 6 Mounting and positioning
 - axial, on the gripper bottom
- 7 Sensing slot
 - mounting and positioning of magnetic field sensors
- 8 Robust, lightweight housing
 - Hard-coated aluminum alloy
- (9) Gripper jaw
 - individual gripper finger mounting

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information



O-RING ASSEMBLY GRIPPER, OUTER

INSTALLATION SIZE GS65

PRODUCT SPECIFICATIONS



► INCLUDED IN DELIVERY



Centering Disc

DST06510

► RECOMMENDED ACCESSORIES



Ejector Jaws Aluminium

UB65-3





Expanding Jaws Steel

UB65-4



Mounting block

KB6.5-02



Inductive proximity switch

NJ6.5-E2-01



Inductive proximity switch

NJ6.5-E2S



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0.3 m - Connector M8

MFS103SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

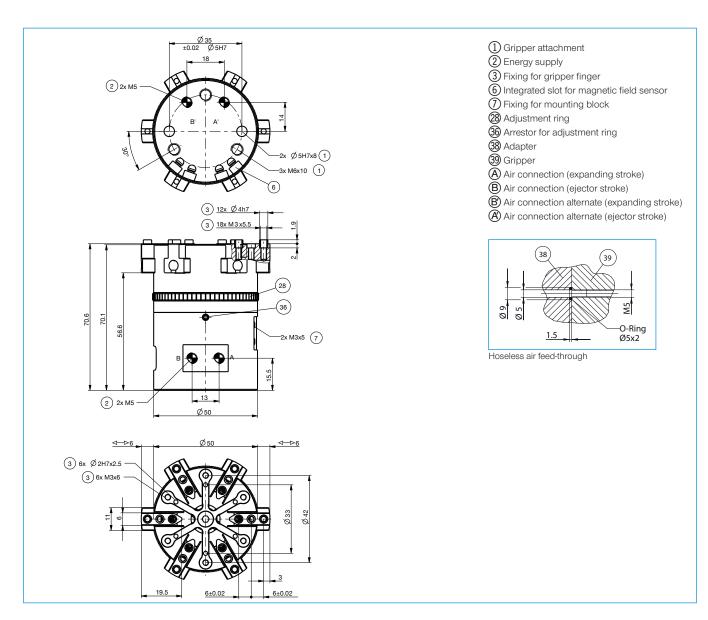
KAW500



Straight Fittings - Quick Connect Style

	► Technical Data*
Order no.	GS65-B
Opening stroke adjustable per jaw min. [mm]	3
Opening stroke adjustable per jaw max. [mm]	6
Stripping stroke [mm]	5
Opening force [N]	300
Recommended O-ring diameter min. [mm]	4
Recommended O-ring diameter max. [mm]	60
Number of gripping jaws [Quantity]	6
Closing time [s]	0.05
Opening time [s]	0.05
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	4
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Weight [kg]	0.5

*All data measured at 6 bar



O-RING ASSEMBLY GRIPPER, OUTER **INSTALLATION SIZE GS810**

PRODUCT SPECIFICATIONS



► INCLUDED IN DELIVERY



Centering Disc

DST40600

► RECOMMENDED ACCESSORIES



Ejector Jaws Aluminium

UB810-3



Expanding Jaws Steel

UB810-4



Mounting block

KB6.5-02



Inductive proximity switch

NJ8-E2



Inductive proximity switch

NJ8-E2S



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0.3 m - Connector M8

MFS103SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500

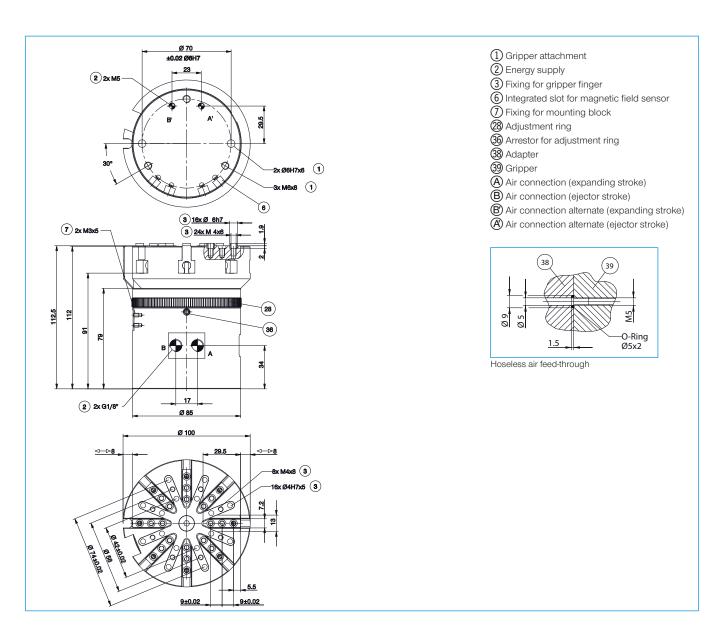


Straight Fittings - Quick Connect Style

GV1-8X6

	► Technical Data*
Order no.	GS810-B
Opening stroke adjustable per jaw min. [mm]	4
Opening stroke adjustable per jaw max. [mm]	8
Stripping stroke [mm]	10
Opening force [N]	1200
Recommended O-ring diameter min. [mm]	30
Recommended O-ring diameter max. [mm]	120
Number of gripping jaws [Quantity]	8
Closing time [s]	0.05
Opening time [s]	0.05
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Weight [kg]	2.5

*All data measured at 6 bar



O-RING ASSEMBLY GRIPPER, OUTER **INSTALLATION SIZE GS1015**

PRODUCT SPECIFICATIONS



► INCLUDED IN DELIVERY



Mounting block



Centering Disc

KB8K

DST60800

► RECOMMENDED ACCESSORIES



Ejector Jaws Aluminium

UB1015-3



Expanding Jaws Steel

UB1015-4



Inductive proximity switch



Inductive proximity switch Connector M8 NJ8-E2S



Magnetic field sensor Angled Cable 5 m MFS103KHC

NJ8-E2



Magnetic field sensor Angled Cable 0.3 m - Connector M8

MFS103SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Straight Fittings - Quick Connect Style

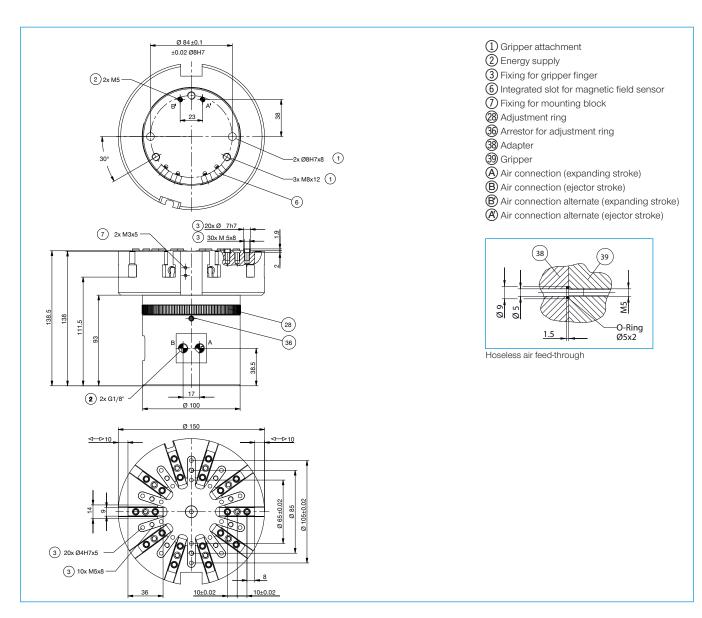
GV1-8X8



Plug-in connector customizable Straight - Connector M8

	► Technical Data*
Order no.	GS1015-B
Opening stroke adjustable per jaw min. [mm]	1.6
Opening stroke adjustable per jaw max. [mm]	10
Stripping stroke [mm]	15
Opening force [N]	1450
Recommended O-ring diameter min. [mm]	40
Recommended O-ring diameter max. [mm]	150
Number of gripping jaws [Quantity]	10
Closing time [s]	0.05
Opening time [s]	0.05
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Weight [kg]	5.4

*All data measured at 6 bar



O-RING ASSEMBLY GRIPPER, INNER **SERIES GSI**

PRODUCT ADVANTAGES



Concentration on the essentials

Only pay for what you need - individual standard gripper specific to O-ring inside assembly

Adjustable expanding stroke

Prevents the O-ring from overexpanding and ensures consistent production quality

Query about magnetic field sensor technology

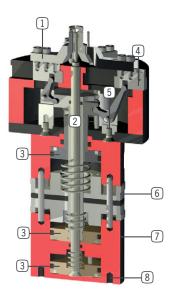
Detecting the end position allows you to have shorter cycle times and an integrated control system

► THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!





1 Spread jaws

to position the O-ring in the groove of the workpiece

2 Ejector (piston rod)

- to remove the O-ring

3 Driven by three single-acting pneumatic cylinders

- drive for grabber jaws
- drive for spread jaws
- drive for ejector

4 Grabber jaw

- to grab the O-ring

5 Force transfer

- via lever and connecting rod

6 Stroke adjustment on grabber jaws

- prevents overstretching of O-ring during assembly

7 Stroke on spread jaws

- adjustable to fit bore diameter of workpiece

8 Mounting and positioning

- axial, on the gripper bottom

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information



O-RING ASSEMBLY GRIPPER, INNER

INSTALLATION SIZE GSI206

PRODUCT SPECIFICATIONS



► INCLUDED IN DELIVERY



Centering Disc

DST06510

► RECOMMENDED ACCESSORIES



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Cable 5m - Socket M8

KAW500



Straight Fittings - Quick

GVM5



Plug-in connector customiz-able Straight - Connector M8

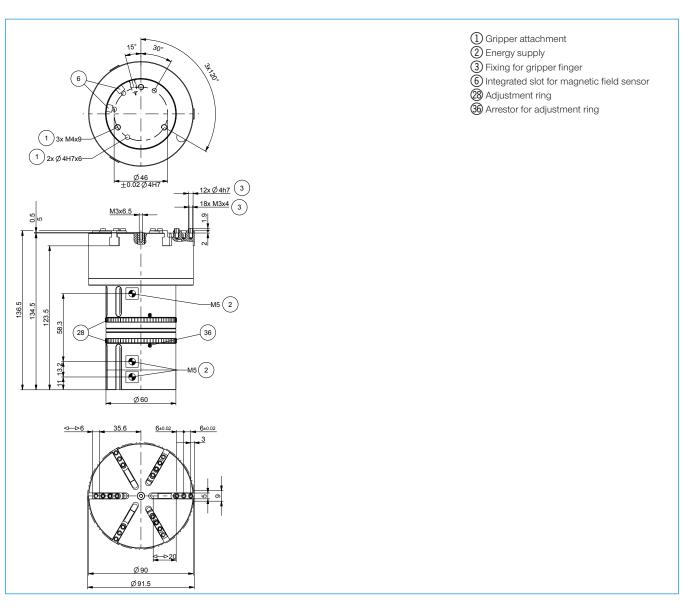
S8-G-3



Plug-in connector customiz able Straight - Connector M12

	► Technical Data*
Order no.	GSI206
Stroke adjustable per jaw min. [mm]	6
Stroke adjustable per jaw max. [mm]	20
Opening stroke adjustable per jaw min. [mm]	1
Opening stroke adjustable per jaw max. [mm]	6
Stripping stroke [mm]	5
Opening force [N]	240
Possible O-ring diameter at cord size 1 [mm]	11-45
Possible O-ring diameter at cord size 2 [mm]	20-130
Possible O-ring diameter at cord size 3 [mm]	32-130
Possible O-ring diameter at cord size 4 [mm]	42-100
Number of gripping jaws [Quantity]	6
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Weight [kg]	1.1

^{*}All data measured at 6 bar



MAGNETIC GRIPPER SERIES HM1000

PRODUCT ADVANTAGES



Secure hold during EMERGENCY STOP

Magnets attached to springs ensure your workpiece remains secure, even during a drop in pressure

Contact plate that increases friction value

The replaceable O-ring ensures the high dynamics in your application and protection of your workpiece

► Residual holding force < 1N

The demagnetised contact surface safeguards the process reliability of dropping off your workpiece

► THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!





1 Mounting and positioning

- via centering sleeve and thread

2 Spring

- for piston return
- secured holding even in drop pressure

3 Permanent magnet

- requires no power supply
- high holding forces

(4) Transport safeguarding

(5) Robust, lightweight housing

- Hard-coated aluminum alloy

6 single-acting pneumatic cylinders

- only one pneumatic line required
- Spring return

7 Contact plate

- easy replaceable
- embedded O-ring to increase the friction coefficient

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information



MAGNETIC GRIPPER INSTALLATION SIZE HM1030

PRODUCT SPECIFICATIONS



► INCLUDED IN DELIVERY



Locking nut

C043910002

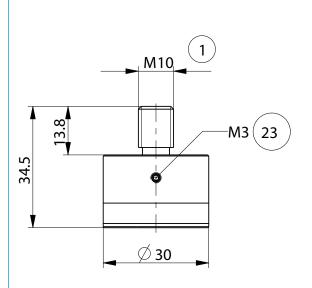
► RECOMMENDED ACCESSORIES

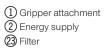


Straight Fittings - Quick Connect Style

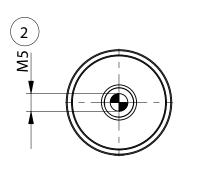
GVM5

	► Technical Data
Order no.	HM1030NC
Max. adhesive force [N]	27
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	3.5
Weight [kg]	0.06









PRODUCT SPECIFICATIONS



► RECOMMENDED ACCESSORIES



Centering Disc

ZE10H7X6

Ball Joints



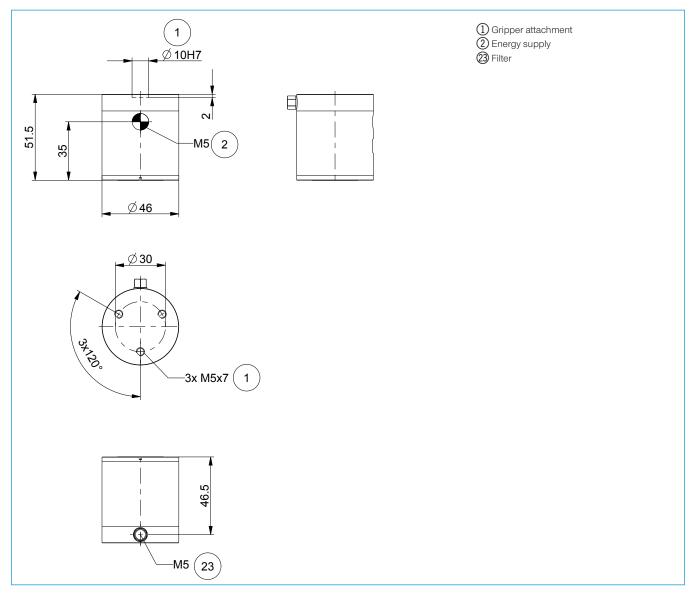
Ball Joints Steel

KG40ST



Straight Fittings - Quick Connect Style GVM5

	► Technical Data
Order no.	HM1046NC
Max. adhesive force [N]	65
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	9
Weight [kg]	0.28



PRODUCT SPECIFICATIONS



► INCLUDED IN DELIVERY



Set Screw

C091505129



Dummy plug

CPNEU00536

► RECOMMENDED ACCESSORIES



Centering Disc

ZE15H7X4



Ball Joints

KG60



Ball Joints Steel

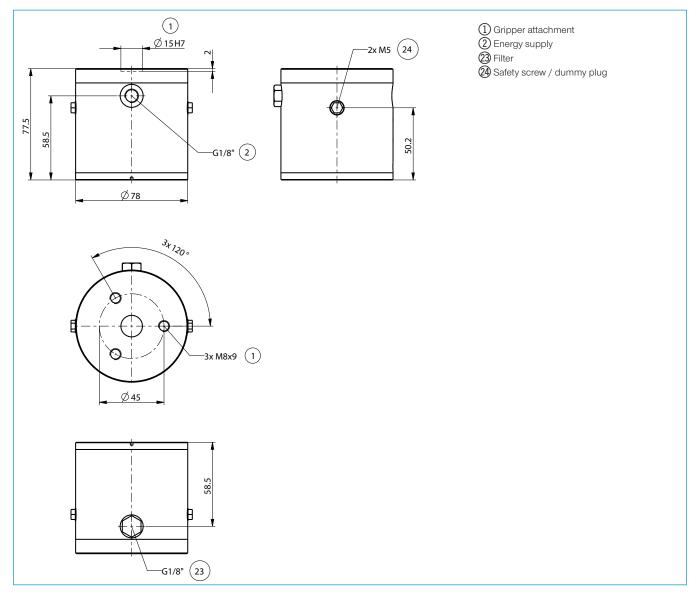
KG60ST



Straight Fittings - Quick

GV1-8X6

	► Technical Data
Order no.	HM1078NC
Max. adhesive force [N]	220
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	75
Weight [kg]	1.2



PRODUCT SPECIFICATIONS



► INCLUDED IN DELIVERY



Set Screw

C091505129



Dummy plug

CPNEU00536

► RECOMMENDED ACCESSORIES



Centering Disc

ZE20H7X4



KG80



Ball Joints Steel

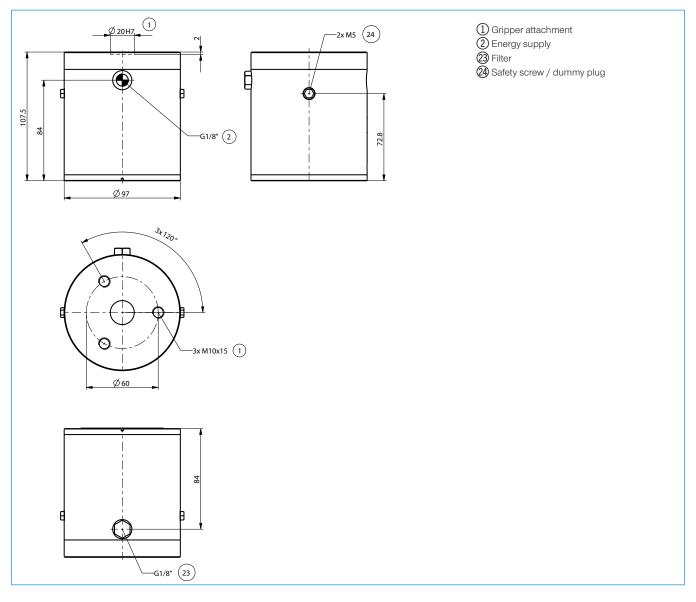




Straight Fittings - Quick

GV1-8X6

	► Technical Data
Order no.	HM1097NC
Max. adhesive force [N]	450
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	250
Weight [kg]	2.2



GRIPPERS FOR SPECIFIC TASKS OVERVIEW OF SERIES



► ELECTRICAL		
•	Series GEN9100	516
0	Series HEM1000	520

NEEDLE GRIPPER SERIES GEN9100

PRODUCT ADVANTAGES



Plug and play

Reduce programming and assembly costs to a minimum with the integrated control system and the 2 position query

Saving energy with pulse control

You only have to supply current briefly when retracting and extending the needle; no energy is required when transporting the workpiece

Smooth stroke configuration

The needle stroke is displayed via a scale. You can smoothly adjust the needle stroke to fit your application

► THE BEST PRODUCT FOR YOUR APPLICATION

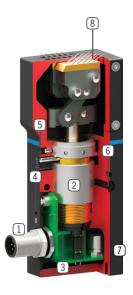


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BENEFITS IN DETAIL



1 Energy supply

- standardized interface M12 round connector

2 Drive

- via Pot magnet and coil bobbin according to the coil system principle
- energy consumption only at impulse <25 ms

(3) Position sensing

- integrated Hallsensor
- 2 positions monitorable

4 Status control

- optical LED position display
- Needles retracted, needles extended

5 Stroke adjustment

- infinitely variable
- Can be read off the scale

6 Mounting and positioning

- mounting possible from several sides for versatile positioning

7 Robust, lightweight housing

- Hard-coated aluminum alloy

8 Extending needles

- gripping by penetration

► FURTHER INFORMATION IS AVAILABLE ONLINE



Technical Information

All information just a click away at: www.zimmer-group.com Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.



NEEDLE GRIPPER INSTALLATION SIZE GEN9102

PRODUCT SPECIFICATIONS



► RECOMMENDED ACCESSORIES



Plug-in Connector Straight Cable 10 m - Female M12

KAG1000B8



Plug-in Connector Angled Cable 10 m - Female M12

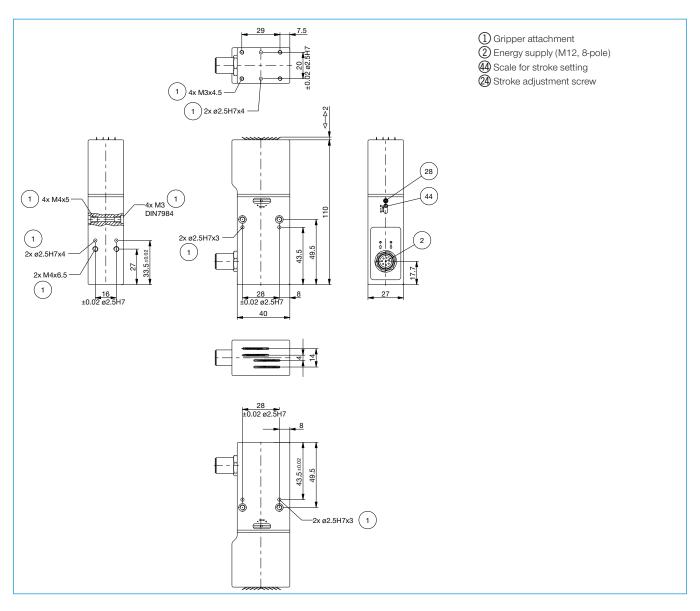
KAW1000B8



see page 875

ZUBBOX9000-01

	► Technical Data
Order no.	GEN9102
Pulse time in extend [ms]	25
Pulse time in retract [ms]	20
Needle stroke adjustable min. [mm]	0
Needle stroke adjustable max. [mm]	2
Current consumption in a stand-by mode [A]	0.02
Current consumption per pulse max. [A]	5
Cycle count max. [cycle/min]	150
Permanent operation cycle count max. [cycle/min]	120
Operating time [ms]	<28
Operating temperature min. [°C]	10
Operating temperature max. [°C]	+50
Debounce time [ms]	10
Noise level [db(A)]	<70
Repetition accuracy +/- [mm]	0.1
Protection to IEC 60529	IP50
Weight [kg]	0.33



MAGNETIC GRIPPER SERIES HEM1000

PRODUCT ADVANTAGES



Plug and play

Reduce your installation effort to a minimum by using the single cable solution and the simple control system via plus and minus buttons

Saving energy with pulse control

You only have to supply current briefly when releasing the workpiece; no energy is required when transporting the workpiece

Secure hold during EMERGENCY STOP

The magnet provides full holding force when it is not powered, preventing the loss of the workpiece if there is a voltage drop

► THE BEST PRODUCT FOR YOUR APPLICATION

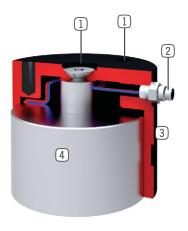


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BENEFITS IN DETAIL



- 1 Mounting and positioning
 - via centering sleeve and thread
- 2 Energy supply
 - standardized interface M8 round plug
- (3) Robust, lightweight housing
 - Hard-coated aluminum alloy
- 4 Holding solenoid
 - with electrical switch off

TERMS

Adhesive surface: Complete contact surface of the gripper

Adhesive force: refers to 100% coating of the adhesive surface, zero clearance, status at operating temperature on

ST37 steel and compliance with the minimum coating thickness

Minimum coating thickness: Minimum thickness of the workpiece to be gripped to reach the max. adhesive force

Remaining adhesive force: max. 3% of the adhesive force

On-time: the time in which current is supplied to the gripper

Break time: the time in which no current is supplied to the gripper

Cycle time: On-time + break time

PRODUCT SPECIFICATIONS



► RECOMMENDED ACCESSORIES



Centering Disc

ZE10H7X6



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector Angled Cable 5m - Socket M8

KAW500

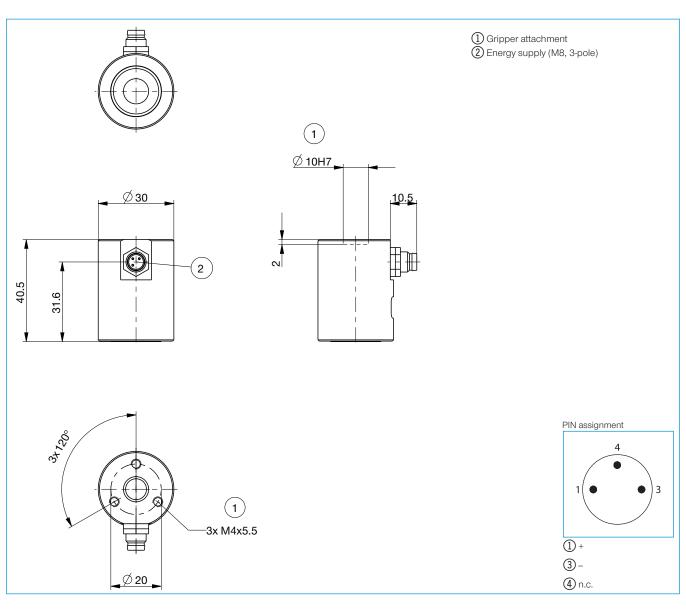


Plug-in connector customizable Straight -Connector M8

S8-G-3

	► Technical Data
Order no.	HEM1030NC
Max. adhesive force [N]*	40
Minimum coating thickness [mm]	2.5
Max. residual retention force [N]	1.2
Duty cycle max. with a cycle time < 2 min [%]	25
Duty cycle max. with a cycle time < 0.5 min [%]	40
Input power [W]	3.6
Voltage [V]	24
Operating temperature min. [°C]	-25
Operating temperature max. [°C]	+80
Weight [kg]	0.09

^{*}St37-100%, St34 -88%, St 50-81%, St70-75%, GT-65%, 20MnCr5-55%, GG-35%



PRODUCT SPECIFICATIONS



► RECOMMENDED ACCESSORIES



Centering Disc

Ball Joints

KG40



Plug-in connector Straight Cable 5m - Socket M8 KAG500



Plug-in connector Angled Cable 5m - Socket M8 KAW500



Plug-in connector customizable Straight -Connector M8

S8-G-3







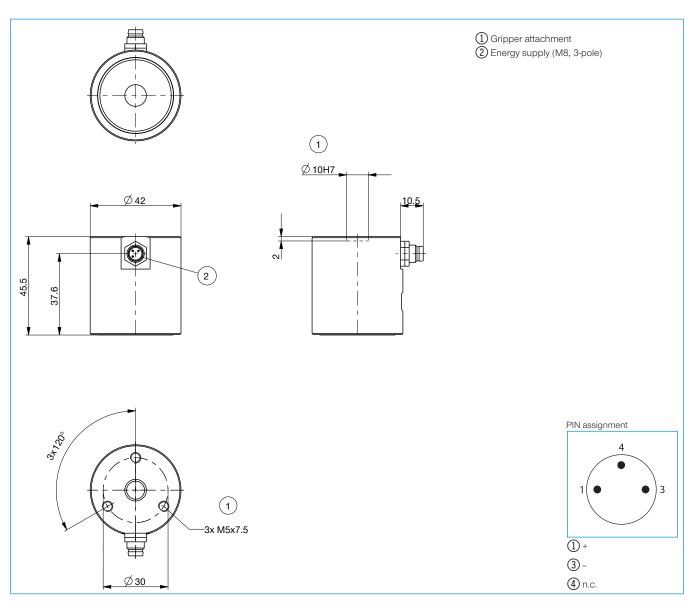


Plug-in Connector Customiz-able Angled - Connector M8

S8-W-3

	► Technical Data
Order no.	HEM1042NC
Max. adhesive force [N]*	160
Minimum coating thickness [mm]	3
Max. residual retention force [N]	4.8
Duty cycle max. with a cycle time < 2 min [%]	25
Duty cycle max. with a cycle time < 0.5 min [%]	40
Input power [W]	4.6
Voltage [V]	24
Operating temperature min. [°C]	-25
Operating temperature max. [°C]	+80
Weight [kg]	0.28

^{*}St37-100%, St34 -88%, St 50-81%, St70-75%, GT-65%, 20MnCr5-55%, GG-35%



PRODUCT SPECIFICATIONS



► RECOMMENDED ACCESSORIES



Centering Disc

ZE10H7X6



Ball Joints

KG60



Plug-in connector Straight Cable 5m - Socket M8 KAG500



Plug-in connector Angled Cable 5m - Socket M8 KAW500



Plug-in connector customizable Straight -Connector M8

S8-G-3

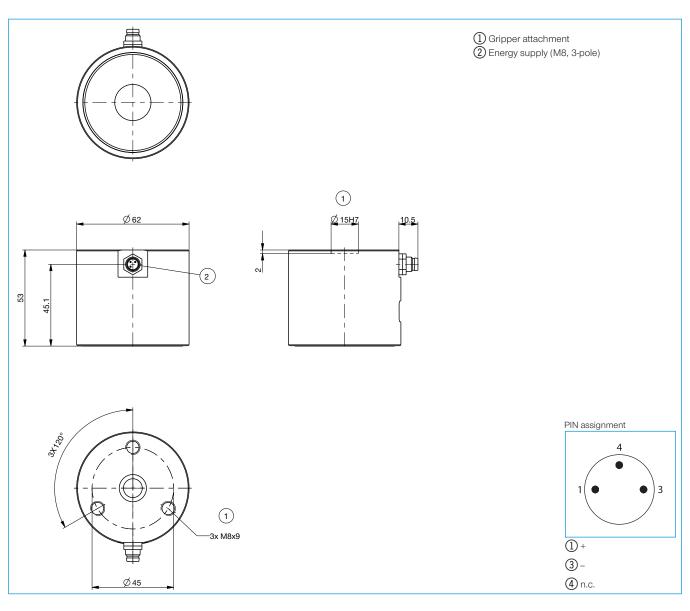


Plug-in Connector Customiz-able Angled - Connector M8

S8-W-3

	► Technical Data
Order no.	HEM1062NC
Max. adhesive force [N]*	420
Minimum coating thickness [mm]	4.5
Max. residual retention force [N]	12.6
Duty cycle max. with a cycle time < 2 min [%]	25
Duty cycle max. with a cycle time < 0.5 min [%]	40
Input power [W]	9
Voltage [V]	24
Operating temperature min. [°C]	-25
Operating temperature max. [°C]	+80
Weight [kg]	0.66

^{*}St37-100%, St34 -88%, St 50-81%, St70-75%, GT-65%, 20MnCr5-55%, GG-35%



PRODUCT SPECIFICATIONS



► RECOMMENDED ACCESSORIES



Centering Disc



Ball Joints

KG80



Plug-in connector Straight Cable 5m - Socket M8 KAG500



Plug-in connector Angled Cable 5m - Socket M8 KAW500



Plug-in connector customizable Straight -Connector M8

S8-G-3



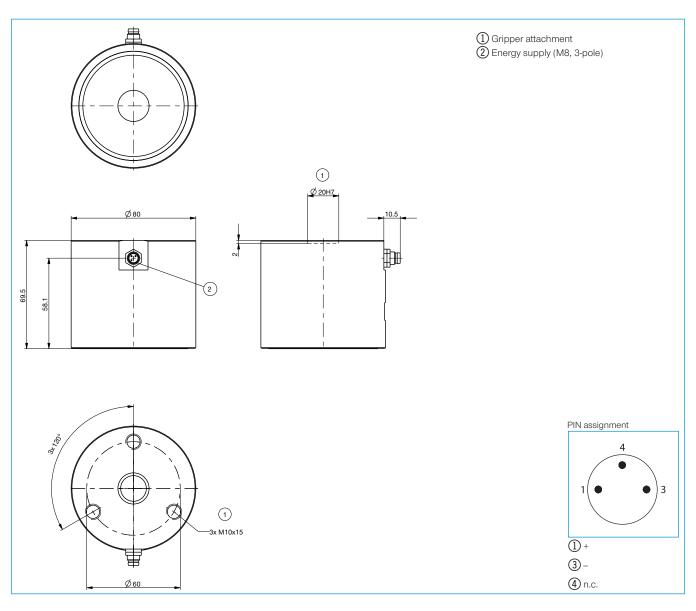


Plug-in Connector Customiz-able Angled - Connector M8

S8-W-3

	► Technical Data
Order no.	HEM1080NC
Max. adhesive force [N]*	720
Minimum coating thickness [mm]	6
Max. residual retention force [N]	21.6
Duty cycle max. with a cycle time < 2 min [%]	25
Duty cycle max. with a cycle time < 0.5 min [%]	40
Input power [W]	13.3
Voltage [V]	24
Operating temperature min. [°C]	-25
Operating temperature max. [°C]	+80
Weight [kg]	1.3

^{*}St37-100%, St34 -88%, St 50-81%, St70-75%, GT-65%, 20MnCr5-55%, GG-35%



ANGULAR GRIP & ROTATE MODULES OVERVIEW OF SERIES



► PNEUMATIC		
	Series DGK	532
	Series DGP400	536

2-JAW ANGULAR ROTARY GRIPPERS **SERIES DGK**

PRODUCT ADVANTAGES



"TWO in ONE"

Smooth stroke configuration

You can adjust the 180° opening angle to be unique to your application using an adjusting screw

2 in 1

Gripping and swivelling in a module allows optimum utilisation of the installation space

Individually adjustable

How you stay flexible: 90° or 180° swivel angle - You decide what your application requires on site

► THE BEST PRODUCT FOR YOUR APPLICATION



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Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com



BENEFITS IN DETAIL



- 1 Stroke adjustment screw
 - Infinitely adjustable opening stroke
- 2 Gripper jaw
 - individual gripper finger mounting
- (3) Guided toggle lever mechanism
 - synchronized the movement of the gripper jaws
 - mechanically self-locking
- 4 Endposition 0/90/180° adjustment
 - endstops for 0°/90°/180° included with purchase
- (5) Rotating-drive mechanism
 - robust, wear-resistant
- 6 Drive
 - two double-acting pneumatic cylinders
- 7 Slot for magnetic field sensor
 - sensing of the rotational position and gripper jaw position

► FURTHER INFORMATION IS AVAILABLE ONLINE



Technical Information

All information just a click away at: www.zimmer-group.com Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.

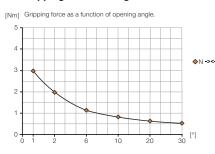


2-JAW ANGULAR ROTARY GRIPPERS **INSTALLATION SIZE DGK20**

PRODUCT SPECIFICATIONS



Gripping moment diagram



Forces and moments

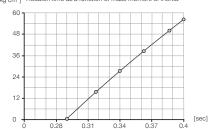
Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	0.8
Mx [Nm]	0.8
My [Nm]	1
Fa [N]	150

Rotation time diagram

Rotation time as a function of mass moment of inertia [ka cm²]



► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint DRVM5X4



Stop 90° + 180°

ANS0065

RECOMMENDED ACCESSORIES



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC

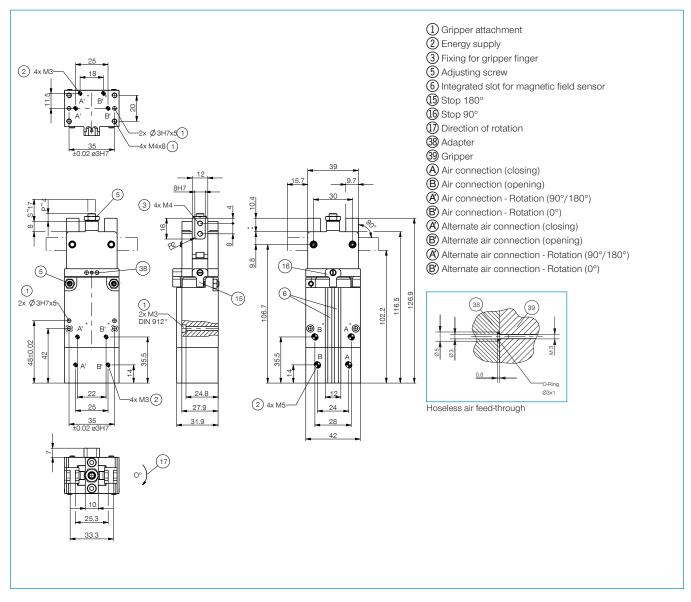


Straight Fittings - Quick

GVM5

	► Technical Data*								
Order no.	DGK20N								
Stroke per jaw [°]	90								
Gripping force in closing [N]	150								
Gripping moment in closing [Nm]									
Closing time [s]	0.25								
Opening time [s]	0.25								
Torque [Nm]	0.5								
Repetition accuracy +/- [mm]	0.1								
Repetition accuracy +/- [°]	0.05								
Axial bearing load [N]	960								
Radial bearing load [Nm]	10								
Operating pressure min. [bar]	3								
Operating pressure max. [bar]	8								
Operating temperature min. [°C]	5								
Operating temperature max. [°C]	+80								
Air volume per cycle [cm³]	9								
Air volume per cycle 90° [cm³]	4.6								
Air volume per cycle 180° [cm³]	9.2								
Weight [kg]	0.55								

^{*}All data measured at 6 bar



2-JAW PARALLEL ROTARY GRIPPERS **SERIES DGP400**

PRODUCT ADVANTAGES



"TWO in ONE"

Proven T slot guide

This established and proven guiding technology stands for the highest process reliability like no other

> 2 in 1

Gripping and swivelling in a module allows optimum utilisation of the installation space

Individually adjustable

How you stay flexible: 90° or 180° swivel angle - You decide what your application requires on site

► THE BEST PRODUCT FOR YOUR APPLICATION



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HOW TO ORDER **CORRECTLY**

The product order numbers are arranged according to this diagram:

Order no.	DGP404N							
For external gripping, self-locking, spring closing	gripping, self-locking, spring closing							
For internal gripping, self-locking, spring opening	0							



BENEFITS IN DETAIL



- 1 Removable centering sleeves
 - quick and economical positioning of the gripper fingers
- 2 Wedge hook mechanism
 - synchronized the movement of the gripper jaws
- (3) Precise T-Slot guide
 - high forces and moments capacity
- 4 Endposition 0/90/180° adjustment
 - endstops for 0°/90°/180° included with purchase
- 5 Rotating-drive mechanism
 - robust, wear-resistant
- (6) Drive
 - two double-acting pneumatic cylinders
- 7 Slot for magnetic field sensor
 - sensing of the rotational position and gripper jaw position
- 8 Integrated gripping force safety device
 - optional via integrated spring (C or O models)

► FURTHER INFORMATION IS AVAILABLE ONLINE



Technical Information

All information just a click away at: www.zimmer-group.com Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.



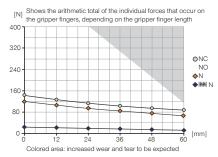
2-JAW PARALLEL ROTARY GRIPPERS

INSTALLATION SIZE DGP404

PRODUCT SPECIFICATIONS



Gripping moment diagram



Forces and moments

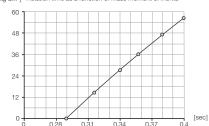
Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	8	
Mx [Nm]	15	
My [Nm]	10	
Fa [N]	300	

Rotation time diagram

Rotation time as a function of mass moment of inertia [ka cm²]



► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint DRVM5X4



Centering Disc

DST40400



Stop 90° + 180°

ANS0065

RECOMMENDED ACCESSORIES



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC

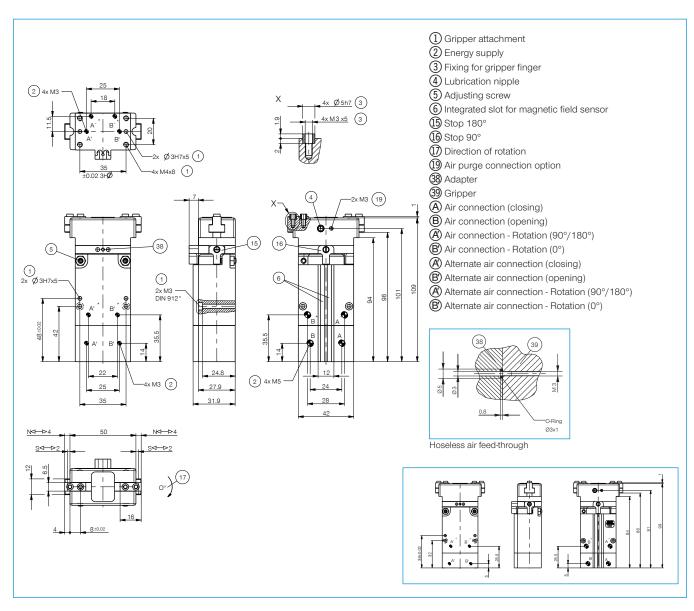


Straight Fittings - Quick

GVM5

	► Technical Data*							
Order no.	DGP404N	DGP404NC	DGP404NO					
Stroke per jaw [mm]	4	4	4					
Gripping force in opening [N]	115		155					
Gripping force in closing [N]	115	155						
Gripping force secured by spring min. [N]		40	40					
Closing time / Opening time [s]	0.01 / 0.01	0.015 / 0.015	0.015 / 0.015					
Torque [Nm]	0.5	0.5	0.5					
Repetition accuracy +/- [mm]	0.05	0.05	0.05					
Repetition accuracy +/- [°]	0.05	0.05	0.05					
Axial bearing load [N]	960	960	960					
Radial bearing load [Nm]	10	10	10					
Operating pressure [bar]	3 8	3 8	3 8					
Operating temperature [°C]	5 +80	5 +80	5 +80					
Air volume per cycle [cm³]	3	5	5					
Air volume per cycle 90° [cm³]	4.5	4.5	4.5					
Air volume per cycle 180° [cm³]	9	9	9					
Weight [kg]	0.44	0.48	0.48					

^{*}All data measured at 6 bar



SWIVEL- AND ROTARY MODULES OVERVIEW OF SERIES

Products		Torque [Nm]	Swivel angle [°]	Number of installation sizes
Rotary Cylinders pneumatic	Page 542			
Series PRN		0,15 247	90 270	•••••
Series SH		0,59-7,2	0 360	••
Flat Swivel Units pneumatic	Page 572			
Series MSF		0,3-1,2	90-180	•••
Series SF-C		1,5	0 180	•••••
Flat Swivel Units electric	Page 654			
Series DES		12 64	∞	••
Angle Pivot Units pneumatic	Page 668			
Series SWM1000		10 64	90	••••
Series SW		1,5	180	•••••
Swivel Jaws pneumatic	Page 694			
Series SB *		0,1-1,6	90-180	•••
Series SBZ		1,2 57	90-180	••••

^{*}Specifications for setup in pairs

	Position sensing		Positionability			Options					Safety character- istics	aracter-				
AP	+ 🕏	+ 000									IP IP	b	4 ⇒		#	The state of the s
AP class	Magnetic field sensor	Inductive sensor	Integrated sensing	Positionability, 2 positions	Positionability, 3 positions	Positionability, 4 positions	Positionability freely selectable	Elastomer end position damping	PowerStop end position damping	Adjustable swivel angle	IP class	Fluid feed-through	Electrical feed- through	Self locking mech- anism	Maintenance-free cycles (max.)	Maintenance-free revolutions (max.)
1		•		•							54				1.5 million	
1						•				•	54				1.5 million	
2	•			•				•	•	•	41	•			10 million	
3	•	•		•	•				•	•	64	•			10 million	
3			•				•			•	54	•	•	•		5 million
3	•			•					•		30				10 million	
3	•	•		•					•		64	•			10 million	
2		•		•				•		•	54				10 million	
3		•		•					•		54				10 million	

ROTARY CYLINDERS OVERVIEW OF SERIES



► PNEUMATIC			
	Series PRN	54	14
	Series SH	56	36

ROTARY CYLINDERS SERIES PRN

PRODUCT ADVANTAGES



"The economical"

Concentration on the essentials

The most economic type of swivelling reduces your production costs

Dampened end position

Using the hydraulic brake allows you to move up to the end positions gently, increasing the process reliability and durability of your application

Forged drive shaft

This shaft is not only robust, but can be individually adjusted, e.g. with supply holes through the axis

► THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com

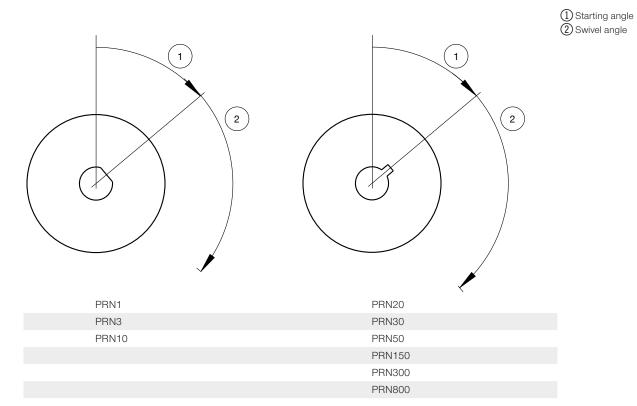
HOW TO ORDER CORRECTLY

The product order numbers are arranged according to this diagram:

Order no.	PRN30-		-В	
Rotation angle 90°		90		
Rotation angle 100°		100		
Rotation angle 180°		180		
Swivel angle 270°		270		
Swivel angle 280°		280		



STARTING ANGLE



SERIES CHARACTERISTICS



Number of installation sizes	9
Swivel angle	90° - 270°
Torque	0,15 Nm - 247 Nm
Weight	0,04 kg - 12,5 kg
AP class	1



Inductive sensor



Positionability - 2 positions



IP54



1.5 million maintenance-free cycles (max.)

▶ PRODUCT SPECIFICATIONS



Moment of inertia Shows the expected swivel time vs the calculated moment of inertia 1.6 **■**PRN1-90-B ▲PRN1-180-B ■PRN1-270-B 1.2 0.8 Swivel time in [sec] Data measured at 6 bar and horizontal mounting

Forces and moments

Shows the maximum static shaft load.



FY [N]	3
FZ [N]	30

► RECOMMENDED ACCESSORIES



Flange F1-P

Angle flange

F1-LB



Straight Fittings - Quick Connect Style

GVM5



Flow Control Valves - with Swivel joint

DRVM5X4



DSV1-8

► RECOMMENDED ACCESSORY ROTATION LIMITER



Rotation limiter

DB1-B



Inductive proximity switch

NJ3-F2-02



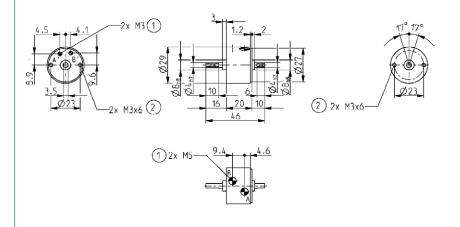
Plug-in connector customizable Straight -Connector M8 **\$8-G-3**

	► Technical Data*		
Order no.	PRN1-90-B	PRN1-180-B	PRN1-270-B
Swivel angle [°]	90	180	270
Tolerance swivel angle [°]	0° / +4°	0° / +4°	0° / +4°
Starting Angle [°]	90	90	45
Torque [Nm]	0.15	0.15	0.15
Swivel time [s]	0.1	0.17	0.24
Operating pressure min. [bar]	2	2	2
Operating pressure max. [bar]	7	7	7
Operating temperature min. [°C]	-5	-5	-5
Operating temperature max. [°C]	+80	+80	+80
Air volume per cycle [cm³]	2.8	2.8	2.8
Weight [kg]	0.04	0.04	0.04

^{*}All data measured at 6 bar

- ① Energy supply ② Fixing Rotor

- (A) Air connection (0°-90°/180°/270°) (B) Air connection (90°/180°/270°-0°)
- Alternate air connection 0°-90°/180°/270°
- (B) Alternate air connection 90°/180°/270°-0°



▶ PRODUCT SPECIFICATIONS



Moment of inertia

Shows the expected swivel time vs the calculated moment of inertia **■**PRN3-90-B ▲PRN3-180-B ■PRN3-270-B Swivel time in Data measured at 6 bar and horizontal mounting

Forces and moments

Shows the maximum static shaft load.



FY [N]	4
FZ [N]	40

► RECOMMENDED ACCESSORIES



Flange F3-P

Angle flange

F3-LB



Straight Fittings - Quick Connect Style

GVM5



Flow Control Valves - with Swivel joint

DRVM5X4



Pressure Safety Valve

DSV1-8

► RECOMMENDED ACCESSORY ROTATION LIMITER



Rotation limiter

DB3



Inductive proximity switch

NJ3-F2-02



Plug-in connector customizable Straight Connector M8 **\$8-G-3**

	► Technical Data*		
Order no.	PRN3-90-B	PRN3-180-B	PRN3-270-B
Swivel angle [°]	90	180	270
Tolerance swivel angle [°]	0° / +4°	0° / +4°	0° / +4°
Starting Angle [°]	90	90	45
Torque [Nm]	0.38	0.38	0.38
Swivel time [s]	0.13	0.2	0.28
Operating pressure min. [bar]	2	2	2
Operating pressure max. [bar]	7	7	7
Operating temperature min. [°C]	-5	-5	-5
Operating temperature max. [°C]	+80	+80	+80
Air volume per cycle [cm³]	6.8	6.8	6.8
Weight [kg]	0.07	0.07	0.07

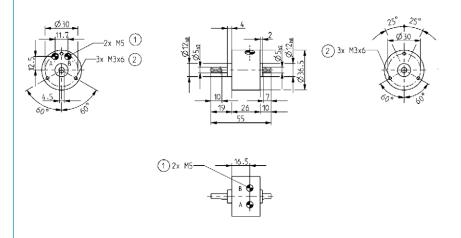
^{*}All data measured at 6 bar

① Energy supply ② Fixing Rotor

(A) Air connection (0°-90°/180°/270°) (B) Air connection (90°/180°/270°-0°)

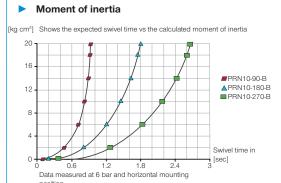
Alternate air connection 0°-90°/180°/270°

(B) Alternate air connection 90°/180°/270°-0°



▶ PRODUCT SPECIFICATIONS





Forces and moments

Shows the maximum static shaft load.



FY [N]	4
FZ [N]	50

► RECOMMENDED ACCESSORIES



F10-P



Angle flange

F10-LB



Straight Fittings - Quick Connect Style

GVM5



Flow Control Valves - with Swivel joint

DRVM5X4



Pressure Safety Valve

DSV1-8

► RECOMMENDED ACCESSORY ROTATION LIMITER



Rotation limiter

DB10



Stop Stroke Adjustment

AI-M8X1-38



Inductive proximity switch

NJ12-F2



Inductive proximity switch Connector M8

NJ12-E2S



Plug-in connector Angled Cable 5m - Socket M8

(female) KAW500

	► Technical Data*		
Order no.	PRN10-90-B	PRN10-180-B	PRN10-270-B
Swivel angle [°]	90	180	270
Tolerance swivel angle [°]	0° / +4°	0° / +4°	0° / +4°
Starting Angle [°]	90	90	45
Torque [Nm]	1.2	1.2	1.2
Swivel time [s]	0.13	0.2	0.28
Operating pressure min. [bar]	2	2	2
Operating pressure max. [bar]	7	7	7
Operating temperature min. [°C]	-5	-5	-5
Operating temperature max. [°C]	+80	+80	+80
Air volume per cycle [cm³]	19.6	19.6	19.6
Weight [kg]	0.14	0.14	0.14

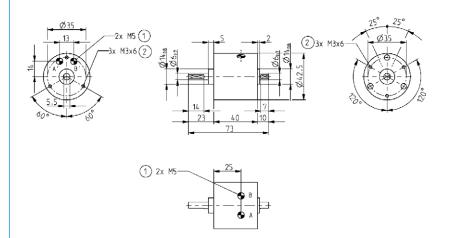
^{*}All data measured at 6 bar

① Energy supply ② Fixing Rotor

(A) Air connection (0°-90°/180°/270°) (B) Air connection (90°/180°/270°-0°)

Alternate air connection 0°-90°/180°/270°

(B) Alternate air connection 90°/180°/270°-0°



▶ PRODUCT SPECIFICATIONS



Moment of inertia Shows the expected swivel time vs the calculated moment of inertia 100 ■PRN20-90-B ▲PRN20-180-B ■PRN20-270-B 75 50

Forces and moments

Shows the maximum static shaft load.



FY [N]	25
FZ [N]	300

► RECOMMENDED ACCESSORIES



F20-P



Angle flange

F20-LB



Data measured at 6 bar and horizontal mounting

Connect Style GVM5

Straight Fittings - Quick

Flow Control Valves - with Swivel joint

DRVM5X4

Swivel time in 3.5 [sec]



Pressure Safety Valve

DSV1-8

► RECOMMENDED ACCESSORY ROTATION LIMITER



Rotation limiter

DB20



Stop Stroke Adjustment

AI-M8X1-38



Inductive proximity switch

NJ12-F2



Inductive proximity switch

NJ12-E2S



Plug-in connector Angled Cable 5m - Socket M8 (female) KAW500

	Technical Data	1*	
Order no.	PRN20-90-B	PRN20-180-B	PRN20-270-B
Swivel angle [°]	90	180	270
Tolerance swivel angle [°]	0°/+4°	0° / +4°	0° / +4°
Starting Angle [°]	90	90	45
Torque [Nm]	2.1	2.1	2.1
Swivel time [s]	0.14	0.25	0.34
Operating pressure min. [bar]	2	2	2
Operating pressure max. [bar]	10	10	10
Operating temperature min. [°C]	-5	-5	-5
Operating temperature max. [°C]	+80	+80	+80
Air volume per cycle [cm³]	34	34	34
Weight [kg]	0.25	0.25	0.25

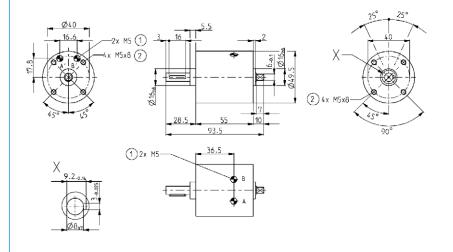
^{*}All data measured at 6 bar

① Energy supply ② Fixing Rotor

(A) Air connection (0°-90°/180°/270°) (B) Air connection (90°/180°/270°-0°)

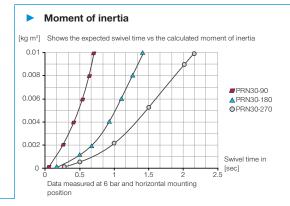
Alternate air connection 0°-90°/180°/270°

(B) Alternate air connection 90°/180°/270°-0°



> PRODUCT SPECIFICATIONS





Forces and moments

Shows the maximum static shaft load.



FY [N]	30
FZ [N]	400

► RECOMMENDED ACCESSORIES



F30-P



Angle flange

F30-LB



Straight Fittings - Quick Connect Style

GV1-8X6



Swivel joint

DRV1-8X6



Pressure Safety Valve

DSV1-8

► RECOMMENDED ACCESSORY ROTATION LIMITER



Rotation limiter

DB30



AI-M8X1-38



Inductive proximity switch

NJ12-F2



Inductive proximity switch Connector M8

NJ12-E2S



Plug-in connector Angled Cable 5m - Socket M8

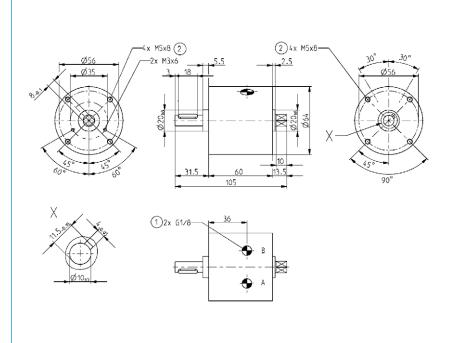
KAW500

	Technical Data	1*	
Order no.	PRN30-90	PRN30-180	PRN30-270
Swivel angle [°]	90	180	270
Tolerance swivel angle [°]	0°/+3°	0°/+3°	0°/+3°
Starting Angle [°]	45	45	45
Torque [Nm]	4.1	4.1	4.1
Swivel time [s]	0.17	0.33	0.5
Operating pressure min. [bar]	2	2	2
Operating pressure max. [bar]	10	10	10
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+60	+60	+60
Air volume per cycle [cm³]	74	74	86
Weight [kg]	0.5	0.5	0.5

^{*}All data measured at 6 bar



(A) Air connection (0°-90°/180°/270°) (B) Air connection (90°/180°/270°-0°)



> PRODUCT SPECIFICATIONS



Moment of inertia Shows the expected swivel time vs the calculated moment of inertia 0.03 0.024 **■**PRN50-100 0.018 ▲PRN50-180 ●PRN50-280 0.012 Swivel time in Data measured at 6 bar and horizontal mounting

Forces and moments

Shows the maximum static shaft load.



FY [N]	44
FZ [N]	580

RECOMMENDED ACCESSORIES



F50-P



Angle flange

F50-LB



Straight Fittings - Quick Connect Style

GV1-8X6



Flow Control Valves - with Swivel joint

DRV1-8X6



Pressure Safety Valve

DSV1-8

► RECOMMENDED ACCESSORY ROTATION LIMITER



Rotation limiter

DB50



AI-M8X1-38



Inductive proximity switch

NJ12-F2



Inductive proximity switch Connector M8

NJ12-E2S



Plug-in connector Angled Cable 5m - Socket M8

KAW500

RECOMMENDED ACCESSORY OIL DAMPER



see page 564

CRN50



Stop Lever 90° / Starting

A50-90-B



Stop Lever 180° / Starting

A50-180-B



Stop Lever 270° / Starting Angle 45°

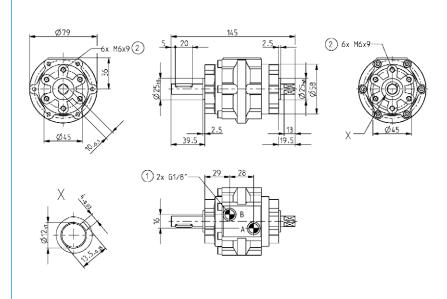
A50-270

	Technical Data	*	
Order no.	PRN50-90	PRN50-180-B	PRN50-270
Swivel angle [°]	90	180	270
Tolerance swivel angle [°]	0°/+3°	0°/+3°	0°/+3°
Starting Angle [°]	45	45	45
Torque [Nm]	12.8	5.9	5.9
Swivel time [s]	0.17	0.33	0.5
Operating pressure min. [bar]	2	2	2
Operating pressure max. [bar]	10	10	10
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+60	+60	+60
Air volume per cycle [cm³]	86	102	124
Weight [kg]	0.8	0.75	0.75

^{*}All data measured at 6 bar



- ① Energy supply ② Fixing Rotor ③ Air connection (90°/180°/270°-0°) ④ Air connection (0°-90°/180°/270°)



> PRODUCT SPECIFICATIONS



Moment of inertia Shows the expected swivel time vs the calculated moment of inertia 0.3 0.24 ■PRN150-100 ▲PRN150-180 0.18 OPRN150-280 0.12 Swivel time in

Forces and moments

Shows the maximum static shaft load.



FY [N]	88
FZ [N]	1170

RECOMMENDED ACCESSORIES



F150-P



Angle flange

F150-LB



Data measured at 6 bar and horizontal mounting

Straight Fittings - Quick Connect Style GV1-4X8



Flow Control Valves - with Swivel joint DRV1-4X8



DSV1-8

► RECOMMENDED ACCESSORY ROTATION LIMITER



Rotation limiter

DB150



AI-M10X1-70



Inductive proximity switch



Inductive proximity switch Connector M8

NJ12-E2S



Plug-in connector Angled Cable 5m - Socket M8

KAW500

RECOMMENDED ACCESSORY OIL DAMPER

NJ12-F2



see page 564 CRN150



Stop Lever 90° / Starting A150-90-B



Stop Lever 180° / Starting

A150-180-B



Stop Lever 270° / Starting

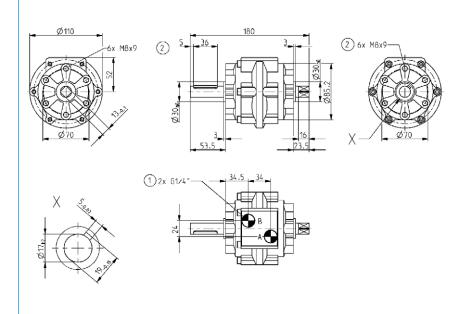
A150-270

	Technical Data*		
Order no.	PRN150-90	PRN150-180-B	PRN150-270
Swivel angle [°]	90	180	270
Tolerance swivel angle [°]	0° / +3°	0° / +3°	0° / +3°
Starting Angle [°]	45	45	45
Torque [Nm]	41.5	18	18
Swivel time [s]	0.25	0.38	0.63
Operating pressure min. [bar]	2	2	2
Operating pressure max. [bar]	10	10	10
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+60	+60	+60
Air volume per cycle [cm³]	246	292	370
Weight [kg]	1.9	1.9	1.6

^{*}All data measured at 6 bar



- (A) Air connection (0°-90°/180°/270°) (B) Air connection (90°/180°/270°-0°)



> PRODUCT SPECIFICATIONS



Moment of inertia Shows the expected swivel time vs the calculated moment of inertia ■PRN300-100 ▲PRN300-180 1.5 OPRN300-280 Swivel time in

Forces and moments

Shows the maximum static shaft load.



FY [N]	145
FZ [N]	1950

RECOMMENDED ACCESSORIES



Angle flange

F300-LB



Straight Fittings - Barb Style Connection

GV3-8X13ID



Data measured at 6 bar and horizontal mounting

Flow Control Valves - in Line

DRV1-4I



Pressure Safety Valve

DSV1-8

[sec]

► RECOMMENDED ACCESSORY ROTATION LIMITER



Rotation limiter

DB300



AI-M10X1-70



Inductive proximity switch

NJ12-F2



Inductive proximity switch

NJ12-E2S



Plug-in connector Angled Cable 5m - Socket M8

KAW500

RECOMMENDED ACCESSORY OIL DAMPER



see page 564

CRN300



Stop Lever 90° / Starting

A300-90-B



Stop Lever 180° / Starting

A300-180-B



Stop Lever 270° / Starting

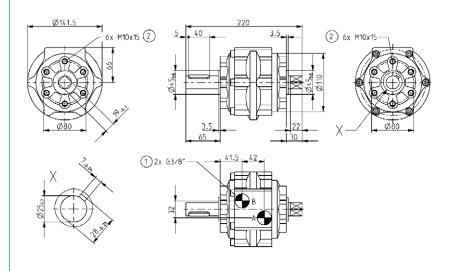
A300-270

	Technical Data*		
Order no.	PRN300-90	PRN300-180-B	PRN300-270
Swivel angle [°]	90	180	270
Tolerance swivel angle [°]	0° / +3°	0°/+3°	0°/+3°
Starting Angle [°]	45	45	45
Torque [Nm]	83	34.5	34.5
Swivel time [s]	0.33	0.5	0.71
Operating pressure min. [bar]	2	2	2
Operating pressure max. [bar]	10	10	10
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+60	+60	+60
Air volume per cycle [cm³]	542	566	730
Weight [kg]	4.1	3.7	3.6

^{*}All data measured at 6 bar



- (A) Air connection (0°-90°/180°/270°) (B) Air connection (90°/180°/270°-0°)



> PRODUCT SPECIFICATIONS



Moment of inertia Shows the expected swivel time vs the calculated moment of inertia 12 ■PRN800-100 ▲PRN800-280 Swivel time in 7.5 [sec] Data measured at 6 bar and horizontal mounting

Forces and moments

Shows the maximum static shaft load.



FY [N]	490
FZ [N]	4900

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Barb Style Connection GV1-2X13ID



Flow Control Valves - in Line

DRV1-4I



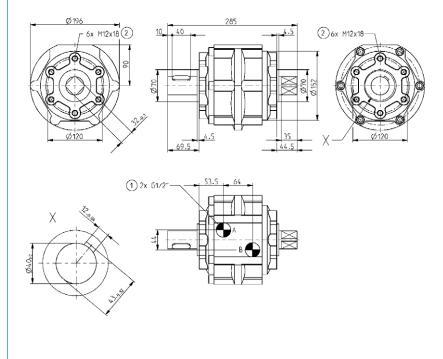
DSV1-8

	► Technical Data*	
Order no.	PRN800-90	PRN800-270
Swivel angle [°]	90	270
Tolerance swivel angle [°]	0° / +3°	0° / +3°
Starting Angle [°]	45	45
Torque [Nm]	247	123
Swivel time [s]	0.45	1
Operating pressure min. [bar]	2	2
Operating pressure max. [bar]	10	10
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+60	+60
Air volume per cycle [cm³]	1548	2092
Weight [kg]	12.5	11

^{*}All data measured at 6 bar



- (A) Air connection (0°-90°/180°/270°) (B) Air connection (90°/180°/270°-0°)

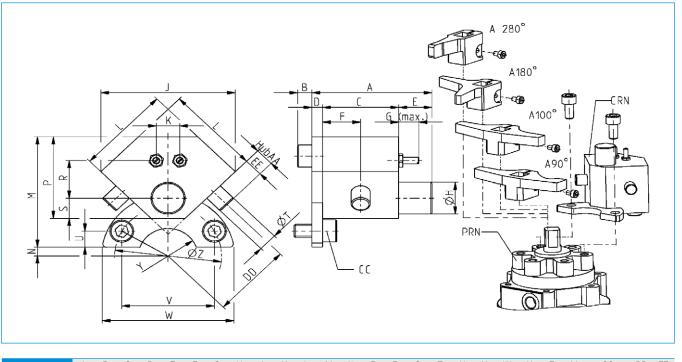


ROTARY CYLINDERS ACCESSORIES SERIES PRN

OIL DAMPER FOR PNEUMATIC ROTOR



	Technical Data		
Order no.	CRN50	CRN150	CRN300
suitable for	PRN50	PRN150	PRN300
Brake angle [°]	11	12	14
Energy absorption per stroke max. [Nm]	3	10	20
Energy absorption per stroke max. [Nm/h]	12000	43200	84000
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	50	50	50
Weight [g]	240	420	780



	Α	В	С	D	Е	F	G	Н	J	K	L	М	Ν	Р	R	S	Т	U	V	W	Υ	Z	AA	CC	DD	EE
Order no.	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		[mm]	[mm]							
CRN50	50.6	6.0	3.2	4.5	14	16	8.5	Ø14,4	56.6	9.9	40	50	4.0	37	17.0	9.2	Ø8	7.2	39.0	56	R12,5	Ø45	6.5	M6x1x12	34	8
CRN150	56.5	7.2	36	4.5	16	18	8.5	Ø18,4	70.7	11.3	50	62	9.5	49	25.5	11.4	Ø10	8.0	60.6	80	R15,0	Ø70	10.0	M8x1,25x16	46	12
CRN300	62.5	7.2	42	4.5	16	21	12.0	Ø22,5	91.9	12.7	65	87	8.0	61	33.2	14.1	Ø12	12.0	69.2	95	R22,5	Ø80	15.0	M10x1,5x20	62	18

> STOP LEVER FOR OIL DAMPER



> STOP LEVER PRN50

Order no.	A50-90-B	A50-180-B	A50-270
Swivel angle [°]	90	180	270

> STOP LEVER PRN150

Order no.	A150-90-B	A150-180-B	A150-270
Swivel angle [°]	90	180	270

> STOP LEVER PRN300

Order no.	А300-90-В	A300-180-B	A300-270
Swivel angle [°]	90	180	270

ROTARY CYLINDERS SERIES SH

PRODUCT ADVANTAGES



"The flexible"

Movable to four positions

The two separately or jointly controlled rotors provide you with the greatest flexibility in positioning your workpieces

High torque rating

The optimal ratio of installation space and torque reduces interference contours and creates precious space in your application

> 360° swivel angle

Do you want your application to be flexible and individualised? The infinitely variable 360° adjustable swivel angle lets you!

► THE BEST PRODUCT FOR YOUR APPLICATION

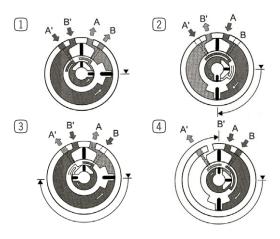


Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com



BENEFITS IN DETAIL



1 0-position

- High-pressure air in 1B and 2B: Internal- and external blades go to the 0-position

2 First 90°-intermediate adjustment

- High-pressure air A and A': The external blade swivel up to the external limit stop (Stopper) at 90 °.

3 Second 90°-intermediate setting

- High-pressure air B and B': The external blade swivels with the internal 90° limit stop to the 0-position. The internal blade swivel $\,$ 180° set opposite each other.

4 Third 90°-intermediate adjustment

- High-pressure air A and B: The external blade swivels with the internal blade in the movement direction at 90°.

> SERIES CHARACTERISTICS



Number of installation sizes	2
Swivel angle	360°
Torque	0,59 Nm - 7,2 Nm
Weight	0,52 kg - 1,13 kg
AP class	1



Positionability - 4 positions



Adjustable swivel angle



IP54



1.5 million maintenance-free cycles (max.)

> PRODUCT SPECIFICATIONS Moment of inertia Forces and moments Shows the maximum static shaft load. Shows the expected swivel time vs the calculated moment of inertia ■ Inner blade Outer blade

Data measured at 6 bar and horizontal mounting

FY [N]

FZ [N]

60

▶ RECOMMENDED ACCESSORIES



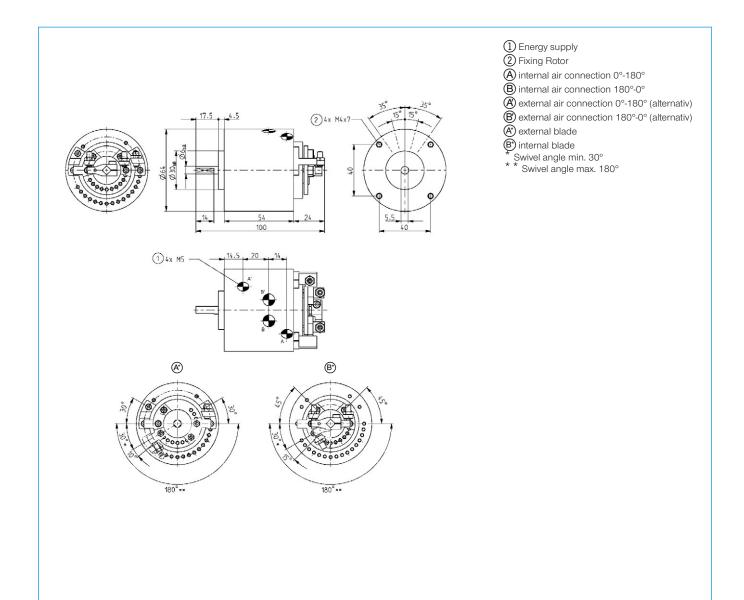
Straight Fittings - Quick Connect Style GVM5



Flow Control Valves - with DRVM5X4

	► Technical Data*
Order no.	SH-5
Swivel angle [°]	360
Torque outer blade [Nm]	2.73
Torque inner blade [Nm]	0.59
Swivel time outer blade [s]	0.8
Swivel time inner blade [s]	0.5
Repetition accuracy +/- [°]	3
Operating pressure min. [bar]	3
Operating pressure max. [bar]	7
Air volume per cycle outer blade [cm³]	14
Air volume per cycle inner blade [cm³]	56
Weight [kg]	0.52

^{*}All data measured at 6 bar



> PRODUCT SPECIFICATIONS



Moment of inertia Shows the expected swivel time vs the calculated moment of inertia 80 60 40 -Data measured at 6 bar and horizontal mounting

Forces and moments

Shows the maximum static shaft load.



FY [N]	125
FZ [N]	255

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style GV1-8X6

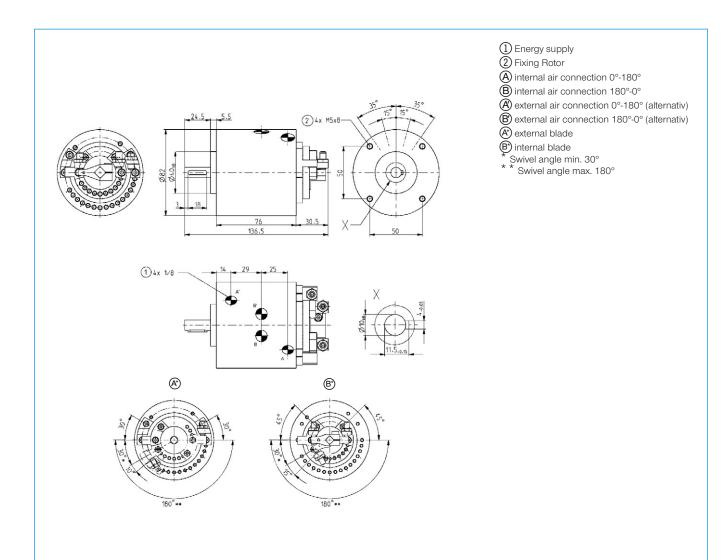


Flow Control Valves - with Swivel joint

DRV1-8X6

	► Technical Data*
Order no.	SH-20
Swivel angle [°]	360
Torque outer blade [Nm]	7.2
Torque inner blade [Nm]	2.35
Swivel time outer blade [s]	1.1
Swivel time inner blade [s]	0.8
Repetition accuracy +/- [°]	3
Operating pressure min. [bar]	3
Operating pressure max. [bar]	7
Air volume per cycle outer blade [cm³]	72
Air volume per cycle inner blade [cm³]	23
Weight [kg]	1.13

^{*}All data measured at 6 bar



FLAT SWIVEL UNITS OVERVIEW OF SERIES



▶ PNEUMATIC Series MSF 574 Series SF-C 582

FLAT SWIVEL UNITS SERIES MSF

PRODUCT ADVANTAGES

"The unique"

Decide for yourself!

Flange connection or journal shaft, with or without shock absorbers: The multitude of variants ensure you always find what you need

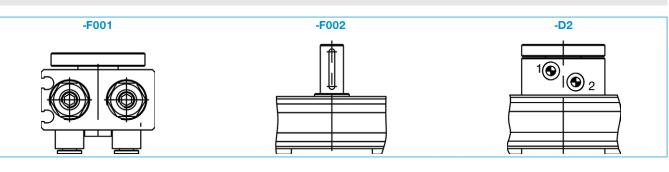
Flat structure

Thanks to the reverse double piston drive, the unit can work in operations requiring flat conditions. This is how you can build your application to save more space

Infinitely adjustable swivel angle

Become flexible and unique with the completely adjustable swivel angle that also reduces set up times





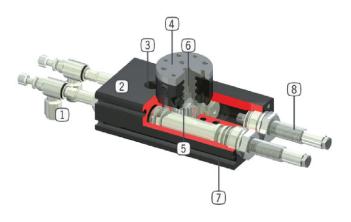
HOW TO ORDER **CORRECTLY**

The product order numbers are arranged according to this diagram:

Order no.	MSF40			
Without shock absorber		N		
With shock absorber		S		
Tool holder via flange			-F001	
Tool holder via shaft extension			-F002	
Tool holder via flange with integrated 2-way rotary distribut	or		-D2	



BENEFITS IN DETAIL



1 Air flow control valve

- for speed regulation
- included in scope of delivery

2 Robust, lightweight housing

- Hard-coated aluminum alloy

3 Mounting and positioning

- mounting possible from several sides for versatile positioning
- 4 Tool intake
 - with shaft extension or flange available

5 Force transfer

- rack and pinion

6 Up to 2 way integrated air feed-through

- for hoseless air transfer
- hose package does not have to be pivoted

7 Sensing slot

- mounting and positioning of magnetic field sensors

8 Integrated shock absorbers with spiral groove technology

- adjustable end position damping

> SERIES CHARACTERISTICS



Number of installation sizes	3
Swivel angle	90° - 180°
Torque	0,3 Nm - 1,2 Nm
Weight	0,17 kg - 0,46 kg
AP class	2



Elastomer end position damping



Magnetic field sensor



IP41



Powerstop end position damping



Positionability - 2 positions



10 million maintenance-free cycles (max.)



fluid feed-through



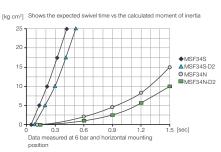
Adjustable swivel angle

FLAT SWIVEL UNITS INSTALLATION SIZE MSF34

PRODUCT SPECIFICATIONS



Moment of inertia



► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint

DRVM3X4



Centering Disc

DST40800

► RECOMMENDED ACCESSORIES



Magnetic field sensor Angled Cable 0,3 m -

Connector M8
MFS103SKHC



Straight Cable 0,3 m -

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Cable 5m - Socket M8 (female) KAG500



Plug-in connector Angled Cable 5m - Socket M8

KAW500



able Straight - Connector M8

S8-G-3



Plug-in connector customiz able Straight - Connector M12

S12-G-3



Straight Fittings - Barb Style Connection

GVM3

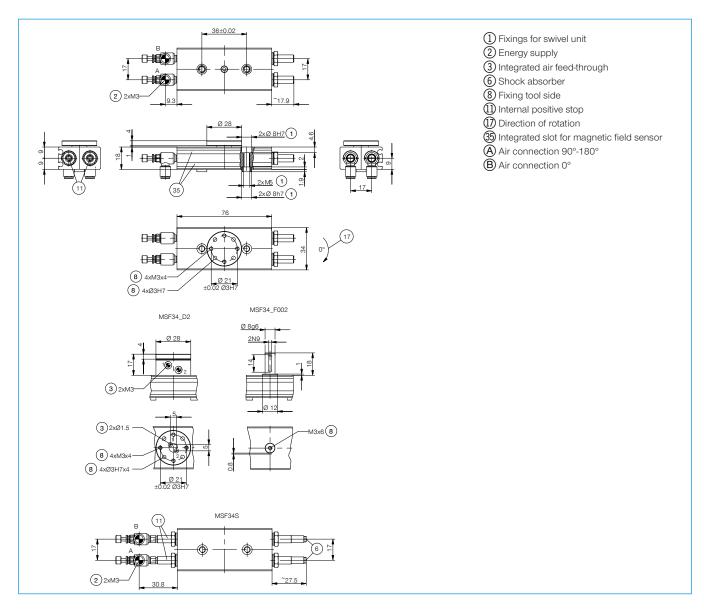


Pressure Safety Valve

DSV1-8

	► Technical Data*					
Order no.	MSF34N-F001	MSF34S-F001	MSF34N-F002	MSF34S-F002	MSF34N-D2	MSF34S-D2
Swivel angle [°]	90-180	90-180	90-180	90-180	90-180	90-180
Torque [Nm]	0.4	0.4	0.4	0.4	0.3	0.3
End position damping by	Elastomer	PowerStop	Elastomer	PowerStop	Elastomer	PowerStop
Tool holder via	Flange	Flange	Shaft extension	Shaft extension	Flange	Flange
Repetition accuracy +/- [°]	0.07	0.01	0.07	0.01	0.07	0.01
Air feed-through [Quantity]	0	0	0	0	2	2
Axial bearing load [N]	215	215	215	215	215	215
Radial bearing load [Nm]	5.5	5.5	5.5	5.5	5.5	5.5
Operating pressure min. [bar]	3	3	3	3	3	3
Operating pressure max. [bar]	8	8	8	8	8	8
Operating temperature min. [°C]	5	5	5	5	5	5
Operating temperature max. [°C]	+80	+80	+80	+80	+80	+80
Air volume per cycle 90° [cm³]	3	3	3	3	3	3
Air volume per cycle 180° [cm³]	6	6	6	6	6	6
Weight [kg]	0.17	0.18	0.17	0.18	0.2	0.21

^{*}All data measured at 6 bar



FLAT SWIVEL UNITS INSTALLATION SIZE MSF40

PRODUCT SPECIFICATIONS



Moment of inertia

[kg cm²] Shows the expected swivel time vs the calculated moment of inertia ♦MSF40S ▲MSF40S-D2 ● MSF40N ■MSF40N-D2

► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint

DRVM3X4



Centering Disc

DST40800

► RECOMMENDED ACCESSORIES



Magnetic field sensor Angled Cable 0,3 m -

Connector M8
MFS103SKHC



Straight Cable 0,3 m -

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Cable 5m - Socket M8 (female) KAG500



Plug-in connector Angled Cable 5m - Socket M8

KAW500



able Straight - Connector M8

S8-G-3



Plug-in connector customiz able Straight - Connector M12

S12-G-3



Straight Fittings - Barb Style Connection

GVM3

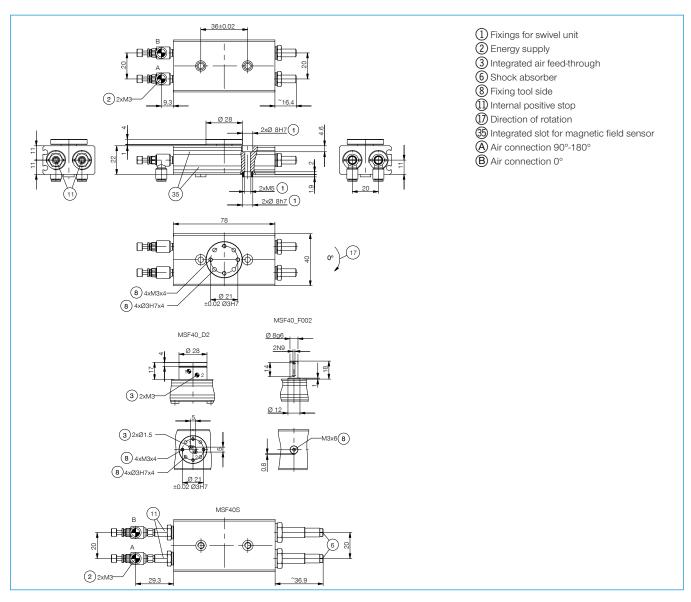


Pressure Safety Valve

DSV1-8

	Technical	Data*				
Order no.	MSF40N-F001	MSF40S-F001	MSF40N-F002	MSF40S-F002	MSF40N-D2	MSF40S-D2
Swivel angle [°]	90-180	90-180	90-180	90-180	90-180	90-180
Torque [Nm]	0.7	0.7	0.7	0.7	0.6	0.6
End position damping by	Elastomer	PowerStop	Elastomer	PowerStop	Elastomer	PowerStop
Tool holder via	Flange	Flange	Shaft extension	Shaft extension	Flange	Flange
Repetition accuracy +/- [°]	0.07	0.01	0.07	0.01	0.07	0.01
Air feed-through [Quantity]	0	0	0	0	2	2
Axial bearing load [N]	215	215	215	215	215	215
Radial bearing load [Nm]	7	7	7	7	7	7
Operating pressure min. [bar]	3	3	3	3	3	3
Operating pressure max. [bar]	8	8	8	8	8	8
Operating temperature min. [°C]	5	5	5	5	5	5
Operating temperature max. [°C]	+80	+80	+80	+80	+80	+80
Air volume per cycle 90° [cm³]	4.3	4.3	4.3	4.3	4.3	4.3
Air volume per cycle 180° [cm³]	8.6	8.6	8.6	8.6	8.6	8.6
Weight [kg]	0.26	0.27	0.26	0.27	0.28	0.29

^{*}All data measured at 6 bar



FLAT SWIVEL UNITS INSTALLATION SIZE MSF44

PRODUCT SPECIFICATIONS



Moment of inertia

[kg cm²] Shows the expected swivel time vs the calculated moment of inertia ◆MSF44S ▲MSF44S-D2 ● MSF44N ■MSF44N-D2

► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint

DRVM3X4



Centering Disc

DST40800

► RECOMMENDED ACCESSORIES



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Straight Cable 0,3 m -

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Plug-in connector Straight Cable 5m - Socket M8 (female) KAG500



Plug-in connector Angled Cable 5m - Socket M8

KAW500



able Straight - Connector M8

S8-G-3



Plug-in connector customiz able Straight - Connector M12

S12-G-3



Straight Fittings - Barb Style Connection

GVM3

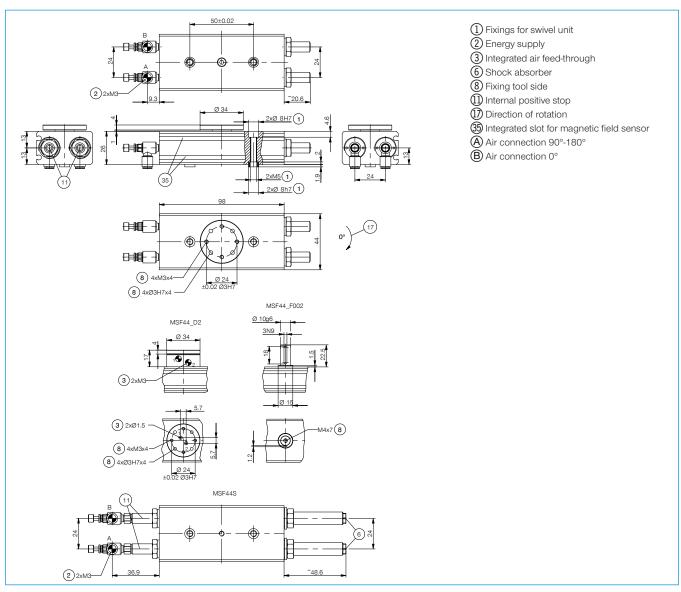


Pressure Safety Valve

DSV1-8

	Technical	Data*				
Order no.	MSF44N-F001	MSF44S-F001	MSF44N-F002	MSF44S-F002	MSF44N-D2	MSF44S-D2
Swivel angle [°]	90-180	90-180	90-180	90-180	90-180	90-180
Torque [Nm]	1.2	1.2	1.2	1.2	1	1
End position damping by	Elastomer	PowerStop	Elastomer	PowerStop	Elastomer	PowerStop
Tool holder via	Flange	Flange	Shaft extension	Shaft extension	Flange	Flange
Repetition accuracy +/- [°]	0.07	0.01	0.07	0.01	0.07	0.01
Air feed-through [Quantity]	0	0	0	0	2	2
Axial bearing load [N]	520	520	520	520	520	520
Radial bearing load [Nm]	19	19	19	19	19	19
Operating pressure min. [bar]	3	3	3	3	3	3
Operating pressure max. [bar]	8	8	8	8	8	8
Operating temperature min. [°C]	5	5	5	5	5	5
Operating temperature max. [°C]	+80	+80	+80	+80	+80	+80
Air volume per cycle 90° [cm³]	7.7	7.7	7.7	7.7	7.7	7.7
Air volume per cycle 180° [cm³]	15.4	15.4	15.4	15.4	15.4	15.4
Weight [kg]	0.41	0.42	0.41	0.42	0.45	0.46

^{*}All data measured at 6 bar



FLAT SWIVEL UNITS SERIES SF-C

PRODUCT ADVANTAGES



"The superior"

▶ Up to 100% more performance than the benchmark

Superior end position damping lets you swivel more mass in the shortest amount of time, increasing your machine's component output

Large centre bore

Reduce the interference contours in your application by placing your power supply line directly through the middle of the rotary flange

▶ More than 100% higher radial bearing load than the benchmark

The generously scaled bearings stand for robustness and long service life and provide the highest process reliability for your application

> THE BEST PRODUCT FOR YOUR APPLICATION

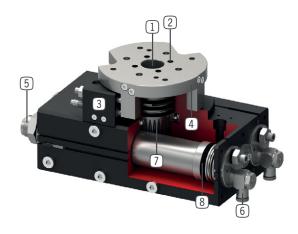


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BENEFITS IN DETAIL



1 Two way ball bearing hollow shaft

- for feedthrough cables and hoses
- high forces and moments capacity

2 Up to 8 way integrated air feed-through

- for hoseless air transfer
- hose package does not have to be pivoted

3 Adjustable end position

- +/- 3° adjustable end position

4 Large, precise locating flange

- simple tool connection

5 Integrated shock absorbers with spiral groove technology

- adjustable end position damping
- heating is prevented through installation in pneumatic pressure chamber

6 Air flow control valve

- for speed regulation (included in the delivery)

7 Force transfer

- rack and pinion

8 Drive

- two double-acting pneumatic cylinders
- high torque rating

> SERIES CHARACTERISTICS



Number of installation sizes	6
Swivel angle	0° - 180°
Torque	1,5 Nm - 130 Nm
Weight	0,6 kg - 41,1 kg
AP class	3



Powerstop end position damping



Magnetic field sensor



Adjustable swivel angle



fluid feed-through



Positionability - 2 positions



IP64



Inductive sensor



Positionability - 3 positions



10 million maintenance-free cycles (max.)

FLAT SWIVEL UNITS SF SERIES

► HOW TO ORDER CORRECTLY

Order no.	SF		
Clean room class 5			
Flat swivel units	_		
Installation size		50	
Installation size		74	
Installation size		100	
Installation size		125	
Installation size		155	
Installation size		195	
Swivel angle 0° - 180°, infinitely variable			N
Integrated hoseless pneumatic feed-through, 4-way			D4
Integrated hoseless pneumatic feed-through, 6-way			D6
Integrated hoseless pneumatic feed-through, 8-way			D8
Rotation angle 90°			-90N
Integrated hoseless pneumatic feed-through, 4-way			-90 D 4
Integrated hoseless pneumatic feed-through, 6-way			-90 D 6
Integrated hoseless pneumatic feed-through, 8-way			-90 D 8
Rotation angle 180°			-180N
Integrated hoseless pneumatic feed-through, 4-way			-180 D 4
Integrated hoseless pneumatic feed-through, 6-way			-180D6
Integrated hoseless pneumatic feed-through, 8-way	_		-180D8
Version: ML (Size SF50 / SF74 / SF100)			
➤ At -90° and +90° position, mechanical and shock-absorbed fixed stop			
0° position is not locked, as opposed to the M version			
For these units, the driven pistons move against dominant limit stop pistons and, like for the center position, undergo shock absorption while moving into end position	e locked		
Simplified activation for horizontal rotary movements			
Swivel angle -90° - 0° - +90°			ML
Integrated hoseless pneumatic feed-through, 4-way			MLD4
Integrated hoseless pneumatic feed-through, 6-way			MLD6
Integrated hoseless pneumatic feed-through, 8-way			MLD8
Version: M (Size SF125 / SF155 / SF195)			
 All three positions for mechanical and shock-mounted fixed stop 			
 0° center position using two stopper pistons with integrated shock absorbers 			
A mechanical fixed stop is generated using ratchet bolts that are pushed through arrester into the ring groove of the stopper piston	oistons		
Swivel angle -90° - 0° - +90°			M
Integrated hoseless pneumatic feed-through, 4-way			MD4
			MD6
Integrated hoseless pneumatic feed-through, 6-way			

► VERSION: ML (SIZE SF50 / SF74 / SF100)



► VERSION: M (SIZE SF125 / SF155 / SF195)

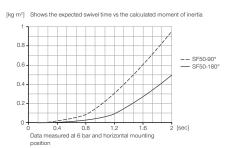


FLAT SWIVEL UNITS INSTALLATION SIZE SF50N-C

PRODUCT SPECIFICATIONS



Moment of inertia



► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint

DRVM5X4

► RECOMMENDED ACCESSORIES



0,3 m - Connector M8

MFSP2SKHC-02



Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector customizable Straight -Connector M8

S8-G-3



Pressure Safety Valve

DSV1-8

► RECOMMENDED ACCESSORY ATTACHMENT KIT



Attachment Kit

ANS0006



Inductive proximity switch Cable 5 m

NJ8-E2



Inductive proximity switch

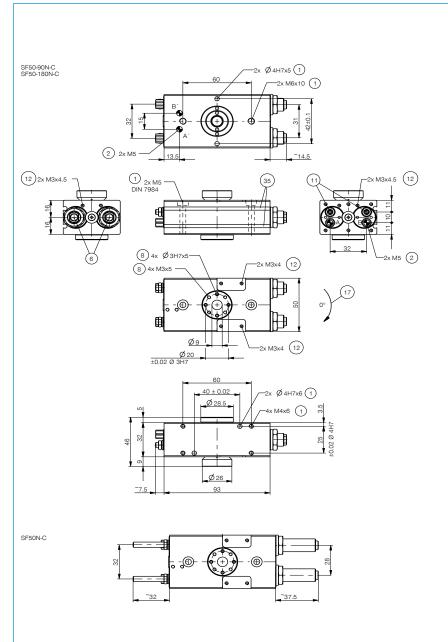
NJ8-E2S



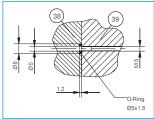
Plug-in connector Angled Cable 5m - Socket M8 (female)

	Technical Data*		
Order no.	SF50-90N-C	SF50-180N-C	SF50N-C
Swivel angle [°]	90	180	0-180
Torque [Nm]	2.4	2.4	2.4
Swivel angle regulable +/- [°]	3	3	180
Repetition accuracy +/- [°]	0.01	0.01	0.01
Passage bore Ø [mm]	9	9	9
Axial bearing load [N]	490	490	490
Radial bearing load [Nm]	24	24	24
Operating pressure min. [bar]	3	3	3
Operating pressure max. [bar]	8	8	8
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+80	+80	+80
Air volume per cycle [cm³]	14	28	28
Weight [kg]	0.6	0.6	0.6

^{*}All data measured at 6 bar



- 1 Fixings for swivel unit
- Energy supplyShock absorber
- 8 Fixing tool side
- (1) Internal positive stop
- 12 Fixing ANS
- Direction of rotation
- 35 Integrated slot for magnetic field sensor
- 38 Adapter
- 39 Swivel unit
- Air connection 90°-180°
- B Air connection 0°
- Alternate air connection (90°-180°)
- B Alternate air connection (0°)



Hoseless energy supply (machine)

FLAT SWIVEL UNITS INSTALLATION SIZE SF50D4-C

PRODUCT SPECIFICATIONS



Moment of inertia

[kg m²] Shows the expected swivel time vs the calculated moment of inertia



► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint DRVM5X4

O-Ring

COR0020100

► RECOMMENDED ACCESSORIES



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector customizable Straight -Connector M8

S8-G-3



Pressure Safety Valve

DSV1-8

► RECOMMENDED ACCESSORY ATTACHMENT KIT



Attachment Kit

ANS0008



Inductive proximity switch Cable 5 m

NJ8-E2



Inductive proximity switch

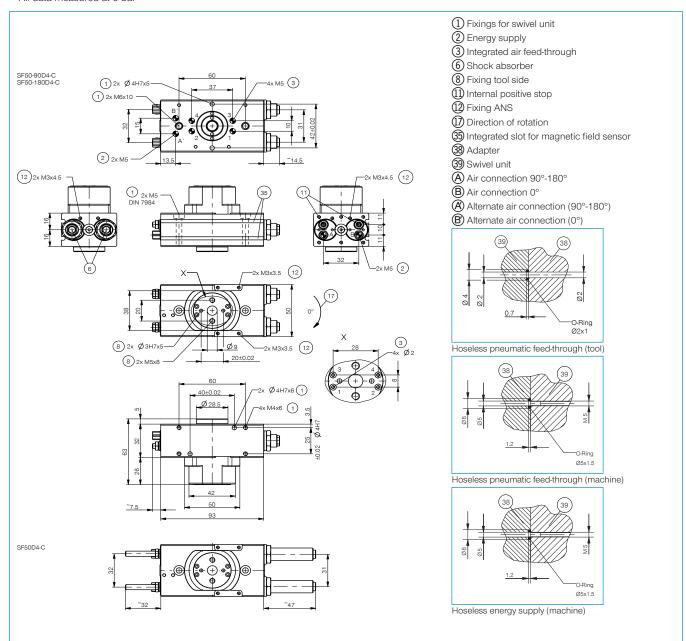
NJ8-E2S



Plug-in connector Angled Cable 5m - Socket M8

	Technical Data*		
Order no.	SF50-90D4-C	SF50-180D4-C	SF50D4-C
Swivel angle [°]	90	180	0-180
Torque [Nm]	1.5	1.5	1.5
Swivel angle regulable +/- [°]	3	3	180
Repetition accuracy +/- [°]	0.01	0.01	0.01
Passage bore Ø [mm]	9	9	9
Axial bearing load [N]	490	490	490
Radial bearing load [Nm]	24	24	24
Operating pressure min. [bar]	3	3	3
Operating pressure max. [bar]	8	8	8
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+80	+80	+80
Air volume per cycle [cm³]	14	28	28
Weight [kg]	0.76	0.76	0.76

^{*}All data measured at 6 bar



FLAT SWIVEL UNITS INSTALLATION SIZE SF50ML-C

PRODUCT SPECIFICATIONS



Moment of inertia

[kg m²] Shows the expected swivel time vs the calculated moment of inertia - SF50ML-C

► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint

DRVM5X4



Attachment Kit

ANS0066



Commissioning USB

052650

► RECOMMENDED ACCESSORIES



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector customizable Straight -Connector M8

S8-G-3



Pressure Safety Valve

DSV1-8

► RECOMMENDED ACCESSORY ATTACHMENT KIT



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch

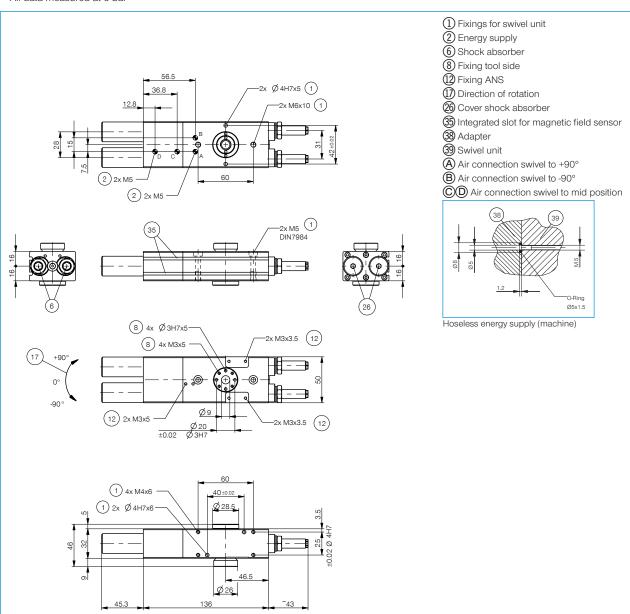
NJ8-E2S



Plug-in connector Angled Cable 5m - Socket M8

	► Technical Data*
Order no.	SF50ML-C
Swivel angle [°]	-90 / 0 / +90
Torque [Nm]	2.4
Swivel angle regulable +/- [°]	3
Repetition accuracy +/- [°]	0.01
Passage bore Ø [mm]	9
Axial bearing load [N]	490
Radial bearing load [Nm]	24
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	44
Weight [kg]	0.98

*All data measured at 6 bar

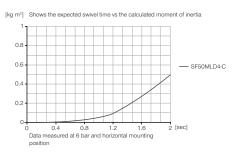


FLAT SWIVEL UNITS INSTALLATION SIZE SF50MLD4-C

PRODUCT SPECIFICATIONS



Moment of inertia



► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint

DRVM5X4



COR0020100



Attachment Kit

ANS0067



Commissioning USB

052650

► RECOMMENDED ACCESSORY



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector customizable Straight -Connector M8

S8-G-3



Pressure Safety Valve

DSV1-8

► RECOMMENDED ACCESSORY ATTACHMENT KIT



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch

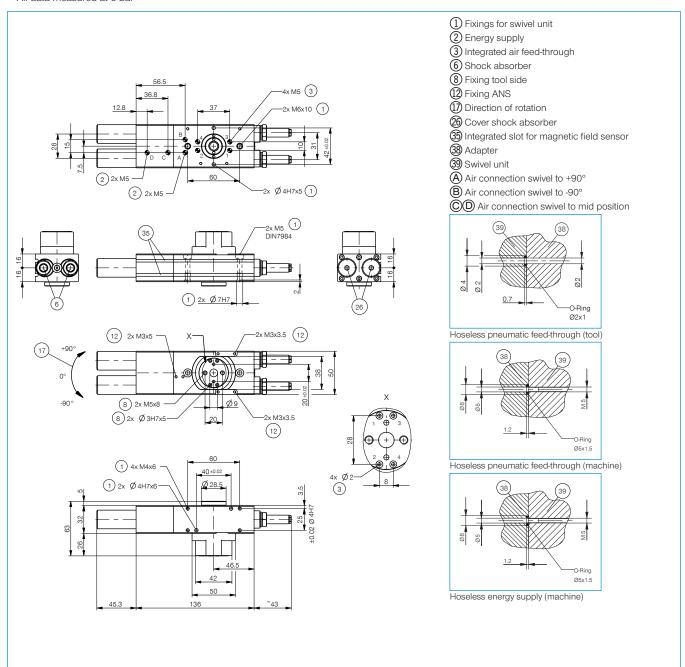
NJ8-E2S



Plug-in connector Angled Cable 5m - Socket M8

	► Technical Data*
Order no.	SF50MLD4-C
Swivel angle [°]	-90 / 0 / +90
Torque [Nm]	1.5
Swivel angle regulable +/- [°]	3
Repetition accuracy +/- [°]	0.01
Passage bore Ø [mm]	9
Axial bearing load [N]	490
Radial bearing load [Nm]	24
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	44
Weight [kg]	1.14

^{*}All data measured at 6 bar

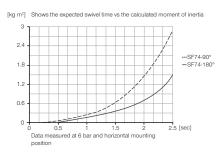


FLAT SWIVEL UNITS INSTALLATION SIZE SF74N-C

PRODUCT SPECIFICATIONS



Moment of inertia



► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint

DRV1-8X6

► RECOMMENDED ACCESSORIES



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Pressure Safety Valve

DSV1-8

► RECOMMENDED ACCESSORY ATTACHMENT KIT



Attachment Kit

ANS0010



Inductive proximity switch Cable 5 m

NJ6.5-E2-01



Inductive proximity switch - Connector M8

NJ6.5-E2S



Inductive proximity switch - Cable 5 m

NJ8-E2

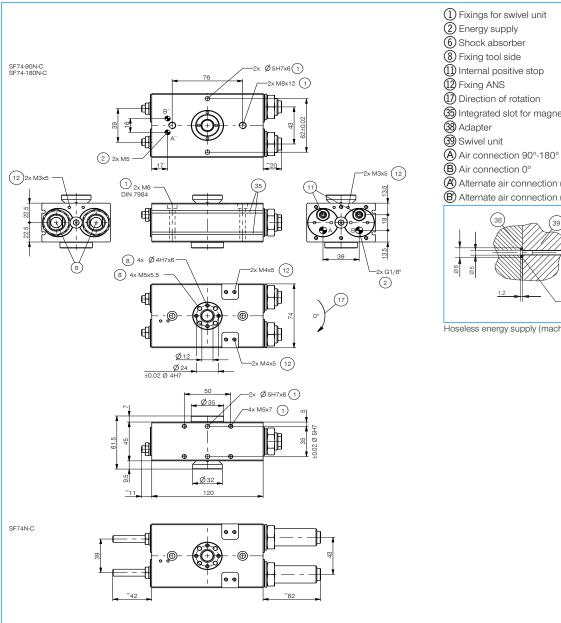


Inductive proximity switch Connector M8

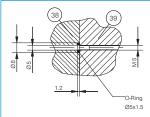
NJ8-E2S

	► Technical Data*		
Order no.	SF74-90N-C	SF74-180N-C	SF74N-C
Swivel angle [°]	90	180	0-180
Torque [Nm]	7.3	7.3	7.3
Swivel angle regulable +/- [°]	3	3	180
Repetition accuracy +/- [°]	0.01	0.01	0.01
Passage bore Ø [mm]	12	12	12
Axial bearing load [N]	1120	1120	1120
Radial bearing load [Nm]	88	88	88
Operating pressure min. [bar]	3	3	3
Operating pressure max. [bar]	8	8	8
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+80	+80	+80
Air volume per cycle [cm³]	42	84	84
Weight [kg]	1.6	1.6	1.6

^{*}All data measured at 6 bar



- 35 Integrated slot for magnetic field sensor
- Alternate air connection (90°-180°)
- B Alternate air connection (0°)



Hoseless energy supply (machine)

pneumatic / Installation size SF74D4-C / Flat Swivel Units /

FLAT SWIVEL UNITS INSTALLATION SIZE SF74D4-C

PRODUCT SPECIFICATIONS



Moment of inertia

[kg m²] Shows the expected swivel time vs the calculated moment of inertia

► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint

DRV1-8X6



O-Ring

COR0020100

► RECOMMENDED ACCESSORIES



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Pressure Safety Valve

DSV1-8

► RECOMMENDED ACCESSORY ATTACHMENT KIT



Attachment Kit

ANS0012



Inductive proximity switch Cable 5 m

NJ6.5-E2-01



Inductive proximity switch - Connector M8

NJ6.5-E2S



Inductive proximity switch - Cable 5 m

NJ8-E2

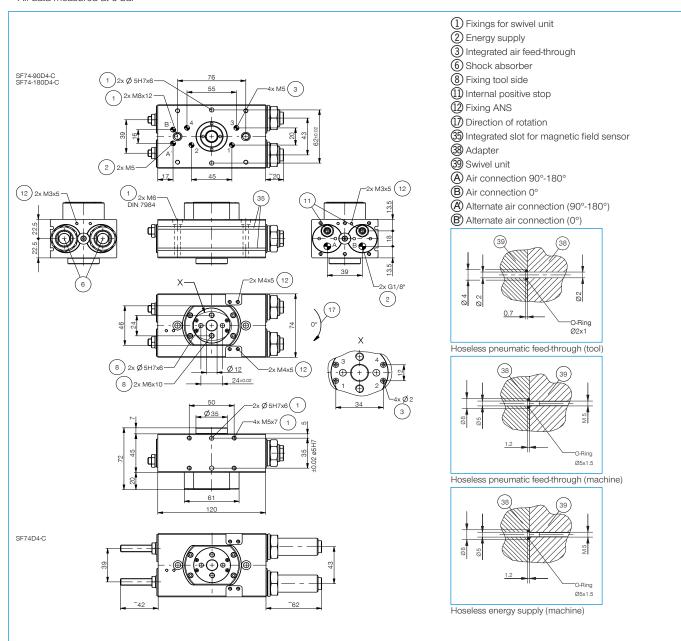


Inductive proximity switch Connector M8

NJ8-E2S

	► Technical Data*		
Order no.	SF74-90D4-C	SF74-180D4-C	SF74D4-C
Swivel angle [°]	90	180	0-180
Torque [Nm]	5.5	5.5	5.5
Swivel angle regulable +/- [°]	3	3	180
Repetition accuracy +/- [°]	0.01	0.01	0.01
Passage bore Ø [mm]	12	12	12
Axial bearing load [N]	1120	1120	1120
Radial bearing load [Nm]	88	88	88
Operating pressure min. [bar]	3	3	3
Operating pressure max. [bar]	8	8	8
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+80	+80	+80
Air volume per cycle [cm³]	42	84	84
Weight [kg]	1.8	1.8	1.8

^{*}All data measured at 6 bar

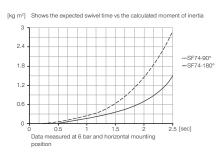


FLAT SWIVEL UNITS INSTALLATION SIZE SF74D6-C

PRODUCT SPECIFICATIONS



Moment of inertia



► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint

DRV1-8X6



O-Ring

COR0020100

► RECOMMENDED ACCESSORIES



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Pressure Safety Valve

DSV1-8

► RECOMMENDED ACCESSORY ATTACHMENT KIT



Attachment Kit

ANS0012



Inductive proximity switch Cable 5 m

NJ6.5-E2-01



Inductive proximity switch - Connector M8

NJ6.5-E2S



Inductive proximity switch - Cable 5 m

NJ8-E2

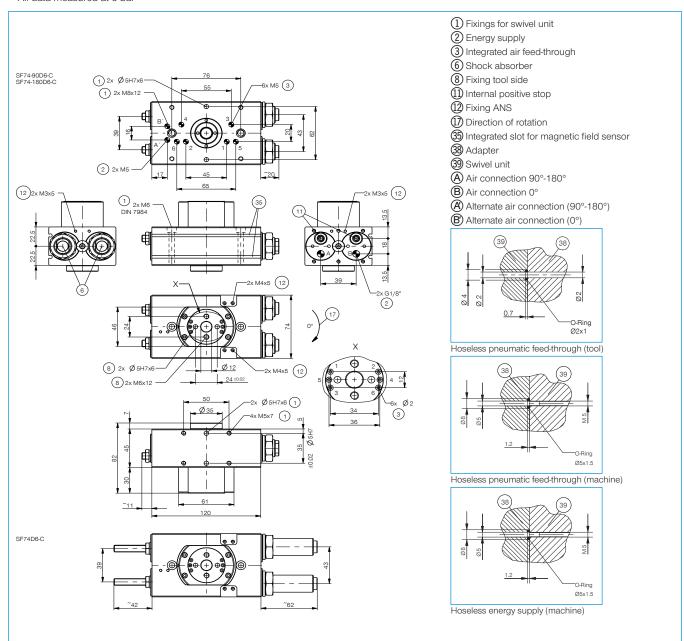


Inductive proximity switch Connector M8

NJ8-E2S

	Technical Data*		
Order no.	SF74-90D6-C	SF74-180D6-C	SF74D6-C
Swivel angle [°]	90	180	0-180
Torque [Nm]	4.5	4.5	4.5
Swivel angle regulable +/- [°]	3	3	180
Repetition accuracy +/- [°]	0.01	0.01	0.01
Passage bore Ø [mm]	12	12	12
Axial bearing load [N]	1120	1120	1120
Radial bearing load [Nm]	88	88	88
Operating pressure min. [bar]	3	3	3
Operating pressure max. [bar]	8	8	8
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+80	+80	+80
Air volume per cycle [cm³]	42	84	84
Weight [kg]	1.8	1.8	1.8

^{*}All data measured at 6 bar

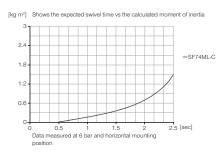


FLAT SWIVEL UNITS INSTALLATION SIZE SF74ML-C

PRODUCT SPECIFICATIONS



Moment of inertia



► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint

DRV1-8X6



Attachment Kit

ANS0068



Commissioning USB

052650

► RECOMMENDED ACCESSORIES



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector customizable Straight -Connector M8

S8-G-3



Pressure Safety Valve

DSV1-8

► RECOMMENDED ACCESSORY ATTACHMENT KIT



Inductive proximity switch

NJ6.5-E2-01



Inductive proximity switch

NJ6.5-E2S



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch

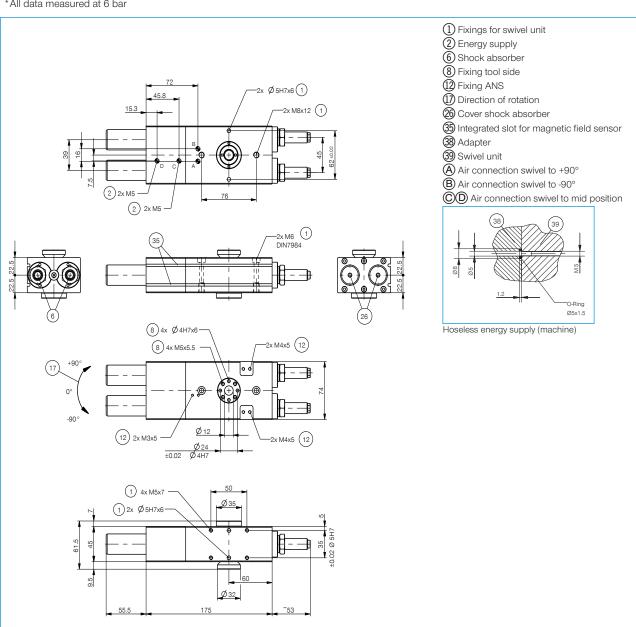
NJ8-E2S



Plug-in connector Angled Cable 5m - Socket M8

	► Technical Data*
Order no.	SF74ML-C
Swivel angle [°]	-90 / 0 / +90
Torque [Nm]	7.3
Swivel angle regulable +/- [°]	3
Repetition accuracy +/- [°]	0.01
Passage bore Ø [mm]	12
Axial bearing load [N]	1120
Radial bearing load [Nm]	88
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	125
Weight [kg]	2.4

^{*}All data measured at 6 bar



FLAT SWIVEL UNITS INSTALLATION SIZE SF74MLD4-C

PRODUCT SPECIFICATIONS



Moment of inertia

[kg m²] Shows the expected swivel time vs the calculated moment of inertia -SF74MLD4-C

► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint DRV1-8X6



O-Ring

COR0020100



Attachment Kit

ANS0069



Commissioning USB

052650

► RECOMMENDED ACCESSORIES



Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector customizable Straight -Connector M8

S8-G-3



Pressure Safety Valve

DSV1-8

► RECOMMENDED ACCESSORY ATTACHMENT KIT



Inductive proximity switch

NJ6.5-E2-01



Inductive proximity switch

NJ6.5-E2S



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch

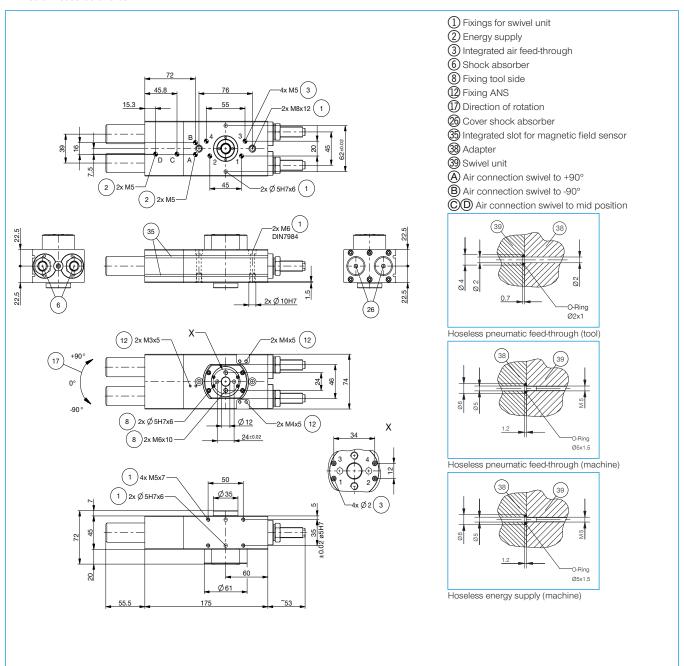
NJ8-E2S



Plug-in connector Angled Cable 5m - Socket M8

	► Technical Data*
Order no.	SF74MLD4-C
Swivel angle [°]	-90 / 0 / +90
Torque [Nm]	5.5
Swivel angle regulable +/- [°]	3
Repetition accuracy +/- [°]	0.01
Passage bore Ø [mm]	12
Axial bearing load [N]	1120
Radial bearing load [Nm]	88
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	125
Weight [kg]	2.6

^{*}All data measured at 6 bar

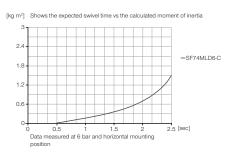


FLAT SWIVEL UNITS INSTALLATION SIZE SF74MLD6-C

PRODUCT SPECIFICATIONS



Moment of inertia



► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint

DRV1-8X6



O-Ring

COR0020100



ANS0070



Commissioning USB

052650

► RECOMMENDED ACCESSORIES



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector customizable Straight -Connector M8

S8-G-3



Pressure Safety Valve

DSV1-8

► RECOMMENDED ACCESSORY ATTACHMENT KIT



Inductive proximity switch

NJ6.5-E2-01



Inductive proximity switch

NJ6.5-E2S



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch

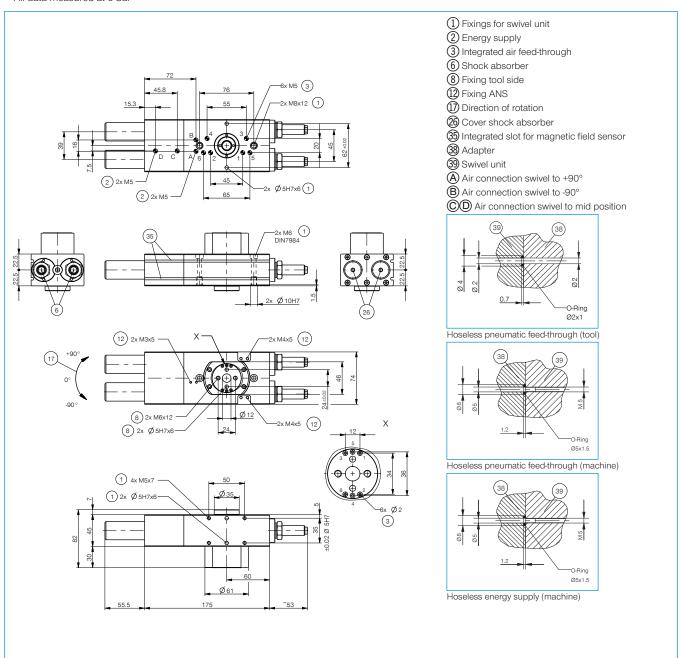
NJ8-E2S



Plug-in connector Angled Cable 5m - Socket M8

	► Technical Data*
Order no.	SF74MLD6-C
Swivel angle [°]	-90 / 0 / +90
Torque [Nm]	4.5
Swivel angle regulable +/- [°]	3
Repetition accuracy +/- [°]	0.01
Passage bore Ø [mm]	12
Axial bearing load [N]	1120
Radial bearing load [Nm]	88
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	125
Weight [kg]	2.6

^{*}All data measured at 6 bar

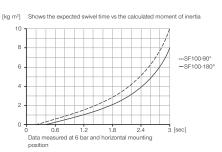


FLAT SWIVEL UNITS INSTALLATION SIZE SF100N-C

PRODUCT SPECIFICATIONS



Moment of inertia



► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint

DRV1-8X6

► RECOMMENDED ACCESSORIES



Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector customizable Straight -Connector M8

S8-G-3



Pressure Safety Valve

DSV1-8

► RECOMMENDED ACCESSORY ATTACHMENT KIT



Attachment Kit

ANS0015



Inductive proximity switch Cable 5 m

NJ8-E2



Inductive proximity switch

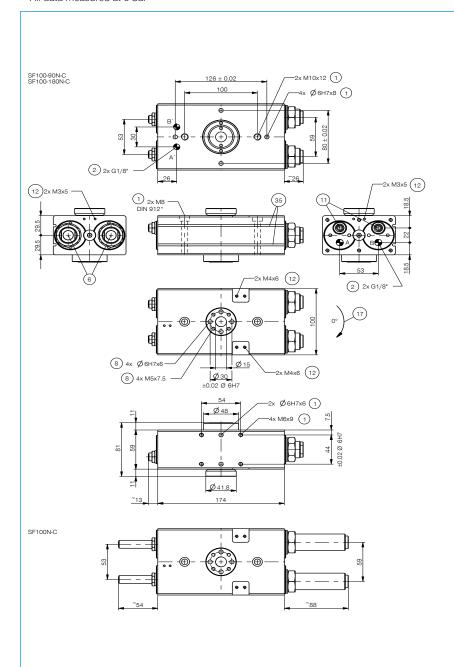
NJ8-E2S



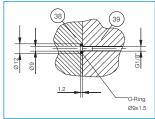
Plug-in connector Angled Cable 5m - Socket M8 (female)

	Technical Data*		
Order no.	SF100-90N-C	SF100-180N-C	SF100N-C
Swivel angle [°]	90	180	0-180
Torque [Nm]	20	20	20
Swivel angle regulable +/- [°]	3	3	180
Repetition accuracy +/- [°]	0.01	0.01	0.01
Passage bore Ø [mm]	15	15	15
Axial bearing load [N]	2500	2500	2500
Radial bearing load [Nm]	155	155	155
Operating pressure min. [bar]	3	3	3
Operating pressure max. [bar]	8	8	8
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+80	+80	+80
Air volume per cycle [cm³]	103	206	206
Weight [kg]	3.7	3.7	3.7

^{*}All data measured at 6 bar



- 1 Fixings for swivel unit
- Energy supplyShock absorber
- 8 Fixing tool side
- (1) Internal positive stop
- 12 Fixing ANS
- Direction of rotation
- 35 Integrated slot for magnetic field sensor
- 38 Adapter
- 39 Swivel unit
- Air connection 90°-180°
- B Air connection 0°
- Alternate air connection (90°-180°)
- B Alternate air connection (0°)



Hoseless energy supply (machine)

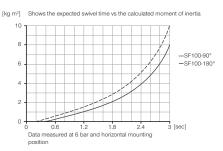
FLAT SWIVEL UNITS

INSTALLATION SIZE SF100D4-C

PRODUCT SPECIFICATIONS



Moment of inertia



► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint

DRV1-8X6



O-Ring

COR0030100

► RECOMMENDED ACCESSORIES



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector customizable Straight -Connector M8

S8-G-3



Pressure Safety Valve

DSV1-8

► RECOMMENDED ACCESSORY ATTACHMENT KIT



Attachment Kit

ANS0017



Inductive proximity switch Cable 5 m

NJ8-E2



Inductive proximity switch

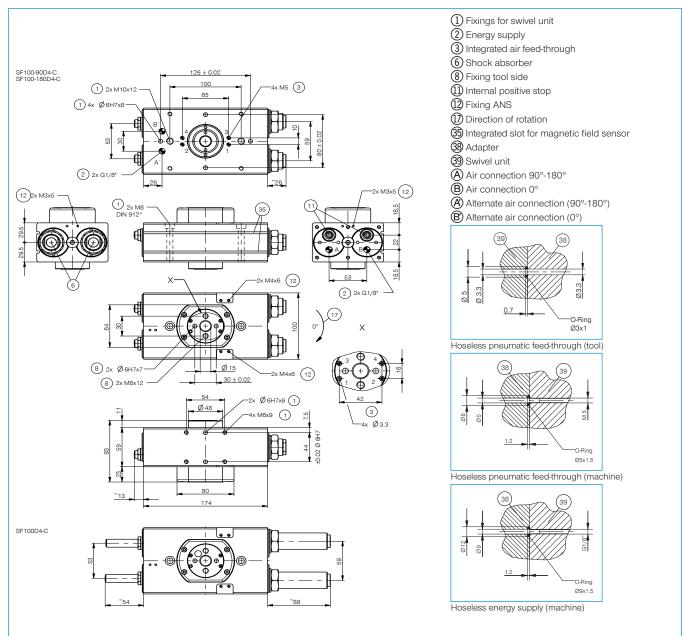
NJ8-E2S



Plug-in connector Angled Cable 5m - Socket M8

	► Technical Data*		
Order no.	SF100-90D4-C	SF100-180D4-C	SF100D4-C
Swivel angle [°]	90	180	0-180
Torque [Nm]	15	15	15
Swivel angle regulable +/- [°]	3	3	180
Repetition accuracy +/- [°]	0.01	0.01	0.01
Passage bore Ø [mm]	15	15	15
Axial bearing load [N]	2500	2500	2500
Radial bearing load [Nm]	155	155	155
Operating pressure min. [bar]	3	3	3
Operating pressure max. [bar]	8	8	8
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+80	+80	+80
Air volume per cycle [cm³]	103	206	206
Weight [kg]	4	4	4

^{*}All data measured at 6 bar

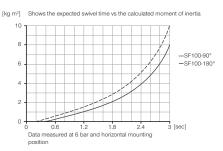


FLAT SWIVEL UNITS INSTALLATION SIZE SF100D6-C

PRODUCT SPECIFICATIONS



Moment of inertia



► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint

DRV1-8X6



O-Ring

COR0030100

► RECOMMENDED ACCESSORIES



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector customizable Straight -Connector M8

S8-G-3



Pressure Safety Valve

DSV1-8

► RECOMMENDED ACCESSORY ATTACHMENT KIT



Attachment Kit

ANS0017



Inductive proximity switch Cable 5 m

NJ8-E2



Inductive proximity switch

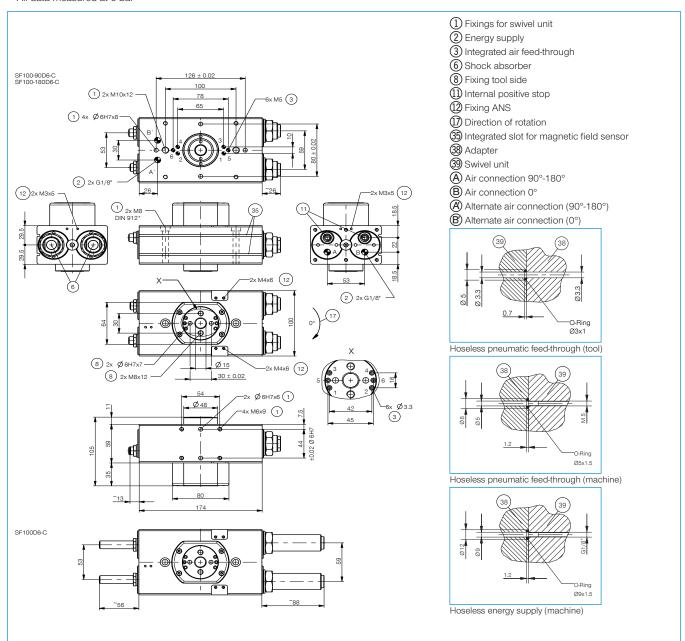
NJ8-E2S



Plug-in connector Angled Cable 5m - Socket M8

	► Technical Data*		
Order no.	SF100-90D6-C	SF100-180D6-C	SF100D6-C
Swivel angle [°]	90	180	0-180
Torque [Nm]	13	13	13
Swivel angle regulable +/- [°]	3	3	180
Repetition accuracy +/- [°]	0.01	0.01	0.01
Passage bore Ø [mm]	15	15	15
Axial bearing load [N]	2500	2500	2500
Radial bearing load [Nm]	155	155	155
Operating pressure min. [bar]	3	3	3
Operating pressure max. [bar]	8	8	8
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+80	+80	+80
Air volume per cycle [cm³]	103	206	206
Weight [kg]	4.1	4.1	4.1

^{*}All data measured at 6 bar

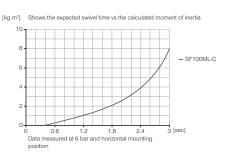


FLAT SWIVEL UNITS INSTALLATION SIZE SF100ML-C

PRODUCT SPECIFICATIONS



Moment of inertia



► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint DRV1-8X6



Attachment Kit

ANS0071



Commissioning USB

052650

► RECOMMENDED ACCESSORIES



Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector customizable Straight -Connector M8

S8-G-3



Pressure Safety Valve

DSV1-8

► RECOMMENDED ACCESSORY ATTACHMENT KIT



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch

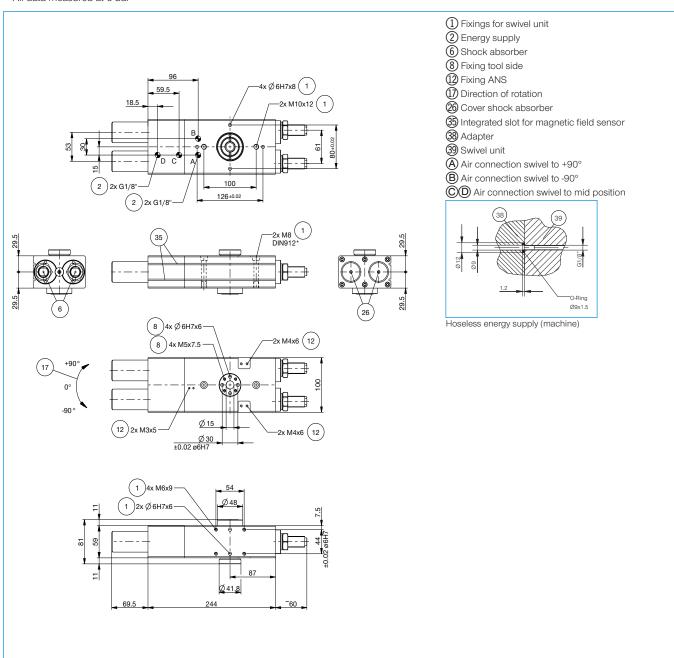
NJ8-E2S



Plug-in connector Angled Cable 5m - Socket M8

	► Technical Data*
Order no.	SF100ML-C
Swivel angle [°]	-90 / 0 / +90
Torque [Nm]	20
Swivel angle regulable +/- [°]	3
Repetition accuracy +/- [°]	0.01
Passage bore Ø [mm]	15
Axial bearing load [N]	2500
Radial bearing load [Nm]	155
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	304
Weight [kg]	5.4

^{*}All data measured at 6 bar



FLAT SWIVEL UNITS INSTALLATION SIZE SF100MLD4-C

PRODUCT SPECIFICATIONS



Moment of inertia

[kg m²] Shows the expected swivel time vs the calculated moment of inertia - SE100MLD4-C

► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint

DRV1-8X6



O-Ring

COR0030100



ANS0072



Commissioning USB

052650

► RECOMMENDED ACCESSORIES



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector customizable Straight -Connector M8

S8-G-3



Pressure Safety Valve

DSV1-8

► RECOMMENDED ACCESSORY ATTACHMENT KIT



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch

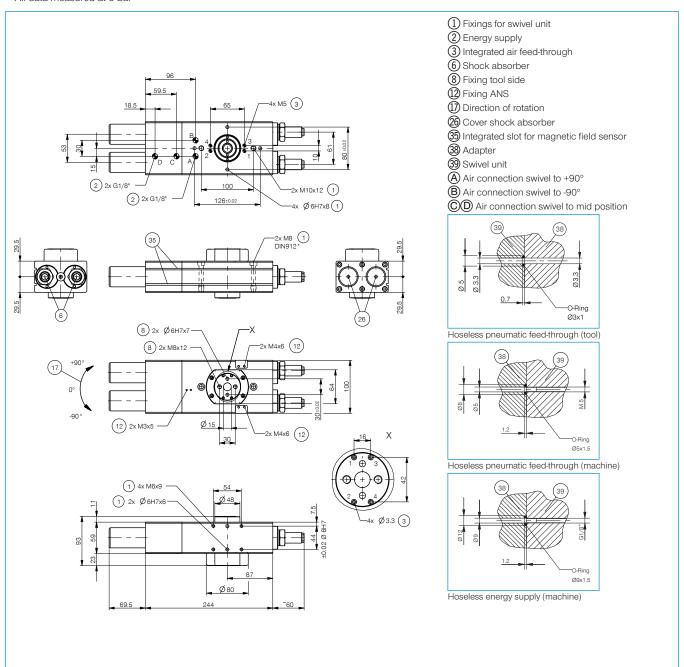
NJ8-E2S



Plug-in connector Angled Cable 5m - Socket M8

	► Technical Data*
Order no.	SF100MLD4-C
Swivel angle [°]	-90 / 0 / +90
Torque [Nm]	15
Swivel angle regulable +/- [°]	3
Repetition accuracy +/- [°]	0.01
Passage bore Ø [mm]	15
Axial bearing load [N]	2500
Radial bearing load [Nm]	155
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	304
Weight [kg]	5.7

^{*}All data measured at 6 bar



FLAT SWIVEL UNITS

INSTALLATION SIZE SF100MLD6-C

PRODUCT SPECIFICATIONS



Moment of inertia

[kg m²] Shows the expected swivel time vs the calculated moment of inertia - SE100MLD6-C

► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint

DRV1-8X6



O-Ring

COR0030100



ANS0073



Commissioning USB

052650

► RECOMMENDED ACCESSORIES



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector customizable Straight -Connector M8

S8-G-3



Pressure Safety Valve

DSV1-8

► RECOMMENDED ACCESSORY ATTACHMENT KIT



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch

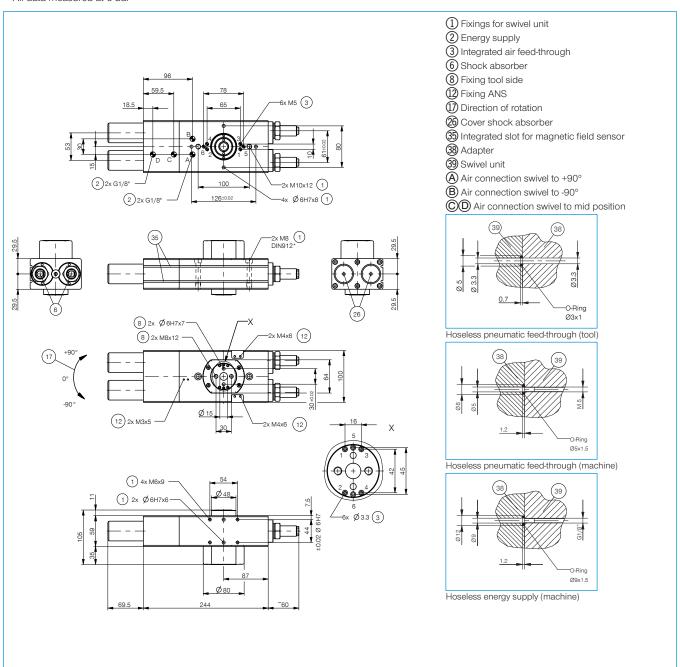
NJ8-E2S



Plug-in connector Angled Cable 5m - Socket M8

	► Technical Data*
Order no.	SF100MLD6-C
Swivel angle [°]	-90 / 0 / +90
Torque [Nm]	13
Swivel angle regulable +/- [°]	3
Repetition accuracy +/- [°]	0.01
Passage bore Ø [mm]	15
Axial bearing load [N]	2500
Radial bearing load [Nm]	155
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	304
Weight [kg]	5.8

^{*}All data measured at 6 bar

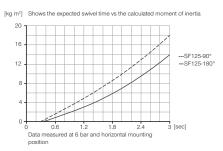


FLAT SWIVEL UNITS INSTALLATION SIZE SF125N-C

PRODUCT SPECIFICATIONS



Moment of inertia



► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint

DRV1-4X8

► RECOMMENDED ACCESSORIES



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector customizable Straight -Connector M8

S8-G-3



Pressure Safety Valve

DSV1-8

► RECOMMENDED ACCESSORY ATTACHMENT KIT



Attachment Kit

ANS0035



Inductive proximity switch Cable 5 m

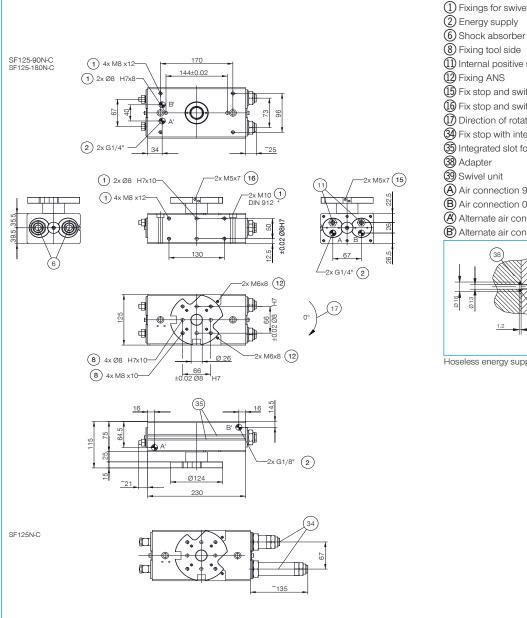
NJ8-E2



Inductive proximity switch - Cable 5 m

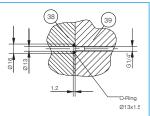
	Technical Data*		
Order no.	SF125-90N-C	SF125-180N-C	SF125N-C
Swivel angle [°]	90	180	0-180
Torque [Nm]	38	38	38
Swivel angle regulable +/- [°]	3	3	180
Repetition accuracy +/- [°]	0.01	0.01	0.01
Passage bore Ø [mm]	26	26	26
Axial bearing load [N]	3400	3400	3400
Radial bearing load [Nm]	391	391	391
Operating pressure min. [bar]	3	3	3
Operating pressure max. [bar]	8	8	8
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+80	+80	+80
Air volume per cycle [cm³]	220	440	440
Weight [kg]	8.8	8.8	9.8

^{*}All data measured at 6 bar



- 1 Fixings for swivel unit

- 8 Fixing tool side
- 11 Internal positive stop
- 12 Fixing ANS
- 15 Fix stop and switch cam 90°
- 16 Fix stop and switch cam 180°
- 1 Direction of rotation
- 34 Fix stop with integrated shock absorber
- 35 Integrated slot for magnetic field sensor
- 38 Adapter
- 39 Swivel unit
- Air connection 90°-180°
- B Air connection 0°
- Alternate air connection (90°-180°)
- B Alternate air connection (0°)



Hoseless energy supply (machine)

FLAT SWIVEL UNITS INSTALLATION SIZE SF125D4-C

PRODUCT SPECIFICATIONS



Moment of inertia

[kg m²] Shows the expected swivel time vs the calculated moment of inertia

► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint

DRV1-4X8



O-Ring

COR0040150

► RECOMMENDED ACCESSORIES



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector customizable Straight -Connector M8

S8-G-3



Pressure Safety Valve

DSV1-8

► RECOMMENDED ACCESSORY ATTACHMENT KIT



ANS0036



Inductive proximity switch Cable 5 m

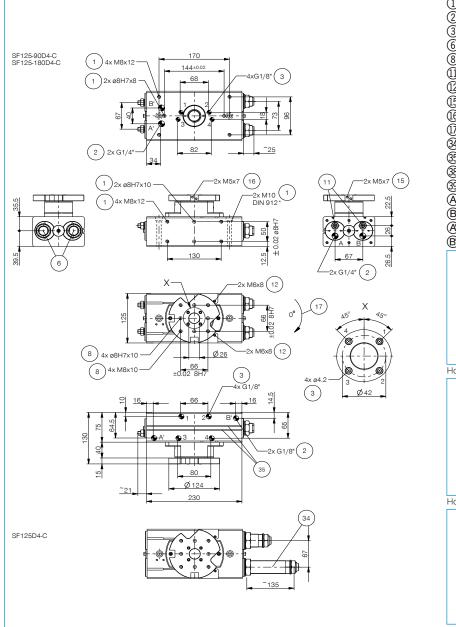
NJ8-E2



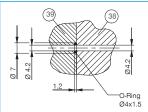
Inductive proximity switch - Cable 5 m

	Technical Data*		
Order no.	SF125-90D4-C	SF125-180D4-C	SF125D4-C
Swivel angle [°]	90	180	0-180
Torque [Nm]	34	34	34
Swivel angle regulable +/- [°]	3	3	180
Repetition accuracy +/- [°]	0.01	0.01	0.01
Passage bore Ø [mm]	26	26	26
Axial bearing load [N]	3400	3400	3400
Radial bearing load [Nm]	391	391	391
Operating pressure min. [bar]	3	3	3
Operating pressure max. [bar]	8	8	8
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+80	+80	+80
Air volume per cycle [cm³]	220	440	440
Weight [kg]	9.5	9.5	10.5

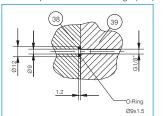
^{*}All data measured at 6 bar



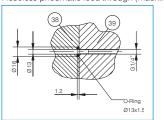
- 1 Fixings for swivel unit
- ② Energy supply③ Integrated air feed-through
- 6 Shock absorber
- 8 Fixing tool side
- 11 Internal positive stop
- 12 Fixing ANS
- 15 Fix stop and switch cam 90°
- 16 Fix stop and switch cam 180°
- ① Direction of rotation
- 34 Fix stop with integrated shock absorber
- 35 Integrated slot for magnetic field sensor
- 38 Adapter
- 39 Swivel unit
- Air connection 90°-180°
- B Air connection 0°
- Alternate air connection (90°-180°)
- B) Alternate air connection (0°)



Hoseless pneumatic feed-through (tool)



Hoseless pneumatic feed-through (machine)



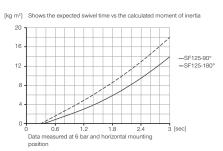
Hoseless energy supply (machine)

FLAT SWIVEL UNITS INSTALLATION SIZE SF125D8-C

PRODUCT SPECIFICATIONS



Moment of inertia



► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint

DRV1-4X8



O-Ring

COR0040150

► RECOMMENDED ACCESSORIES



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector customizable Straight -Connector M8

S8-G-3



Pressure Safety Valve

DSV1-8

► RECOMMENDED ACCESSORY ATTACHMENT KIT



Attachment Kit

ANS0037



Inductive proximity switch Cable 5 m

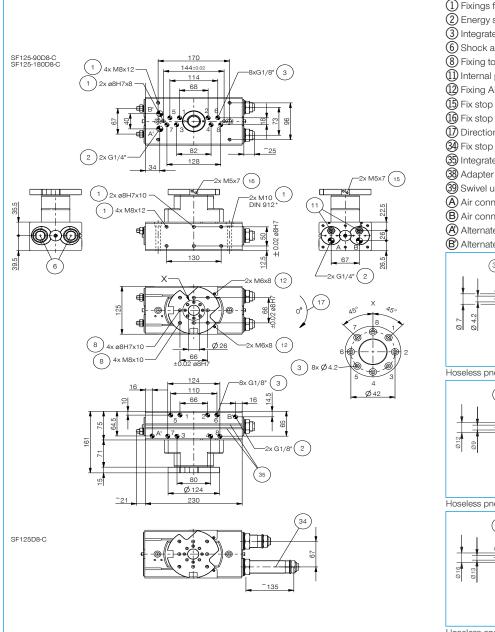
NJ8-E2



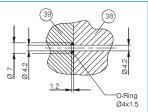
Inductive proximity switch - Cable 5 m

	Technical Data*		
Order no.	SF125-90D8-C	SF125-180D8-C	SF125D8-C
Swivel angle [°]	90	180	0-180
Torque [Nm]	32	32	32
Swivel angle regulable +/- [°]	3	3	180
Repetition accuracy +/- [°]	0.01	0.01	0.01
Passage bore Ø [mm]	26	26	26
Axial bearing load [N]	3400	3400	3400
Radial bearing load [Nm]	391	391	391
Operating pressure min. [bar]	3	3	3
Operating pressure max. [bar]	8	8	8
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+80	+80	+80
Air volume per cycle [cm³]	220	440	440
Weight [kg]	10.5	10.5	11.5

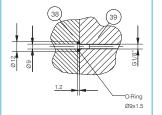
^{*}All data measured at 6 bar



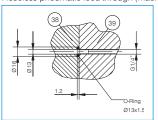
- 1 Fixings for swivel unit
- 2 Energy supply
- 3 Integrated air feed-through
- 6 Shock absorber
- 8 Fixing tool side
- 11 Internal positive stop
- 12 Fixing ANS
- 15 Fix stop and switch cam 90°
- 16 Fix stop and switch cam 180°
- ① Direction of rotation
- 34 Fix stop with integrated shock absorber
- 35 Integrated slot for magnetic field sensor
- 39 Swivel unit
- Air connection 90°-180°
- B Air connection 0°
- Alternate air connection (90°-180°)
- B) Alternate air connection (0°)



Hoseless pneumatic feed-through (tool)



Hoseless pneumatic feed-through (machine)



Hoseless energy supply (machine)

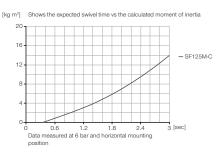
pneumatic /

FLAT SWIVEL UNITS INSTALLATION SIZE SF125M-C

PRODUCT SPECIFICATIONS



Moment of inertia



► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint

DRV1-4X8



Attachment Kit

ANS0071



Commissioning USB

052650

► RECOMMENDED ACCESSORIES



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector customizable Straight -Connector M8

S8-G-3



Pressure Safety Valve

DSV1-8

► RECOMMENDED ACCESSORY ATTACHMENT KIT



Inductive proximity switch - Cable 5 m

NJ8-E2

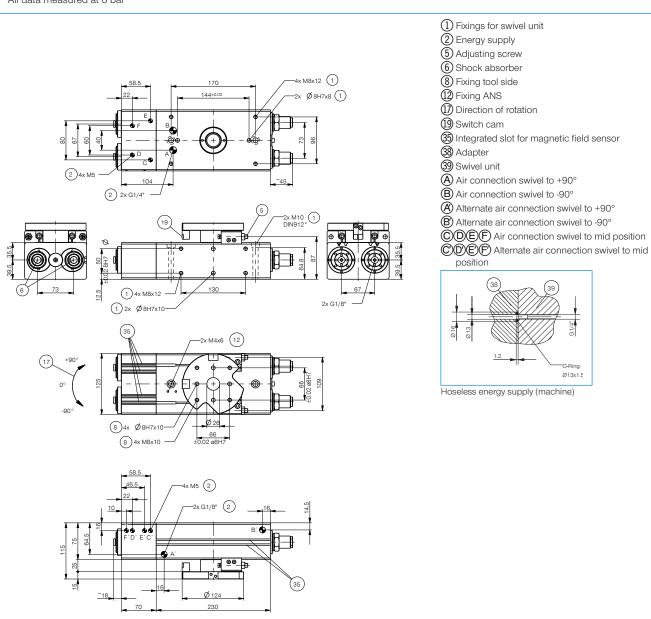


Inductive proximity switch

Cable 5 m NJ12-E2

	► Technical Data*
Order no.	SF125M-C
Swivel angle [°]	-90 / 0 / +90
Torque [Nm]	38
Swivel angle regulable +/- [°]	3
Repetition accuracy +/- [°]	0.01
Passage bore Ø [mm]	26
Axial bearing load [N]	3400
Radial bearing load [Nm]	391
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	540
Weight [kg]	11.9

^{*}All data measured at 6 bar

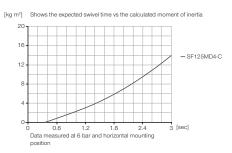


FLAT SWIVEL UNITS INSTALLATION SIZE SF125MD4-C

PRODUCT SPECIFICATIONS



Moment of inertia



► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint

DRV1-4X8



O-Ring

COR0040150



ANS0075



Commissioning USB

052650

► RECOMMENDED ACCESSORIES



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector customizable Straight -Connector M8

S8-G-3



Pressure Safety Valve

DSV1-8

► RECOMMENDED ACCESSORY ATTACHMENT KIT



Inductive proximity switch - Cable 5 m

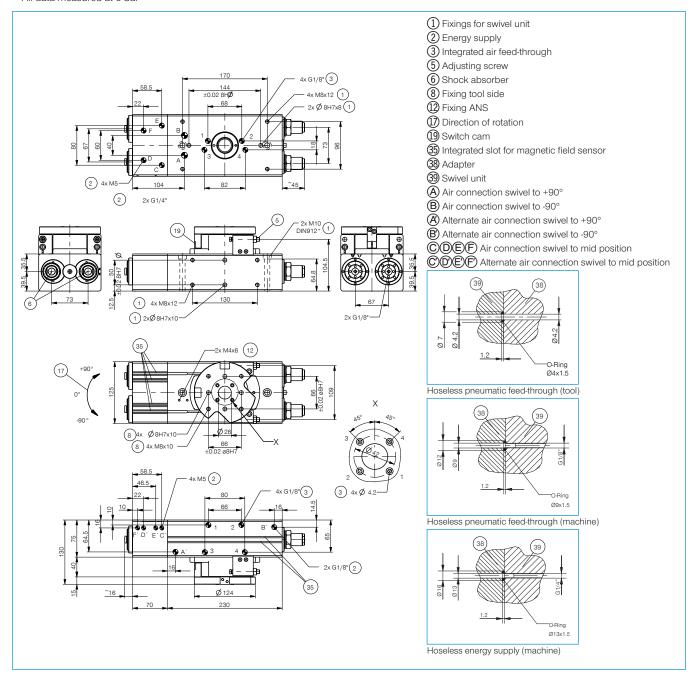
NJ8-E2



Inductive proximity switch Cable 5 m

	► Technical Data*
Order no.	SF125MD4-C
Swivel angle [°]	-90 / 0 / +90
Torque [Nm]	34
Swivel angle regulable +/- [°]	3
Repetition accuracy +/- [°]	0.01
Passage bore Ø [mm]	26
Axial bearing load [N]	3400
Radial bearing load [Nm]	391
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	540
Weight [kg]	12.9

^{*}All data measured at 6 bar

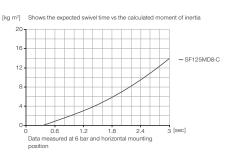


FLAT SWIVEL UNITS INSTALLATION SIZE SF125MD8-C

PRODUCT SPECIFICATIONS



Moment of inertia



► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint

DRV1-4X8



O-Ring

COR0040150



ANS0076



Commissioning USB

052650

► RECOMMENDED ACCESSORIES



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector customizable Straight -Connector M8

S8-G-3



Pressure Safety Valve

DSV1-8

► RECOMMENDED ACCESSORY ATTACHMENT KIT



Inductive proximity switch - Cable 5 m

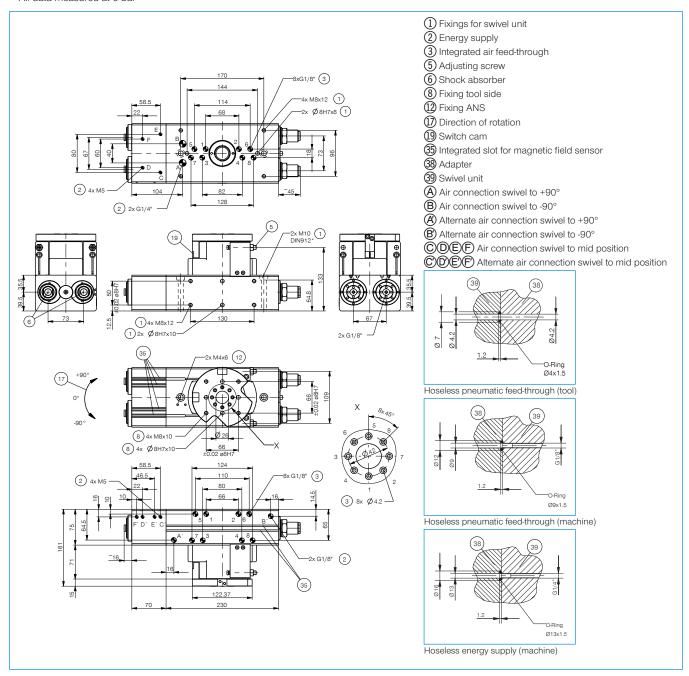
NJ8-E2



Inductive proximity switch Cable 5 m

	► Technical Data*
Order no.	SF125MD8-C
Swivel angle [°]	-90 / 0 / +90
Torque [Nm]	32
Swivel angle regulable +/- [°]	3
Repetition accuracy +/- [°]	0.01
Passage bore Ø [mm]	26
Axial bearing load [N]	3400
Radial bearing load [Nm]	391
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	540
Weight [kg]	12.9

^{*}All data measured at 6 bar

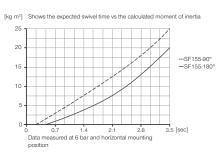


FLAT SWIVEL UNITS INSTALLATION SIZE SF155N-C

PRODUCT SPECIFICATIONS



Moment of inertia



► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint

DRV1-4X8

► RECOMMENDED ACCESSORIES



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector customizable Straight -Connector M8

S8-G-3



Pressure Safety Valve

DSV1-8

► RECOMMENDED ACCESSORY ATTACHMENT KIT



ANS0038



Inductive proximity switch Cable 5 m

NJ8-E2



Inductive proximity switch - Cable 5 m

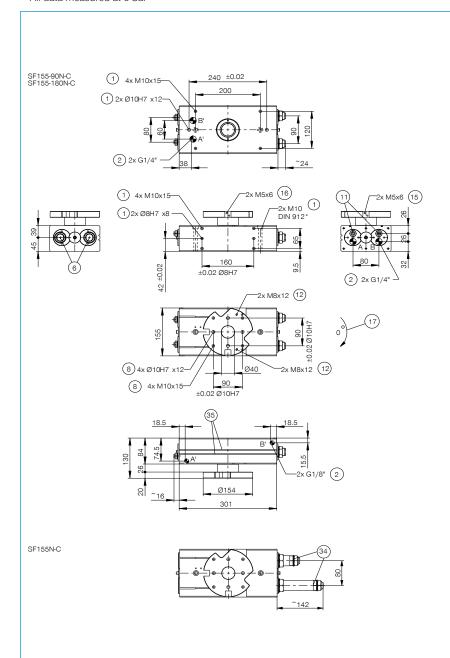
NJ12-E2



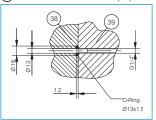
Plug-in connector Angled Cable 5m - Socket M8

	Technical Data*		
Order no.	SF155-90N-C	SF155-180N-C	SF155N-C
Swivel angle [°]	90	180	0-180
Torque [Nm]	62	62	62
Swivel angle regulable +/- [°]	3	3	180
Repetition accuracy +/- [°]	0.01	0.01	0.01
Passage bore Ø [mm]	40	40	40
Axial bearing load [N]	5900	5900	5900
Radial bearing load [Nm]	761	761	761
Operating pressure min. [bar]	3	3	3
Operating pressure max. [bar]	8	8	8
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+80	+80	+80
Air volume per cycle [cm³]	350	700	700
Weight [kg]	15	15	16.5

^{*}All data measured at 6 bar



- 1 Fixings for swivel unit
- Energy supplyShock absorber
- 8 Fixing tool side
- 11 Internal positive stop
- 12 Fixing ANS
- 15 Fix stop and switch cam 90°
- 16 Fix stop and switch cam 180°
- 1 Direction of rotation
- 34 Fix stop with integrated shock absorber
- 35 Integrated slot for magnetic field sensor
- 38 Adapter
- 39 Swivel unit
- Air connection 90°-180°
- B Air connection 0°
- Alternate air connection (90°-180°)
- B Alternate air connection (0°)



Hoseless energy supply (machine)

FLAT SWIVEL UNITS INSTALLATION SIZE SF155D4-C

PRODUCT SPECIFICATIONS



Moment of inertia

[kg m²] Shows the expected swivel time vs the calculated moment of inertia

► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint

DRV1-4X8



O-Ring

COR0040150

► RECOMMENDED ACCESSORIES



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector customizable Straight -Connector M8

S8-G-3



Pressure Safety Valve

DSV1-8

► RECOMMENDED ACCESSORY ATTACHMENT KIT



ANS0039



Inductive proximity switch Cable 5 m

NJ8-E2



Inductive proximity switch - Cable 5 m

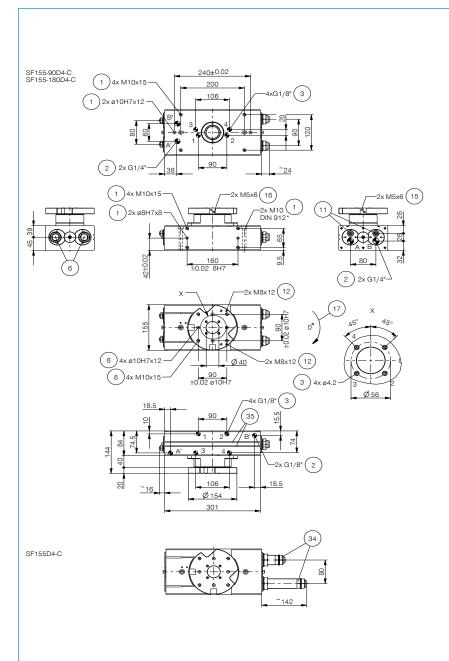
NJ12-E2



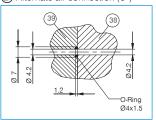
Plug-in connector Angled Cable 5m - Socket M8

	Technical Data*		
Order no.	SF155-90D4-C	SF155-180D4-C	SF155D4-C
Swivel angle [°]	90	180	0-180
Torque [Nm]	58	58	58
Swivel angle regulable +/- [°]	3	3	180
Repetition accuracy +/- [°]	0.01	0.01	0.01
Passage bore Ø [mm]	40	40	40
Axial bearing load [N]	5900	5900	5900
Radial bearing load [Nm]	761	761	761
Operating pressure min. [bar]	3	3	3
Operating pressure max. [bar]	8	8	8
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+80	+80	+80
Air volume per cycle [cm³]	350	700	700
Weight [kg]	16	16	17.5

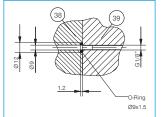
^{*}All data measured at 6 bar



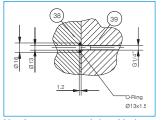
- 1 Fixings for swivel unit
- ② Energy supply③ Integrated air feed-through
- 6 Shock absorber
- 8 Fixing tool side
- 11 Internal positive stop
- 12 Fixing ANS
- 15 Fix stop and switch cam 90°
 - 16 Fix stop and switch cam 180°
- ① Direction of rotation
- 34 Fix stop with integrated shock absorber
- 35 Integrated slot for magnetic field sensor
- 38 Adapter
- 39 Swivel unit
- Air connection 90°-180°
- B Air connection 0°
- Alternate air connection (90°-180°)
- B) Alternate air connection (0°)



Hoseless pneumatic feed-through (tool)



Hoseless pneumatic feed-through (machine)



Hoseless energy supply (machine)

FLAT SWIVEL UNITS INSTALLATION SIZE SF155D8-C

PRODUCT SPECIFICATIONS



Moment of inertia

[kg m²] Shows the expected swivel time vs the calculated moment of inertia

► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint

DRV1-4X8



O-Ring

COR0040150

► RECOMMENDED ACCESSORIES



Straight Cable 5 m

MFS204KHC



Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector customizable Straight -Connector M8

S8-G-3



Pressure Safety Valve

DSV1-8

► RECOMMENDED ACCESSORY ATTACHMENT KIT



ANS0040



Inductive proximity switch Cable 5 m

NJ8-E2



Inductive proximity switch - Cable 5 m

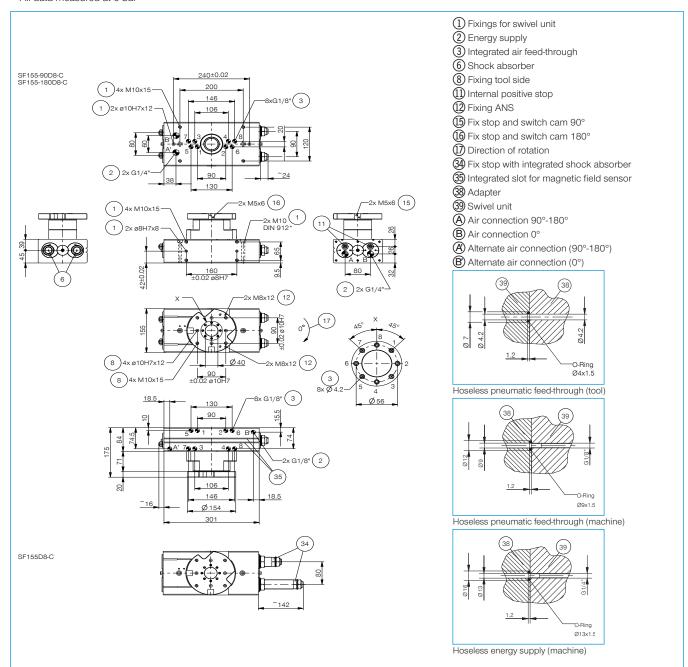
NJ12-E2



Cable 5m - Socket M8

	► Technical Data*		
Order no.	SF155-90D8-C	SF155-180D8-C	SF155D8-C
Swivel angle [°]	90	180	0-180
Torque [Nm]	54	54	54
Swivel angle regulable +/- [°]	3	3	180
Repetition accuracy +/- [°]	0.01	0.01	0.01
Passage bore Ø [mm]	40	40	40
Axial bearing load [N]	5900	5900	5900
Radial bearing load [Nm]	761	761	761
Operating pressure min. [bar]	3	3	3
Operating pressure max. [bar]	8	8	8
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+80	+80	+80
Air volume per cycle [cm³]	350	700	700
Weight [kg]	17.5	17.5	19

^{*}All data measured at 6 bar

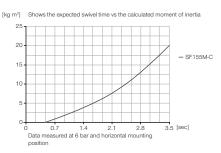


FLAT SWIVEL UNITS INSTALLATION SIZE SF155M-C

PRODUCT SPECIFICATIONS



Moment of inertia



► INCLUDED IN DELIVERY



DRV1-4X8

Flow Control Valves - with Swivel joint



Attachment Kit

ANS0077



Commissioning USB

052650

► RECOMMENDED ACCESSORIES



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector customizable Straight -Connector M8

S8-G-3



Pressure Safety Valve

DSV1-8

► RECOMMENDED ACCESSORY ATTACHMENT KIT



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch Cable 5 m

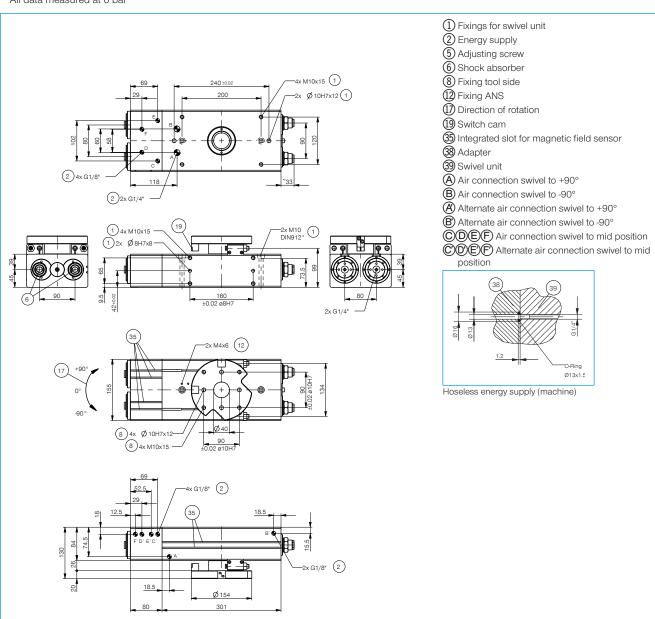
NJ12-E2



Plug-in connector Angled Cable 5m - Socket M8

	► Technical Data*
Order no.	SF155M-C
Swivel angle [°]	-90 / 0 / +90
Torque [Nm]	62
Swivel angle regulable +/- [°]	3
Repetition accuracy +/- [°]	0.01
Passage bore Ø [mm]	40
Axial bearing load [N]	5900
Radial bearing load [Nm]	761
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	1010
Weight [kg]	19.3

^{*}All data measured at 6 bar



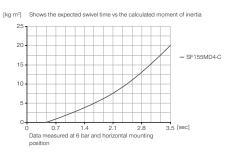
pneumatic /

FLAT SWIVEL UNITS INSTALLATION SIZE SF155MD4-C

PRODUCT SPECIFICATIONS



Moment of inertia



► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint

DRV1-4X8



O-Ring

COR0040150



ANS0078



Commissioning USB

052650

► RECOMMENDED ACCESSORIES



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector customizable Straight -Connector M8

S8-G-3



Pressure Safety Valve

DSV1-8

► RECOMMENDED ACCESSORY ATTACHMENT KIT



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch Cable 5 m

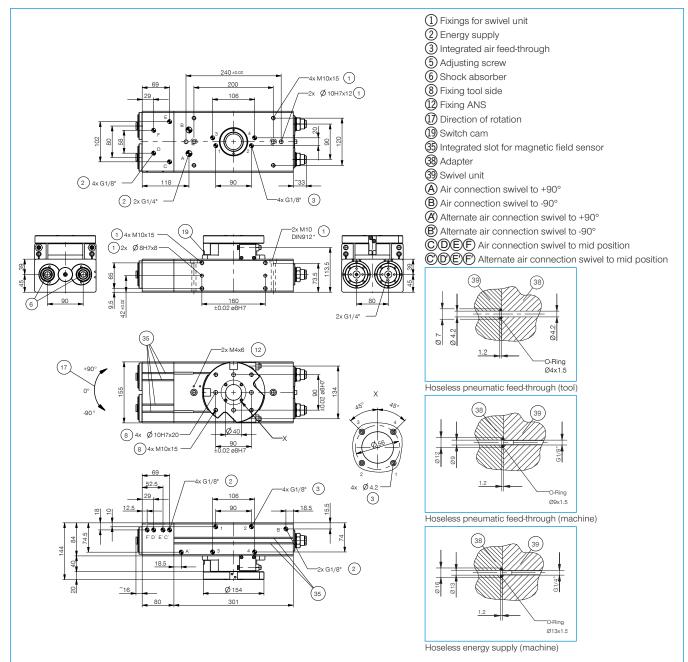
NJ12-E2



Plug-in connector Angled Cable 5m - Socket M8

	► Technical Data*
Order no.	SF155MD4-C
Swivel angle [°]	-90 / 0 / +90
Torque [Nm]	58
Swivel angle regulable +/- [°]	3
Repetition accuracy +/- [°]	0.01
Passage bore Ø [mm]	40
Axial bearing load [N]	5900
Radial bearing load [Nm]	761
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	1010
Weight [kg]	20.3

^{*}All data measured at 6 bar

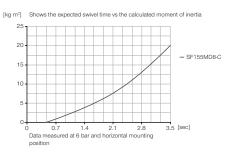


FLAT SWIVEL UNITS INSTALLATION SIZE SF155MD8-C

PRODUCT SPECIFICATIONS



Moment of inertia



► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint

DRV1-4X8



COR0040150



ANS0079



Commissioning USB

052650

► RECOMMENDED ACCESSORIES



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector customizable Straight -Connector M8

S8-G-3



Pressure Safety Valve

DSV1-8

► RECOMMENDED ACCESSORY ATTACHMENT KIT



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch Cable 5 m

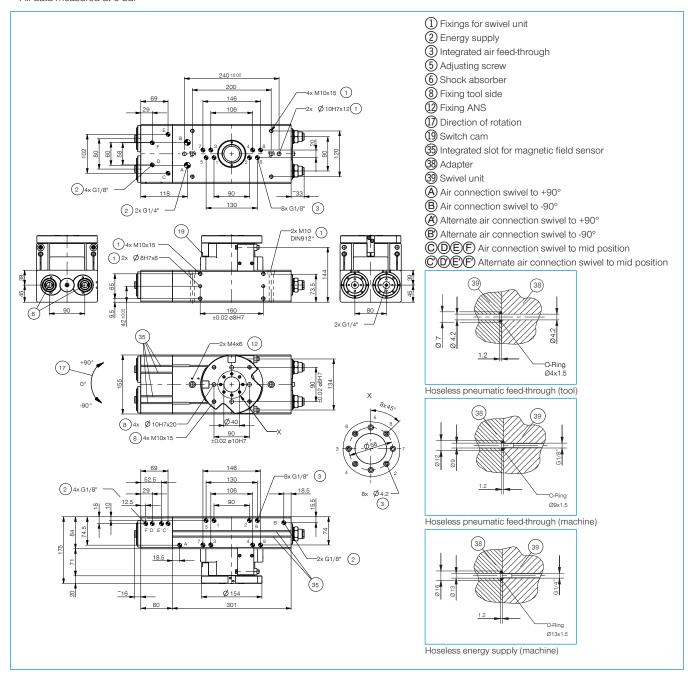
NJ12-E2



Plug-in connector Angled Cable 5m - Socket M8

	► Technical Data*
Order no.	SF155MD8-C
Swivel angle [°]	-90 / 0 / +90
Torque [Nm]	54
Swivel angle regulable +/- [°]	3
Repetition accuracy +/- [°]	0.01
Passage bore Ø [mm]	40
Axial bearing load [N]	5900
Radial bearing load [Nm]	761
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	1010
Weight [kg]	21.8

^{*}All data measured at 6 bar

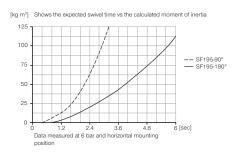


FLAT SWIVEL UNITS INSTALLATION SIZE SF195N-C

PRODUCT SPECIFICATIONS



Moment of inertia



► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint

DRV1-4X8

► RECOMMENDED ACCESSORIES



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector customizable Straight -Connector M8

S8-G-3



Pressure Safety Valve

DSV1-8

► RECOMMENDED ACCESSORY ATTACHMENT KIT



ANS0041



Inductive proximity switch Cable 5 m

NJ8-E2



Inductive proximity switch - Cable 5 m

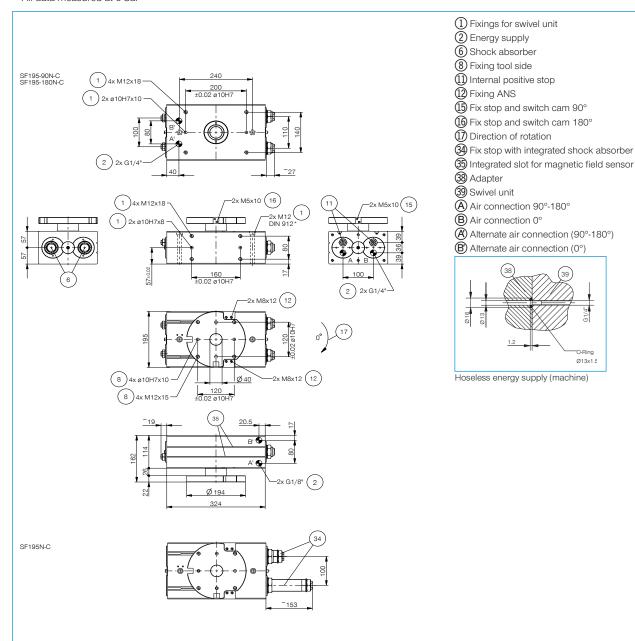
NJ12-E2



Plug-in connector Angled Cable 5m - Socket M8 (female)

	► Technical Data*		
Order no.	SF195-90N-C	SF195-180N-C	SF195N-C
Swivel angle [°]	90	180	0-180
Torque [Nm]	130	130	130
Swivel angle regulable +/- [°]	3	3	180
Repetition accuracy +/- [°]	0.01	0.01	0.01
Passage bore Ø [mm]	40	40	40
Axial bearing load [N]	7000	7000	7000
Radial bearing load [Nm]	1253	1253	1253
Operating pressure min. [bar]	3	3	3
Operating pressure max. [bar]	8	8	8
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+80	+80	+80
Air volume per cycle [cm³]	740	1480	1480
Weight [kg]	27.5	27.5	29.5

^{*}All data measured at 6 bar



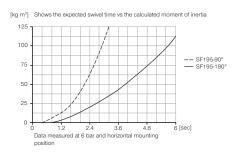
Ø13x1.5

FLAT SWIVEL UNITS INSTALLATION SIZE SF195D4-C

PRODUCT SPECIFICATIONS



Moment of inertia



► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint

DRV1-4X8



O-Ring

COR0050100

► RECOMMENDED ACCESSORIES



Straight Cable 5 m

MFS204KHC



Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector customizable Straight -Connector M8

S8-G-3



Pressure Safety Valve

DSV1-8

► RECOMMENDED ACCESSORY ATTACHMENT KIT



ANS0042



Inductive proximity switch Cable 5 m

NJ8-E2



Inductive proximity switch - Cable 5 m

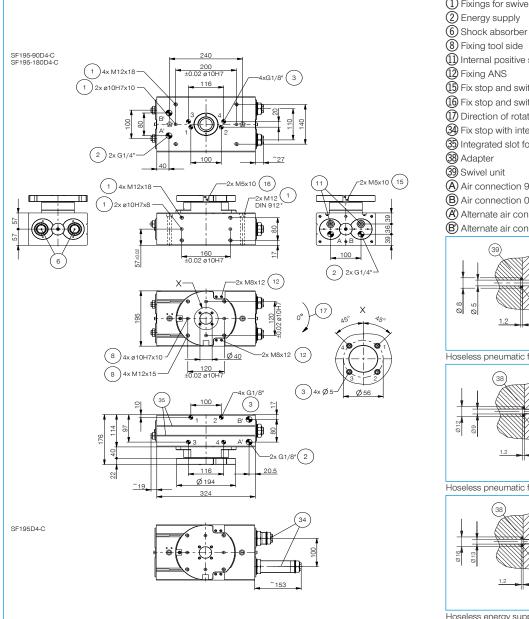
NJ12-E2



Plug-in connector Angled Cable 5m - Socket M8

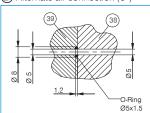
	► Technical Data*		
Order no.	SF195-90D4-C	SF195-180D4-C	SF195D4-C
Swivel angle [°]	90	180	0-180
Torque [Nm]	125	125	125
Swivel angle regulable +/- [°]	3	3	180
Repetition accuracy +/- [°]	0.01	0.01	0.01
Passage bore Ø [mm]	40	40	40
Axial bearing load [N]	7000	7000	7000
Radial bearing load [Nm]	1253	1253	1253
Operating pressure min. [bar]	3	3	3
Operating pressure max. [bar]	8	8	8
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+80	+80	+80
Air volume per cycle [cm³]	740	1480	1480
Weight [kg]	29	29	31

^{*}All data measured at 6 bar

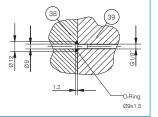


- 1 Fixings for swivel unit

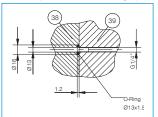
- (1) Internal positive stop
- 15 Fix stop and switch cam 90°
- 16 Fix stop and switch cam 180°
- ① Direction of rotation
- 34 Fix stop with integrated shock absorber
- 35 Integrated slot for magnetic field sensor
- Air connection 90°-180°
- B Air connection 0°
- Alternate air connection (90°-180°)
- B Alternate air connection (0°)



Hoseless pneumatic feed-through (tool)



Hoseless pneumatic feed-through (machine)



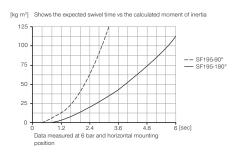
Hoseless energy supply (machine)

FLAT SWIVEL UNITS INSTALLATION SIZE SF195D8-C

PRODUCT SPECIFICATIONS



Moment of inertia



► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint DRV1-4X8



O-Ring

COR0050100

► RECOMMENDED ACCESSORIES



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector customizable Straight -Connector M8

S8-G-3



Pressure Safety Valve

DSV1-8

► RECOMMENDED ACCESSORY ATTACHMENT KIT



ANS0043



Inductive proximity switch Cable 5 m

NJ8-E2



Inductive proximity switch - Cable 5 m

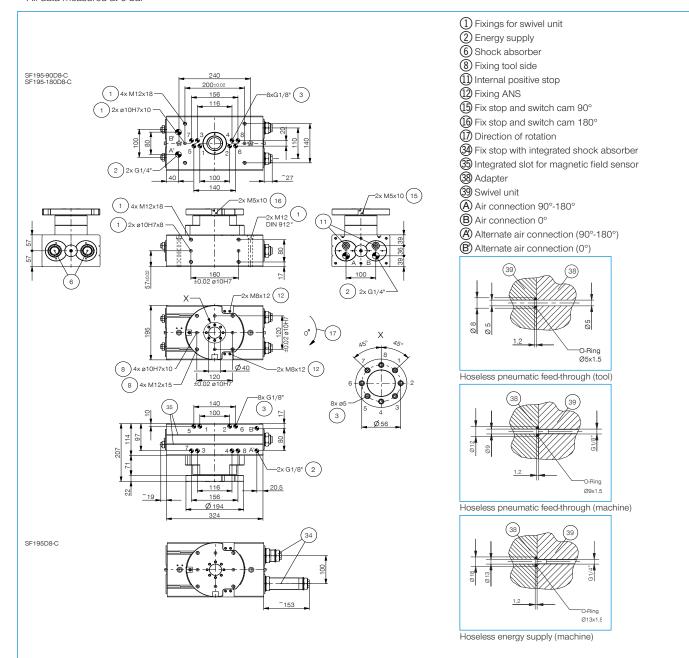
NJ12-E2



Plug-in connector Angled Cable 5m - Socket M8

	► Technical Data*		
Order no.	SF195-90D8-C	SF195-180D8-C	SF195D8-C
Swivel angle [°]	90	180	0-180
Torque [Nm]	120	120	120
Swivel angle regulable +/- [°]	3	3	180
Repetition accuracy +/- [°]	0.01	0.01	0.01
Passage bore Ø [mm]	40	40	40
Axial bearing load [N]	7000	7000	7000
Radial bearing load [Nm]	1253	1253	1253
Operating pressure min. [bar]	3	3	3
Operating pressure max. [bar]	8	8	8
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+80	+80	+80
Air volume per cycle [cm³]	740	1480	1480
Weight [kg]	31.5	31.5	33.5

^{*}All data measured at 6 bar

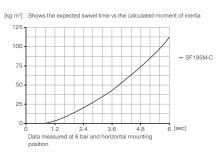


FLAT SWIVEL UNITS INSTALLATION SIZE SF195M-C

PRODUCT SPECIFICATIONS



Moment of inertia



► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint

DRV1-4X8



Attachment Kit

ANS0080



Commissioning USB

052650

► RECOMMENDED ACCESSORIES



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector customizable Straight -Connector M8

S8-G-3



Pressure Safety Valve

DSV1-8

► RECOMMENDED ACCESSORY ATTACHMENT KIT



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch Cable 5 m

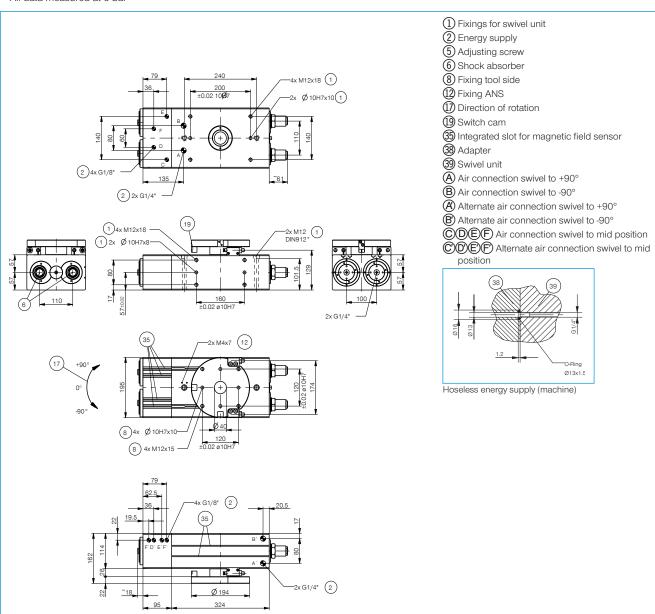
NJ12-E2



Plug-in connector Angled Cable 5m - Socket M8

	► Technical Data*
Order no.	SF195M-C
Swivel angle [°]	-90 / 0 / +90
Torque [Nm]	130
Swivel angle regulable +/- [°]	3
Repetition accuracy +/- [°]	0.01
Passage bore Ø [mm]	40
Axial bearing load [N]	7000
Radial bearing load [Nm]	1253
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	2035
Weight [kg]	37.1

^{*}All data measured at 6 bar

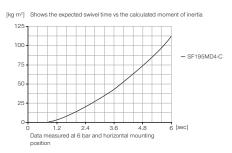


FLAT SWIVEL UNITS INSTALLATION SIZE SF195MD4-C

PRODUCT SPECIFICATIONS



Moment of inertia



► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint

DRV1-4X8



O-Ring

COR0050100



Attachment Kit

ANS0081



Commissioning USB

052650

► RECOMMENDED ACCESSORIES



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector customizable Straight -Connector M8

S8-G-3



Pressure Safety Valve

DSV1-8

► RECOMMENDED ACCESSORY ATTACHMENT KIT



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch Cable 5 m

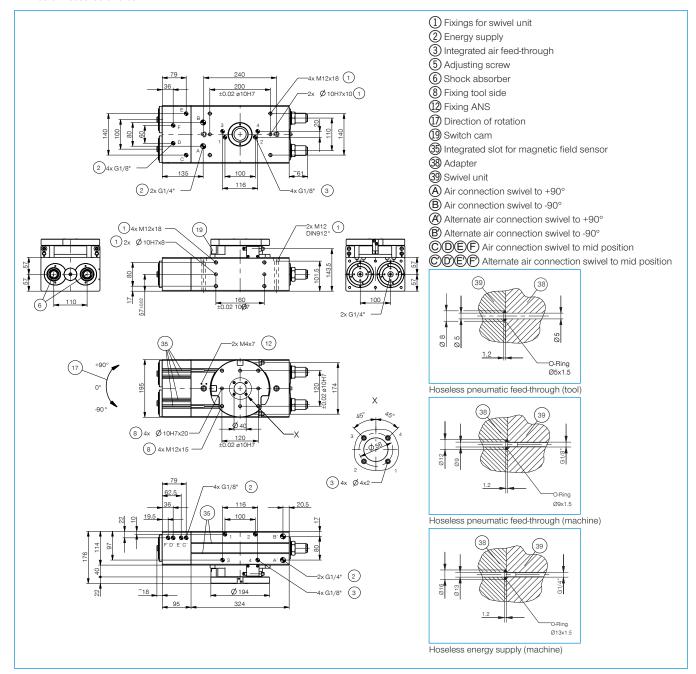
NJ12-E2



Plug-in connector Angled Cable 5m - Socket M8

	► Technical Data*
Order no.	SF195MD4-C
Swivel angle [°]	-90 / 0 / +90
Torque [Nm]	125
Swivel angle regulable +/- [°]	3
Repetition accuracy +/- [°]	0.01
Passage bore Ø [mm]	40
Axial bearing load [N]	7000
Radial bearing load [Nm]	1253
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm3]	2035
Weight [kg]	41.1

^{*}All data measured at 6 bar

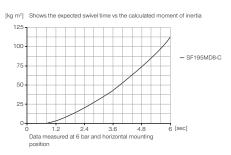


FLAT SWIVEL UNITS INSTALLATION SIZE SF195MD8-C

PRODUCT SPECIFICATIONS



Moment of inertia



► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint

DRV1-4X8



O-Ring

COR0050100



Attachment Kit

ANS0082



Commissioning USB

052650

► RECOMMENDED ACCESSORIES



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector customizable Straight -Connector M8

S8-G-3



Pressure Safety Valve

DSV1-8

► RECOMMENDED ACCESSORY ATTACHMENT KIT



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch Cable 5 m

NJ12-E2

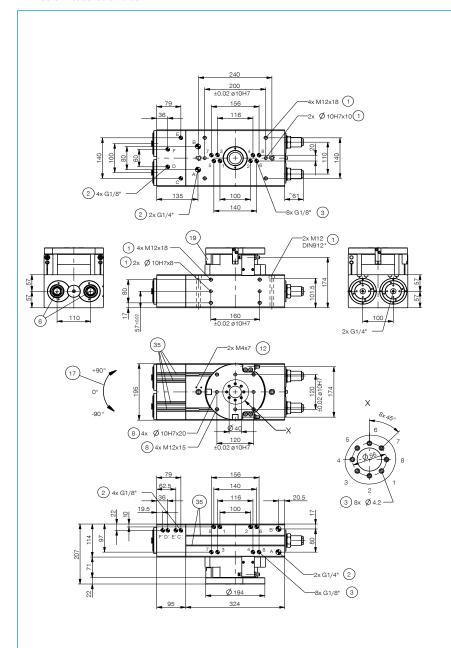


Plug-in connector Angled Cable 5m - Socket M8

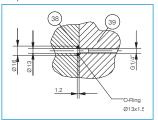
KAW500

	► Technical Data*
Order no.	SF195MD8-C
Swivel angle [°]	-90 / 0 / +90
Torque [Nm]	120
Swivel angle regulable +/- [°]	3
Repetition accuracy +/- [°]	0.01
Passage bore Ø [mm]	40
Axial bearing load [N]	7000
Radial bearing load [Nm]	1253
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	2035
Weight [kg]	41.1

^{*}All data measured at 6 bar



- 1 Fixings for swivel unit
- 2 Energy supply
 3 Integrated air feed-through
- Adjusting screw
- 6 Shock absorber
- 8 Fixing tool side
- 12 Fixing ANS
- ① Direction of rotation
- 19 Switch cam
- 35 Integrated slot for magnetic field sensor
- 38 Adapter
- 39 Swivel unit
- Air connection swivel to +90°
- B Air connection swivel to -90°
- Alternate air connection swivel to +90°
- B Alternate air connection swivel to -90°
- CDEF Air connection swivel to mid position
- CDEF Alternate air connection swivel to mid position



Hoseless energy supply (machine)

FLAT SWIVEL UNITS OVERVIEW OF SERIES



► ELECTRICAL



Series DES

656

FLAT SWIVEL UNITS SERIES DES

PRODUCT ADVANTAGES



"The unique"

Decide for yourself!

With the standard motor or motors from another manufacturer - You decide what harmonises the best with your system

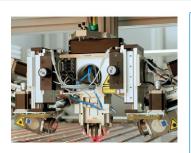
Integrated media transmission

The D1 media exchanger makes cable breaks and undefined interference contours through the power supply line a thing of the past

Freely positionable

No matter whether your task involves rotating, lifting or cycling: The unit is universally usable and can be uniquely adjusted to your application

> THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com

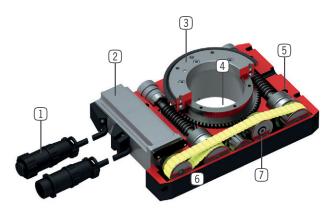
HOW TO ORDER CORRECTLY

The product order numbers are arranged according to this diagram:

Order no.	DES140			
Feed-through, 12x electrical, 1x pneumatic		D1		
Unpowered; installation provided by customer			-99	



BENEFITS IN DETAIL



1 Energy supply

- motor cable, female
- encoder cable, male

2 Drive

- AC servo motor

(3) Intake flange

- for connection to application-specific adapter plate (to be produced by the customer)
- simple tool connection

4 Central bore

- for cable feed-through

5 Mounting and positioning

- mounting possible from several sides for versatile positioning

6 Robust, lightweight housing

- Hard-coated aluminum alloy

7 Force transfer

- tooth belt/gear rack/worm gear

> SERIES CHARACTERISTICS



Number of installation sizes	2
Swivel angle	∞
Torque	12 Nm - 64 Nm
Weight	4 kg - 15,9 kg
AP class	3
Weight	4 kg - 15,9 kg



electrical feed-through



Self locking mechanism



IP54



fluid feed-through









Integrated sensing



Adjustable swivel angle

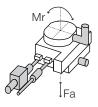
FLAT SWIVEL UNITS INSTALLATION SIZE DES140

> PRODUCT SPECIFICATIONS



Forces and moments

Indicates the static load on the bearing.



Fa [N]	7000
Mr [Nm]	400

INCLUDED IN DELIVERY



Commissioning USB

052650

► RECOMMENDED ACCESSORIES





ZUBHCSS



Drive controller Profibus

ZUBHCS



Drive control unit SER-COS III, PROFINET IO, EtherNet/IP, EtherCAT ZUBHCSME



Programming cable



Power cable 5 m

ZUBHCSKAP01

ZUBHCSKAL05



Power cable 10 m

ZUBHCSKAL10



Power cable 25 m

ZUBHCSKAL25



Encoder cable 5 m

ZUBHCSKAG05



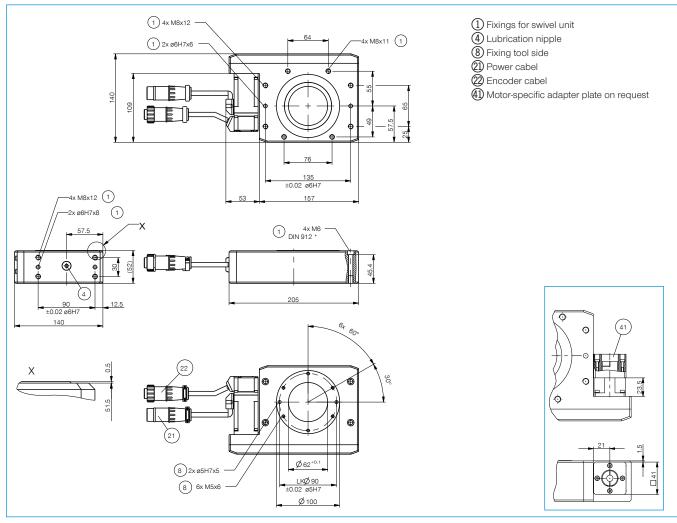
ZUBHCSKAG10



ZUBHCSKAG25

	► Technical Data	
Order no.	DES140	DES140-99
Drive *	AC servo motor	Specific to the customer*
Rotation angle [°]	unlimited	
Nominal torque [Nm]	9	
Torque max. [Nm]	12	
Nominal speed [rpm]	30	
Max. speed [rpm]	50	
Swivel time 360° with 30 rpm [s]**	2.5	
Swivel time 360° with 50 rpm [s]**	1.8	
Moment of inertia max. [kg m²]	1	
Jaw speed in positioning mode [rad/s²]	50	
Positioning delay [rad/s ²]	50	
Electrical energy transfer		
Pneumatic energy transfer [Quantity]		
Self locking mechanism	Helical gear / worm gear	Helical gear / worm gear
Power transfer	Helical gear / worm gear	Helical gear / worm gear
Repetition accuracy +/- [°]	0.1	0.1
Operating temperature [°C]	5 +80	5 +80
Protection to IEC 60529	IP54	
Net input voltage	1x200-240 VAC 50HZ	
Continuous current [A]	0.9	
Peak current [A]	3	
Weight [kg]	4.2	4

- * Select the third-party motor corresponding to the motor performance figures in the DES series Accessories chapter
- * Swivel time does not depend on the moment of inertia (the maximum moment of inertia must not be exceeded)



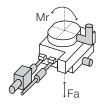
FLAT SWIVEL UNITS INSTALLATION SIZE DES140D1

> PRODUCT SPECIFICATIONS



Forces and moments

Indicates the static load on the bearing.



Fa [N]	7000
Mr [Nm]	400

INCLUDED IN DELIVERY



Commissioning USB

052650

► RECOMMENDED ACCESSORIES



Indra Works Drive Start Up CD

ZUBHCSS



Drive controller Profibus

ZUBHCS



Drive control unit SER-COS III, PROFINET IO, EtherNet/IP, EtherCAT ZUBHCSME



Round plug, straight -M23 socket

RSTVSM23G12B-B



Round plug, angular M23 socket

RSTVSM23W12B-B



Round plug, straight -M23 plug

RSTVSM23G12S-B



Round plug, angular M23 plug

RSTVSM23W12S-B



Programming cable

ZUBHCSKAP01



Power cable 5 m

ZUBHCSKAL05

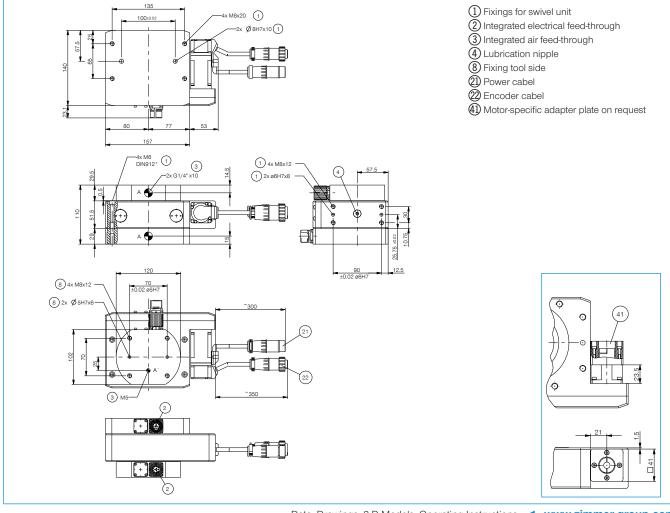


Power cable 10 m

ZUBHCSKAL10

	► Technical Data	
Order no.	DES140D1	DES140D1-99
Drive *	AC servo motor	Specific to the customer*
Rotation angle [°]	unlimited	
Nominal torque [Nm]	7	
Torque max. [Nm]	10	
Nominal speed [rpm]	30	
Max. speed [rpm]	50	
Swivel time 360° with 30 rpm [s]**	2.5	
Swivel time 360° with 50 rpm [s]**	1.8	
Moment of inertia max. [kg m²]	1	
Jaw speed in positioning mode [rad/s²]	50	
Positioning delay [rad/s²]	50	
Electrical energy transfer	12x2A / 12x120V DC	12x2A / 12x120V DC
Pneumatic energy transfer [Quantity]	1	1
Self locking mechanism	Helical gear / worm gear	Helical gear / worm gear
Power transfer	Helical gear / worm gear	Helical gear / worm gear
Repetition accuracy +/- [°]	0.1	0.1
Operating temperature [°C]	5 +80	5 +80
Protection to IEC 60529	IP54	
Net input voltage	1x200-240 VAC 50HZ	
Continuous current [A]	0.9	
Peak current [A]	3	
Weight [kg]	7	6.8

- * Select the third-party motor corresponding to the motor performance figures in the DES series Accessories chapter
- $^{\star}\,\text{Swivel time does not depend on the moment of inertia (the maximum moment of inertia must not be exceeded)}$



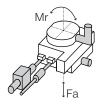
FLAT SWIVEL UNITS INSTALLATION SIZE DES190

> PRODUCT SPECIFICATIONS



Forces and moments

Indicates the static load on the bearing.



Fa [N]	8000
Mr [Nm]	525

INCLUDED IN DELIVERY



Commissioning USB

052650

► RECOMMENDED ACCESSORIES



Indra Works Drive Start Up CD

ZUBHCSS



Drive controller Profibus

ZUBHCS



Drive control unit SER-COS III, PROFINET IO, EtherNet/IP, EtherCAT ZUBHCSME



Programming cable

ZUBHCSKAP01



Power cable 5 m

ZUBHCSKAL05



Power cable 10 m

ZUBHCSKAL10



Power cable 25 m

ZUBHCSKAL25



Encoder cable 5 m

ZUBHCSKAG05



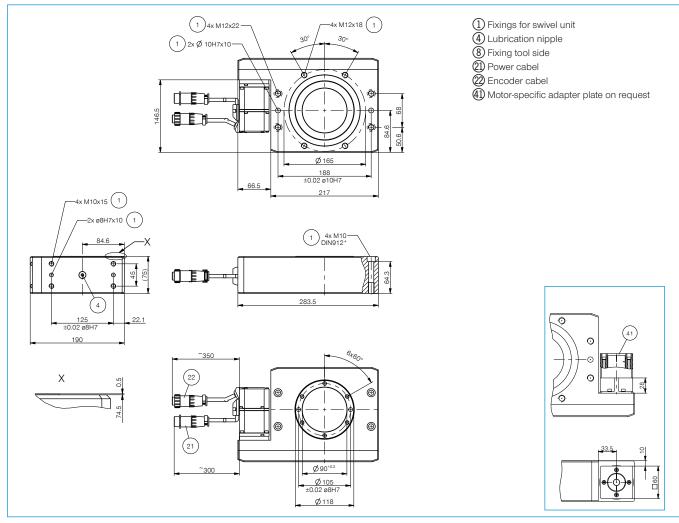
ZUBHCSKAG10



ZUBHCSKAG25

	► Technical Data	
Order no.	DES190	DES190-99
Drive *	AC servo motor	Specific to the customer*
Rotation angle [°]	unlimited	
Nominal torque [Nm]	50	
Torque max. [Nm]	64	
Nominal speed [rpm]	15	
Max. speed [rpm]	25	
Swivel time 360° with 15 rpm [s]**	4.6	
Swivel time 360° with 25 rpm [s]**	3	
Moment of inertia max. [kg m²]	3	
Jaw speed in positioning mode [rad/s²]	50	
Positioning delay [rad/s ²]	50	
Electrical energy transfer		
Pneumatic energy transfer [Quantity]		
Self locking mechanism	Helical gear / worm gear	Helical gear / worm gear
Power transfer	Helical gear / worm gear	Helical gear / worm gear
Repetition accuracy +/- [°]	0.05	0.05
Operating temperature [°C]	5 +80	5 +80
Protection to IEC 60529	IP54	
Net input voltage	1x200-240 VAC 50HZ	
Continuous current [A]	2.3	
Peak current [A]	7.4	
Weight [kg]	11.2	10.8

- *Select the third-party motor corresponding to the motor performance figures in the DES series Accessories chapter
- * Swivel time does not depend on the moment of inertia (the maximum moment of inertia must not be exceeded)



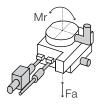
FLAT SWIVEL UNITS INSTALLATION SIZE DES190D1

> PRODUCT SPECIFICATIONS



Forces and moments

Indicates the static load on the bearing.



Fa [N]	8000
Mr [Nm]	525

INCLUDED IN DELIVERY



Commissioning USB

052650

► RECOMMENDED ACCESSORIES



Indra Works Drive Start Up CD

ZUBHCSS



Drive controller Profibus

ZUBHCS



Drive control unit SER-COS III, PROFINET IO, EtherNet/IP, EtherCAT ZUBHCSME



Round plug, straight -M23 socket

RSTVSM23G12B-B



Round plug, angular M23 socket

RSTVSM23W12B-B



Round plug, straight -M23 plug

RSTVSM23G12S-B



Round plug, angular M23 plug

RSTVSM23W12S-B



Programming cable

ZUBHCSKAP01



Power cable 5 m

ZUBHCSKAL05

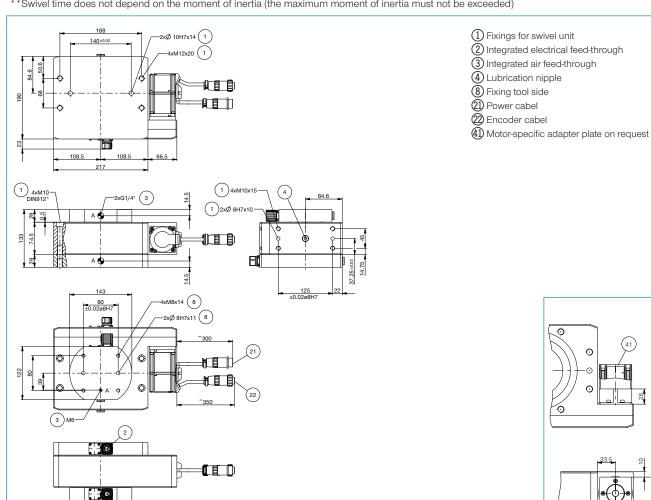


Power cable 10 m

ZUBHCSKAL10

	► Technical Data	
Order no.	DES190D1	DES190D1-99
Drive *	AC servo motor	Specific to the customer*
Rotation angle [°]	unlimited	
Nominal torque [Nm]	48	
Torque max. [Nm]	62	
Nominal speed [rpm]	15	
Max. speed [rpm]	25	
Swivel time 360° with 15 rpm [s]**	4.6	
Swivel time 360° with 25 rpm [s]**	3	
Moment of inertia max. [kg m²]	3	
Jaw speed in positioning mode [rad/s²]	50	
Positioning delay [rad/s ²]	50	
Electrical energy transfer	12x2A / 12x48V DC	12x2A / 12x48V DC
Pneumatic energy transfer [Quantity]	1	1
Self locking mechanism	Helical gear / worm gear	Helical gear / worm gear
Power transfer	Helical gear / worm gear	Helical gear / worm gear
Repetition accuracy +/- [°]	0.05	0.05
Operating temperature [°C]	5 +80	5 +80
Protection to IEC 60529	IP54	
Net input voltage	1x200-240 VAC 50HZ	
Continuous current [A]	2.3	
Peak current [A]	7.4	
Weight [kg]	15.9	15.5

- *Select the third-party motor corresponding to the motor performance figures in the DES series Accessories chapter
- $^{\star\,\star}\text{Swivel time does not depend on the moment of inertia (the maximum moment of inertia must not be exceeded)}$



FLAT SWIVEL UNITS DES SERIES - ACCESSORIES

► RECOMMENDED ACCESSORIES



Indra Works Drive Start Up CD

ZUBHCSS



Drive controller Profibus

ZUBHCS



Drive control unit SERCOS III, PROF-INET IO, EtherNet/IP, EtherCAT

ZUBHCSME



ZUBHCSN



Encoder cable 5 m

ZUBHCSKAG05





ZUBHCSKAG25



Programming cable ZUBHCSKAP01



ZUBHCSKAL05



Power cable 10 m **ZUBHCSKAL10**

ZUBHCSKAG10



Power cable 25 m **ZUBHCSKAL25**

(5)

Straight Fittings - Quick

GV1-8X4



Angled Fittings - Quick Connect Style

WV1-4X8



Round plug, straight - M23

RSTVSM23G12S-B



M23 plug

RSTVSM23W12S-B



Round plug, straight - M23

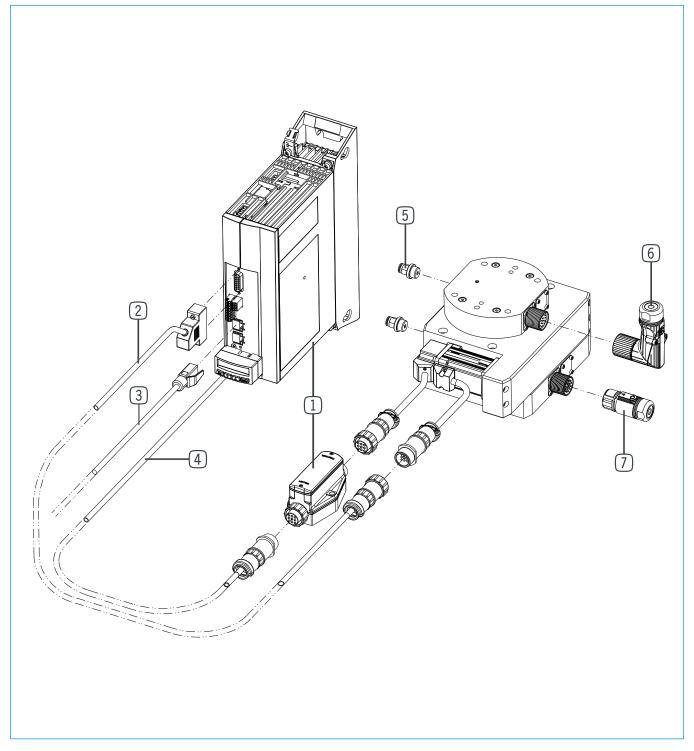
RSTVSM23G12B-B



Round plug, angular M23 socket

RSTVSM23W12B-B

	Technical data for mo	► Technical data for motors		
Order no.	MSM019B	MSM031C		
compatible with	DES140	DES190		
Manufacturer	BOSCH	BOSCH		
Nominal torque [Nm]	0,32	1,3		
Torque max. [Nm]	0.95	3.8		
Nominal speed [rpm]	3000	3000		
Max. speed [rpm]	5000	5000		
Protection to IEC 60529	IP54	IP54		



ANGLE PIVOT UNITS OVERVIEW OF SERIES



PNEUMATIC Series SWM1000 670 680 Series SW

ANGLE PIVOT UNITS SERIES SWM1000

PRODUCT ADVANTAGES



"The slim"

Optimised design

Adjusted to a gantry axle, you can integrate the unit in your machine loading system to save space

► Large locating flange

The large mounting surface simplifies your design and allows secure attachment of follow-on tools

Failure-free continuous operation

Our uncompromising "Made in Germany" quality guarantees up to 10 million maintenance-free gripping cycles

► THE BEST PRODUCT FOR YOUR APPLICATION

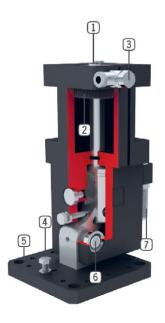


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Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com



BENEFITS IN DETAIL



1 Mounting and positioning

2 Drive

- double-acting pneumatic cylinder

3 Air flow control valve

- for speed regulation
- included in scope of delivery

4 Adjustable end position

- +/- 3° adjustable end position

5 Intake flange

- for connection to application-specific adapter plate (to be supplied by the customer)

6 Force transfer 90° pivoting

- toggle lever principle

7 Patented, hydraulic shock absorber

- adjustable end position damping

> SERIES CHARACTERISTICS



Number of installation sizes	4
Swivel angle	90°
Torque	10 Nm - 64 Nm
Weight	0,65 kg - 3,5 kg
AP class	3



Powerstop end position damping

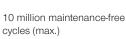


IP30





Positionability - 2 positions



> PRODUCT SPECIFICATIONS



Moment of inertia Shows the torque when lifting vs the swivel angle. [Nm] Torque 12.5 10 SWM1035 7.5 2.5 Swivel angle Data measured at 6 bar

Forces and moments

Indicates the static load on the bearing.



Fa [N]	200
Mr [Nm]	10

► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint

DRVM5X4



Centering Disc

DST60800

► RECOMMENDED ACCESSORIES





ANS0046



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Shock Absorbers

M8X1M



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Plug-in connector Straight Ca-

ble 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector customiz able Straight - Connector M8

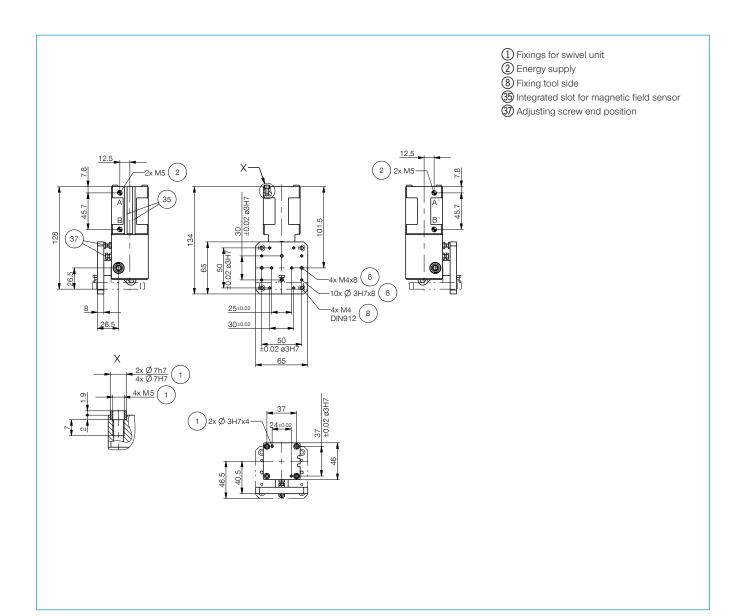
S8-G-3



Pressure Safety Valve

	► Technical Data*
Order no.	SWM1035
Swivel angle [°]	90
Swivel angle regulable +/- [°]	3
Torque 0° [Nm]	10
Torque 45° [Nm]	7
Torque 90° [Nm]	10
Repetition accuracy +/- [°]	0.01
Swivel time without extension load [s]	0.3
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	55
Weight [kg]	0.65

^{*}All data measured at 6 bar



> PRODUCT SPECIFICATIONS



Moment of inertia Shows the torque when lifting vs the swivel angle. [Nm] Torque 20 SWM1045 10 Data measured at 6 bar

Forces and moments

Indicates the static load on the bearing.



Fa [N]	300
Mr [Nm]	20

► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint

DRVM5X4



Centering Disc

DST40800

► RECOMMENDED ACCESSORIES



Attachment Kit

ANS0047



Shock Absorbers

M10X1H



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



ble 5m - Socket M8 (female) KAW500



Plug-in connector customiz able Straight - Connector M8

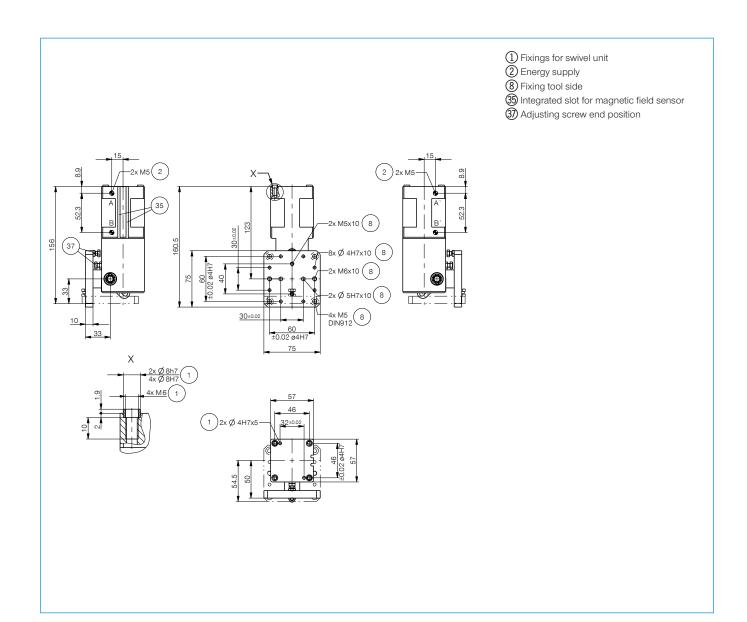
S8-G-3



Pressure Safety Valve

	► Technical Data*
Order no.	SWM1045
Swivel angle [°]	90
Swivel angle regulable +/- [°]	3
Torque 0° [Nm]	21
Torque 45° [Nm]	14
Torque 90° [Nm]	21
Repetition accuracy +/- [°]	0.01
Swivel time without extension load [s]	0.4
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	110
Weight [kg]	1.2

^{*}All data measured at 6 bar



> PRODUCT SPECIFICATIONS



Moment of inertia Shows the torque when lifting vs the swivel angle. [Nm] Torque 40 SWM1054 30 20 Swivel angle Data measured at 6 bar

Forces and moments

Indicates the static load on the bearing.



Fa [N]	400
Mr [Nm]	30

► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint

DRV1-8X6



Centering Disc

DST11500

► RECOMMENDED ACCESSORIES



Attachment Kit





Shock Absorbers

M12X1H



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector customiz able Straight - Connector M8

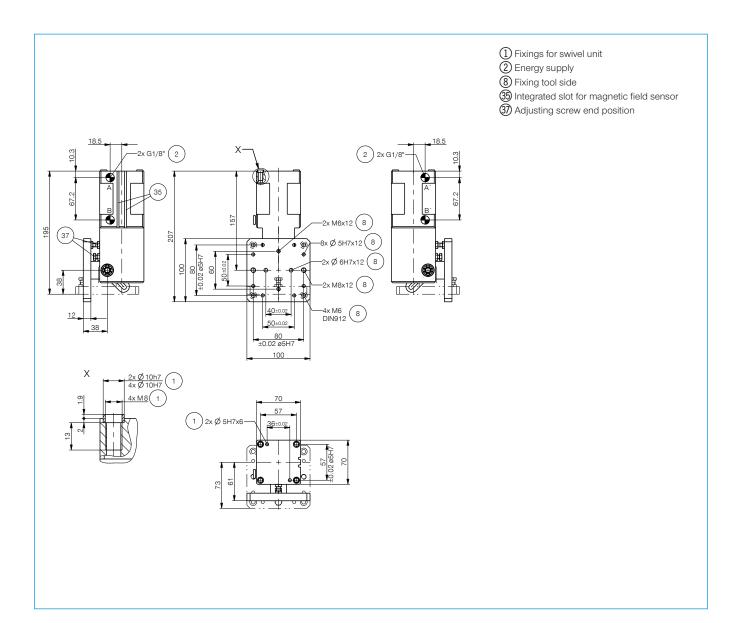
S8-G-3



Pressure Safety Valve

	► Technical Data*
Order no.	SWM1054
Swivel angle [°]	90
Swivel angle regulable +/- [°]	3
Torque 0° [Nm]	40
Torque 45° [Nm]	29
Torque 90° [Nm]	40
Repetition accuracy +/- [°]	0.01
Swivel time without extension load [s]	0.5
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	215
Weight [kg]	2.3

^{*}All data measured at 6 bar



> PRODUCT SPECIFICATIONS



Moment of inertia Shows the torque when lifting vs the swivel angle. [Nm] Torque 60 SWM1063 45 30 Data measured at 6 bar

Forces and moments

Indicates the static load on the bearing.



Fa [N]	500
Mr [Nm]	45

► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint

DRV1-8X6



Centering Disc

DST42000

► RECOMMENDED ACCESSORIES



Attachment Kit

ANS0049



Shock Absorbers

M14X1H



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector customiz able Straight - Connector M8

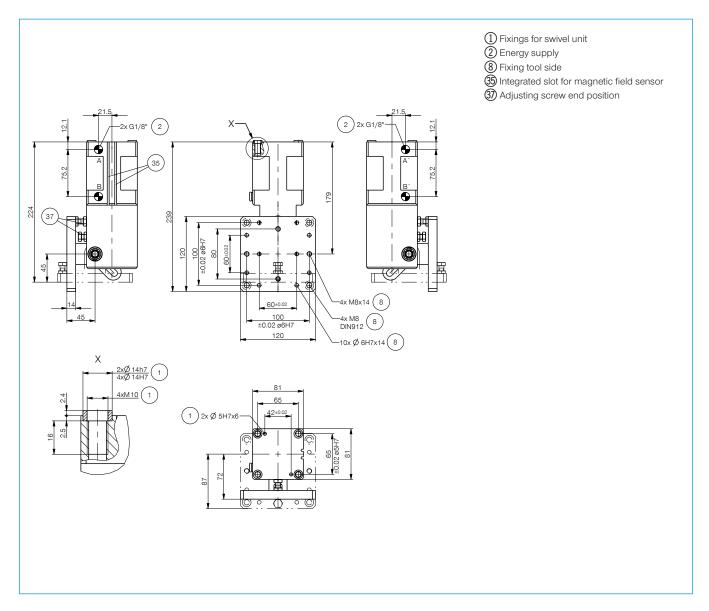
S8-G-3



Pressure Safety Valve

	► Technical Data*
Order no.	SWM1063
Swivel angle [°]	90
Swivel angle regulable +/- [°]	3
Torque 0° [Nm]	64
Torque 45° [Nm]	39
Torque 90° [Nm]	64
Repetition accuracy +/- [°]	0.01
Swivel time without extension load [s]	0.6
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	340
Weight [kg]	3.5

^{*}All data measured at 6 bar



ANGLE PIVOT UNITS SERIES SW

PRODUCT ADVANTAGES



"The superior"

▶ Up to 100% more performance than the benchmark

Superior end position damping lets you swivel more mass in the shortest amount of time, increasing your machine's component output

Includes two angle flanges

Reduce your design and manufacturing efforts with the angle pivot unit aligned on the machine loading system

▶ More than 100% higher radial bearing load than the benchmark

The generously scaled bearings stand for robustness and long service life and provide the highest process reliability for your application

► THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!

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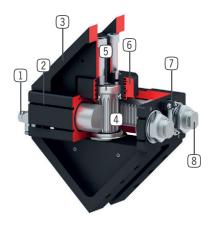
HOW TO ORDER **CORRECTLY**

The product order numbers are arranged according to this diagram:

Order no.	SW50		-C	
two double acting pneumatic cylinders, hoseless pneumatic 4 way rotary distributor		D4		
two double acting pneumatic cylinders, hoseless pneumatic 8 way rotary distributor		D8		



BENEFITS IN DETAIL



- 1 Air flow control valve
 - for speed regulation (included in the delivery)
- 2 Sensing slot
 - mounting and positioning of magnetic field sensors
- 3 Robust, lightweight housing
 - Hard-coated aluminum alloy
- 4 Force transfer
 - rack and pinion
- 5 Two way ball bearing hollow shaft
 - for feedthrough cables and hoses
 - high forces and moments capacity
- 6 Up to 8 way integrated air feed-through
- - for hoseless air transfer
 - hose package does not have to be pivoted
- 7 Mounting block
 - mounting for inductive proximity switch
- 8 Integrated and patented hydraulic shock absorbers
 - adjustable end position damping
 - heating is prevented through installation in pneumatic pressure chamber

> SERIES CHARACTERISTICS



Number of installation sizes	6
Swivel angle	180°
Torque	1,5 Nm - 120 Nm
Weight	1,2 kg - 48,2 kg
AP class	3
AF Class	J





fluid feed-through



Positionability - 2 positions



Inductive sensor



IP64



10 million maintenance-free cycles (max.)

Magnetic field sensor

PRODUCT SPECIFICATIONS



► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint DRVM5X4



O-Ring

COR0050100

► RECOMMENDED ACCESSORIES



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector customizable Straight -Connector M12

S12-G-3



Pressure Safety Valve

DSV1-8

► RECOMMENDED ACCESSORY ATTACHMENT KIT



Attachment Kit

ANS0062



Inductive proximity switch

NJ8-E2

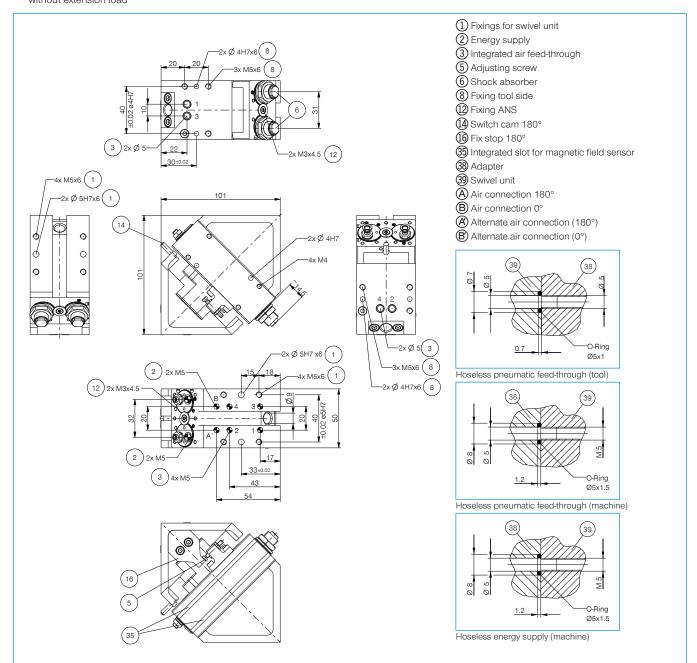


Inductive proximity switch

NJ8-E2S

	► Technical Data*
Order no.	SW50D4-C
Swivel angle [°]	180
Torque [Nm]	1.5
Repetition accuracy +/- [°]	0.01
Swivel time [s] * *	0.3
Passage bore Ø [mm]	9
Axial bearing load [N]	490
Radial bearing load [Nm]	25
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature [°C]	5 +80
Air volume per cycle [cm³]	15
Weight [kg]	1.2

- *All data measured at 6 bar
- * *without extension load



▶ PRODUCT SPECIFICATIONS



► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint DRV1-8X6



O-Ring

COR0050100

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -Connector M8

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector customizable Straight -Connector M12

S12-G-3



Pressure Safety Valve

DSV1-8

► RECOMMENDED ACCESSORY ATTACHMENT KIT



Attachment Kit

ANS0063



Inductive proximity switch - Cable 5 m

NJ8-E2

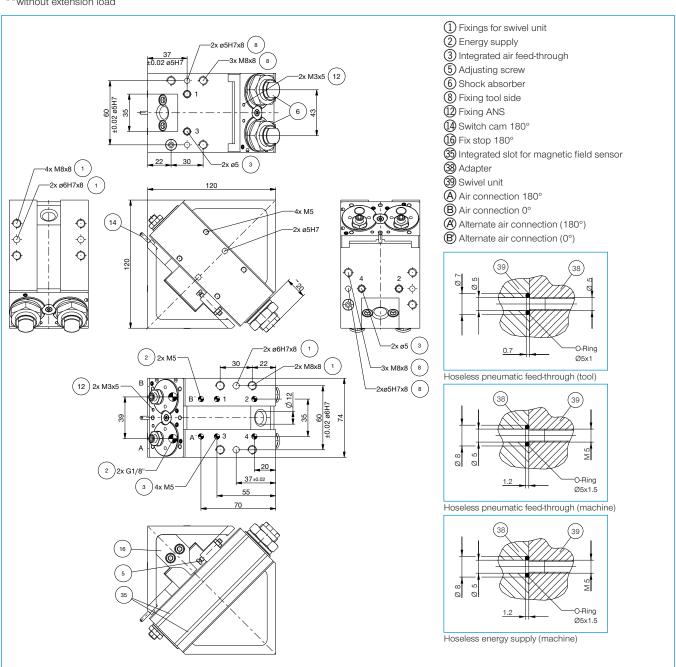


Inductive proximity switch - Connector M8

NJ8-E2S

	► Technical Data*
Order no.	SW74D4-C
Swivel angle [°]	180
Torque [Nm]	5.5
Repetition accuracy +/- [°]	0.01
Swivel time [s] * *	0.3
Passage bore Ø [mm]	12
Axial bearing load [N]	1120
Radial bearing load [Nm]	90
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature [°C]	5 +80
Air volume per cycle [cm³]	42
Weight [kg]	2.6

- *All data measured at 6 bar
- **without extension load



PRODUCT SPECIFICATIONS



► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint DRV1-8X6



O-Ring

COR0050100

► RECOMMENDED ACCESSORIES



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -Connector M8

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector customizable Straight -Connector M12

S12-G-3



Pressure Safety Valve

DSV1-8

► RECOMMENDED ACCESSORY ATTACHMENT KIT



Attachment Kit

ANS0064



Inductive proximity switch - Cable 5 m

NJ8-E2

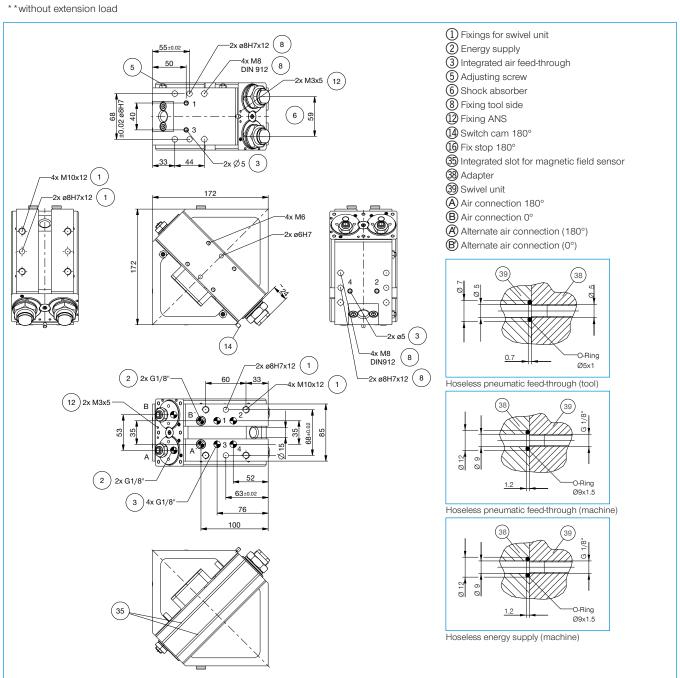


Inductive proximity switch - Connector M8

NJ8-E2S

	► Technical Data*
Order no.	SW100D4-C
Swivel angle [°]	180
Torque [Nm]	15
Repetition accuracy +/- [°]	0.01
Swivel time [s]**	0.5
Passage bore Ø [mm]	15
Axial bearing load [N]	2500
Radial bearing load [Nm]	155
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature [°C]	5 +80
Air volume per cycle [cm³]	108
Weight [kg]	6.3

- *All data measured at 6 bar



ANGLE PIVOT UNITS INSTALLATION SIZE SW125

PRODUCT SPECIFICATIONS



► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint

DRV1-4X8



O-Ring

COR0090150

► RECOMMENDED ACCESSORIES



Inductive proximity switch - Cable 5 m





Inductive proximity switch - Cable 5 m

NJ12-E2



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector customizable Straight - Connector M8

S8-G-3



Plug-in connector customiz-able Straight - Connector M12

S12-G-3



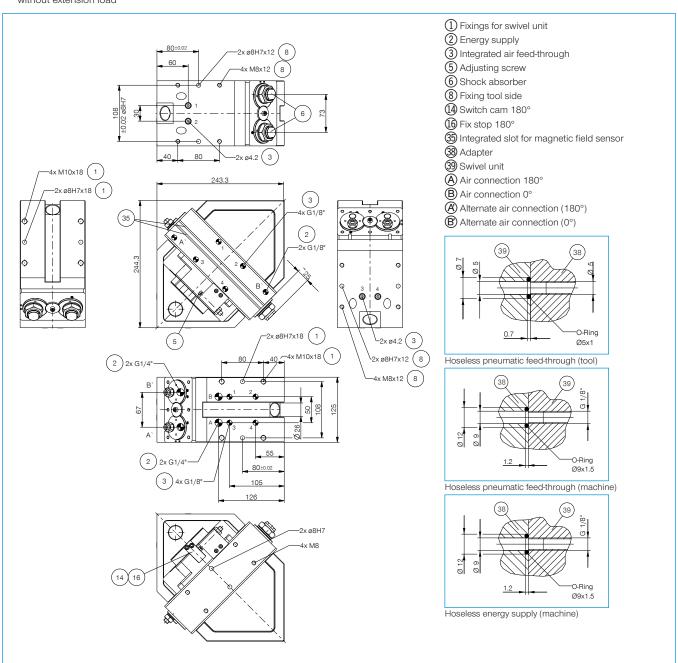
Pressure Safety Valve

DSV1-8

	► Technical Data*
Order no.	SW125D4-C
Swivel angle [°]	180
Torque [Nm]	34
Repetition accuracy +/- [°]	0.01
Swivel time [s] * *	0.6
Passage bore Ø [mm]	26
Axial bearing load [N]	3400
Radial bearing load [Nm]	390
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature [°C]	5 +80
Air volume per cycle [cm³]	440
Weight [kg]	15.3

^{*}All data measured at 6 bar

^{* *}without extension load



ANGLE PIVOT UNITS INSTALLATION SIZE SW155

PRODUCT SPECIFICATIONS



► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint

DRV1-4X8



O-Ring

COR0090150

► RECOMMENDED ACCESSORIES



- Cable 5 m

NJ8-E2



- Cable 5 m

NJ12-E2



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector customizable Straight - Connector M8

S8-G-3



Plug-in connector customiz-able Straight - Connector M12

S12-G-3

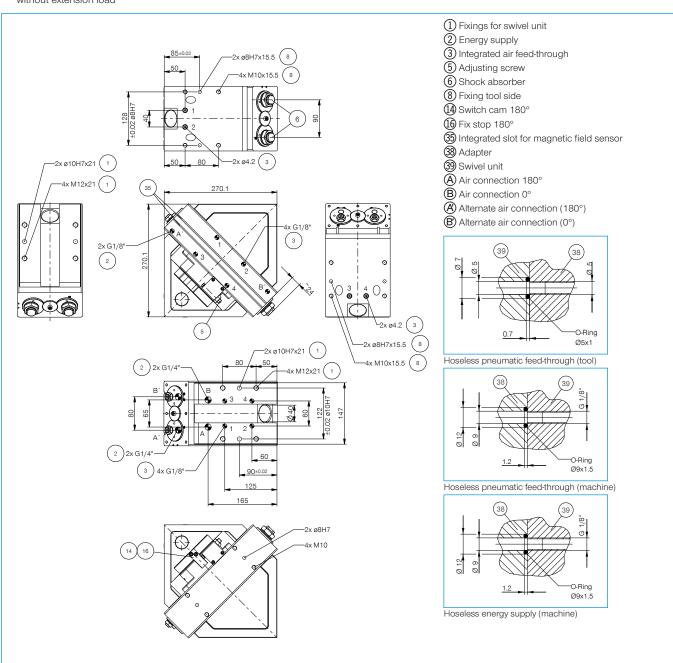


Pressure Safety Valve

	► Technical Data*
Order no.	SW155D4-C
Swivel angle [°]	180
Torque [Nm]	58
Repetition accuracy +/- [°]	0.01
Swivel time [s] * *	0.8
Passage bore Ø [mm]	40
Axial bearing load [N]	5900
Radial bearing load [Nm]	760
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature [°C]	5 +80
Air volume per cycle [cm3]	730
Weight [kg]	25.3

^{*}All data measured at 6 bar

^{* *}without extension load



ANGLE PIVOT UNITS INSTALLATION SIZE SW195

PRODUCT SPECIFICATIONS



► INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint

DRV1-4X8



O-Ring

COR0120150

► RECOMMENDED ACCESSORIES



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Cable 5 m

NJ12-E2



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector customizable Straight - Connector M8

S8-G-3



Plug-in connector customiz-able Straight - Connector M12

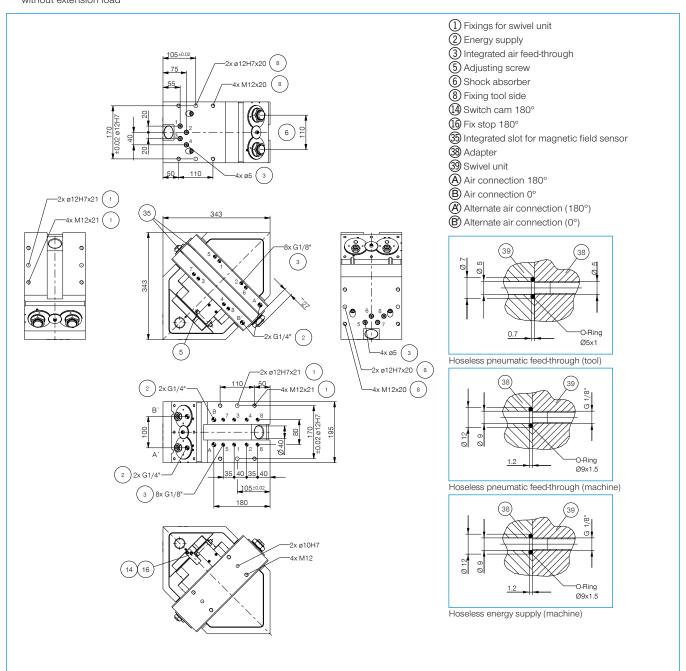
S12-G-3



Pressure Safety Valve

	► Technical Data*
Order no.	SW195D8-C
Swivel angle [°]	180
Torque [Nm]	120
Repetition accuracy +/- [°]	0.01
Swivel time [s] * *	1.1
Passage bore Ø [mm]	40
Axial bearing load [N]	7000
Radial bearing load [Nm]	1250
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature [°C]	5 +80
Air volume per cycle [cm³]	1520
Weight [kg]	48.2

- *All data measured at 6 bar
- * *without extension load



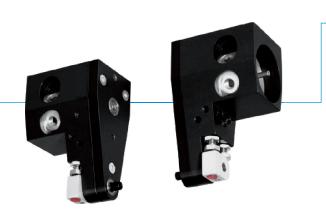
SWIVEL JAWS OVERVIEW OF SERIES



► PNEUMAT	TIC	
9 6	Series SB	696
11	Series SBZ	704

SWIVEL JAWS SERIES SB

▶ PRODUCT ADVANTAGES



"The economical"

Concentration on the essentials

The most cost-effective type of swivelling reduces your production costs

Proven technology

We have more than 20 years of proven reliability, which ensures uninterrupted production for you

► Flexible swivel angle

90° or 180°; you decide which using the provided limit stops. This allows you to be flexible while only needing to maintain one product in your system

► THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com



BENEFITS IN DETAIL



1 Drive shaft

- as hexagonal or round shaft with feather key, depending on design
- quick and cost effective positioning of application-specific workpiece intakes

2 Two way bearing drive shaft

- high forces and moments capacity

3 Stop

- swivel angle of 90 and 180°
- stable, with Fibroflex stop surface

4 Position sensing

- inquiry of end positions 0° and 90° (or180°) via inductive proximity switch
- integrated in housing, therefore no additional interference contour

(5) End position

- +/- 3° adjustable end position

6 Force transfer

- stable toothed belt with steel reinforcement
- quiet, reliable, durable

7 Energy supply

- possible from several sides

8 Drive

- double-acting rotor cylinder

> SERIES CHARACTERISTICS



Number of installation sizes	3
Swivel angle	90° - 180°
Torque	0,1 Nm - 1,6 Nm
Weight (pair)	0,3 kg - 2,2 kg
AP class	2



Elastomer end position damping



Adjustable swivel angle



Inductive sensor



IP54



Positionability - 2 positions

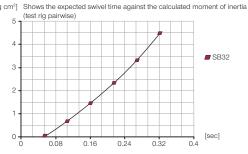


10 million maintenance-free cycles (max.)

> PRODUCT SPECIFICATIONS



Moment of inertia



Forces and moments

Indicates the static load on the bearing.



Fa [N]	180
Mr [Nm]	2.1
FD [N]**	90
FZ [N]**	90

► INCLUDED IN DELIVERY



Stop 90°

GEH03350



Stop 180° GEH03340



Sleeve For Proximity Switch DMS03210



Cylinder Pin

C632504100

RECOMMENDED ACCESSORIES



Basic jaw

SB32-1-B



Basic jaw

SB32-1-B-01



Basic Jaw Rubberized

SB32-2-B



Inductive proximity switch - Cable 5 m

NJ4-E2-01



Inductive Proximity
Switch Cable 0,3 m

NJ4-E2SK-01



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector customiz-able Straight - Connector M8

S8-G-3



Plug-in connector customiz-able Straight - Connector M12

S12-G-3

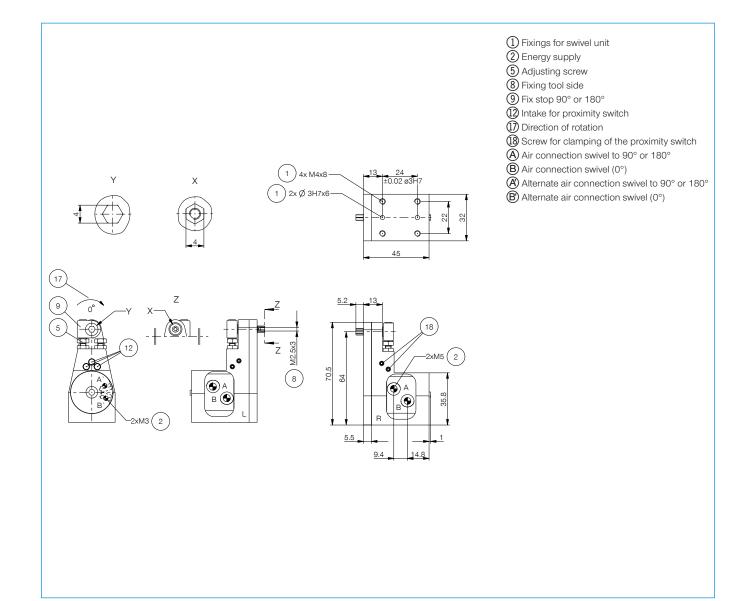


Pressure Safety Valve

DSV1-8

	► Technical Data*
Order no.	SB32-D
Swivel angle [°]	90 / 180
Torque per jaw [Nm]	0.1
Swivel angle regulable +/- [°]	3
Repetition accuracy +/- [°]	0.5
Operating pressure min. [bar]	3
Operating pressure max. [bar]	7
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	2
Weight (pair) [kg]	0.3
FD [N]**	90
FZ [N]* *	90

- *All data measured at 6 bar
- **Observe the gripper force



> PRODUCT SPECIFICATIONS



Moment of inertia

Shows the expected swivel time against the calculated moment of inertia (test rig pairwise) 20 16 **■**SB40

Forces and moments

Indicates the static load on the bearing.



Fa [N]	770
Mr [Nm]	10.8
FD [N]**	385
FZ [N]**	385

► INCLUDED IN DELIVERY



GEH04160



Stop 180° GEH04150



Sleeve For Proximity Switch DMS03210



C632504100

> RECOMMENDED ACCESSORIES



Basic jaw SB40-1



Basic Jaw Rubberized

SB40-2



Inductive proximity switch - Cable 5 m

NJ4-E2-01



Inductive Proximity Switch Cable 0,3 m - Connector



NJ4-E2SK-01

Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Ca-ble 5m - Socket M8 (female) KAW500



Plug-in connector customiz-able Straight - Connector M8 S8-G-3



Plug-in connector customiz-able Straight - Connector M12

S12-G-3

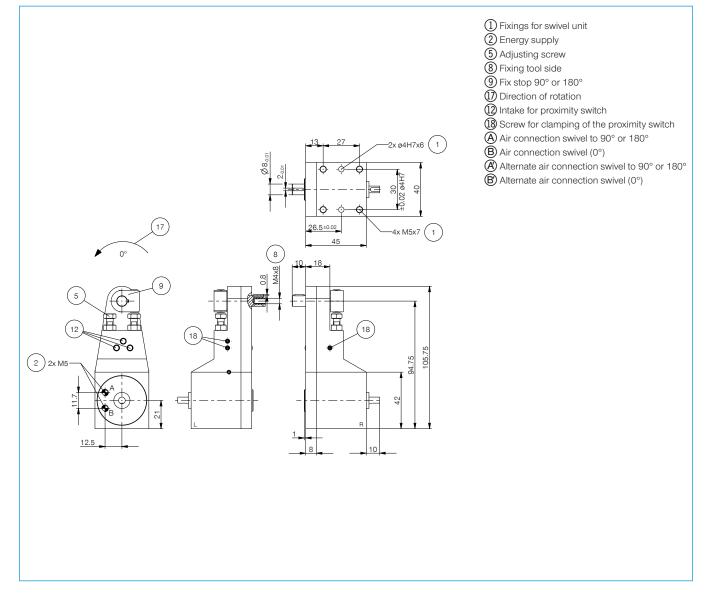


Pressure Safety Valve

DSV1-8

	► Technical Data*
Order no.	SB40-B
Swivel angle [°]	90 / 180
Torque per jaw [Nm]	0.3
Swivel angle regulable +/- [°]	3
Repetition accuracy +/- [°]	0.5
Operating pressure min. [bar]	3
Operating pressure max. [bar]	7
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm3]	4
Weight (pair) [kg]	0.7
FD [N]**	385
FZ [N]**	385

^{*}All data measured at 6 bar



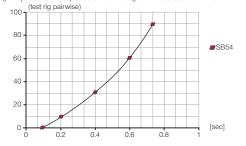
^{* *}Observe the gripper force

> PRODUCT SPECIFICATIONS



Moment of inertia

Shows the expected swivel time against the calculated moment of inertia (test rig pairwise)



Forces and moments

Indicates the static load on the bearing.



Fa [N]	850
Mr [Nm]	15.3
FD [N]**	425
FZ [N]**	425

► INCLUDED IN DELIVERY



Stop 90°

GEH05501



Stop 180°

GEH05491



Sleeve For Proximity Switch DMS03210



Straight pin

KUN05410

> RECOMMENDED ACCESSORIES



Basic jaw

SB54-1



SB54-2

Basic Jaw Rubberized



Inductive proximity switch - Cable 5 m

NJ4-E2-01



Inductive Proximity Switch Cable 0,3 m - Connector



Plug-in connector Straight Cable 5m - Socket M8 (female) KAG500

NJ4-E2SK-01



Plug-in connector Angled Ca-ble 5m - Socket M8 (female)

KAW500



Plug-in connector customiz-able Straight - Connector M8

S8-G-3



Plug-in connector customiz-able Straight - Connector M12

S12-G-3

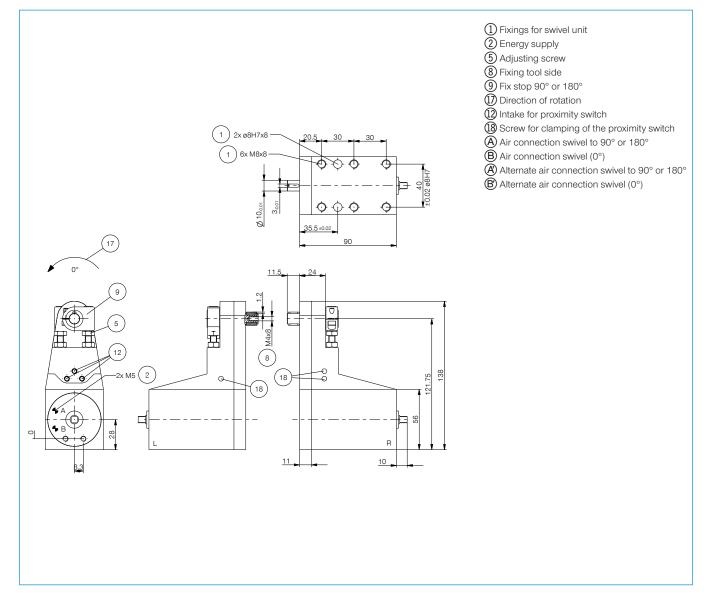


Pressure Safety Valve

DSV1-8

	► Technical Data*
Order no.	SB54-B
Swivel angle [°]	90 / 180
Torque per jaw [Nm]	1.6
Swivel angle regulable +/- [°]	3
Repetition accuracy +/- [°]	0.5
Operating pressure min. [bar]	3
Operating pressure max. [bar]	7
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	16
Weight (pair) [kg]	2.2
FD [N]* *	425
FZ [N]**	425

- *All data measured at 6 bar
- * *Observe the gripper force



SWIVEL JAWS SERIES SBZ

PRODUCT ADVANTAGES



"The superior"

Shock absorber with spiral groove technology

Superior end position damping lets you swivel more mass in the shortest amount of time, increasing your machine's component output

► Force transmission via gear wheel set

The robust gear wheels stand for precision, reliability and long service life and guarantee smooth operation

► Failure-free continuous operation

Our uncompromising "Made in Germany" quality guarantees up to 10 million maintenance-free gripping cycles

► THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com

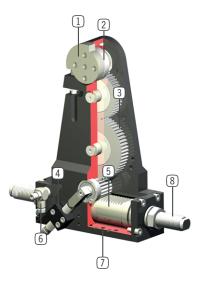
HOW TO ORDER CORRECTLY

The product order numbers are arranged according to this diagram:

Order no.	SB100			-B
counter bearing (no drive)		G		
Rotation angle 90°			-90	
Rotation angle 180°			-180	



BENEFITS IN DETAIL



1 Two way bearing drive shaft

- high forces and moments capacity

2 Drive flange

- large size drive flange with end stop and large central hole (from SB150)

3 Force transfer

- stable gear wheel set
- precise, reliable, durable

4 Position sensing

- inquiry of end positions 0° and 90° (or180°) via inductive proximity switch
- adjustable on rotatable switch cam

5 Drive

- double-acting pneumatic cylinder

6 Air flow control valve

- for speed regulation (included in the delivery)

7 Mounting and positioning

- mounting possible from several sides for versatile positioning

8 Integrated and patented hydraulic shock absorbers

- adjustable end position damping

> SERIES CHARACTERISTICS



Number of installation sizes	5
Swivel angle	90° - 180°
Torque	1,2 Nm - 57 Nm
Weight	0,45 kg - 28 kg
AP class	3
7.11 01000	



Powerstop end position damping



IP54



Inductive sensor



Positionability - 2 positions



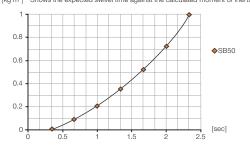
10 million maintenance-free cycles (max.)

> PRODUCT SPECIFICATIONS



Moment of inertia

Shows the expected swivel time against the calculated moment of inertia



Forces and moments

Indicates the static load on the bearing.



1720
15
360
630

► INCLUDED IN DELIVERY



Mounting block

KB8K-02



Flow Control Valves - with

DRVM5X4

> RECOMMENDED ACCESSORIES







NJ8-E2





Inductive proximity switch - Connector M8

NJ8-E2S



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector Angled Cable 5m - Socket M8

KAW500



Plug-in connector customizable Straight -Connector M8

S8-G-3



Plug-in connector customiz-able Straight - Connector M12

S12-G-3



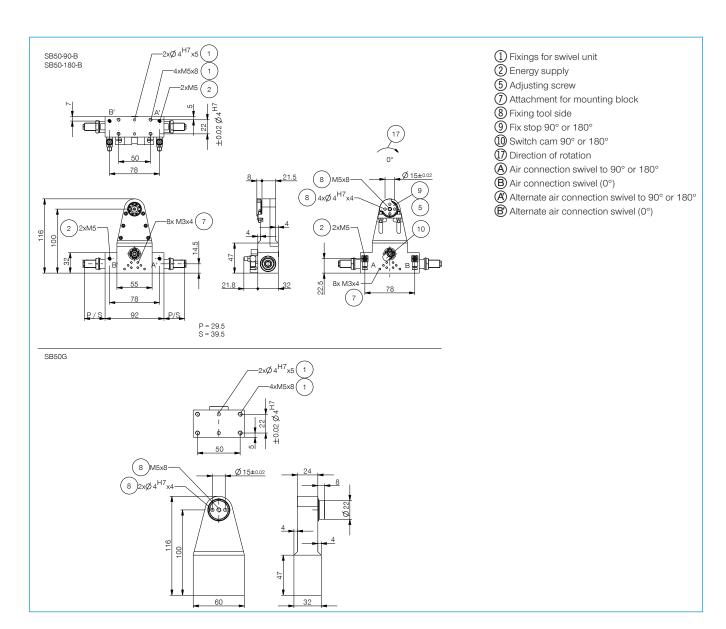
Pressure Safety Valve

DSV1-8

	► Technical Data	ŧ		
Order no.	SB50-90-B	SB50-180-B	SB50G	
Swivel angle [°]	90	180		
Torque per jaw [Nm]	1.2	1.2		
Swivel angle regulable +/- [°]	3	3		
Repetition accuracy +/- [°]	0.01	0.01		
Operating pressure min. [bar]	3	3		
Operating pressure max. [bar]	8	8		
Operating temperature min. [°C]	5	5	5	
Operating temperature max. [°C]	+80	+80	+80	
Air volume per cycle [cm³]	5.5	7.5		
Weight [kg]	0.75	0.75	0.45	
FD [N]**	860	860	860	
FZ [N]**	630	630	630	

^{*}All data measured at 6 bar

^{**}Observe the gripper force

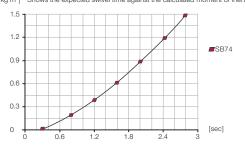


> PRODUCT SPECIFICATIONS



Moment of inertia

Shows the expected swivel time against the calculated moment of inertia



Forces and moments

Indicates the static load on the bearing.



Fa [N]	2400
Mr [Nm]	20
FD [N]**	1200
FZ [N]**	630

► INCLUDED IN DELIVERY



Mounting block

KB8K-02



Flow Control Valves - with

DRVM5X4

> RECOMMENDED ACCESSORIES



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector Angled Cable 5m - Socket M8

KAW500



Plug-in connector customizable Straight -Connector M8

S8-G-3



Plug-in connector customiz-able Straight - Connector M12

S12-G-3

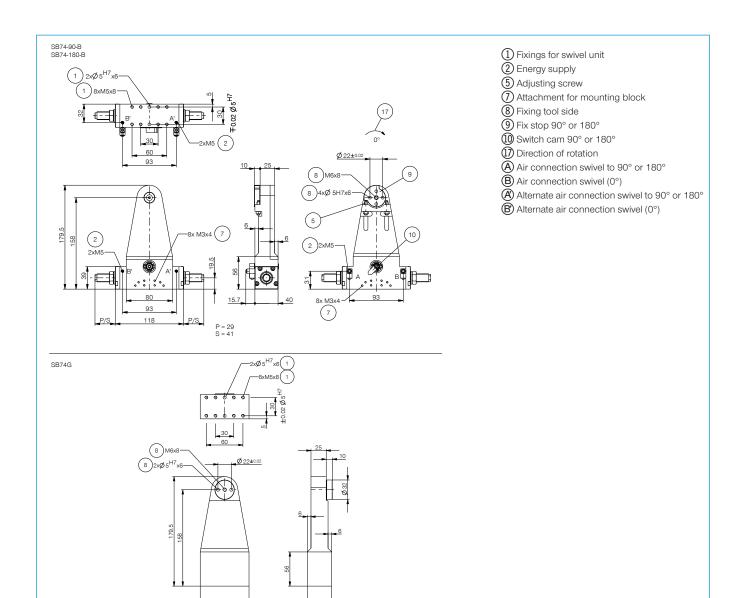


Pressure Safety Valve

	► Technical Data*		
Order no.	SB74-90-B	SB74-180-B	SB74G
Swivel angle [°]	90	180	
Torque per jaw [Nm]	3.5	3.5	
Swivel angle regulable +/- [°]	3	3	
Repetition accuracy +/- [°]	0.01	0.01	
Operating pressure min. [bar]	3	3	
Operating pressure max. [bar]	8	8	
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+80	+80	+80
Air volume per cycle [cm³]	16	21	
Weight [kg]	1.7	1.7	1.1
FD [N]**	1200	1200	1200
FZ [N]**	630	630	630

^{*}All data measured at 6 bar

^{**}Observe the gripper force

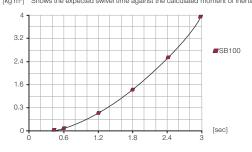


> PRODUCT SPECIFICATIONS



Moment of inertia

Shows the expected swivel time against the calculated moment of inertia



Forces and moments

Indicates the static load on the bearing.



Fa [N]	4000
Mr [Nm]	70
FD [N]**	2000
FZ [N]**	1200

► INCLUDED IN DELIVERY



Mounting block

KB8K-02



Flow Control Valves - with

DRV1-8X6

> RECOMMENDED ACCESSORIES



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector Angled Cable 5m - Socket M8

KAW500



Plug-in connector customizable Straight -Connector M8

S8-G-3



Plug-in connector customiz-able Straight - Connector M12

S12-G-3

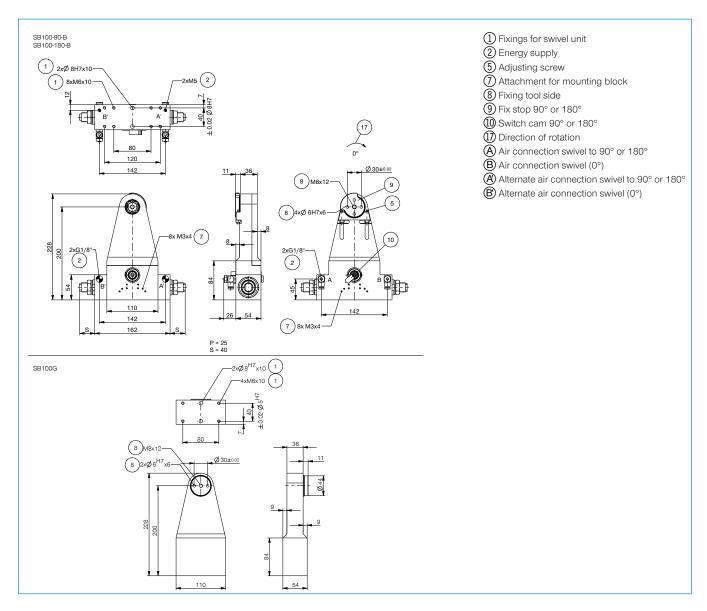


Pressure Safety Valve

	► Technical Data*		
Order no.	SB100-90-B	SB100-180-B	SB100G
Swivel angle [°]	90	180	
Torque per jaw [Nm]	10	10	
Swivel angle regulable +/- [°]	3	3	
Repetition accuracy +/- [°]	0.01	0.01	
Operating pressure min. [bar]	3	3	
Operating pressure max. [bar]	8	8	
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+80	+80	+80
Air volume per cycle [cm³]	40	54	
Weight [kg]	4	4	1.5
FD [N]**	2000	2000	2000
FZ [N]**	1200	1200	1200

^{*}All data measured at 6 bar

^{**}Observe the gripper force

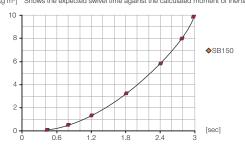


> PRODUCT SPECIFICATIONS



Moment of inertia

Shows the expected swivel time against the calculated moment of inertia



Forces and moments

Indicates the static load on the bearing.



Fa [N]	15000
Mr [Nm]	270
FD [N]**	7500
FZ [N]**	3700

► INCLUDED IN DELIVERY



Mounting block

KB8K



Flow Control Valves - with

DRV1-4X8

> RECOMMENDED ACCESSORIES



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector Angled Cable 5m - Socket M8

KAW500



Plug-in connector customizable Straight -Connector M8

S8-G-3



Plug-in connector customiz-able Straight - Connector M12

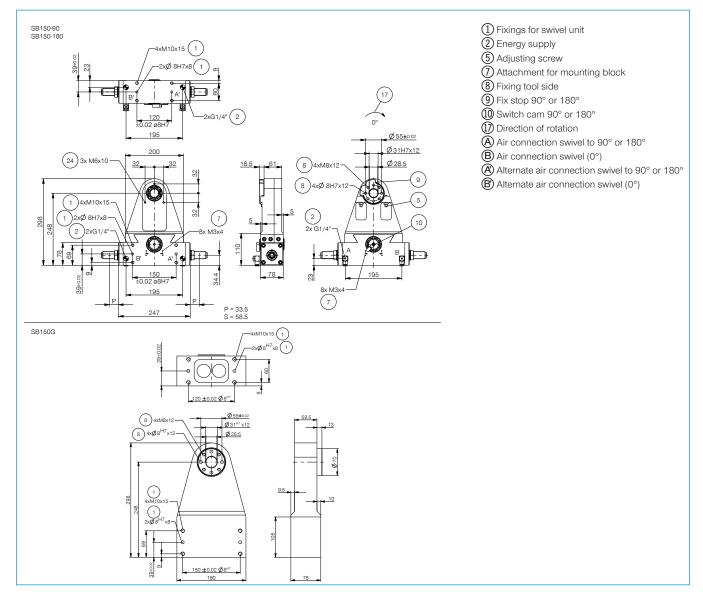
S12-G-3



Pressure Safety Valve

	► Technical Data*		
Order no.	SB150-90	SB150-180	SB150G
Swivel angle [°]	90	180	
Torque per jaw [Nm]	23	23	
Swivel angle regulable +/- [°]	3	3	
Repetition accuracy +/- [°]	0.01	0.01	0.01
Operating pressure min. [bar]	3	3	
Operating pressure max. [bar]	8	8	
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+80	+80	+80
Air volume per cycle [cm³]	190	260	
Weight [kg]	11	11	6.5
FD [N]**	7500	7500	7500
FZ [N]**	3700	3700	3700

^{*}All data measured at 6 bar

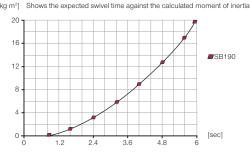


^{**}Observe the gripper force

> PRODUCT SPECIFICATIONS



Moment of inertia



Forces and moments

Indicates the static load on the bearing.



Fa [N]	25000
Mr [Nm]	600
FD [N]**	12500
FZ [N]**	6100

► INCLUDED IN DELIVERY



Mounting block

KB12-03



Flow Control Valves - with

DRV1-4X8

> RECOMMENDED ACCESSORIES



Inductive proximity switch - Cable 5 m

NJ12-E2



Inductive proximity switch - Connector M8

NJ12-E2S



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector Angled Cable 5m - Socket M8

KAW500



Plug-in connector customizable Straight -Connector M8

S8-G-3



Plug-in connector customiz-able Straight - Connector M12

S12-G-3



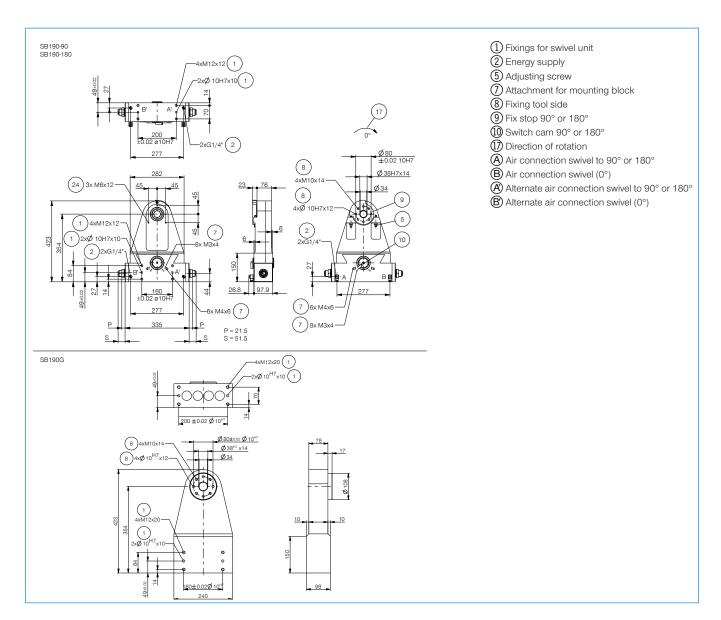
Pressure Safety Valve

DSV1-8

	► Technical Data*		
Order no.	SB190-90	SB190-180	SB190G
Swivel angle [°]	90	180	
Torque per jaw [Nm]	57	57	
Swivel angle regulable +/- [°]	3	3	
Repetition accuracy +/- [°]	0.01	0.01	
Operating pressure min. [bar]	3	3	
Operating pressure max. [bar]	8	8	
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+80	+80	+80
Air volume per cycle [cm³]	320	320	
Weight [kg]	28	28	19.5
FD [N]**	12500	12500	12500
FZ [N]**	6100	6100	6100

^{*}All data measured at 6 bar

^{**}Observe the gripper force



LINEAR CYLINDERS OVERVIEW OF SERIES



► PNEUMATIC				
	Series SHX	718		
2017	Series LI	724		

LINEAR CYLINDERS SERIES SHX

PRODUCT ADVANTAGES



Proven technology

We have more than 20 years of proven reliability, which ensures uninterrupted production for you

Constant drive force

Equal force and travel time when retracting and extending increases your machine's process reliability

► Failure-free continuous operation

Our uncompromising "Made in Germany" quality guarantees up to 10 million maintenance-free cycles

► THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com

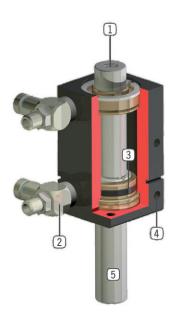
HOW TO ORDER CORRECTLY

The product order numbers are arranged according to this diagram:

Order no.	SHX-		25	
Continuous piston rod		D		



BENEFITS IN DETAIL



1 Connection to customer specific application

- possible from several sides on XD series

2 Energy supply

- reducing exhaust air is recommended

- double-acting pneumatic cylinder

4 Mounting and positioning

- mounting possible from several sides for versatile positioning

5 Piston rod

- polished, hard chrome plated steel
- continuous in design XD

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information

All information just a click away at: www.zimmer-group.com Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.



LINEAR CYLINDERS INSTALLATION SIZE SH-X

PRODUCT SPECIFICATIONS



► RECOMMENDED ACCESSORIES



Mounting block

квзм



Inductive proximity switch - Cable 5 m

NJ3-E2



Inductive Proximity Switch Cable 0,3 m - Connector

NJ3-E2SK



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector Angled Cable 5m - Socket M8

KAW500



Plug-in connector customiz-able Straight - Connector M8 S8-G-3



Plug-in connector customiz-able Straight - Connector M12

S12-G-3



Flow Control Valves - with Swivel joint

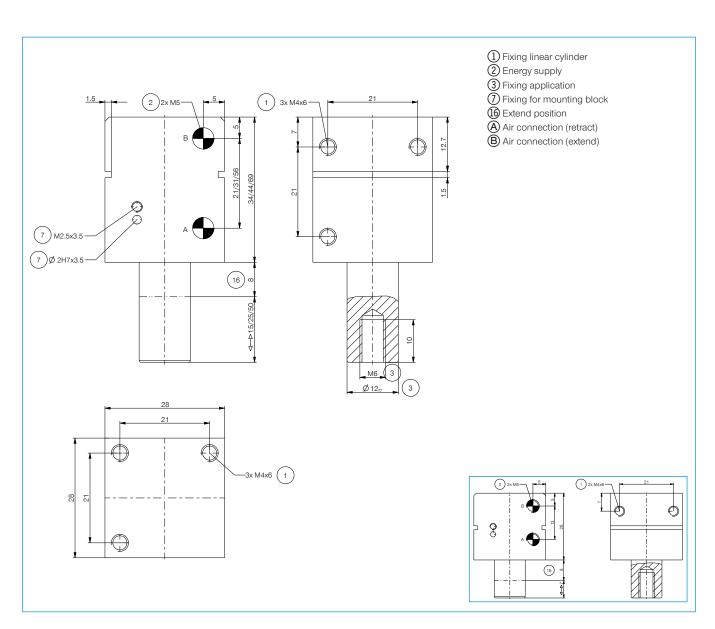
DRVM5X4



Pressure Safety Valve

	► Technical Data*				
Order no.	SH-X7	SH-X15	SH-X25	SH-X50	
Stroke [mm]	7	15	25	50	
Retraction force [N]	100	100	100	100	
Extension time [ms]	5	15	34	65	
Retraction time [ms]	7.5	24	60	124	
Operating temperature min. [°C]	5	5	5	5	
Operating temperature max. [°C]	+80	+80	+80	+80	
Air volume per cycle [cm³]	1.7	3.4	13.4	30	
Weight [kg]	0.09	0.1	0.13	0.18	

^{*}All data measured at 6 bar



LINEAR CYLINDERS INSTALLATION SIZE SH-XD

PRODUCT SPECIFICATIONS



► RECOMMENDED ACCESSORIES



Mounting block

квзм



Inductive proximity switch - Cable 5 m

NJ3-E2



Inductive Proximity Switch Cable 0,3 m - Connector

NJ3-E2SK



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector Angled Cable 5m - Socket M8

KAW500



Plug-in connector customiz-able Straight - Connector M8 S8-G-3

Plug-in connector customiz-able Straight - Connector M12

S12-G-3



Flow Control Valves - with Swivel joint

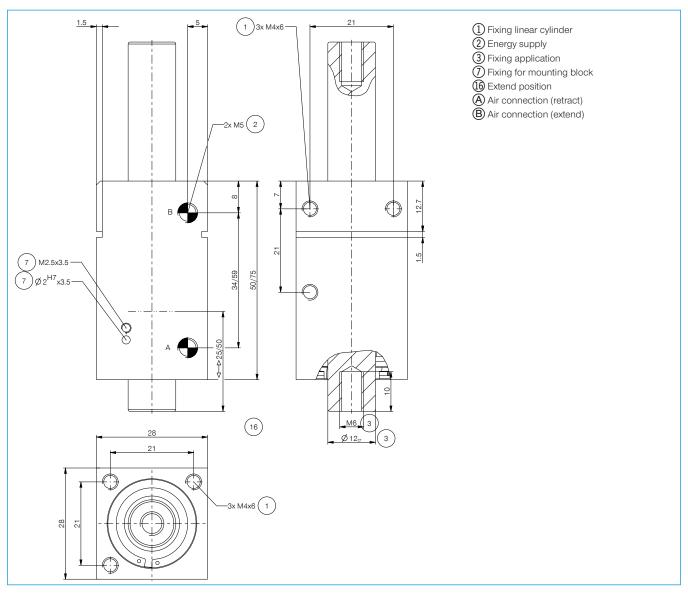
DRVM5X4



Pressure Safety Valve

	► Technical Data*		
Order no.	SH-XD25	SH-XD50	
Stroke [mm]	25	50	
Retraction force [N]	100	100	
Operating temperature min. [°C]	5	5	
Operating temperature max. [°C]	+80	+80	
Air volume per cycle [cm³]	12	25	
Weight [kg]	0.19	0.27	

^{*}All data measured at 6 bar



LINEAR CYLINDERS SERIES LI

PRODUCT ADVANTAGES



Large locating flange

The large mounting surface simplifies your design and allows secure attachment of follow-on tools

Dampened end position

By using PowerStop shock absorbers, you can gently move up to the end positions, increasing the process reliability and durability of your application

► Failure-free continuous operation

Our uncompromising "Made in Germany" quality guarantees up to 10 million maintenance-free cycles

▶ THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com

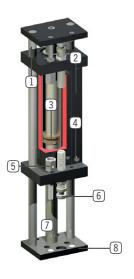
HOW TO ORDER **CORRECTLY**

The product order numbers are arranged according to this diagram:

Order no.	LI40		
3 way guiding, continuous piston rod		D	
2 way guiding		S	



BENEFITS IN DETAIL



1 Guide rod

- hardened, polished steel shaft

2 Mounting block

- mounting for inductive proximity switch

- double-acting pneumatic cylinder

4 Energy supply

- reducing exhaust air is recommended

5 End stop confirmation screw

- direct flange position sensing
- included in scope of delivery

6 End position damping

- with elastomer absorber or patented hydraulic shock absorber

7 Piston rod

- polished, hard chrome plated steel
- continuous in design D

8 Intake flange

- for connection to application-specific adapter plate (to be supplied by the customer)

► FURTHER INFORMATION IS AVAILABLE ONLINE



Technical Information

All information just a click away at: www.zimmer-group.com Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.



LINEAR CYLINDERS INSTALLATION SIZE LI16

PRODUCT SPECIFICATIONS



Forces and moments

Max allowable static forces and moments.



► RECOMMENDED ACCESSORIES



Centering Disc



Inductive proximity switch - Connector M8

NJ8-E2S



Plug-in connector Straight Cable 5m - Socket M8 KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female) KAW500



Flow Control Valves - with Swivel joint

DRVM5X4



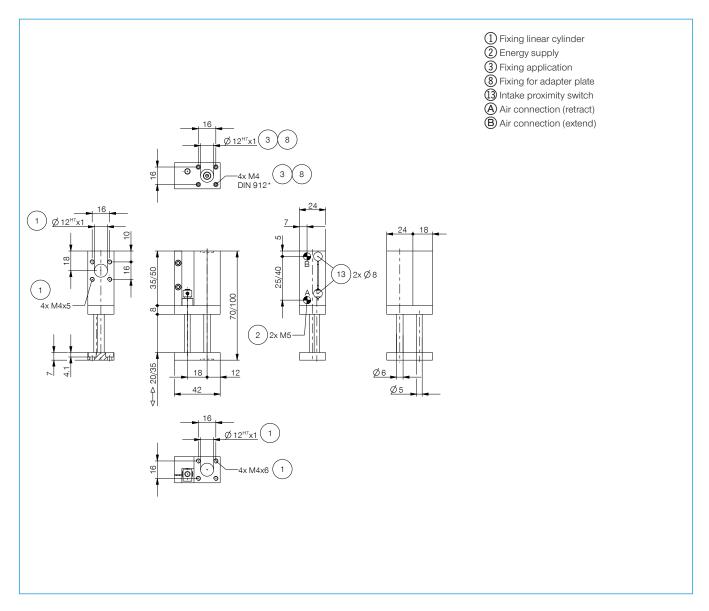




Adapter plate

	► Technical Data*	► Technical Data*		
Order no.	LI16-20	LI16-35		
Stroke [mm]	20	35		
Pressure force max. [N]	100	100		
Retraction force [N]	80	80		
Travel time without external load [s]	0.04	0.07		
Operating temperature min. [°C]	5	5		
Operating temperature max. [°C]	+80	+80		
Air volume per cycle [cm³]	5	13		
Weight [kg]	0.15	0.18		
Load Fa max. [N]	25	15		
Max. deflection A [mm]	0.05	0.05		

^{*}All data measured at 6 bar



LINEAR CYLINDERS INSTALLATION SIZE LI16D

PRODUCT SPECIFICATIONS



Forces and moments

Max allowable static forces and moments.



► RECOMMENDED ACCESSORIES



Centering Disc



Inductive proximity switch - Connector M8

NJ8-E2S



Plug-in connector Straight Cable 5m - Socket M8 KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female) KAW500



Flow Control Valves - with Swivel joint

DRVM5X4

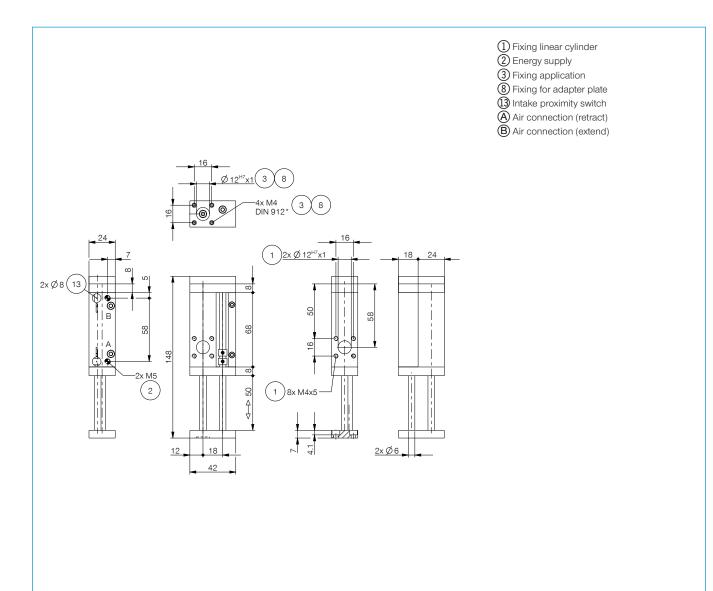




Adapter plate

	► Technical Data*
Order no.	LI16-50D
Stroke [mm]	50
Pressure force max. [N]	80
Retraction force [N]	80
Travel time without external load [s]	0.1
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	15
Weight [kg]	0.3
Load Fa max. [N]	40
Max. deflection A [mm]	0.1

^{*}All data measured at 6 bar



LI30-15 / LI30-30

PRODUCT SPECIFICATIONS



Forces and moments

Max allowable static forces and moments.



► RECOMMENDED ACCESSORIES



Absorber intake

HV30



Shock Absorbers

AD-M10X1



Shock Absorbers

M10X1S



Centering Disc

ZE20H7X4



Inductive proximity switch - Connector M8

NJ12-E2S



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Ca-ble 5m - Socket M8 (female)

KAW500



Flow Control Valves - with

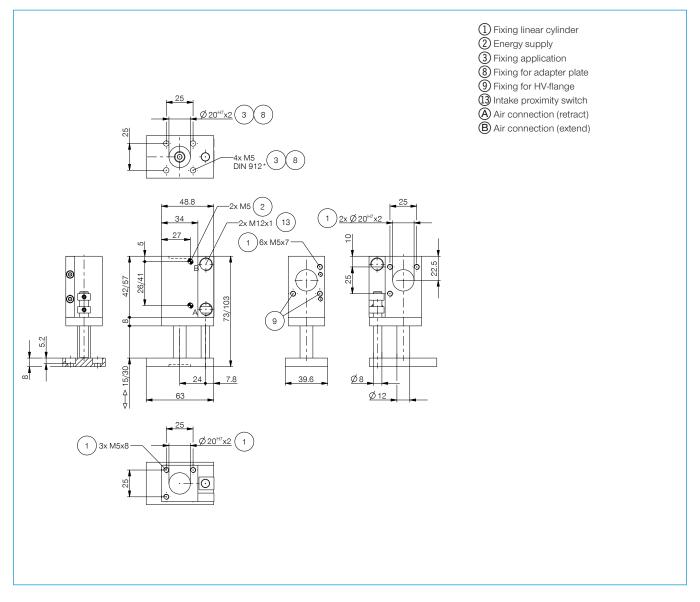
DRVM5X4



Adapter plate

	► Technical Data*		
Order no.	Ll30-15	LI30-30	
Stroke [mm]	15	30	
Pressure force max. [N]	270	270	
Retraction force [N]	200	200	
Travel time without external load [s]	0.06	0.14	
Operating temperature min. [°C]	5	5	
Operating temperature max. [°C]	+80	+80	
Air volume per cycle [cm³]	12	25	
Weight [kg]	0.3	0.36	
Load Fa max. [N]	70	50	
Max. deflection A [mm]	0.05	0.05	

^{*}All data measured at 6 bar



LI30-60 / LI30-90

PRODUCT SPECIFICATIONS



Forces and moments

Max allowable static forces and moments.



► RECOMMENDED ACCESSORIES



Absorber intake

HV30



Shock Absorbers

AD-M10X1



Shock Absorbers

M10X1S



Centering Disc

ZE20H7X4



Inductive proximity switch - Connector M8

NJ12-E2S



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Ca-ble 5m - Socket M8 (female) KAW500

Flow Control Valves - with Swivel joint

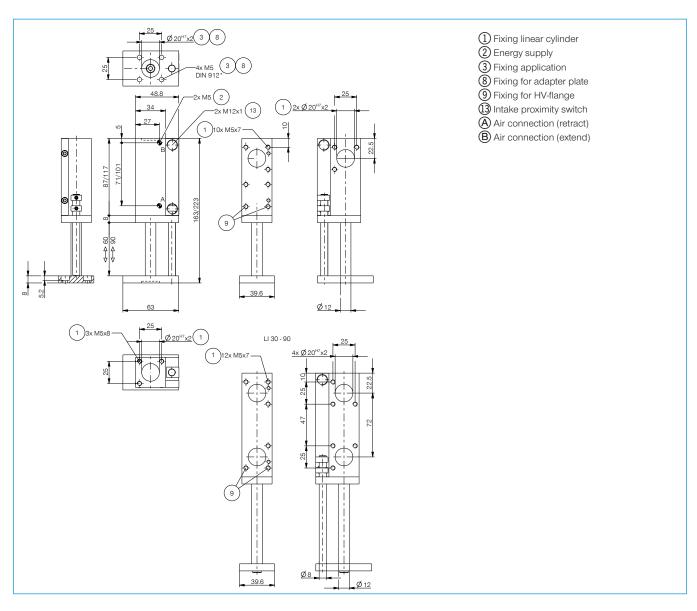
DRVM5X4



Adapter plate

	► Technical Data*		
Order no.	LI30-60	LI30-90	
Stroke [mm]	60	90	
Pressure force max. [N]	270	270	
Retraction force [N]	200	200	
Travel time without external load [s]	0.25	0.26	
Operating temperature min. [°C]	5	5	
Operating temperature max. [°C]	+80	+80	
Air volume per cycle [cm³]	50	92	
Weight [kg]	0.46	0.56	
Load Fa max. [N]	30	20	
Max. deflection A [mm]	0.05	0.05	

^{*}All data measured at 6 bar



LINEAR CYLINDERS INSTALLATION SIZE LI30D

PRODUCT SPECIFICATIONS



Forces and moments

Max allowable static forces and moments.



► RECOMMENDED ACCESSORIES



Absorber intake



Shock Absorbers

AD-M10X1



Shock Absorbers

M10X1S



Centering Disc



Inductive proximity switch - Connector M8

NJ12-E2S

ZE20H7X4



KAG500



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)



Plug-in connector Angled Ca-ble 5m - Socket M8 (female) KAW500



Flow Control Valves - with Swivel joint

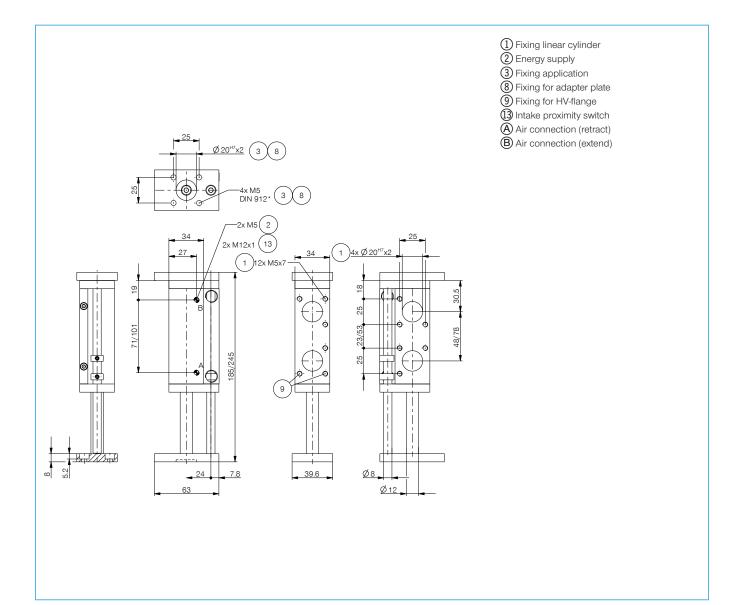
DRVM5X4



Adapter plate

	► Technical Data*		
Order no.	LI30-60D	LI30-90D	
Stroke [mm]	60	90	
Pressure force max. [N]	200	200	
Retraction force [N]	200	200	
Travel time without external load [s]	0.21	0.25	
Operating temperature min. [°C]	5	5	
Operating temperature max. [°C]	+80	+80	
Air volume per cycle [cm³]	50	66	
Weight [kg]	0.7	0.85	
Load Fa max. [N]	80	60	
Max. deflection A [mm]	0.1	0.1	

^{*}All data measured at 6 bar



LINEAR CYLINDERS INSTALLATION SIZE LI40

PRODUCT SPECIFICATIONS



Forces and moments

Max allowable static forces and moments.



► RECOMMENDED ACCESSORIES



Absorber intake

HV40



Shock Absorbers

AD-M10X1



Shock Absorbers

M10X1S



Centering Disc

ZE20H7X4



Inductive proximity switch - Connector M8

NJ12-E2S



Plug-in connector Straight Ca-ble 5m - Socket M8 (female) KAG500



Plug-in connector Angled Ca-ble 5m - Socket M8 (female) KAW500



Flow Control Valves - with Swivel joint

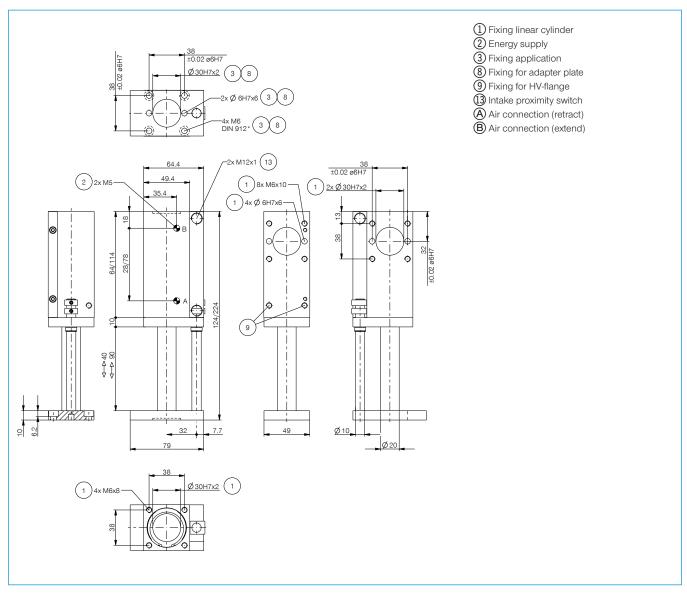
DRVM5X4



Adapter plate

	► Technical Data*		
Order no.	LI40-40	LI40-90	
Stroke [mm]	40	90	
Pressure force max. [N]	450	450	
Retraction force [N]	270	270	
Travel time without external load [s]	0.08	0.2	
Operating temperature min. [°C]	5	5	
Operating temperature max. [°C]	+80	+80	
Air volume per cycle [cm³]	50	117	
Weight [kg]	0.74	0.88	
Load Fa max. [N]	80	30	
Max. deflection A [mm]	0.05	0.05	

^{*}All data measured at 6 bar



LI40-90S / LI40-130S / LI40-160S

PRODUCT SPECIFICATIONS



Forces and moments

Max allowable static forces and moments.



▶ RECOMMENDED ACCESSORIES



Shock Absorbers

AD-M14X1.5



Shock Absorbers

M14X1.5S



Centering Disc

ZE30H7X4



Inductive proximity switch - Connector M8



Plug-in connector Straight Cable 5m - Sock-et M8 (female) KAG500

NJ12-E2S



Plug-in connector Angled Cable 5m - Socket M8 (female) KAW500



Flow Control Valves - with DRV1-8X6



AI-M8X1-53

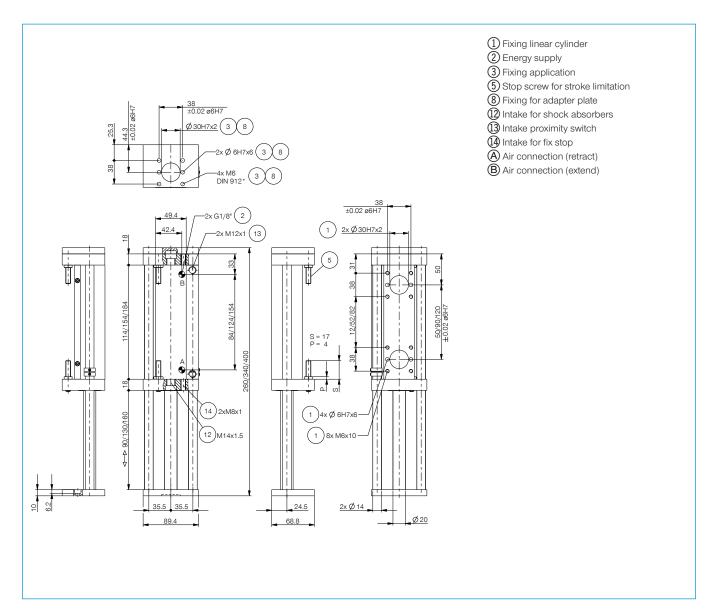


Adapter plate

AP40-S

	► Technical Data*		
Order no.	LI40-90S	LI40-130S	LI40-160S
Stroke [mm]	90	130	160
Pressure force max. [N]	270	270	270
Retraction force [N]	270	270	270
Travel time without external load [s]	0.09	0.13	0.16
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+80	+80	+80
Air volume per cycle [cm³]	100	133	166
Weight [kg]	2.9	3.5	3.9
Load Fa max. [N]	300	230	150
Max. deflection A [mm]	0.09	0.13	0.16
Radial load Mr max. [Ncm]	600	400	320
Max. rotation D at 100 mm [mm]	0.1	0.1	0.1

^{*}All data measured at 6 bar



LI40-200S / LI40-250S / LI40-300S

PRODUCT SPECIFICATIONS



Forces and moments

Max allowable static forces and moments.



▶ RECOMMENDED ACCESSORIES



Shock Absorbers



Shock Absorbers



Centering Disc

ZE30H7X4



Inductive proximity switch - Connector M8

NJ12-E2S



Plug-in connector Straight Cable 5m - Sock-et M8 (female) KAG500

AD-M14X1.5





Stop Stroke Adjustment

AI-M8X1-53



Adapter plate

AP40-S



Plug-in connector Angled Cable 5m - Socket M8 (female) KAW500

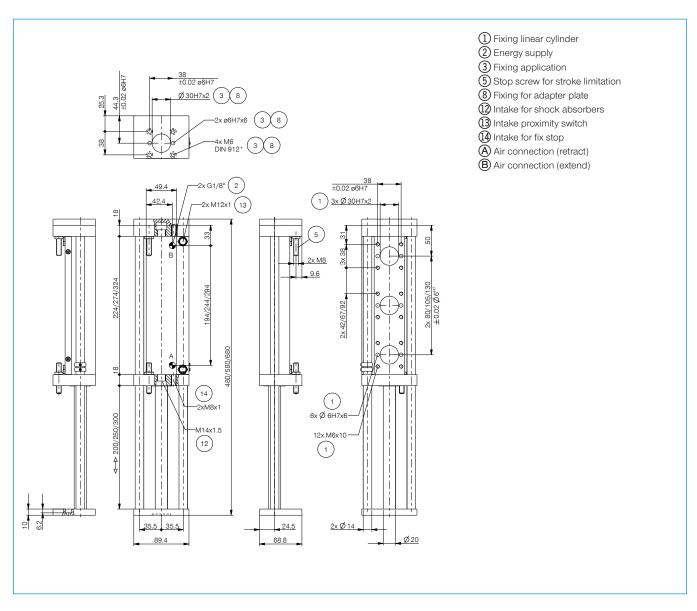


Flow Control Valves - with

DRV1-8X6

	► Technical Data*		
Order no.	LI40-200S	LI40-250S	LI40-300S
Stroke [mm]	200	250	300
Pressure force max. [N]	270	270	270
Retraction force [N]	270	270	270
Travel time without external load [s]	0.22	0.28	0.4
Radial load Mr max. [Ncm]	230	130	100
Max. rotation D at 100 mm [mm]	0.1	0.1	0.1
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+80	+80	+80
Air volume per cycle [cm³]	216	266	316
Weight [kg]	4.5	5.2	5.9
Load Fa max. [N]	120	90	65
Max. deflection A [mm]	0.2	0.25	0.3

^{*}All data measured at 6 bar



LI50-50S / LI50-90S

PRODUCT SPECIFICATIONS



Forces and moments

Max allowable static forces and moments.



► RECOMMENDED ACCESSORIES



Shock Absorbers

M20X1.5S



Centering Disc

ZE30H7X4



Inductive proximity switch - Connector M8



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 KAW500



Flow Control Valves - with Swivel joint DRV1-8X6



Stop Stroke Adjustment Screws

AI-M8X1-53



NJ12-E2S

AP50-S

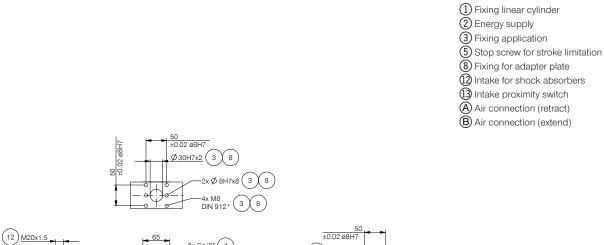
	► Technical Data*		
Order no.	LI50-50S	LI50-90S	
Stroke [mm]	50	90	
Pressure force max. [N]	950	950	
Retraction force [N]	950	950	
Travel time without external load [s]	0.13	0.24	
Radial load Mr max. [Ncm]	1500	1100	
Max. rotation D at 100 mm [mm]	0.08	0.08	
Operating temperature min. [°C]	5	5	
Operating temperature max. [°C]	+80	+80	
Air volume per cycle [cm³]	166	300	
Weight [kg]	2.9	3.6	
Load Fa max. [N]	300	200	
Max. deflection A [mm]	0.03	0.05	

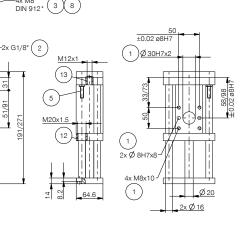
^{*}All data measured at 6 bar

71/17

06/05

P = 4 S = 27





LI50-130S / LI50-160S / LI50-200S

PRODUCT SPECIFICATIONS



Forces and moments

Max allowable static forces and moments.



► RECOMMENDED ACCESSORIES



Shock Absorbers



Centering Disc

ZE30H7X4



Inductive proximity switch - Connector M8

NJ12-E2S



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 KAW500





Flow Control Valves - with Swivel joint DRV1-8X6



Stop Stroke Adjustment

AI-M8X1-53

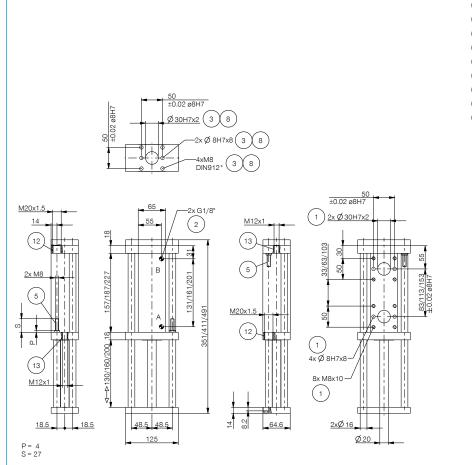


Adapter plate

AP50-S

	Technical Data	► Technical Data*		
Order no.	LI50-130S	LI50-160S	LI50-200S	
Stroke [mm]	130	160	200	
Pressure force max. [N]	950	950	950	
Retraction force [N]	950	950	950	
Travel time without external load [s]	0.34	0.42	0.48	
Radial load Mr max. [Ncm]	900	750	400	
Max. rotation D at 100 mm [mm]	0.1	0.1	0.1	
Operating temperature min. [°C]	5	5	5	
Operating temperature max. [°C]	+80	+80	+80	
Air volume per cycle [cm³]	433	533	666	
Weight [kg]	4.4	4.8	5.5	
Load Fa max. [N]	130	100	90	
Max. deflection A [mm]	0.05	0.08	0.1	

^{*}All data measured at 6 bar



- 1 Fixing linear cylinder
- 2 Energy supply
- 3 Fixing application
- (5) Stop screw for stroke limitation
- 8 Fixing for adapter plate
- 12 Intake for shock absorbers
- (13) Intake proximity switch
- Air connection (retract)
- B Air connection (extend)

LI50-250S / LI50-300S

PRODUCT SPECIFICATIONS



Forces and moments

Max allowable static forces and moments.



► RECOMMENDED ACCESSORIES



Shock Absorbers



Centering Disc

ZE30H7X4



Inductive proximity switch - Connector M8

NJ12-E2S



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 KAW500





Flow Control Valves - with Swivel joint DRV1-8X6



Stop Stroke Adjustment Screws

AI-M8X1-53

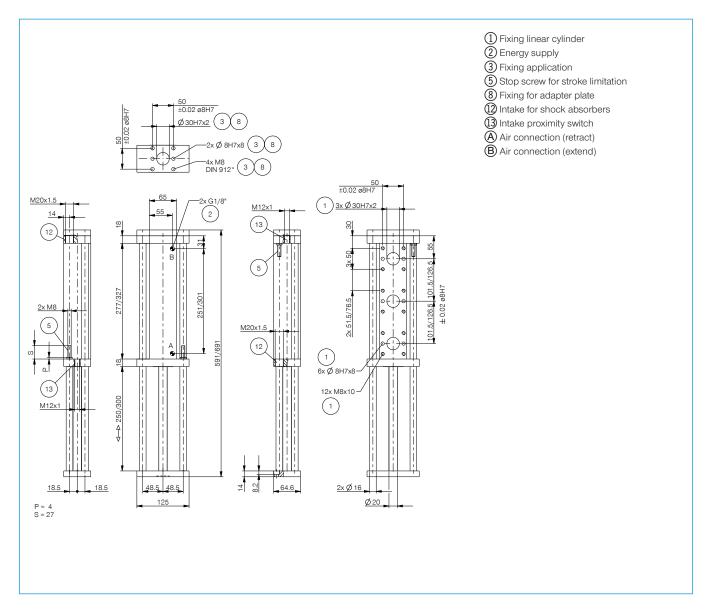


Adapter plate

AP50-S

	► Technical Data*	
Order no.	LI50-250S	LI50-300S
Stroke [mm]	250	300
Pressure force max. [N]	950	950
Retraction force [N]	950	950
Travel time without external load [s]	0.63	0.84
Radial load Mr max. [Ncm]	250	200
Max. rotation D at 100 mm [mm]	0.1	0.1
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	833	1000
Weight [kg]	6.4	7.2
Load Fa max. [N]	75	55
Max. deflection A [mm]	0.15	0.2

^{*}All data measured at 6 bar



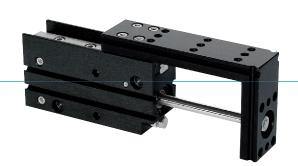
LINEAR RAIL SLIDES OVERVIEW OF SERIES



► PNEUMATIC			
	Series LS		750
FE	Series LSF		760
E	Series LSX		766

LINEAR RAIL SLIDES SERIES LS

PRODUCT ADVANTAGES



Precise profile guide

The linear guide with ball bearing circulation and scrapers provides high precision and rigidity

Standardised adapter plate

Reduce your manufacturing effort and ensure standardisation for your follow-on tools

Modular layout

Makes it possible to combine several units directly to each other and to minimise your design effort

▶ THE BEST PRODUCT FOR YOUR APPLICATION

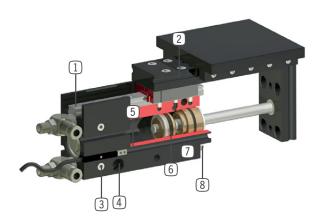


Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com



BENEFITS IN DETAIL



- 1 Linear guide with recirculating ball and wiper
 - dual linear guidance for high forces and moments capacity
- 2 Mounting groove
 - quick and cost-effective positioning of adapter plates: Accessory, Art. No. AP...G
- 3 Energy supply
 - possible from several sides
- 4 Mounting and positioning
 - mounting possible from several sides for versatile positioning
- 5 Mounting groove for magnetic field sensor integrated, space saving position sensing
- 6 Drive
 - double-acting pneumatic cylinder
- 7 Robust, lightweight housing
 - Hard-coated aluminum alloy
- 8 Stroke limiting screw

► FURTHER INFORMATION IS AVAILABLE ONLINE



Technical Information

All information just a click away at: www.zimmer-group.com Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.

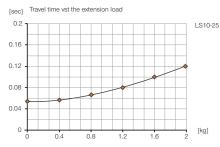


LS10-25

PRODUCT SPECIFICATIONS



Time diagram



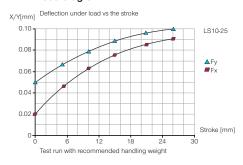
Forces and moments

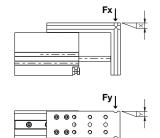
Max allowable static forces and moments on face A.



Ma [Nm]	3.2
Mb [Nm]	3.2
Mc [Nm]	5.1

Load diagram





► RECOMMENDED ACCESSORIES



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector customizable Straight -Connector M8

S8-G-3



Plug-in connector customiz-able Straight - Connector M12

S12-G-3



Flow Control Valves - with

DRVM3X4



Pressure Safety Valve

DSV1-8

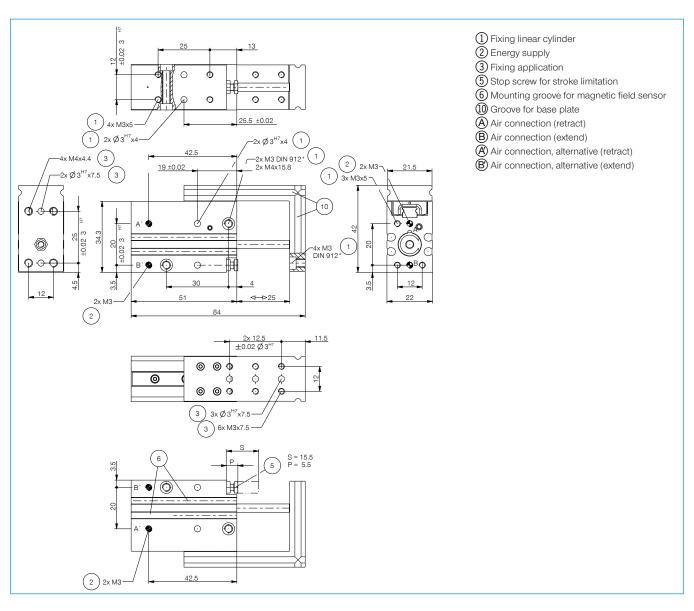


Adapter plate

APLS10G

	► Technical Data*
Order no.	LS10-25
Stroke [mm]	25
Pressure force max. [N]	40
Retraction force [N]	30
Piston diameter [mm]	10
Guide rail size [mm]	7
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	3.6
Weight [kg]	0.15

^{*}All data measured at 6 bar

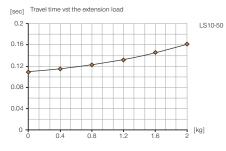


LS10-50

PRODUCT SPECIFICATIONS



Time diagram



Forces and moments

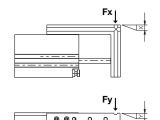
Max allowable static forces and moments on face A.



Ma [Nm]	3.2
Mb [Nm]	3.2
Mc [Nm]	5.1

Load diagram





► RECOMMENDED ACCESSORIES



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector customizable Straight -Connector M8

S8-G-3



Plug-in connector customiz-able Straight - Connector M12

S12-G-3



Flow Control Valves - with

DRVM3X4



Pressure Safety Valve

DSV1-8

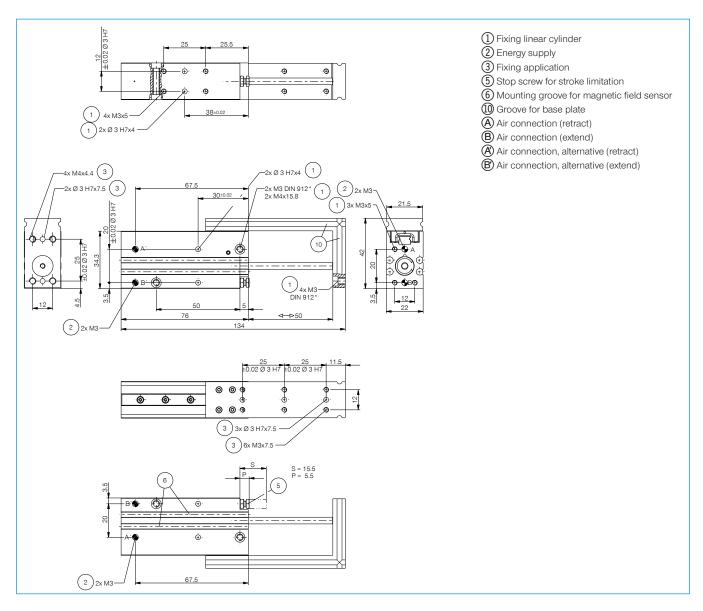


Adapter plate

APLS10G

	► Technical Data*
Order no.	LS10-50
Stroke [mm]	50
Pressure force max. [N]	40
Retraction force [N]	30
Piston diameter [mm]	10
Guide rail size [mm]	7
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	7.2
Weight [kg]	0.2

^{*}All data measured at 6 bar

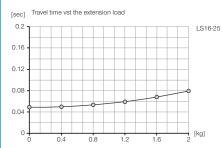


LS16-25

PRODUCT SPECIFICATIONS



Time diagram



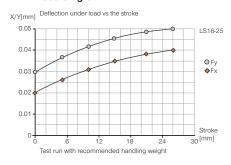
Forces and moments

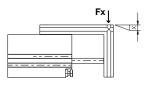
Max allowable static forces and moments on face A.

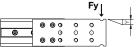


Ma [Nm]	6.4	
Mb [Nm]	6.4	
Mc [Nm]	9.6	

Load diagram







► RECOMMENDED ACCESSORIES



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector Angled Cable 5m - Socket M8

KAW500



Plug-in connector customizable Straight -Connector M12

S12-G-3



Flow Control Valves - with Swivel joint

DRVM5X4



Pressure Safety Valve

DSV1-8

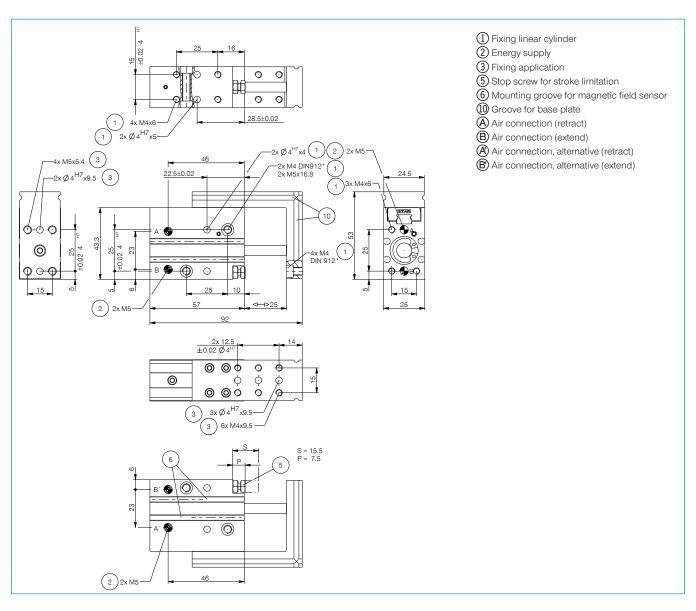


Adapter plate

APLS16G

	► Technical Data*
Order no.	LS16-25
Stroke [mm]	25
Pressure force max. [N]	100
Retraction force [N]	85
Piston diameter [mm]	16
Guide rail size [mm]	9
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	9.6
Weight [kg]	0.25

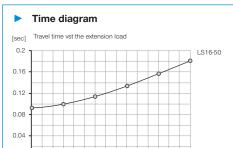
^{*}All data measured at 6 bar



LS16-50

PRODUCT SPECIFICATIONS





Forces and moments

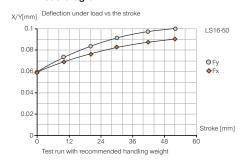
Max allowable static forces and moments on face A.

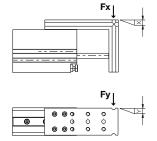


Ma [Nm]	6.4	
Mb [Nm]	6.4	
Mc [Nm]	9.6	

Load diagram

0





► RECOMMENDED ACCESSORIES



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector Angled Cable 5m - Socket M8

KAW500



Plug-in connector customizable Straight -Connector M12

S12-G-3



Flow Control Valves - with Swivel joint

DRVM5X4



Pressure Safety Valve

DSV1-8

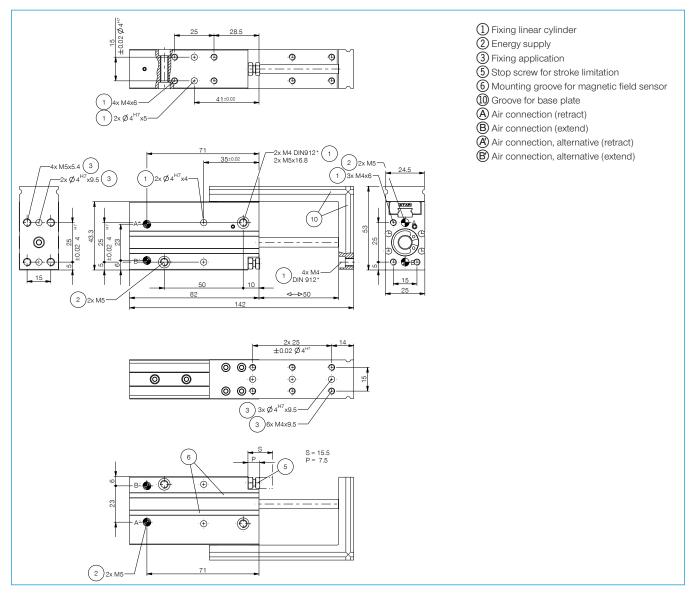


Adapter plate

APLS16G

	► Technical Data*
Order no.	LS16-50
Stroke [mm]	50
Pressure force max. [N]	100
Retraction force [N]	85
Piston diameter [mm]	16
Guide rail size [mm]	9
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	19.2
Weight [kg]	0.3

^{*}All data measured at 6 bar



LINEAR RAIL SLIDES SERIES LSF

▶ PRODUCT ADVANTAGES



Precise profile guide

The linear guide with ball bearing circulation and scrapers provides high precision and rigidity

Dampened end position

By using PowerStop shock absorbers, you can gently move up to the end positions, increasing the process reliability and durability of your application

Flat structure

Reduces the interference contours for your application

► THE BEST PRODUCT FOR YOUR APPLICATION

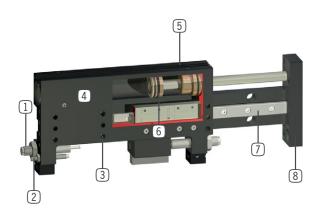


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Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com



BENEFITS IN DETAIL



- 1 Patented, hydraulic shock absorber
 - adjustable end position damping
 - included in scope of delivery
- 2 Stroke limiting screw
- (3) Mounting and positioning
 - possible from several sides
- 4 Robust, lightweight and extremely flat structure housing
 - Hard-coated aluminum alloy
- (5) Mounting groove for magnetic field sensor
 - integrated, space saving position sensing
- (6) Drive
 - double-acting pneumatic cylinder
- (7) Linear guide with recirculating ball and wiper
 - dual linear guidance for high forces and moments capacity
 - 8 Intake flange
 - simple application connection

► FURTHER INFORMATION IS AVAILABLE ONLINE



Technical Information

All information just a click away at: www.zimmer-group.com Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.



LSF25-50

PRODUCT SPECIFICATIONS



Time diagram 0.5 0.4 without Shock Absorber with Shock Absorber

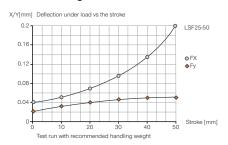
Forces and moments

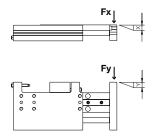
Max allowable static forces and moments on face A.



Ma [Nm]	100	
Mb [Nm]	100	
Mc [Nm]	40	

Load diagram





► RECOMMENDED ACCESSORIES



Mounting block

KB8



Switch cam + screws

SN09



M12X1S





Inductive proximity switch - Cable 5 m





Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Ca-ble 5m - Socket M8 (female)

KAW500

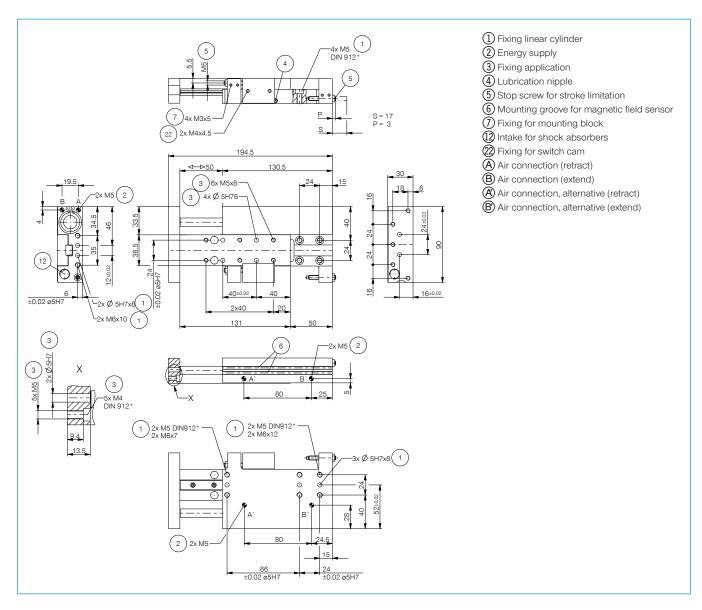


Plug-in connector customiz-able Straight - Connector M8

S8-G-3

	► Technical Data*
Order no.	LSF25-50
Stroke [mm]	50
Pressure force max. [N]	265
Retraction force [N]	220
Piston diameter [mm]	25
Guide rail size [mm]	12
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	45
Weight [kg]	1

^{*}All data measured at 6 bar

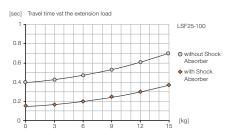


LSF25-100

PRODUCT SPECIFICATIONS



Time diagram



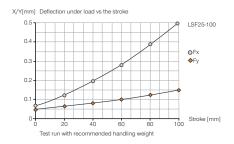
Forces and moments

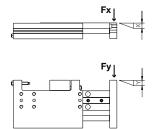
Max allowable static forces and moments on face A.



Ma [Nm]	100	
Mb [Nm]	100	
Mc [Nm]	40	

Load diagram





► RECOMMENDED ACCESSORIES



Mounting block

KB8



Switch cam + screws

SN09



M12X1S



- Cable 5 m NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Ca-ble 5m - Socket M8 (female)

KAW500

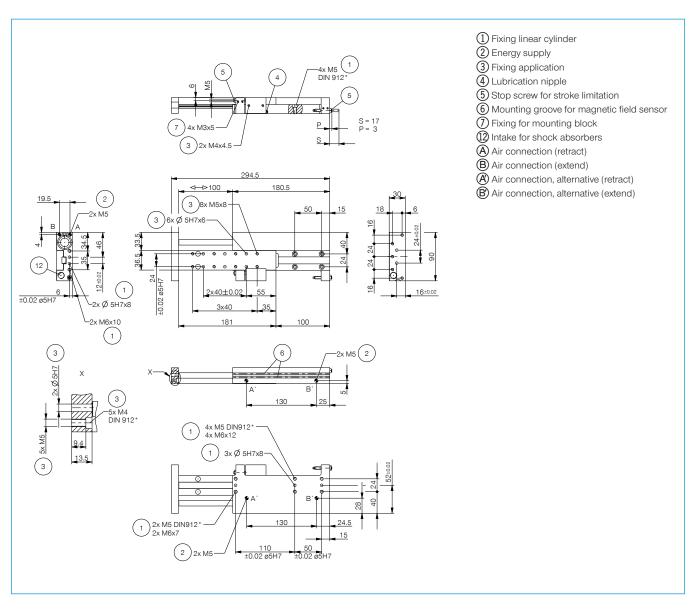


Plug-in connector customiz-able Straight - Connector M8

S8-G-3

	► Technical Data*
Order no.	LSF25-100
Stroke [mm]	100
Pressure force max. [N]	265
Retraction force [N]	220
Piston diameter [mm]	25
Guide rail size [mm]	12
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	90
Weight [kg]	1.3

^{*}All data measured at 6 bar



LINEAR RAIL SLIDES SERIES LSX

PRODUCT ADVANTAGES



Precise double rail profile guide

The linear guide with ball bearing circulation and scrapers provides high precision and rigidity

Dampened end position

By using PowerStop shock absorbers, you can gently move up to the end positions, increasing the process reliability and durability of your application

► Failure-free continuous operation

Our uncompromising "Made in Germany" quality guarantees up to 10 million maintenance-free cycles

► THE BEST PRODUCT FOR YOUR APPLICATION

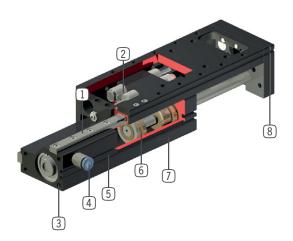


Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com



BENEFITS IN DETAIL



- 1 Linear guide with recirculating ball and wiper
 - two way linear guide for forces and moments capacity
- 2 Patented, hydraulic shock absorber
 - adjustable end position damping
 - included in scope of delivery
- 3 Mounting and positioning
 - mounting possible from several sides for versatile positioning
- 4 Energy supply
 - possible from several sides
- (5) Mounting groove for magnetic field sensor
 - integrated, space saving position sensing
- 6 Robust, lightweight housing
 - Hard-coated aluminum alloy
- 7 Drive
 - double-acting pneumatic cylinder
- 8 Intake flange
 - quick and cost-effective positioning of adapter plates: Accessory, Art. No. AP...G and AP...V

► FURTHER INFORMATION IS AVAILABLE ONLINE



Technical Information

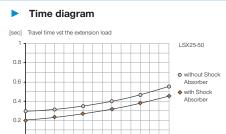
All information just a click away at: www.zimmer-group.com Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.



LSX25-50

PRODUCT SPECIFICATIONS





Forces and moments

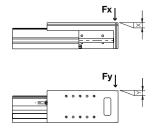
Max allowable static forces and moments on face A.



Ma [Nm]	55	
Mb [Nm]	55	
Mc [Nm]	55	

Load diagram





► RECOMMENDED ACCESSORIES



Shock Absorbers

M12X1S



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8

KAW500



Plug-in connector customiz-able Straight - Connector M8

S8-G-3



Plug-in connector customiz-able Straight - Connector M12

S12-G-3



Flow Control Valves - with Swivel joint

DRV1-8X6



Adapter plate

APLSX25G

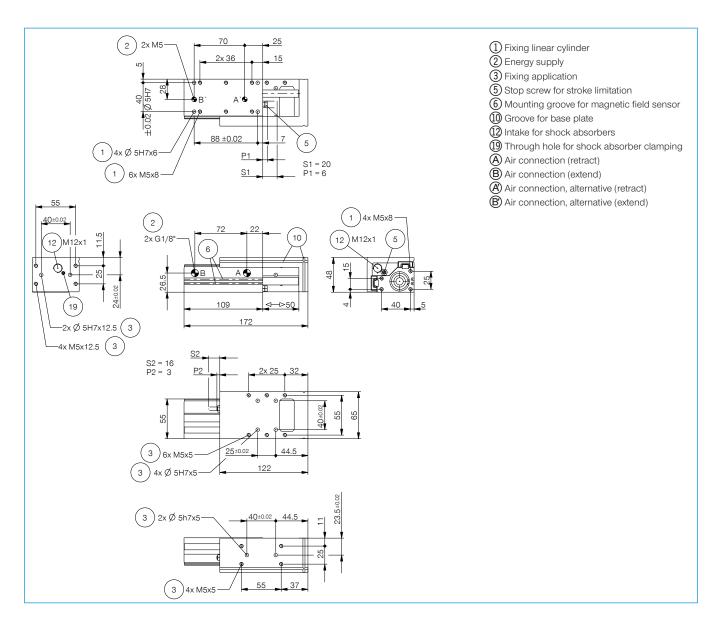


Adapter plate

APLSX25V

	► Technical Data*
Order no.	LSX25-50
Stroke [mm]	50
Pressure force max. [N]	265
Retraction force [N]	220
Recommended handling weight [kg]	15
Piston diameter [mm]	25
Guide rail size [mm]	18
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	45
Weight [kg]	1

^{*}All data measured at 6 bar

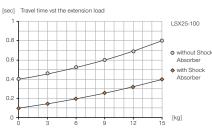


LSX25-100

PRODUCT SPECIFICATIONS



Time diagram



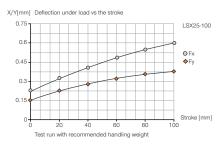
Forces and moments

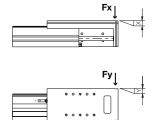
Max allowable static forces and moments on face A.



Ma [Nm]	55
Mb [Nm]	55
Mc [Nm]	55

Load diagram





► RECOMMENDED ACCESSORIES



M12X1S

Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8

KAW500



Plug-in connector customiz-able Straight - Connector M8

S8-G-3



Plug-in connector customiz-able Straight - Connector M12

S12-G-3



Flow Control Valves - with Swivel joint

DRV1-8X6



Adapter plate

APLSX25G

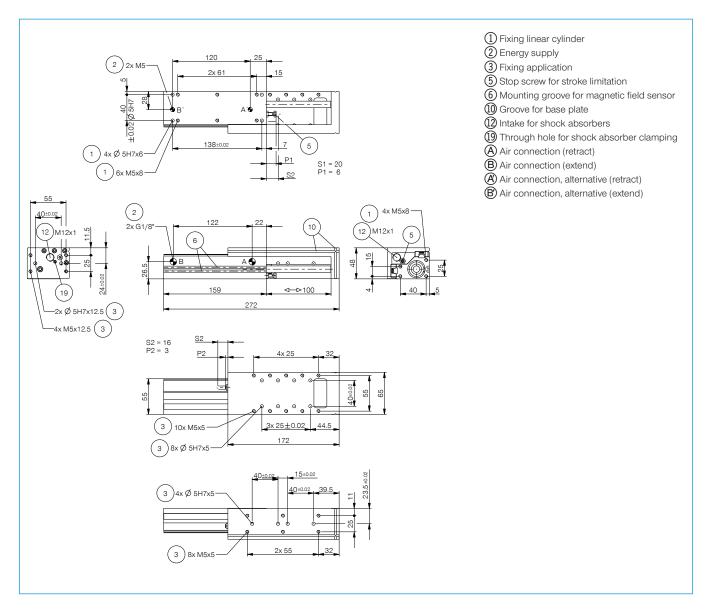


Adapter plate

APLSX25V

	► Technical Data*
Order no.	LSX25-100
Stroke [mm]	100
Pressure force max. [N]	265
Retraction force [N]	220
Recommended handling weight [kg]	15
Piston diameter [mm]	25
Guide rail size [mm]	18
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	90
Weight [kg]	1.3

^{*}All data measured at 6 bar



LSX25-200

PRODUCT SPECIFICATIONS



Time diagram with Shock Absorber

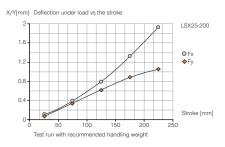
Forces and moments

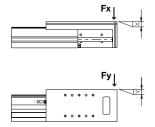
Max allowable static forces and moments on face A.



Ma [Nm]	55
Mb [Nm]	55
Mc [Nm]	55

Load diagram





► RECOMMENDED ACCESSORIES



Shock Absorbers

M12X1S



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8

KAW500



Plug-in connector customiz-able Straight - Connector M8

S8-G-3



Plug-in connector customiz-able Straight - Connector M12

S12-G-3



Flow Control Valves - with Swivel joint

DRV1-8X6



Adapter plate

APLSX25G

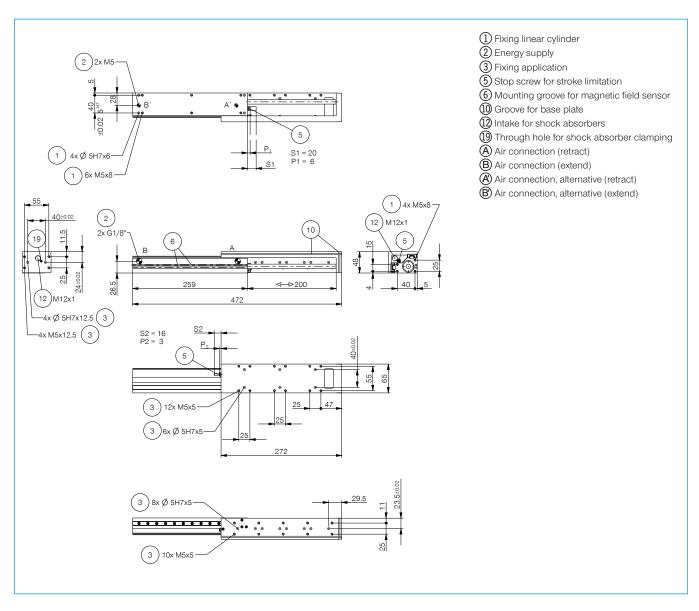


Adapter plate

APLSX25V

	► Technical Data*
Order no.	LSX25-200
Stroke [mm]	200
Pressure force max. [N]	265
Retraction force [N]	220
Recommended handling weight [kg]	15
Piston diameter [mm]	25
Guide rail size [mm]	18
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	180
Weight [kg]	1.9

^{*}All data measured at 6 bar



LSX40-100

PRODUCT SPECIFICATIONS



Time diagram LSX40-100 with Shock Absorber

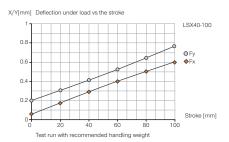
Forces and moments

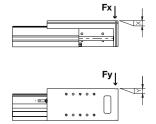
Max allowable static forces and moments on face A.



Ma [Nm]	200	
Mb [Nm]	200	
Mc [Nm]	200	

Load diagram





► RECOMMENDED ACCESSORIES



Shock Absorbers

M20X1.5S



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8

KAW500



Plug-in connector customiz-able Straight - Connector M8

S8-G-3



Plug-in connector customiz-able Straight - Connector M12

S12-G-3



Flow Control Valves - with Swivel joint

DRV1-8X6



Adapter plate

APLSX40G

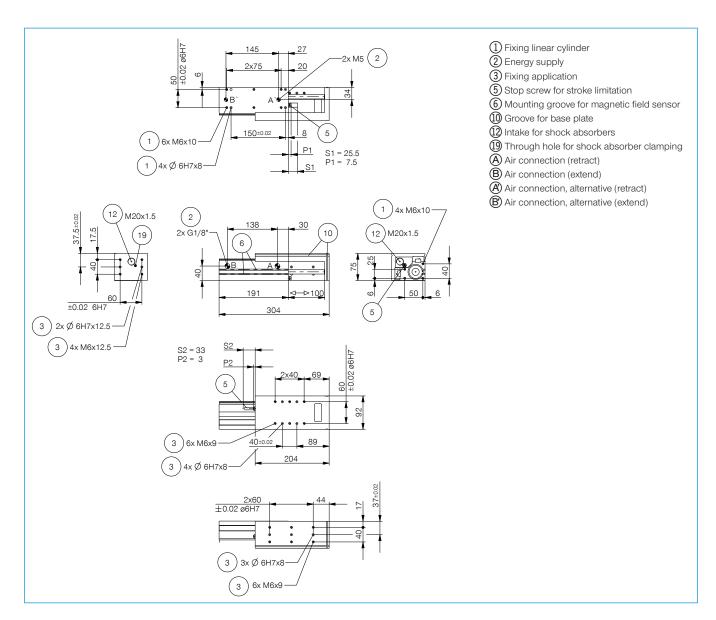


Adapter plate

APLSX40V

	► Technical Data*
Order no.	LSX40-100
Stroke [mm]	100
Pressure force max. [N]	750
Retraction force [N]	680
Recommended handling weight [kg]	40
Piston diameter [mm]	40
Guide rail size [mm]	30
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	235
Weight [kg]	3.2

^{*}All data measured at 6 bar

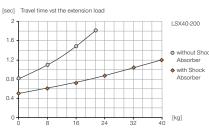


LSX40-200

PRODUCT SPECIFICATIONS



Time diagram



Forces and moments

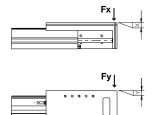
Max allowable static forces and moments on face A.



Ma [Nm]	200
Mb [Nm]	200
Mc [Nm]	200

Load diagram





► RECOMMENDED ACCESSORIES



Shock Absorbers

M20X1.5S



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8

KAW500



Plug-in connector customiz-able Straight - Connector M8 S8-G-3



Plug-in connector customiz-able Straight - Connector M12

S12-G-3



Flow Control Valves - with Swivel joint

DRV1-8X6



Adapter plate

APLSX40G

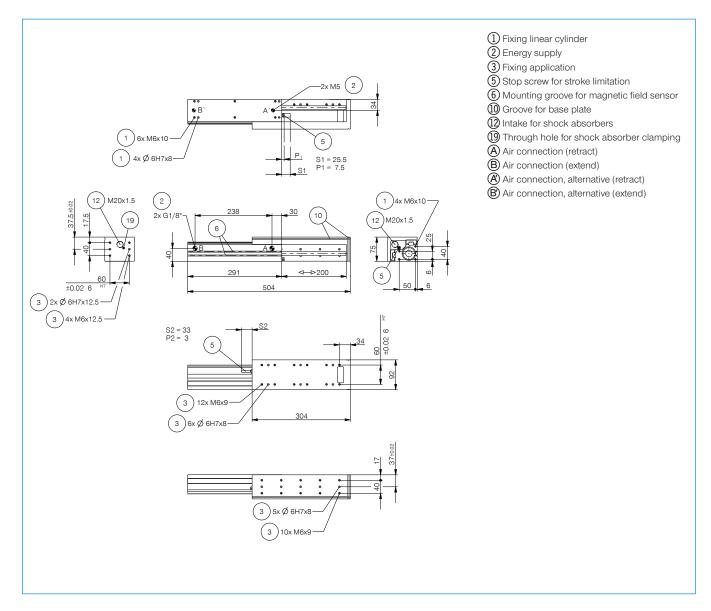


Adapter plate

APLSX40V

	► Technical Data*
Order no.	LSX40-200
Stroke [mm]	200
Pressure force max. [N]	750
Retraction force [N]	680
Recommended handling weight [kg]	40
Piston diameter [mm]	40
Guide rail size [mm]	30
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	235
Weight [kg]	4.4

^{*}All data measured at 6 bar



LIFTING CYLINDERS OVERVIEW OF SERIES



PNEUMATIC



Series HZ 780

LIFTING CYLINDERS **SERIES HZ**

PRODUCT ADVANTAGES



Hoseless air passage

Eliminates undefined interference contours and wearprone hoses and increases the safety of your application in the process

Dampened end position

By using PowerStop shock absorbers, you can gently move up to the end positions, increasing the process reliability and durability of your application

Very robust

Two ground and hard chrome-plated guide rods guarantee a secure process sequence with their rigidity and long service life

► THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com



BENEFITS IN DETAIL



- 1 Integrated air feed-through
 - for hoseless air transfer
- 2 Energy supply
 - possible from several sides
- (3) Mounting and positioning
 - mounting possible from several sides for versatile positioning
- 4 Mounting block
 - mounting for inductive proximity switch
- 5 Drive
 - double-acting pneumatic cylinder
- 6 Patented, hydraulic shock absorber
 - adjustable end position damping
- 7 Intake flange
 - for fixing to the customer specific application
- 8 Two guide rods
 - high forces and moments capacity

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information

All information just a click away at: www.zimmer-group.com Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.



LIFTING CYLINDERS INSTALLATION SIZE HZ40

PRODUCT SPECIFICATIONS



Forces and moments

Max allowable static forces and moments.



► INCLUDED IN DELIVERY



Mounting block

KB8-28



Shock Absorbers

M14X1.5S



Stop sleeve

DST01491

> RECOMMENDED ACCESSORIES



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch

NJ8-E2S



Plug-in connector Straight Cable 5m - Socket M8

KAG500



Plug-in connector Angled Cable 5m - Socket M8

KAW500



Plug-in connector customizable Straight -Connector M8

S8-G-3



Plug-in connector customizable Straight - Connector M12

S12-G-3



Flow Control Valves - with

DRV1-8X6

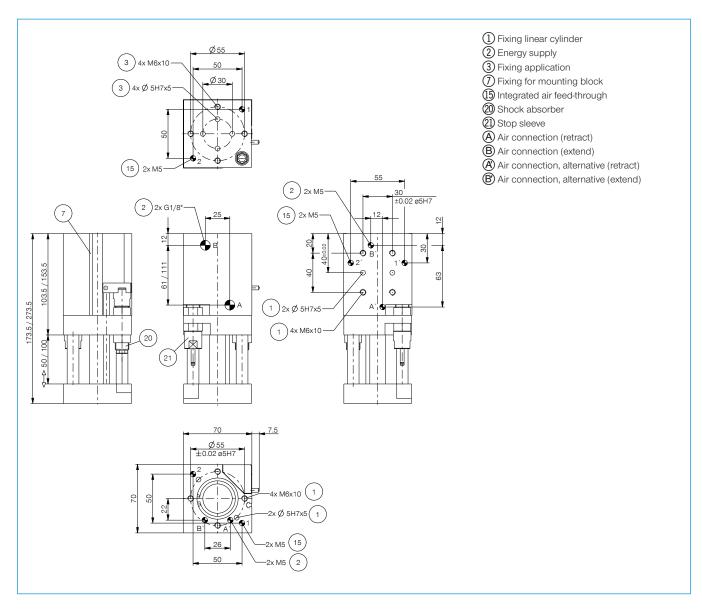


Pressure Safety Valve

DSV1-8

	► Technical Data*	
Order no.	HZ40-50D2	HZ40-100D2
Stroke [mm]	50	100
Pressure force max. [N]	720	720
Retraction force [N]	600	600
Air feed-through [Quantity]	2	2
Air volume per cycle [cm³]	116	232
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Weight [kg]	2	2.7
Deviation D for Mr 5 N [mm]		0.5
Deviation D for Mr 10 N [mm]	0.1	
Deviation D for Mr 15 N [mm]		0.15
Deviation D for Mr 70 N [mm]	0.5	
Deflection A for My 60 N [mm]	0.05	0.1
Deflection A for My 100 N [mm]	0.1	0.15

^{*}All data measured at 6 bar



CUTTING TONGS OVERVIEW OF SERIES



► PNEUMA	ATIC	
•	Series ZK1000	786
: :	Series ZK	798

CUTTING TONGS SERIES ZK1000

PRODUCT ADVANTAGES



Extremely lightweight

This light weight generally allows the use of a smaller moving axis, reducing the overall costs of the application in the process

Integrated magnetic field sensing

One of the few cutting tongs on the market that can have its position queried and transferred to the control system with process reliability

Decide for yourself!

Sprue or steel wire: The variety of cutting geometries and materials ensure you always find the correct cuttings

► THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com



BENEFITS IN DETAIL



- 1 Cutting insert
 - flexible applicable due to specific cutting geometry
- 2 Return spring
 - to open the cuttings
- (3) Mounting clamp
 - mounting and positioning of magnetic field sensors
- 4 Magnetic field sensor
 - for position sensing
- 5 Drive
 - single-acting pneumatic cylinder
- 6 Housing
 - Hard-coated aluminum alloy
- 7 Mounting and positioning
 - via fit, thread and lock nut
- 8 Energy supply

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information

All information just a click away at: www.zimmer-group.com Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.



Installation size ZK1030 / Cutting Tongs / pneumatic / Cutting Tongs

CUTTING TONGS INSTALLATION SIZE ZK1030

PRODUCT SPECIFICATIONS



► INCLUDED IN DELIVERY



Locking nut

C093610009

► RECOMMENDED ACCESSORIES



Sensor holder

KHD30



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Straight Fittings - Barb Style Connection

GVM3



Angled Fittings - Barb Style Connection

WVM3



Cutting Insert 15° for plastics

BK1030-01



Cutting Insert 40° For

BK1030-02



Cutting Insert 0° For Plastics

BK1030-03



Cutting Tong For Plastics

BK1030-04

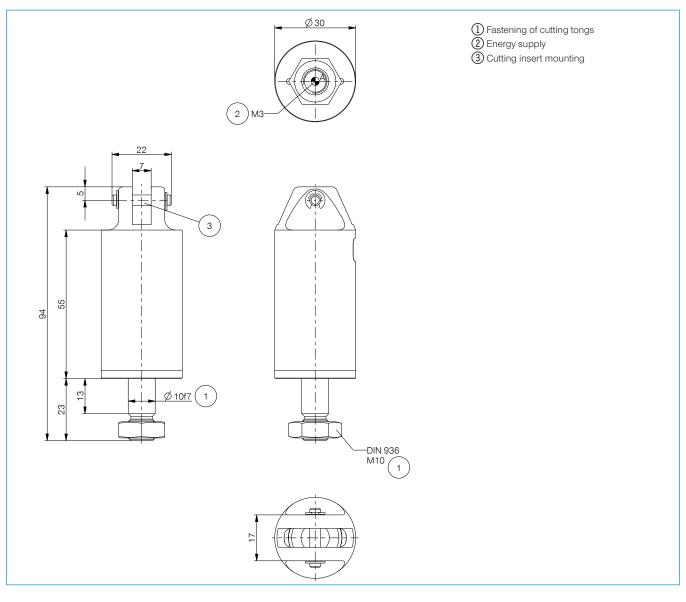


Cutting Insert 0° For Steel

BK1030-05

	► Technical Data*
Order no.	ZK1030
Stroke per jaw [°]	4.25
Gripping moment in closing [Nm]	14
Closing time [s]	0.01
Opening time [s]	0.1
Operating pressure min. [bar]	2
Operating pressure max. [bar]	6
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	5
Weight [kg]	0.08
Possible cutting diameters	
possible cut-Ø max. plastics [mm]	2
possible cut-Ø max. hard-plastic [mm]	
possible cut-Ø max. copper [mm]	1
possible cut-Ø max. steel [mm]	0.5
possible cut-Ø max. piano wire [mm]	0.3

^{*}All data measured at 6 bar



Installation size ZK1036 / Cutting Tongs / pneumatic / Cutting Tongs

CUTTING TONGS INSTALLATION SIZE ZK1036

PRODUCT SPECIFICATIONS



► INCLUDED IN DELIVERY



Locking nut

C093614159

► RECOMMENDED ACCESSORIES



Sensor holder

KHD36



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Straight Fittings - Quick

GVM5



Angled Fittings - Quick

WVM5



Cutting Insert 25° For Plastics

BK1036-01



Cutting Insert 40° For

BK1036-02



Cutting Insert 0° For Plastics

BK1036-03



Cutting Tong For Plastics

BK1036-04

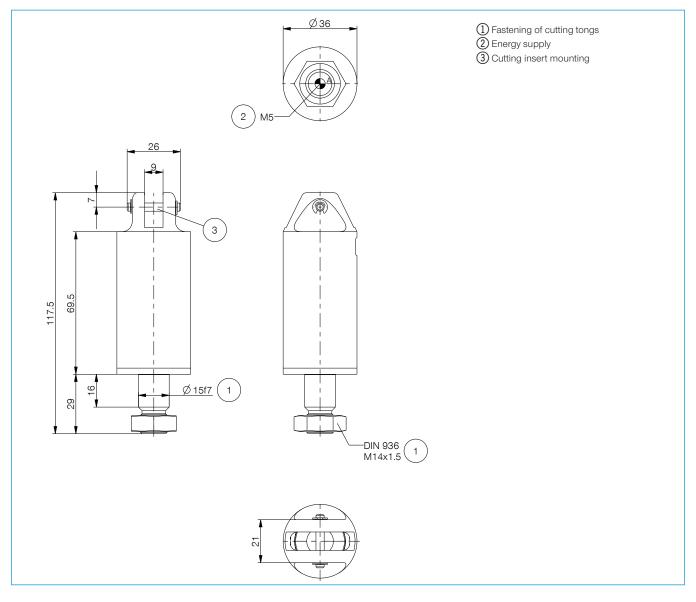


Cutting Insert 0° For Steel

BK1036-05

	N T 1 1 1 D 1 4
	► Technical Data*
Order no.	ZK1036
Stroke per jaw [°]	5
Gripping moment in closing [Nm]	40
Closing time [s]	0.04
Opening time [s]	0.15
Operating pressure min. [bar]	2
Operating pressure max. [bar]	6
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	9.2
Weight [kg]	0.13
Possible cutting diameters	
possible cut-Ø max. plastics [mm]	4
possible cut-Ø max. hard-plastic [mm]	2.6
possible cut-Ø max. copper [mm]	1.6
possible cut-Ø max. steel [mm]	1
possible cut-Ø max. piano wire [mm]	0.5

^{*}All data measured at 6 bar



CUTTING TONGS INSTALLATION SIZE ZK1045

PRODUCT SPECIFICATIONS



► INCLUDED IN DELIVERY



Locking nut

C093620159

► RECOMMENDED ACCESSORIES



Sensor holder

KHD45



Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Straight Fittings - Quick

GV1-8X6



Angled Fittings - Quick Connect Style

WV1-8X6



Cutting Insert 15° for

BK1045-01



Cutting Insert 40° For

BK1045-02



Cutting Insert 0° For Plastics

BK1045-03



Cutting Tong For Plastics

BK1045-04

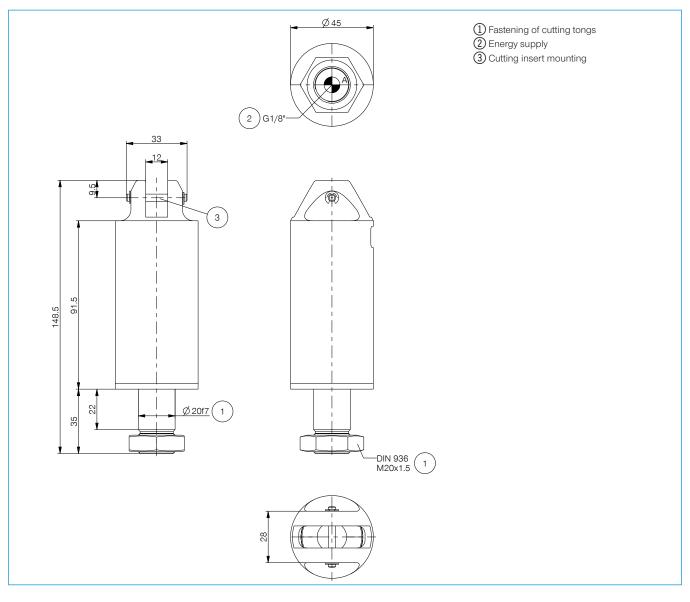


Cutting Insert 0° For Steel

BK1045-05

	► Technical Data*
Order no.	ZK1045
Stroke per jaw [°]	8.5
Gripping moment in closing [Nm]	98
Closing time [s]	0.06
Opening time [s]	0.2
Operating pressure min. [bar]	2
Operating pressure max. [bar]	6
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	32
Weight [kg]	0.24
Possible cutting diameters	
possible cut-Ø max. plastics [mm]	7
possible cut-Ø max. hard-plastic [mm]	5
possible cut-Ø max. copper [mm]	2.6
possible cut-Ø max. steel [mm]	2
possible cut-Ø max. piano wire [mm]	1

^{*}All data measured at 6 bar



Installation size ZK1065 / Cutting Tongs / pneumatic / Cutting Tongs

CUTTING TONGS INSTALLATION SIZE ZK1065

PRODUCT SPECIFICATIONS



► INCLUDED IN DELIVERY



Locking nut

C093620159

► RECOMMENDED ACCESSORIES



Sensor holder

KHD65



Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Straight Fittings - Quick

GV1-8X6



Angled Fittings - Quick Connect Style

WV1-8X6



Cutting Insert 15° for plastics

BK1065-01



Cutting Insert 0° For

BK1065-02



Cutting Insert 30° For Plastics

BK1065-03



Cutting Tong For Plastics

BK1065-04

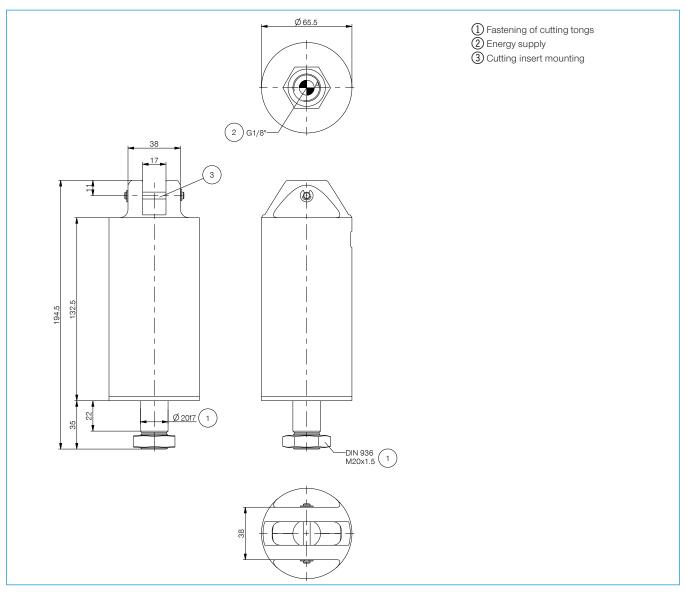


Cutting Insert 0° For Steel

BK1065-05

	► Technical Data*
Order no.	ZK1065
Stroke per jaw [°]	13
Gripping moment in closing [Nm]	400
Closing time [s]	0.1
Opening time [s]	0.4
Operating pressure min. [bar]	2
Operating pressure max. [bar]	6
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	130
Weight [kg]	0.67
Possible cutting diameters	
possible cut-Ø max. plastics [mm]	11
possible cut-Ø max. hard-plastic [mm]	8
possible cut-Ø max. copper [mm]	6
possible cut-Ø max. steel [mm]	4
possible cut-Ø max. piano wire [mm]	

^{*}All data measured at 6 bar

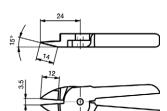


CUTTING TONGS ZK1000 SERIES CUTTING INSERTS

CUTTING INSERTS FOR ZK1030

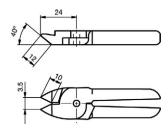
Cutting Insert 15° for plastics

BK1030-01



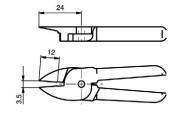
Cutting Insert 40° For Plastics

BK1030-02



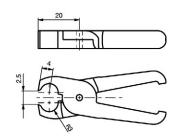
Cutting Insert 0° For Plastics

BK1030-03



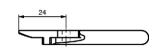
Cutting Tong For Plastics

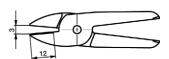
BK1030-04



Cutting Insert 0° For Steel

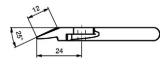
BK1030-05

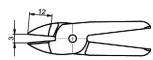




Cutting Insert 25° For Steel

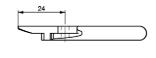
BK1030-06

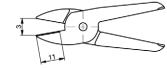




Carbide cutting insert 0° for steel

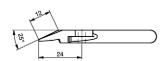
BK1030-07

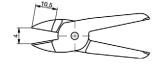




Carbide Cutting Insert 25° For Steel

BK1030-08

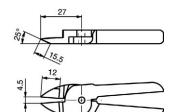




CUTTING INSERTS FOR ZK1036

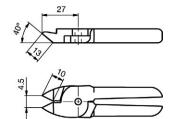
Cutting Insert 25° For Plastics

BK1036-01



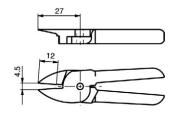
Cutting Insert 40° For Plastics

BK1036-02



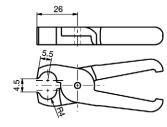
Cutting Insert 0° For Plastics

BK1036-03



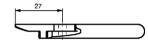
Cutting Tong For Plastics

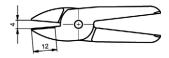
BK1036-04



Cutting Insert 0° For Steel

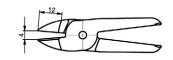
BK1036-05





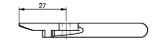
Cutting Insert 25° For Steel

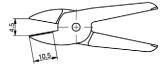
BK1036-06



Carbide cutting insert 0° for steel

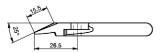
BK1036-07

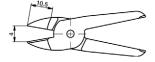




Carbide Cutting Insert 25° For Steel

BK1036-08

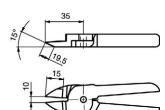




▶ CUTTING INSERTS FOR ZK1045

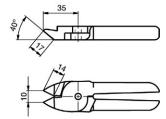
Cutting Insert 15° for plastics

BK1045-01



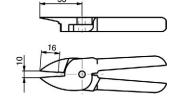
Cutting Insert 40° For Plastics

BK1045-02



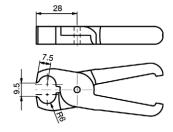
Cutting Insert 0° For Plastics

BK1045-03



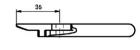
Cutting Tong For Plastics

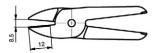
BK1045-04



Cutting Insert 0° For Steel

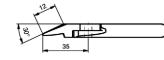
BK1045-05

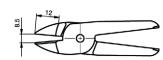




Cutting Insert 30° For Steel

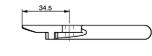
BK1045-06

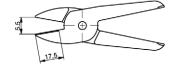




Carbide cutting insert 0° for steel

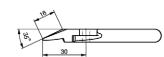
BK1045-07

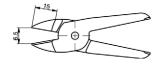




Carbide Cutting Insert 35° For Steel

BK1045-08

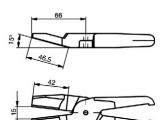




CUTTING INSERTS FOR ZK1065

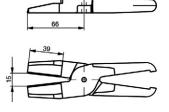
Cutting Insert 15° for plastics

BK1065-01



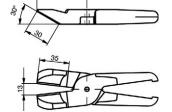
Cutting Insert 0° For Plastics

BK1065-02



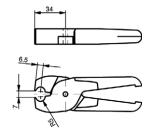
Cutting Insert 30° For Plastics

BK1065-03



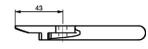
Cutting Tong For Plastics

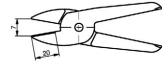
BK1065-04



Cutting Insert 0° For Steel

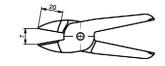
BK1065-05





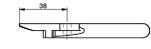
Cutting Insert 30° For Steel

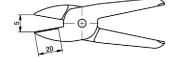
BK1065-06



Carbide cutting insert 0° for steel

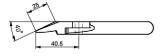
BK1065-07

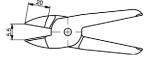




Carbide Cutting Insert 40° For Steel

BK1065-08





CUTTING TONGS SERIES ZK

PRODUCT ADVANTAGES



Flat structure

Reduces the interference contours and enables simple integration into your machine design

▶ Decide for yourself!

The gripper jaw holder provides the option to adapt standard cutting, gripper jaws or your own design

► Failure-free continuous operation

Our uncompromising "Made in Germany" quality guarantees up to 5 million maintenance-free gripping cycles

► THE BEST PRODUCT FOR YOUR APPLICATION

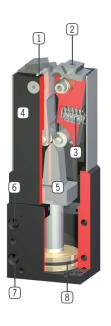


Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com



BENEFITS IN DETAIL



- 1 Switch cam
 - for position sensing
- 2 Mounting
 - for individual jaws, knives, chucks and similar
- (3) Integrated spring
 - supports jaw return (ZK33)
- 4 Robust, lightweight housing
 - Hard-coated aluminum alloy
- 5 Force transfer
 - via wedge and rollers
- 6 Mounting and positioning
 - mounting possible from several sides for versatile positioning
- 7 Energy supply
 - possible from several sides
- 8 Drive
 - double-acting pneumatic cylinder

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information

All information just a click away at: www.zimmer-group.com Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.



CUTTING TONGS INSTALLATION SIZE ZK22

PRODUCT SPECIFICATIONS



Gripping moment diagram

Gripping force as a function of opening angle. 100 75 50 25

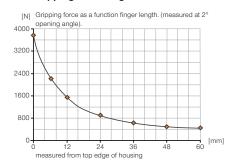
Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	20
My [Nm]	30
Fa [N]	600

Gripping force diagram



► RECOMMENDED ACCESSORIES



Universal Jaw Steel



UB22



Cutter mounting set

BK22



Cutter set with double ground cutting edge

BK22-1



Cutter set with single ground cutting edge

BK22-2



Cutter set with shearing blades

BK22-3



Mounting block

KB3



Inductive proximity switch - Cable 5 m

NJ3-E2



Inductive Proximity Switch Cable 0,3 m - Connector M8

NJ3-E2SK



Straight Fittings - Quick Connect Style

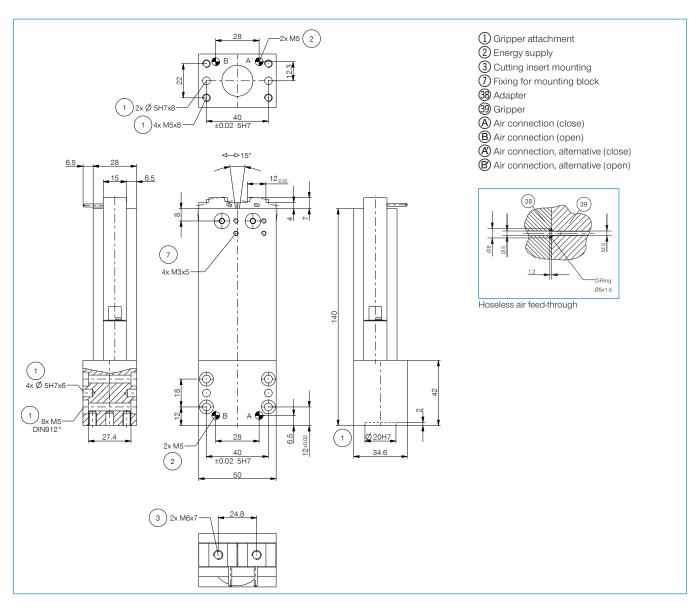
GVM5



Angled Fittings - Quick Connect Style

	► Technical Data*
Order no.	ZK22
Stroke per jaw [°]	7.5
Gripping moment in closing [Nm]	54
Gripping force in closing [N]	3600
Closing time [s]	0.15
Opening time [s]	0.15
Repetition accuracy +/- [mm]	0.1
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	10
Weight [kg]	0.79

^{*}All data measured at 6 bar

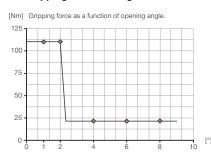


CUTTING TONGS INSTALLATION SIZE ZK33

PRODUCT SPECIFICATIONS



Gripping moment diagram



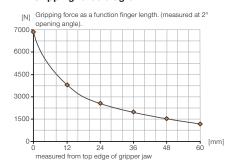
Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	26	
My [Nm]	40	
Fa [N]	720	

Gripping force diagram



► RECOMMENDED ACCESSORIES



Universal Jaw Steel

UB22



Cutter mounting set

BK22



Cutter set with double ground cutting edge

BK22-1



Cutter set with single ground cutting edge

BK22-2



Cutter set with shearing blades

BK22-3



Mounting block

KB3



Inductive proximity switch - Cable 5 m

NJ3-E2



Inductive Proximity Switch Cable 0,3 m - Connector M8

NJ3-E2SK



Straight Fittings - Quick Connect Style

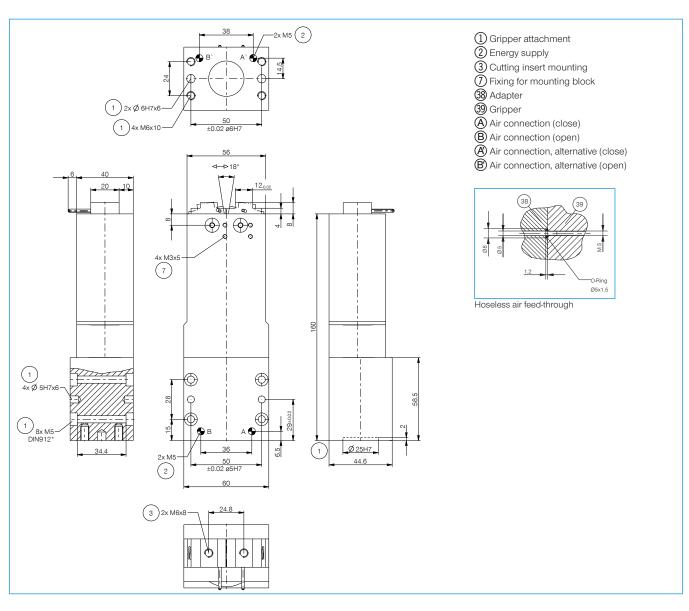
GVM5



Angled Fittings - Quick Connect Style

	► Technical Data*
Order no.	ZK33
Stroke per jaw [°]	9
Gripping moment in closing [Nm]	110
Gripping force in closing [N]	6800
Closing time [s]	0.2
Opening time [s]	0.2
Repetition accuracy +/- [mm]	0.1
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	73
Weight [kg]	1.3

^{*}All data measured at 6 bar



SEPARATORS OVERVIEW OF SERIES



► PNEUMA	► PNEUMATIC		
	Series VEG	806	
	Series VE	818	

SEPARATORS SERIES VEG

▶ PRODUCT ADVANTAGES



Hardened stainless steel guide

This guide is robust, reliable and durable: Exactly what you need for your application!

Decide for yourself!

Sensing via magnetic field sensors or inductive proximity switches: Unlike the benchmark, you are free to choose!

► Failure-free continuous operation

Our uncompromising "Made in Germany" quality guarantees up to 10 million maintenance-free cycles

► THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com



BENEFITS IN DETAIL



- 1 Tapped rod
 - hardened steel
- 2 Mounting
 - individual seperator finger mounting
- 3 Square guide
 - rugged, high forces and moments capacity
- 4 Mounting and positioning
 - mounting possible from several sides for versatile positioning
- 5 Drive
 - double-acting pneumatic cylinder
- 6 Energy supply
- 7 Sensing
 - groove for positioning of the magnetic field sensor
- 8 Permanent magnet
 - installed in piston area

► FURTHER INFORMATION IS AVAILABLE ONLINE



Technical Information

All information just a click away at: www.zimmer-group.com Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.



INSTALLATION SIZE VEG10

▶ PRODUCT SPECIFICATIONS



Forces and moments

Shows static forces and torques that may be present on the plunger



Mr [Nm]	3	
My [Nm]	3	
Mx [Nm]	3	
Fa [N]	75	

► RECOMMENDED ACCESSORIES



Mounting block

KB8-20



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch

NJ8-E2S



Magnetic field sensor Angled Cable 5 m MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Straight Fittings - Quick Connect Style

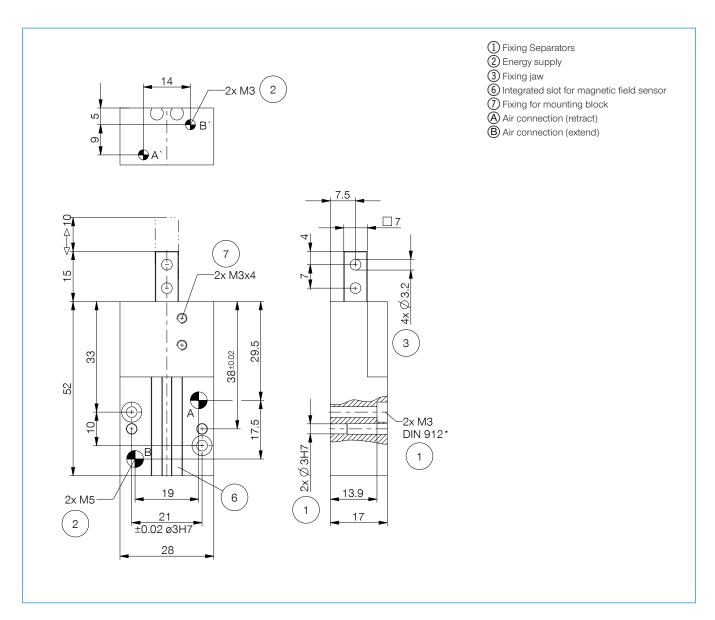
GVM5



Angled Fittings - Quick Connect Style

	► Technical Data*
Order no.	VEG10-B
Stroke per tapped rod [mm]	10
Force in retract [N]	30
Force in extend [N]	40
Cycle count [s]	0.04
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	1.5
Weight [kg]	0.075

^{*}All data measured at 6 bar



INSTALLATION SIZE VEG14

▶ PRODUCT SPECIFICATIONS



Forces and moments

Shows static forces and torques that may be present on the plunger



Mr [Nm]	5
My [Nm]	5
Mx [Nm]	5
Fa [N]	100

► RECOMMENDED ACCESSORIES



Mounting block

KB8-20



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch

NJ8-E2S



Magnetic field sensor Angled Cable 5 m MFS103KHC

Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 5 m MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Straight Fittings - Quick Connect Style

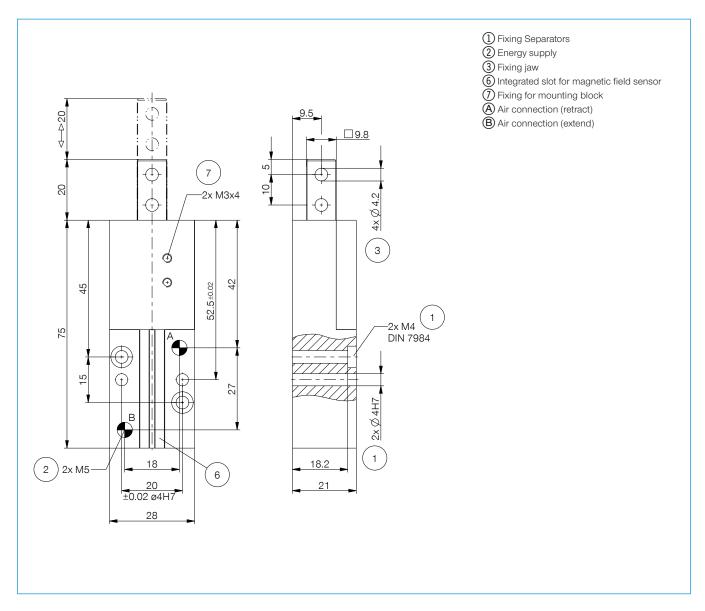
GVM5



Angled Fittings - Quick Connect Style

	► Technical Data*
Order no.	VEG14-B
Stroke per tapped rod [mm]	20
Force in retract [N]	65
Force in extend [N]	80
Cycle count [s]	0.04
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	6
Weight [kg]	0.142

^{*}All data measured at 6 bar



SEPARATORS INSTALLATION SIZE VEG15

▶ PRODUCT SPECIFICATIONS



Forces and moments

Shows static forces and torques that may be present on the plunger



Mr [Nm]	5
My [Nm]	5
Mx [Nm]	5
Fa [N]	100

► RECOMMENDED ACCESSORIES



Mounting block

KB8-20



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch

NJ8-E2S



Magnetic field sensor Angled Cable 5 m MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Straight Fittings - Quick Connect Style

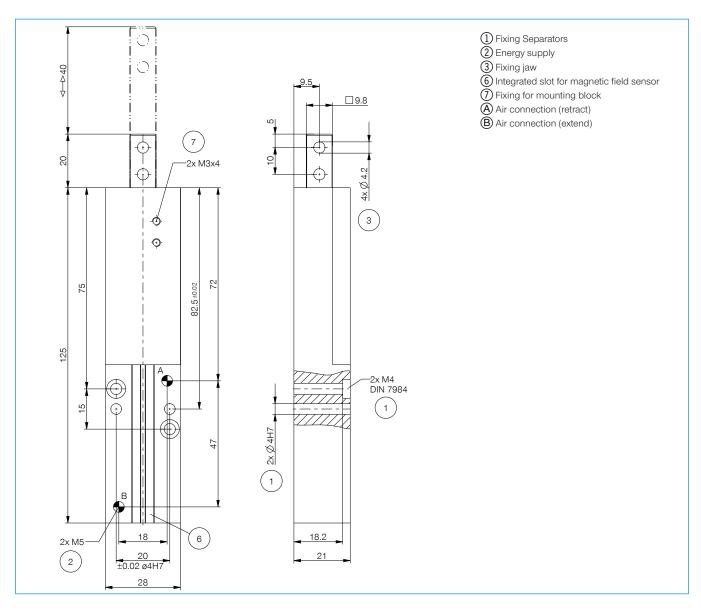
GVM5



Angled Fittings - Quick Connect Style

	► Technical Data*
Order no.	VEG15-B
Stroke per tapped rod [mm]	40
Force in retract [N]	65
Force in extend [N]	80
Cycle count [s]	0.1
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	11
Weight [kg]	0.2

^{*}All data measured at 6 bar



SEPARATORS INSTALLATION SIZE VEG22

▶ PRODUCT SPECIFICATIONS



Forces and moments

Shows static forces and torques that may be present on the plunger



Mr [Nm]	9
My [Nm]	9
Mx [Nm]	9
Fa [N]	180

► RECOMMENDED ACCESSORIES



Mounting block

KB8-20



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch

NJ8-E2S



Magnetic field sensor Angled Cable 5 m MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Straight Fittings - Quick Connect Style

GVM5

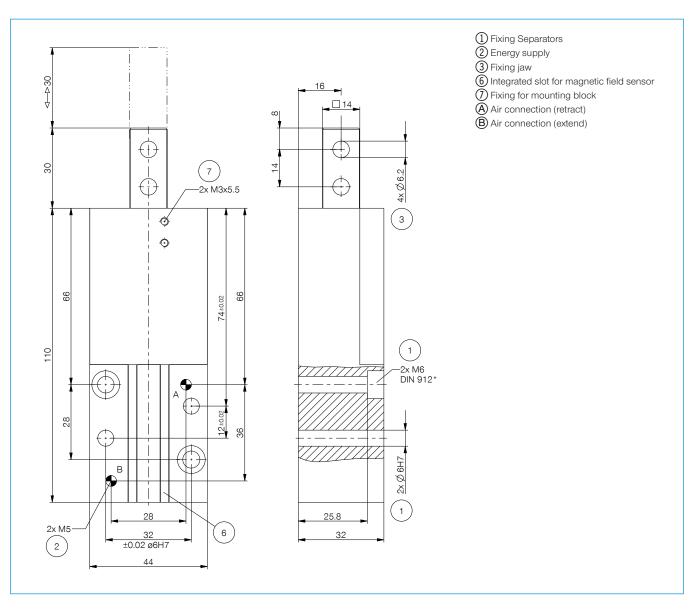


Angled Fittings - Quick Connect Style

WVM5

	► Technical Data*
Order no.	VEG22-B
Stroke per tapped rod [mm]	30
Force in retract [N]	170
Force in extend [N]	220
Cycle count [s]	0.08
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	20
Weight [kg]	0.5

^{*}All data measured at 6 bar



INSTALLATION SIZE VEG23

▶ PRODUCT SPECIFICATIONS



Forces and moments

Shows static forces and torques that may be present on the plunger



Mr [Nm]	9
My [Nm]	9
Mx [Nm]	9
Fa [N]	180

► RECOMMENDED ACCESSORIES



Mounting block

KB8-20



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch

NJ8-E2S



Magnetic field sensor Angled Cable 5 m MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Straight Fittings - Quick Connect Style

GVM5

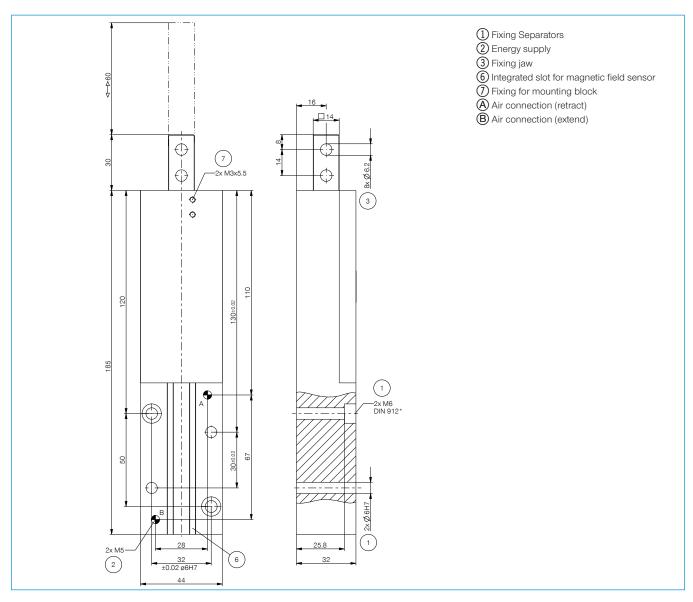


Angled Fittings - Quick Connect Style

WVM5

	► Technical Data*
Order no.	VEG23-B
Stroke per tapped rod [mm]	60
Force in retract [N]	170
Force in extend [N]	220
Cycle count [s]	0.12
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	42
Weight [kg]	0.75

^{*}All data measured at 6 bar



SEPARATORS SERIES VE

PRODUCT ADVANTAGES



Mechanical forced control

Guarantees process reliability for your application since only one workpiece can be separated and guided through at a time

▶ Decide for yourself!

Sensing via magnetic field sensors or inductive proximity switches: Unlike the benchmark, you are free to choose!

► Failure-free continuous operation

Our uncompromising "Made in Germany" quality guarantees up to 10 million maintenance-free cycles

► THE BEST PRODUCT FOR YOUR APPLICATION

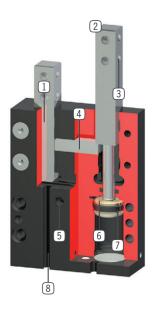


Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com



BENEFITS IN DETAIL



- 1 Square guide
 - rugged, high forces and moments capacity
- 2 Tapped rod
 - hardened steel
- (3) Mounting
 - individual seperator finger mounting
- 4 Locking
 - integrated, mechanical locking
- 5 Energy supply
 - possible from several sides
- (6) Drive
 - two double-acting pneumatic cylinders
- 7 Permanent magnet
 - installed in piston area
- 8 Sensing
 - groove for positioning of the magnetic field sensor

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information

All information just a click away at: www.zimmer-group.com Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.



SEPARATORS INSTALLATION SIZE VE10

▶ PRODUCT SPECIFICATIONS



Forces and moments

Shows static forces and torques that may be present on the plunger



Mr [Nm]	3
My [Nm]	3
Mx [Nm]	3
Fa [N]	75

► RECOMMENDED ACCESSORIES



Mounting block

KB8-20



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch

NJ8-E2S



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Straight Fittings - Quick Connect Style

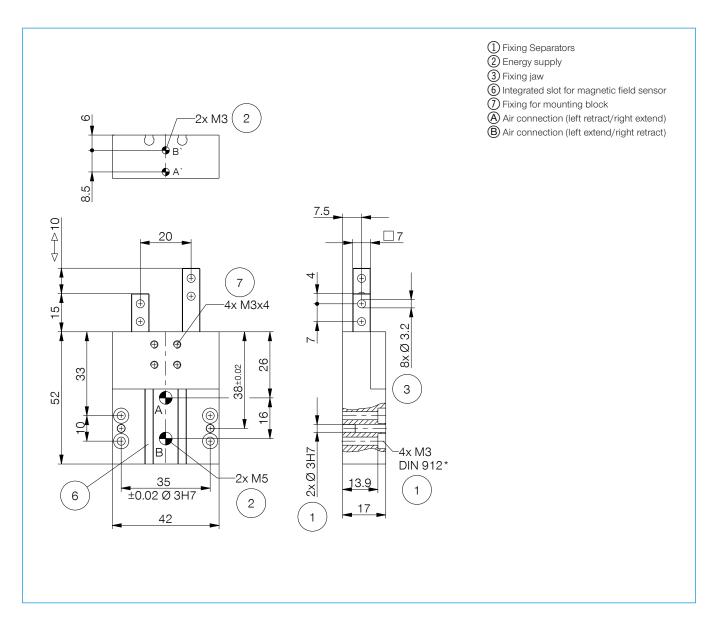
GVM5



Angled Fittings - Quick Connect Style

	► Technical Data*
Order no.	VE10-B
Stroke per tapped rod [mm]	10
Force in retract [N]	30
Force in extend [N]	40
Self locking mechanism	mechanical
Cycle count [s]	0.04
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	3
Weight [kg]	0.12

^{*}All data measured at 6 bar



INSTALLATION SIZE VE14

▶ PRODUCT SPECIFICATIONS



Forces and moments

Shows static forces and torques that may be present on the plunger



Mr [Nm]	5
My [Nm]	5
Mx [Nm]	5
Fa [N]	100

► RECOMMENDED ACCESSORIES



Mounting block

KB8-20



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch

NJ8-E2S



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Straight Fittings - Quick Connect Style

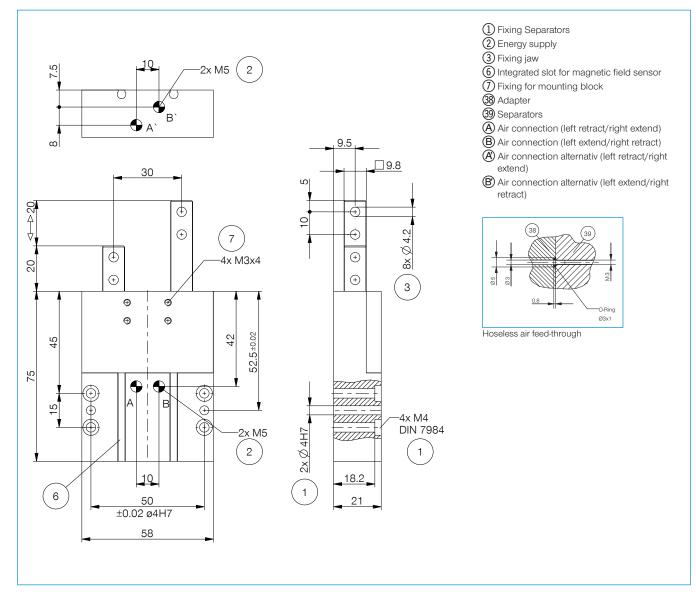
GVM5



Angled Fittings - Quick Connect Style

	► Technical Data*
Order no.	VE14-B
Stroke per tapped rod [mm]	20
Force in retract [N]	65
Force in extend [N]	80
Self locking mechanism	mechanical
Cycle count [s]	0.05
Repetition accuracy +/- [mm]	0.1
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	11
Weight [kg]	0.3

^{*}All data measured at 6 bar



Installation size VE15 / Separators / pneumatic / Separators

SEPARATORS INSTALLATION SIZE VE15

▶ PRODUCT SPECIFICATIONS



Forces and moments

Shows static forces and torques that may be present on the plunger



Mr [Nm]	5
My [Nm]	5
Mx [Nm]	5
Fa [N]	100

► RECOMMENDED ACCESSORIES



Mounting block

KB8-20



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch

NJ8-E2S



Angled Cable 5 m MFS103KHC

Magnetic field sensor



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Straight Fittings - Quick Connect Style

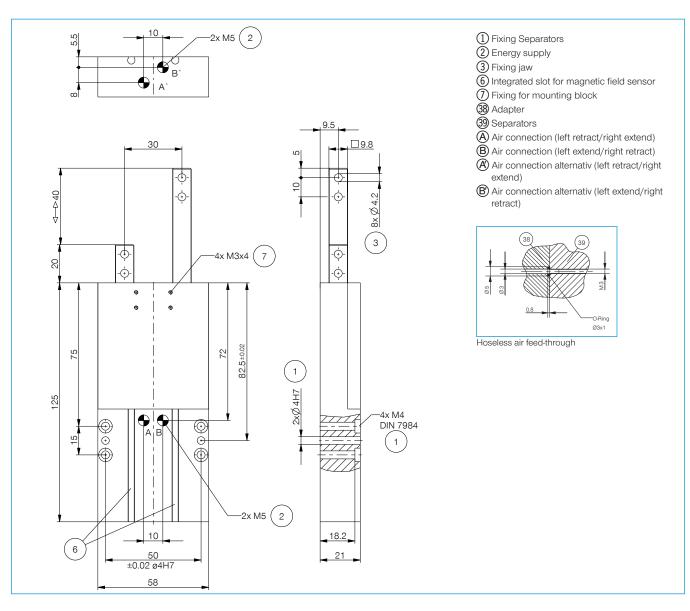
GVM5



Angled Fittings - Quick Connect Style

	► Technical Data*
Order no.	VE15-B
Stroke per tapped rod [mm]	40
Force in retract [N]	65
Force in extend [N]	80
Self locking mechanism	mechanical
Cycle count [s]	0.1
Repetition accuracy +/- [mm]	0.1
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	23
Weight [kg]	0.48

^{*}All data measured at 6 bar



INSTALLATION SIZE VE22

▶ PRODUCT SPECIFICATIONS



Forces and moments

Shows static forces and torques that may be present on the plunger



Mr [Nm]	9
My [Nm]	9
Mx [Nm]	9
Fa [N]	180

► RECOMMENDED ACCESSORIES



Mounting block

KB8-20



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch

NJ8-E2S



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Straight Fittings - Quick Connect Style

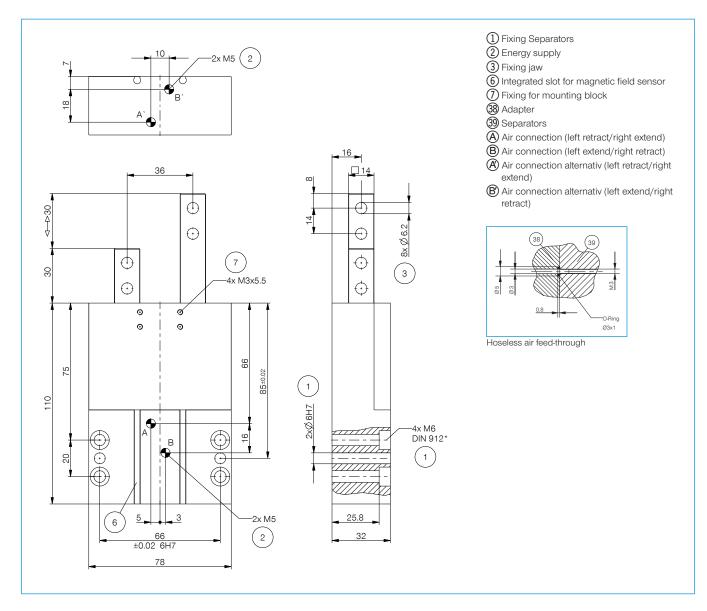
GVM5



Angled Fittings - Quick Connect Style

	► Technical Data*
Order no.	VE22-B
Stroke per tapped rod [mm]	30
Force in retract [N]	170
Force in extend [N]	220
Self locking mechanism	mechanical
Cycle count [s]	0.08
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	42
Weight [kg]	0.915

^{*}All data measured at 6 bar



SEPARATORS INSTALLATION SIZE VE23

▶ PRODUCT SPECIFICATIONS



Forces and moments

Shows static forces and torques that may be present on the plunger



Mr [Nm]	9	
My [Nm]	9	
Mx [Nm]	9	
Fa [N]	180	

► RECOMMENDED ACCESSORIES



Mounting block

KB8-20



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch

NJ8-E2S



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Straight Fittings - Quick Connect Style

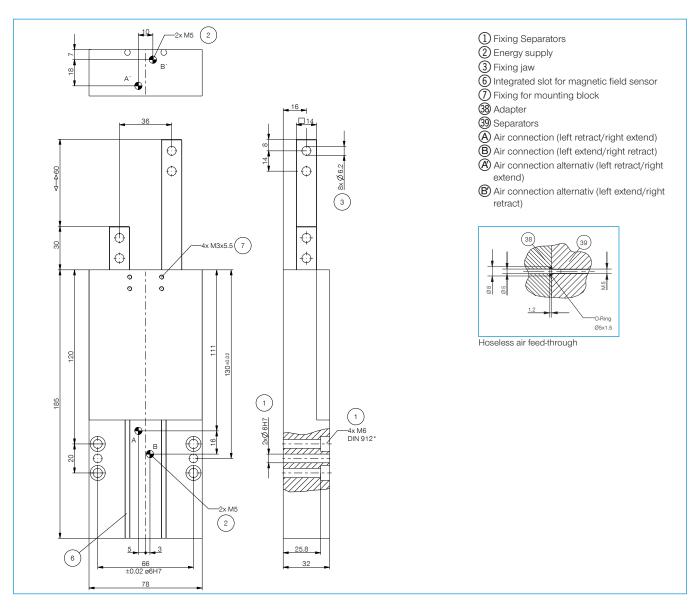
GVM5



Angled Fittings - Quick Connect Style

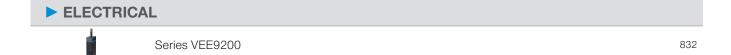
	► Technical Data*
Order no.	VE23-B
Stroke per tapped rod [mm]	60
Force in retract [N]	170
Force in extend [N]	220
Self locking mechanism	mechanical
Cycle count [s]	0.15
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	83
Weight [kg]	1.5

^{*}All data measured at 6 bar



SEPARATORS OVERVIEW OF SERIES





SEPARATORS SERIES VEE9200

PRODUCT ADVANTAGES



▶ 250 cycles per minute

If speed is the key, nothing beats this unit. This lets you increase your component output and lower your unit costs,

Saving energy with pulse control

You only have to supply current briefly when retracting and extending the plunger. No energy is required at the end positions

Plug and play

Reduce your design and programming effort to a minimum with the integrated control system and the 2-position query

► THE BEST PRODUCT FOR YOUR APPLICATION

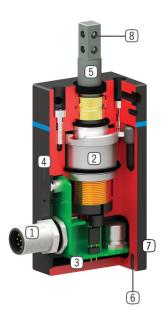


Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com



BENEFITS IN DETAIL



1 Energy supply

- standardized interface M12 round connector

2 Drive

- via Pot magnet and coil bobbin according to the coil system principle
- energy consumption only at impulse <25 ms

(3) Position sensing

- integrated Hallsensor
- 2 positions monitorable

4 Status control

- optical LED position display

5 Tapped rod

- Aluminium hardcoated

6 Mounting and positioning

- mounting possible from several sides for versatile positioning

7 Robust, lightweight housing

- Hard-coated aluminum alloy

8 Mounting

- individual seperator finger mounting

► FURTHER INFORMATION IS AVAILABLE ONLINE



Technical Information

All information just a click away at: www.zimmer-group.com Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.



SEPARATORS INSTALLATION SIZE VEE9200

▶ PRODUCT SPECIFICATIONS



Forces and moments

Shows static forces and torques that may be present on the plunger



Mr [Nm]	0.3	
My [Nm]	0.3	
Mx [Nm]	0.3	
Fa [N]	50	

► RECOMMENDED ACCESSORIES



Plug-in Connector Angled Cable 10 m - Female M12

KAW1000B8



Plug-in Connector Straight Cable 10 m -Female M12

KAG1000B8

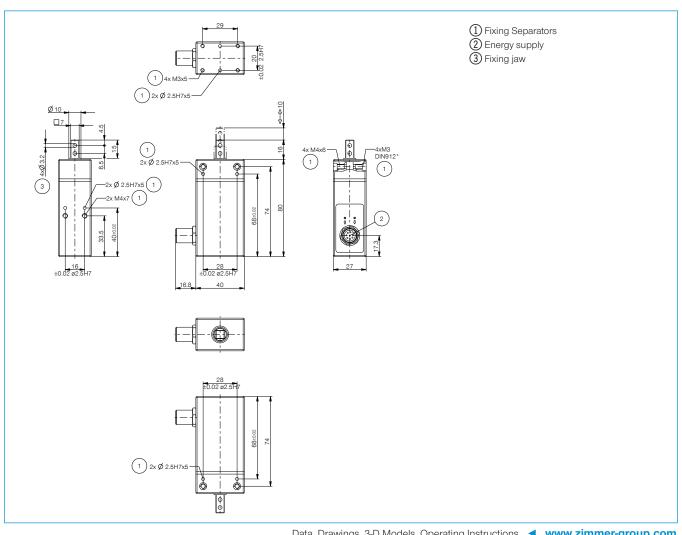


Busbox see page 875

ZUBBOX9000-01

	► Technical Data*	
Order no.	VEE9210	VEE9220
Permissible unevenness of mounting surface [mm]	<0.02	<0.02
Fixing for separator / Tigthening torque	M3 / 1.5	M3 / 1.5
Replacement accuracy [mm]	<0,2	<0,2
Stroke [mm]	10	20
Force in retract [N]	10	8
Force in extend [N]	10	8
Permanent operation cycle count max. [cycle/min]	200	200
Cycle count max. [cycle/min]	250	250
Operating time [ms]	<18	<30
Repetition accuracy +/- [mm]	0.1	0.1
Weight of tappet extension, max. [g]	20	20
Fixing for extension piece / Tigthening torque [Nm]	M3 / 1.5	M3 / 1.5
Pulse time in retract [ms]	25	35
Pulse time in extend [ms]	25	35
Debounce time [ms]	10	10
Current consumption per pulse max. [A]	5	5
Current consumption in a stand-by mode [A]	0.02	0.02
Protection to IEC 60529	IP40	IP40
Certification	C€	CE .
Noise level [db(A)]	<70	<70
Operating temperature [°C]	10 +50	10 +50
Weight [kg]	0.24	0.30

^{*}All data measured at 6 bar



BALL JOINTS SERIES KG

► PRODUCT ADVANTAGES



Lockable displacement position

Be flexible in your application, customise the handling to your workpiece and lock the displacement position with process reliability

Large locating flange

The large mounting surface simplifies your design and allows secure attachment of add-on components

Steel design

The highest force and torque measurement enables flexible for maximum dynamics

► THE BEST PRODUCT FOR YOUR APPLICATION



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PRODUCT SPECIFICATIONS

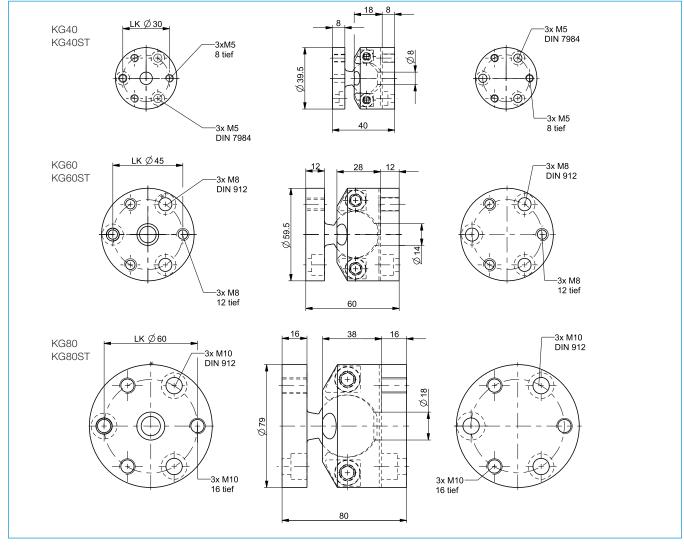


Forces and moments

Shows static forces and torques which may impact on the ball joint



	► Techni	cal Data				
Order no.	KG40	KG40ST	KG60	KG60ST	KG80	KG80ST
Swivel angle [°]	30	30	30	30	30	30
Mx [Nm]	18	18	55	55	124	124
Fa [N]	7500	18000	15000	45000	28000	70000
Weight [kg]	0.1	0.3	0.3	0.9	0.8	2.3



ADJUSTMENT JAWS THE SERIES AT A GLANCE



► ADJUSTMENT JAWS



Series EB5000 840

ADJUSTMENT JAWS SERIES EB5000

PRODUCT ADVANTAGES



Easy and fast

Easy gripper finger adjustment to fit various workpieces saves time and money

Reproducible and durable

The numbering of the detent notches allows you to easily configure the gripper finger length and FEM-calculated adjustment jaws guarantee maximum process reliability

You can install one and the same adjustment jaw within the same 5000 gripper range on various gripper types of identical size and combine it with the respective accessory parts. The increases flexibility and reduces the diversity of parts in equal measure, which in turn reduces the storage costs

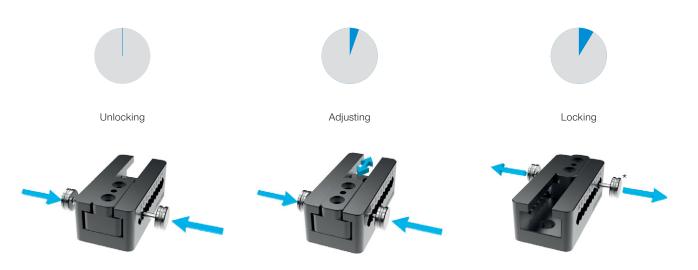
► THE BEST PRODUCT FOR YOUR APPLICATION



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> SETTING THE GRIPPER FINGER POSITION IN UNDER 10 SECONDS



^{*} Pressure pieces are screwed on and can be removed to minimize interference contours

> SERIES CHARACTERISTICS



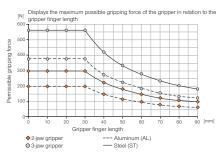
► Technical Information

All information just a click away at: www.zimmer-group.com Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.

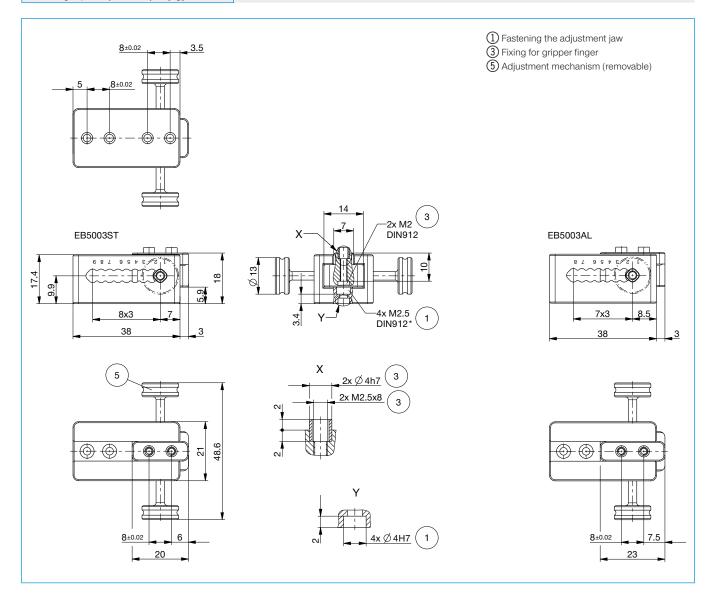


PRODUCT SPECIFICATIONS





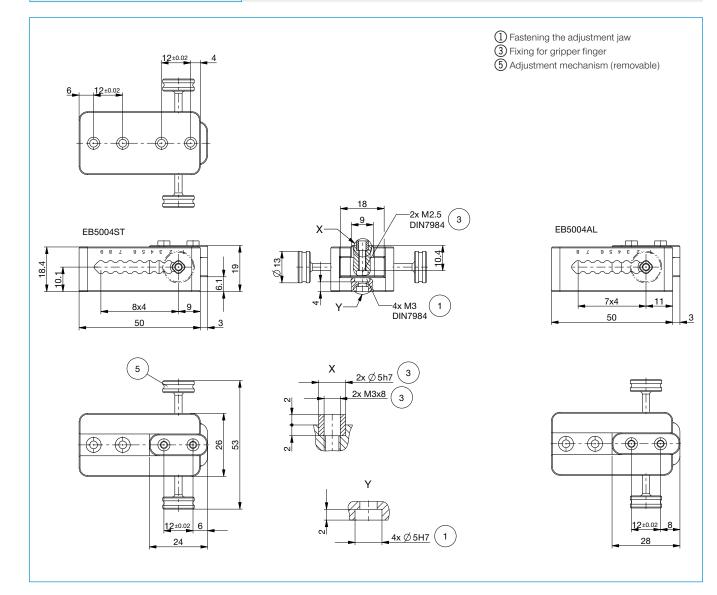
	Technical data	
Order no.	EB5003AL	EB5003ST
compatible with installation size	GPP5003 / GPD5003	GPP5003 / GPD5003
Max. adjustment range [mm]	21	24
Spacing [mm]	7x3	8x3
Max. weight per adjustment jaw [kg]	0.04	0.09



PRODUCT SPECIFICATIONS



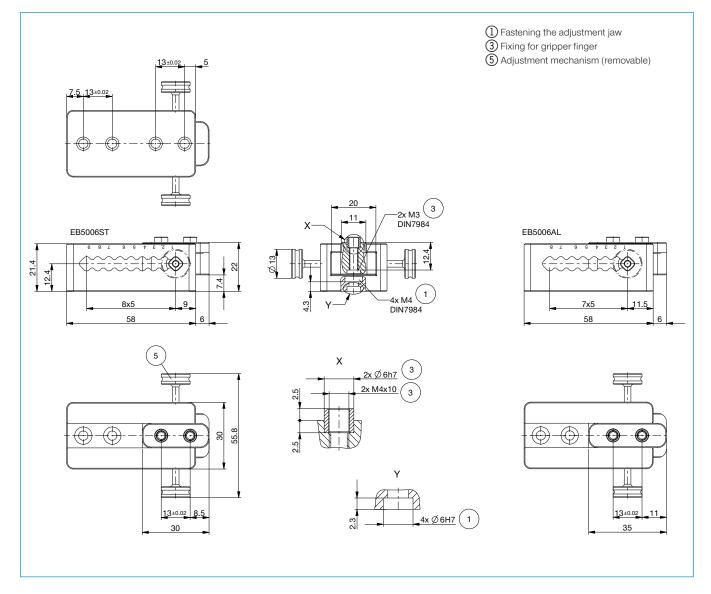
	Technical data	
Order no.	EB5004AL	EB5004ST
compatible with installation size	GPP5004 / GPD5004	GPP5004 / GPD5004
Max. adjustment range [mm]	28	32
Spacing [mm]	7×4	8x4
Max. weight per adjustment jaw [kg]	0.06	0.13



PRODUCT SPECIFICATIONS



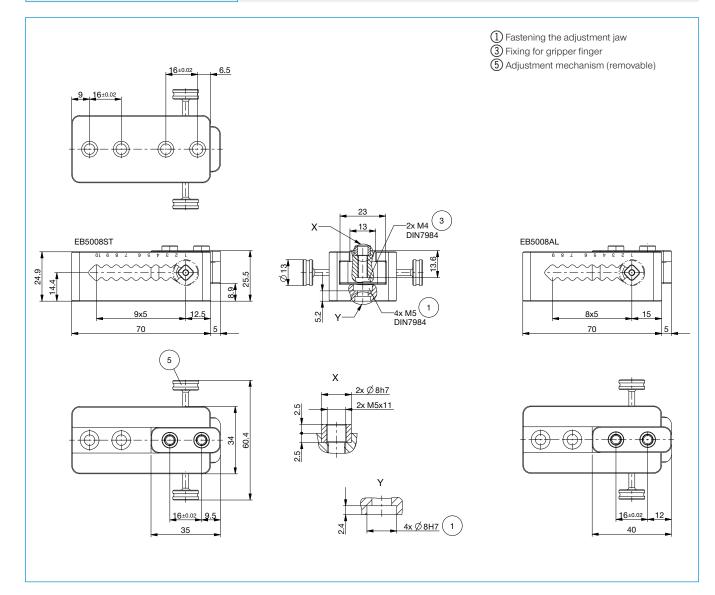
	Technical data	
Order no.	EB5006AL	EB5006ST
compatible with installation size	GPP5006 / GEP5006 / GPD5006 / GED5006	GPP5006 / GEP5006 / GPD5006 / GED5006
Max. adjustment range [mm]	35	40
Spacing [mm]	7x5	8x5
Max. weight per adjustment jaw [kg]	0.10	0.20



PRODUCT SPECIFICATIONS



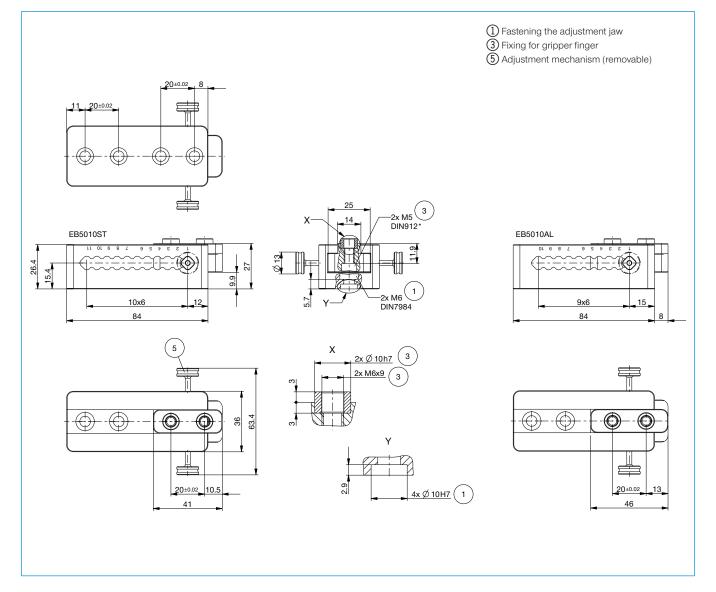
	Technical data	
Order no.	EB5008AL	EB5008ST
compatible with installation size	GPP5008 / GEP5008 / GPD5008 / GED5008 / GPW5008	GPP5008 / GEP5008 / GPD5008 / GED5008 / GPW5008
Max. adjustment range [mm]	40	45
Spacing [mm]	8x5	9x5
Max. weight per adjustment jaw [kg]	0.14	0.34



PRODUCT SPECIFICATIONS

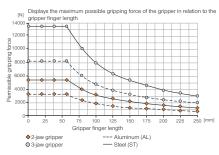


	Technical data	
Order no.	EB5010AL	EB5010ST
compatible with installation size	GPP5010 / GEP5010 / GPD5010 / GED5010	GPP5010 / GEP5010 / GPD5010 / GED5010
Max. adjustment range [mm]	54	60
Spacing [mm]	9x6	10x6
Max. weight per adjustment jaw [kg]	0.19	0.45

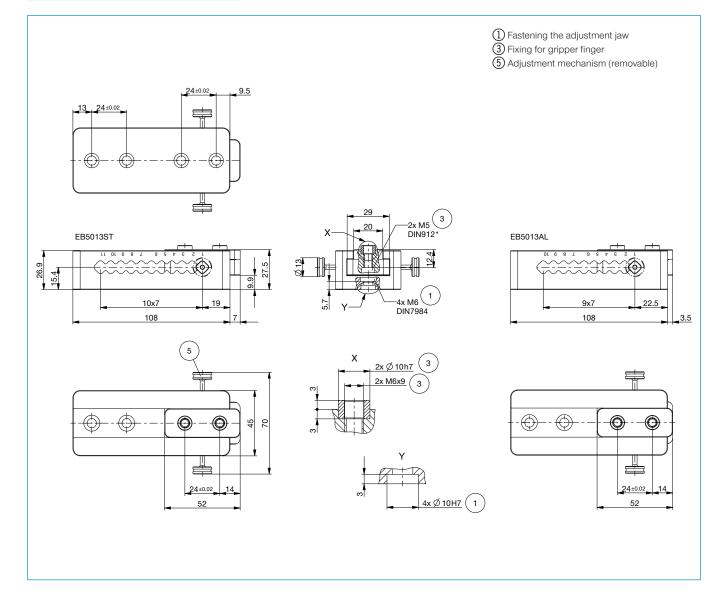


PRODUCT SPECIFICATIONS





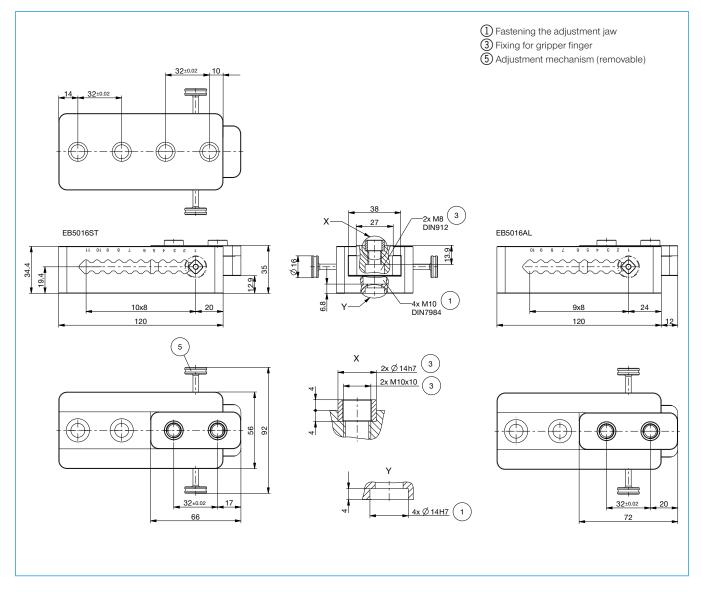
	Technical data	
Order no.	EB5013AL	EB5013ST
compatible with installation size	GPP5013 / GPD5013 / GPW5013	GPP5013 / GPD5013 / GPW5013
Max. adjustment range [mm]	63	70
Spacing [mm]	9x7	10x7
Max. weight per adjustment jaw [kg]	0.30	0.75



PRODUCT SPECIFICATIONS



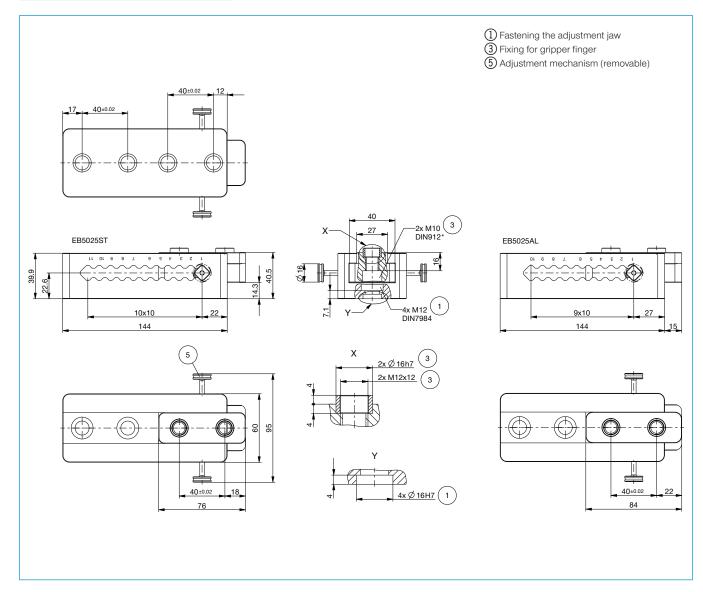
	Technical data	
Order no.	EB5016AL	EB5016ST
compatible with installation size	GPP5016 / GPD5016	GPP5016 / GPD5016
Max. adjustment range [mm]	72	80
Spacing [mm]	9x8	10x8
Max. weight per adjustment jaw [kg]	0.56	1.35



PRODUCT SPECIFICATIONS



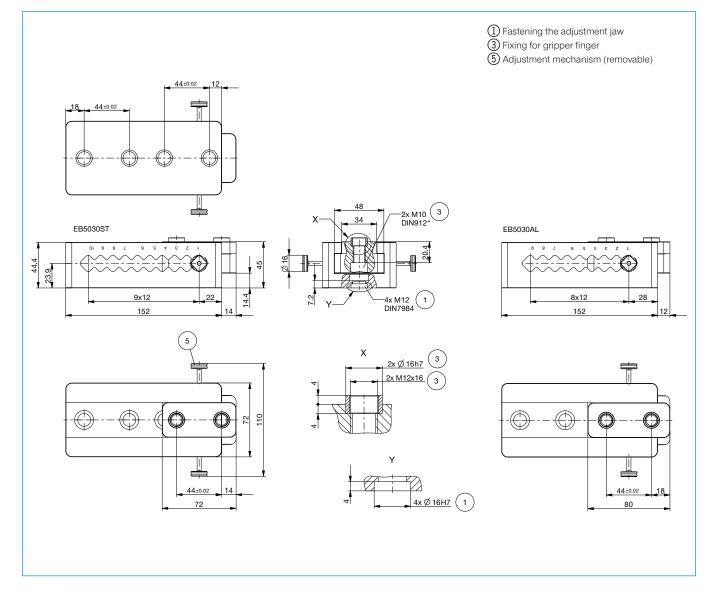
	Technical data	
Order no.	EB5025AL	EB5025ST
compatible with installation size	GPP5025 / GPD5025 / GPW5025	GPP5025 / GPD5025 / GPW5025
Max. adjustment range [mm]	90	100
Spacing [mm]	9x10	10x10
Max. weight per adjustment jaw [kg]	0.81	1.95



PRODUCT SPECIFICATIONS



	Technical data		
Order no.	EB5030AL	EB5030ST	
compatible with installation size	GPP5030 / GPD5030	GPP5030 / GPD5030	
Max. adjustment range [mm]	96	108	
Spacing [mm]	8x12	9x12	
Max. weight per adjustment jaw [kg]	1.07	2.63	



SENSORS & HOLDERS OVERVIEW OF SERIES



► MAGNETIC	FIELD SENSORS	
	Series MFS	854
	Series MFSP	855
► INDUCTIVE	PROXIMITY SWITCHES	
	Series NJ	856
► SENSOR C	ABLES	
	Series KAW	858
	Series KAG	858
W	Series S	859
► STOP STR	OKE ADJUSTMENT SCREWS	
	Series Al	860
	Series AO	860
► HOLDERS		
	Series KB	861

SENSORS AND HOLDERS MAGNETIC FIELD SENSORS

SERIES MFS - MAGNETIC FIELD SENSORS



- For monitoring piston position on pneumatic cylinders
- Non-contacting and wear-free for long service life

	Technical Data	
Order no.	MFS103KHC	MFS103SKHC
Assured switching field streng [kA/m]	2	2
Hysteresis of %	<45	45
Supply voltage [V DC]	10 30	10 30
Voltage drop [V]	2.5	2.5
Load current capacity [mA]	100	100
Current consumption max. [mA]	<8	<8
Protected against polarity reversal	Yes	Yes
Short-circuit-proof	Yes	Yes
Ambient temperature range [°C]	-25 +85	-25 +85
Protection to IEC 60529	IP67	IP67
Housing Material	LCP	LCP
Connection type	Cable	Cable/Connector M8
Cable length [m]	5	0.3
Certification	C€	CE

Get all needed parts in just one sensor-set!

The sets include all sensors, cables and plugs for trouble-free installation position sensing of a gripper with integrated magnetic field sensors.

Set 1: Order no.: MFS103S-01

consisting of:

- 2x Magnetic Field Sensors: MFS103SKHC
- 2x Plug-in Connector: KAG500
- 2x Plug-in Connector: S8-G-3

Set 2: Order no.: MFS103S-02

consisting of:

- 2x Magnetic Field Sensors: MFS103SKHC
- 1x Y-Plug-in Connector: S8-Y-4
- 1x Plug-in Connector: KAG500B4
- 1x Plug-in Connector: S12-G-4

SERIES MFS - MAGNETIC FIELD SENSORS



- For monitoring piston position on pneumatic cylinders
- Non-contacting and wear-free for long service life

	Technical Data	
Order no.	MFS204KHC	MFS204SKHC
Assured switching field streng [kA/m]	2	2
Hysteresis of %	<45	<45
Supply voltage [V DC]	10 30	10 30
Voltage drop [V]	2.5	2.5
Load current capacity [mA]	100	100
Current consumption max. [mA]	<12	<12
Protected against polarity reversal	Yes	Yes
Short-circuit-proof	Yes	Yes
Ambient temperature range [°C]	-25 +85	-25 +85
Protection to IEC 60529	IP67	IP67
Housing Material	PA12	PA12
Connection type	Cable	Cable/Connector M8
Cable length [m]	5	0.3
Certification	C€	C€

Get all needed parts in just one sensor-set!

The sets include all sensors, cables and plugs for trouble-free installation position sensing of a gripper with integrated magnetic field sensors.

Set 3: Order no.: MFS204S-01

consisting of:

- 2x Magnetic Field Sensors: MFS204SKHC
- > 2x Plug-in Connector: KAG500
- > 2x Plug-in Connector: S8-G-3

Set 4: Order no.: MFS204S-02

consisting of:

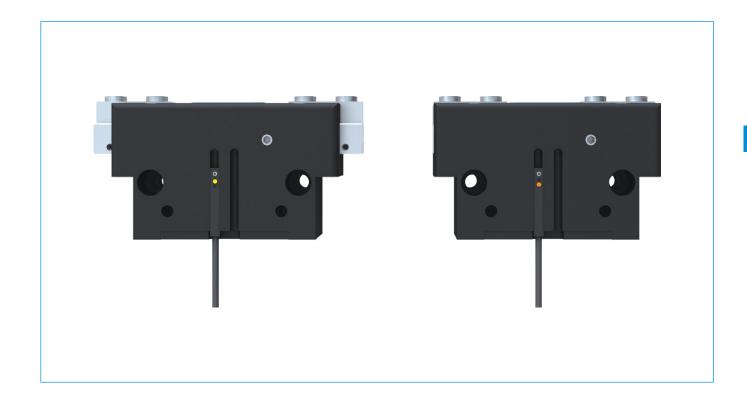
- 2x Magnetic Field Sensors: MFS204SKHC
- ▶ 1x Y-Plug-in Connector: S8-Y-4
- ▶ 1x Plug-in Connector: KAG500B4
- 1x Plug-in Connector: S12-G-4

> SERIES MFSP - MAGNETIC FIELD SENSORS



- ► Two freely programmable switching points
- Straightforward teach-in procedure
- Reduced installation and wiring requirements

	► Technical Data	
Order no.	MFSP2KHC-02	MFSP2SKHC-02
Supply voltage [V DC]	10 30	10 30
Voltage drop [V]	≤2.2	≤2.2
Load current capacity [mA]	<50	<50
Current consumption max. [mA]	<10	<10
Protected against polarity reversal	Yes	Yes
Short-circuit-proof	Yes	Yes
Operating temperature [°C]	-20 +75	-20 +75
Protection to IEC 60529	IP67	IP67
Housing Material	Plastics	Plastics
Connection type	Cable, 4-wire, 5 m	Cable with connector M8, 4-pin, with knurled nuts, 0.3 m
Cable length [m]	5	0.3
Certification	C€	(€



SENSORS AND HOLDERS INDUCTIVE PROXIMITY SWITCHES

► SERIES NJ - INDUCTIVE PROXIMITY SWITCHES



- Contact-free, wear-free and short-circuit proof
- Available starting at 3 mm Ø

	► Technical Data					
Order no.	NJ3-E2	NJ3-E2SK	NJ4-E2-01	NJ4-E2SK-01	NJ5-E2	NJ5-E2SK
Sensor-Ø [mm]	3.0	3.0	4.0	4.0	M5x0.5	M5x0.5
Installation type	flush	flush	flush	flush	flush	flush
Rated operating distance Sn [mm]	1.00	1.00	1.50	1.50	0.80	0.80
Assured switching distance Sa [mm]	0.80	0.80	1.21	1.21	0.65	0.65
Supply voltage [V DC]	10 30	10 30	10 30	10 30	10 30	10 30
Load current capacity [mA]	100	100	100	100	100	100
Current consumption max. [mA]	<12	<12	<12	<12	<12	<12
Protected against polarity reversal	Yes	Yes	Yes	Yes	Yes	Yes
Short-circuit-proof	Yes	Yes	Yes	Yes	Yes	Yes
Repetition accuracy [%]	<5	<5	<5	<5	<5	<5
Ambient temperature range [°C]	-25 +70	-25 +70	-25 +70	-25 +70	-25 +70	-25 +70
Switching frequency [Hz]	3500	3500	5000	5000	5000	5000
Protection to IEC 60529	IP67	IP67	IP67	IP67	IP67	IP67
Housing Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
Active surface material	PBT	PBT	PBT	PBT	PBT	PBT
Connection type	Cable	Cable/Connector M8	Cable	Cable/Connector M8	Cable	Cable/Connector M8
Cable length [m]	5	0.3	5	0.3	5	0.3
Certification	C€	C€	C€	C€	C€	C€

	► Technical Data				
Order no.	NJ6.5-E2-01	NJ6.5-E2-02	NJ6.5-E2S	NJ8-E2	NJ8-E2-01
Sensor-Ø [mm]	6.5	6.5	6.5	M8x1	M8x1
Installation type	flush	flush	flush	flush	flush
Rated operating distance Sn [mm]	1.50	1.50	1.50	1.50	2.00
Assured switching distance Sa [mm]	1.20	1.20	1.20	1.20	1.60
Supply voltage [V DC]	10 30	10 30	10 30	10 30	10 30
Load current capacity [mA]	200	200	200	200	200
Current consumption max. [mA]	<25	<25	<25	<8	<25
Protected against polarity reversal	Yes	Yes	Yes	Yes	Yes
Short-circuit-proof	Yes	Yes	Yes	Yes	Yes
Repetition accuracy [%]	<5	<5	<5	<5	<5
Ambient temperature range [°C]	-25 +70	-25 +70	-25 +70	-25 +70	-25 +70
Switching frequency [Hz]	3000	4000	3000	1000	1500
Protection to IEC 60529	IP68	IP67	IP67	IP67	IP68
Housing Material	Stainless steel	Stainless steel	Stainless steel	CuZn nickel plated	Stainless steel
Active surface material	PBT	PBT	PBT	PA12	PBT
Connection type	Cable	Cable	Connector M8	Cable	Cable
Cable length [m]	5	5		5	5
Certification	C€	C€	C€	C€	C€

	Technical Date	ta		
Order no.	NJ8-E2S	NJ8-E2S-05	NJ12-E2	NJ12-E2S
Sensor-Ø [mm]	M8x1	M8x1	M12x1	M12x1
Installation type	flush	flush	flush	flush
Rated operating distance Sn [mm]	2.00	1.50	2.00	2.00
Assured switching distance Sa [mm]	1.60	1.20	1.60	1.60
Supply voltage [V DC]	10 30	10 30	10 30	10 30
Load current capacity [mA]	200	200	200	130
Current consumption max. [mA]	<25	<8	<12	<25
Protected against polarity reversal	Yes	Yes	Yes	Yes
Short-circuit-proof	Yes	Yes	Yes	Yes
Repetition accuracy [%]	<5	<5	<5	<5
Ambient temperature range [°C]	-25 +70	-25 +70	-25 +70	-25 +70
Switching frequency [Hz]	1500	3000	5000	1000
Protection to IEC 60529	IP68	IP68	IP68	IP67
Housing Material	Stainless steel	Stainless steel	CuZn nickel plated	CuZn nickel plated
Active surface material	PBT	PBT	PBT	PA12
Connection type	Connector M8	Connector M8	Cable	Connector M8
Cable length [m]			5	
Certification	C€	CE	CE	C€

SENSORS AND HOLDERS SENSOR CABLES

> SERIES KAW - PLUG-IN CONNECTOR ANGLED WITH CABLE



- ► Plug-in Connector angled with Cable
- with 3 and 4 poles, with M8 or M12 connection thread size
- Halogen, silicone and PVC free
- Suitable for drag chains (10xØ)

	► Technical Data				
Order no.	KAW500	KAW500-12	KAW500S4	KAW500B4	KAW1000B8
Fixing thread	M8	M12	M8	M8	M12
No. of contacts	3	3	4	4	8
Cable length [m]	5	5	5	5	10
Cable-Ø [mm]	4.0	4.3	4.3	4.3	6.7
Cable sheath material	PUR	PUR	PUR	PUR	PUR
Bend radius	10xØ	10xØ	10xØ	10xØ	10xØ
Protection to IEC 60529	IP67	IP67	IP67	IP67	IP67
Connection type	Female	Female	Male	Female	Female
Version [Type]	Angle	Angle	Angle	Angle	Angle

> SERIES KAG - PLUG-IN CONNECTOR STRAGHT WITH CABLE



- ► Plug-in Connector straight with Cable
- with 3 and 4 poles, with M8 or M12 connection thread size
- ► Halogen, silicone and PVC free
- Suitable for drag chains (10xØ)

	► Technical Data				
Order no.	KAG500	KAG500-02	KAG500S4	KAG500B4	KAG1000B8
Fixing thread	M8	M12	M8	M8	M12
No. of contacts	3	3	4	4	8
Cable length [m]	5	5	5	5	10
Cable-Ø [mm]	4.0	4.3	4.3	4.3	6.7
Cable sheath material	PUR	PUR	PUR	PUR	PUR
Bend radius	10xØ	10xØ	10xØ	10xØ	10xØ
Protection to IEC 60529	IP67	IP67	IP67	IP67	IP67
Connection type	Female	Female	Male	Female	Female
Version [Type]	Straight	Straight	Straight	Straight	Straight

► SERIES S - PLUG-IN CONNECTOR CUSTOMIZABLE WITH SCREW-CUT-TERMINAL



- ▶ Plug-in connector for flexible fabrication on-site
- ► Time-saving fabrication without stripping insulation from individual wires

	► Technica	► Technical Data				
Order no.	S8-G-3	S8-G-4	B8-G-4	S12-G-3	S12-G-4	S12-G-8
Connection type	Male	Male	Female	Male	Male	Male
Fixing thread	M8	M8	M8	M12	M12	M12
No. of contacts	3	4	4	3	4	8
Protection to IEC 60529	IP67	IP67	IP67	IP67	IP67	IP67
Version [Type]	Straight	Straight	Straight	Straight	Straight	Straight

► SERIES S - PLUG-IN CONNECTOR CUSTOMIZABLE WITH SOLDER CONNECTION



▶ Plug-in connector for flexible fabrication on-site

	► Technical Data				
Order no.	S8-W-3	S8-W-4	S12-W-8	B8-W-4	
Connection type	Male	Male	Male	Female	
Fixing thread	M8	M8	M12	M8	
No. of contacts	3	4	8	4	
Protection to IEC 60529	IP67	IP67	IP67	IP67	
Version [Type]	Angle	Angle	Angle	Angle	

> SERIES S - Y-PLUG-IN CONNECTOR



	Technical Data	
Order no.	B8-Y-4	\$8-Y-4
Connection type	Male / Socket / Male	Socket / Male / Socket
Fixing thread	M8	M8
No. of contacts	3 / 4 / 3	3 / 4 / 3
Protection to IEC 60529	IP67	IP67
Version [Type]	Y-Plug-in Connector	Y-Plug-in Connector

SENSORS AND HOLDERS STOP STROKE ADJUSTMENT SCREWS

> SERIES AI - STOP STROKE ADJUSTMENT SCREWS



- Stop stroke adjustment screw for M12 sensor mount
- Stop stroke adjustment screw with customizable sensor mount

	► Technical Data			
Order no.	AI-M8X1-38	AI-M8X1-53	AI-M10X1-70	
Fixing thread	M8X1	M8X1	M10X1	
to match for Sensors-Ø [mm]	M12X1	M12X1	M12X1	

> SERIES AO - STOP STROKE ADJUSTMENT SCREWS



Stop stroke adjustment screw with customizable sensor mount

	Technical Data	► Technical Data				
Order no.	AO-M8X1-38	AO-M8X1-53	AO-M10X1-70			
Fixing thread	M8X1	M8X1	M10X1			
to match for Sensors-Ø [mm]	customizable	customizable	customizable			

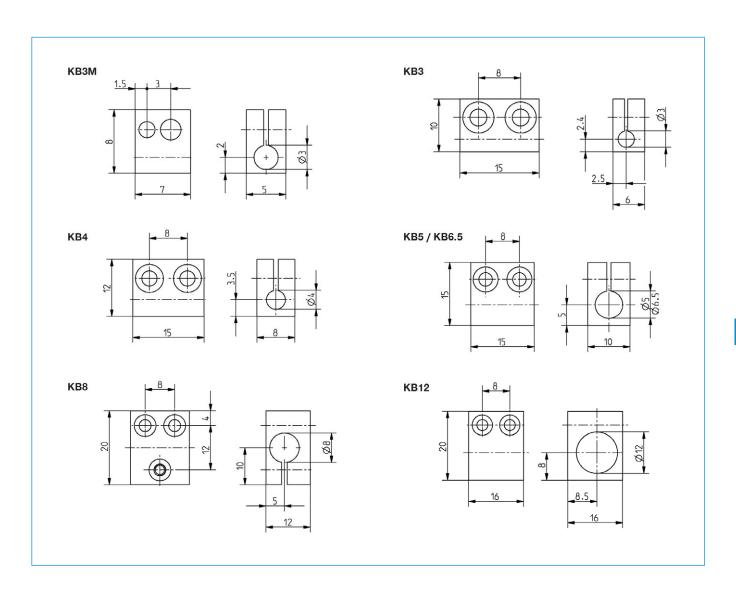
SENSORS & HOLDERS HOLDERS

> SERIES KB - MOUNTING BLOCK



- Mounting for inductive proximity switch
- Available starting at Ø 3 mm

	► Tec	hnical Data					
Order no.	KB3	КВЗМ	KB4	KB5	KB6.5	KB8	KB12
to match for Sensors-Ø [mm]	3	3	4	5	6.5	8	12



VALVES, FITTINGS, ACCESSORIES OVERVIEW OF SERIES













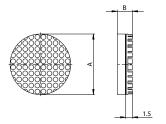
► FITTINGS		
	Series GV	864
	Series WV	865
► VALVES		
	Series DRV	866
	Series DSV	867
	Series DEV	867
> JAW ACCES	SSORIES	
	Series DG	868
	Series GR	868
	Series J	868
	Series GU	869
7	Series KF	870
	Series BGM	870
	Series BN	870
	Series GU800	871
► JAW EXTEN	ISIONS	
	Series GBV	872
► ROTARY DI	STRIBUTORS	
	Series DV	874
► BUSBOX		
	Series ZUBBOX9000	875

VALVES, FITTINGS, ACCESSORIES JAW ACCESSORIES

> SERIES DG - RUBBER JAW PADS



- Available in different versions
- A packaging unit includes 6 pcs.

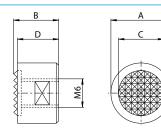


	Techr	nical Data						
Order no.	DG6	DG6SI	DG10	DG10SI	DG16	DG16SI	DG20	DG20SI
A [mm]	6	6	10	10	16	16	20	20
B [mm]	5	5	5	5	5	5	5	5
Material	Neoprene	Silicone	Neoprene	Silicone	Neoprene	Silicone	Neoprene	Silicone

> SERIES GR - HARD JAW INSERTS



Available in different versions

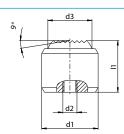


	► Technical Data				
Order no.	GR4	GR4A	GR4C	GR5	GR6
A [mm]	12.7	12.7	12.7	15.8	19
B [mm]	9.5	12.7	16.5	9.5	9.5
C [mm]	9.5	9.5	9.5	12.7	15.8
D [mm]	8.7	11.9	15.8	8.7	8.7

> SERIES J - HARD JAW INSERTS, FLOATING



Available in different versions

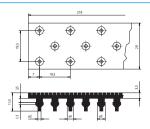


	Technical Data		
Order no.	J712	J718	J728
Ø- d1	12n6	18n6	28n6
Ø- d2 [mm]	M3	M4	M5
Ø- d3 [mm]	7	10	20
L1 [mm]	10	16	25

> SERIES GU - RUBBER JAW LINERS



- Available in different versions
- ► GU1: Basic jaw with infeed knobs
- Receiver holes for infeed knobs 4.5 mm



Order no.
Resistance DIN53504 min. [N/mm²]
Material
Color
Operating temperature max. [°C]
Shore hardness

Technical Data	
GU1	GU1SI
10	10
Neoprene	Silicone
Black	Blue
120	200
65 +/- 3	60 +/- 5

> SERIES GU - RUBBER JAW LINERS



- Available in different versions
- Rubber jaw with baseplate made of aluminum

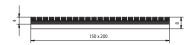


	Technical Data	
Order no.	GU2	GU2SI
Resistance DIN53504 min. [N/mm²]	10	10
Material	Neoprene	Silicone
Color	Black	Blue
Operating temperature max. [°C]	120	200
Shore hardness	65 +/- 3	60 +/- 5

SERIES GU - RUBBER JAW LINERS



- Available in different versions
- Rubber jaw with baseplate made of alumi-



	Technical Data	
Order no.	GU2G	GU2GSI
Resistance DIN53504 min. [N/mm²]	10	10
Material	Neoprene	Silicone
Color	Black	Blue
Operating temperature max. [°C]	120	200
Shore hardness	65 +/- 3	60 +/- 5

VALVES, FITTINGS, ACCESSORIES JAW ACCESSORIES

SERIES KF - RUBBER COATED TAPE



- Smooth surface or knobbed surfaceAdjusts itself optimally to the shape of the gripper jawideal coefficients of friction and compensates for variation in toleranc-
- Resistant against adhesive materials

	► Technical Data	
Order no.	KF50G	KF50N
Size [mm]	500 x 100	500 x 100
Material	Impregnated cotton fabric with special coating	Impregnated cotton fabric with special coating
Surface	smooth	knobbed
Material thickness [mm]	0,48	0,48
Max. permitted temperature range [°C]	+60 (briefly up to +100 °C)	+60 (briefly up to +100 °C)
Tensile strength	0.9	0.9
Adhesive strength	22	22

> SERIES BGM - EPOXY JAW COMPOUND

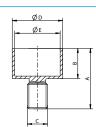


- For your individual gripper jaws in a few steps
- Hard as metal and can be used for the most sensitive parts due to silicone filling
- Sufficient for approximately 10 medium-sized jaw cups

> SERIES BN - JAW CUPS FOR EPOXY JAW COMPOUND



Jaw Cups for Epoxy Jaw Compound (BGM)



	Technical Data			
Order no.	BN8	BN12	BN16	BN20
A [mm]	8	12	16	20
B [mm]	4	6	8	10
C1	M3	M4	M5	M6
Ø- D [mm]	6	10	16	20
Ø- E [mm]	5	9	15	19

► SERIES GU800 - RUBBER MOULDING COMPOUND



- For complicated gripper fingers with boreholes, seals and roller coatings
- ► Repairs to conveyor belts, solid rubber tires, transport casters, pipes, vibration protection on machines and insulation protection

	► Technical Data
Order no.	GU800
Mix ratio	100:50
Shore hardness level after hardening (ISO 868)	80
Sealed	1.04
Tensile strength (ISO 37) [N/mm ²]	8,5
Elongation at break (ISO 37)	900
Tear resistance (DIN 53356)	17
Permitted temperature range [°C]	-60 +90

VALVES, FITTINGS, ACCESSORIES JAW EXTENSIONS

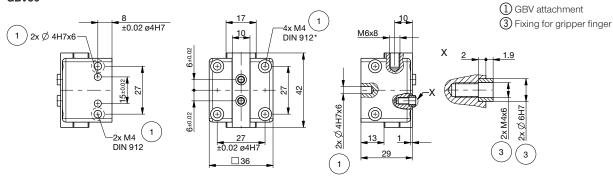
SERIES GBV - JAW EXTENSIONS



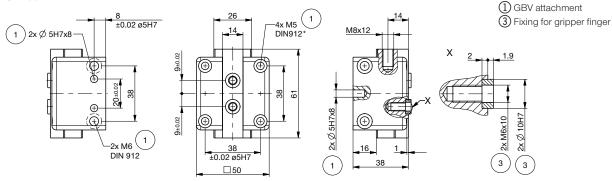
- GBV guide elements can be positioned at any desired distance from the gripper, including different distances
- Connection to gripper is made via threaded rods

	Technical Data		
Order no.	GBV36	GBV50	GBV72
Weight [kg]	0.14	0.4	1.3
Mr [Nm]	20	45	80
Mx [Nm]	50	110	160
My [Nm]	32	65	120
Fa [N]	650	1500	4000

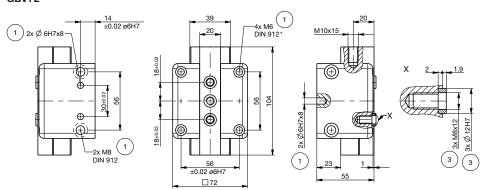
GBV36



GBV50



GBV72



- 1 GBV attachment
- 3 Fixing for gripper finger

► APPLICATION EXAMPLE



VALVES, FITTINGS, ACCESSORIES PNEUMATIC ROTARY MANIFOLDS

▶ SERIE DV - ROTARY DISTRIBUTOR

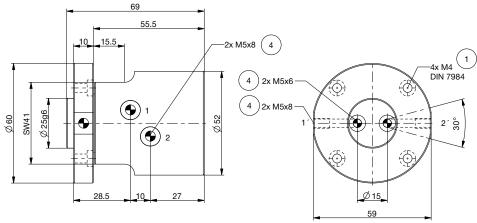


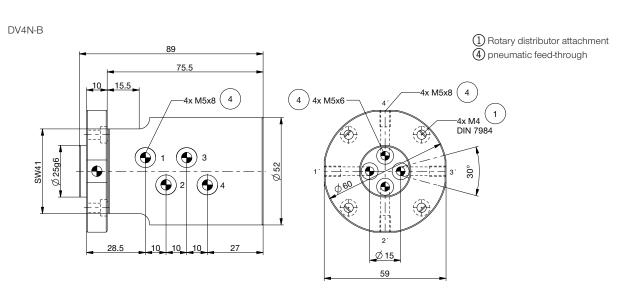
available with 2 or 4 pneumatic feedthroughs

	► Technical Data	
Order no.	DV2N-B	DV4N-B
Air feed-through [Quantity]	2	4
Maximum acceleration [m/s²]	22	22
Maximum speed [°/s]	720	720
Axial bearing load [N]	1300	1300
Radial bearing load [Nm]	104	156
Operating pressure max. [bar]	10	10
Operating temperature [°C]	5 +80	5 +80
Weight [kg]	0.45	0.55

DV2N-B

- 1 Rotary distributor attachment
- 4 pneumatic feed-through





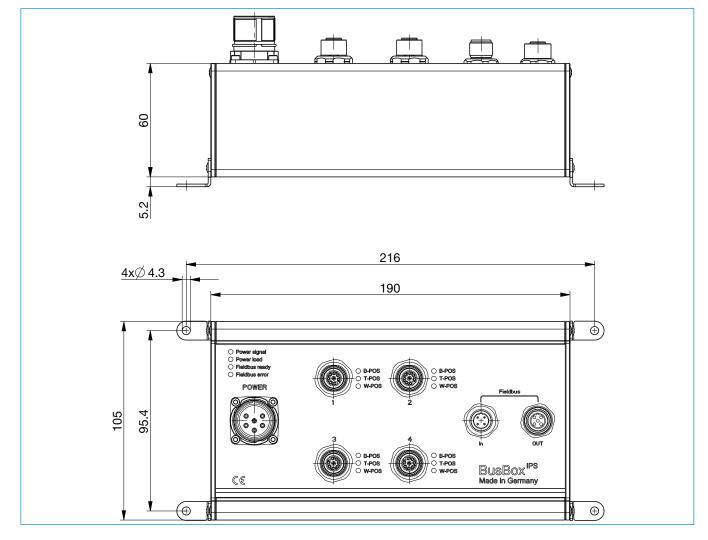
VALVES, FITTINGS, ACCESSORIES BUSBOX

► SERIES ZUBBOX9000-01



- Control via Profibus
- 4 actuators of the series GEP, GEN and VEE can be connected
- Intelligent Power Supply IPC
- Power storage via condensers

	► Technical Data
Order no.	ZUBBOX9000-01
Control	Profibus
Actuator connectors max.	4
Signal voltage [V DC]	24
Load voltage [V DC]	24
Current feed min. [A]	5
Current feed max. [A]	10
Operating temperature [°C]	0 +50
Protection to IEC 60529	IP64
Certification	CE .
Weight [kg]	1.1



CHECKLIST GRIPPER



Customer number			Telephone	e number			
Company			Fax numb				
Contact							
Mr. Mrs.			E-Mail				
Request Order Parallel gripper Other / If yes, which type	esired date	Three-jaw grippe		Req. No. Ord No.	Angular gripp	er	
Drive							
Pneumatic		Electric		Hydrau	ulic		
Operating pressure		bar		Voltage			Volts
Required stroke							
Per jaw		mm or		Total stroke	9		mm
Gripper finger length							
Gripper top edge to force appli	cation point			mm			
Ambient conditions							
Clean / Dry		Small amount of swa Coolant overspray	ırf		amount of swarf pressure of grind		
Chemical substances / If yes	, which						
Temperature		°C		Cycles			per minute
Required force							
Gripping force	N	or	٧	Vorkpiece weig	ght		kg 🔲 g 🔲
Gripping type Gripping inward		Gripping outward					
Frictional fit		Form fit					
Prism angle	° Co	efficient of friction		Axis	s acceleration		m/s²
Self Locking							
Not required	Whe	en closing	Wh	en opening		Pressure s	safety valve



Desired accessories				
Inductive sensor		Magnetic field sensor	With cable	Pluggable
Separate cable / If yes, ho	w long		m	
		Straight fitting		
		Angled fitting		
Pressure safety valve				
Pneumatic fittings / If yes,	which	Straight		
		Angled		
		Flow control va	lve	
Notes/comments				
Editor/Date				
Desired accessories				
Sketch	3D mo	odel	Other	

USAGE NOTEGENERAL

The contents of this catalog are not legally binding and are intended solely for informational purposes. Any final agreement will be in the form of a written order confirmation from ZIMMER GMBH, which occurs only subject to the respective current General Terms and Conditions of Sale and Delivery of ZIMMER GMBH. These can be found online at **www.zimmer-group.com**.

All of the products listed in this catalog are designed for their intended use, e.g. machines for automation. The recognized technical regulations for safety and professional work must be followed for use and installation.

Furthermore, the respective laws, guidelines from TÜV, guidelines from the respective trade association and VDE stipulations shall apply.

The technical data listed in this catalog must be observed by the user. The conditions of use may not fall below or exceed the specified data. If information is missing, it cannot be assumed that there are no upper or lower limits or no limitations for specific use cases. Consultation is required in these cases.

Disposal is not included in the price, which would have to be taken into account accordingly in the event of return to or disposal by ZIMMER GMBH.

TECHNICAL DATA AND FIGURES

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STANDARDS

Zimmer Group has a quality management system certified in accordance with ISO 9001:2008. Zimmer Group has an environmental management system certified in accordance with ISO 14001:2004.







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Energy elements for tool changers of sizes HWR63 / HWR80	26

TOOL CHANGERS SERIES HWR2000

PRODUCT ADVANTAGES



Change in seconds

Reduce your start up costs and minimise downtimes by changing your tool in seconds

Integrated air transfer system

Integrated air transmission lets you activate your actuators. But power transmission is also possible

Includes loss protection

Undesired falling of work pieces is eliminated - this means the highest safety for man and machine

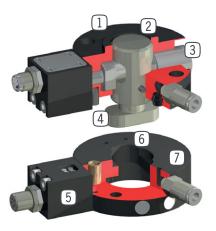
► THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!

Extreme conditions, all over the world-our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com

BENEFITS IN DETAIL



- 1 Fix part
 - for robot side assembly
- 2 Robot flange
 - partial mounting circle in accordance with EN ISO 9409-1
- 3 Eccentric locking bolt
 - with spring supported snap in function
- 4 Locking bolt
 - adapted to the clamping sleeve
- 5 Pre-assembled standard energy element
- (6) Integrated air feed-through
 - air / vaccum transfer from fix to loose part, hoseless control possible
- 7 Loose part
 - for tool side assembly

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information

All information just a click away at: www.zimmer-group.com Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.



▶ PRODUCT SPECIFICATIONS



Forces and moments

Shows static forces and moments which may impact on the tool changer when locked.



Mr [Nm]	30
My [Nm]	25
Fa [N]	1000

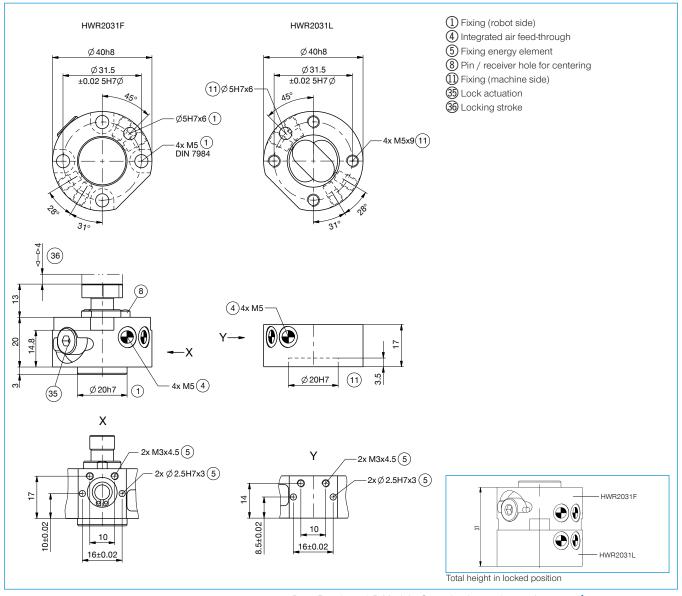


Straight Fittings - Quick Connect Style GVM5



Energy Elements see page 18

	► Technical Data	
Order no.	HWR2031F	HWR2031L
Connecting flange according EN ISO 9409-1	TK31,5	TK31,5
Recommended handling weight [kg]	5	5
Pneumatic energy transfer [Quantity]	4	4
Electrical energy transfer	optional	optional
Self limitation when locking	mechanical	mechanical
Locking stroke [mm]	4	-
Repetition accuracy in Z [mm]	0.01	0.01
Repetition accuracy in X, Y [mm]	0.02	0.02
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Moment of inertia [kg/cm²]	0.13	0.1
Weight [kg]	0.09	0.04



▶ PRODUCT SPECIFICATIONS



Forces and moments

Shows static forces and moments which may impact on the tool changer when locked.



Mr [Nm]	55
My [Nm]	50
Fa [N]	1200

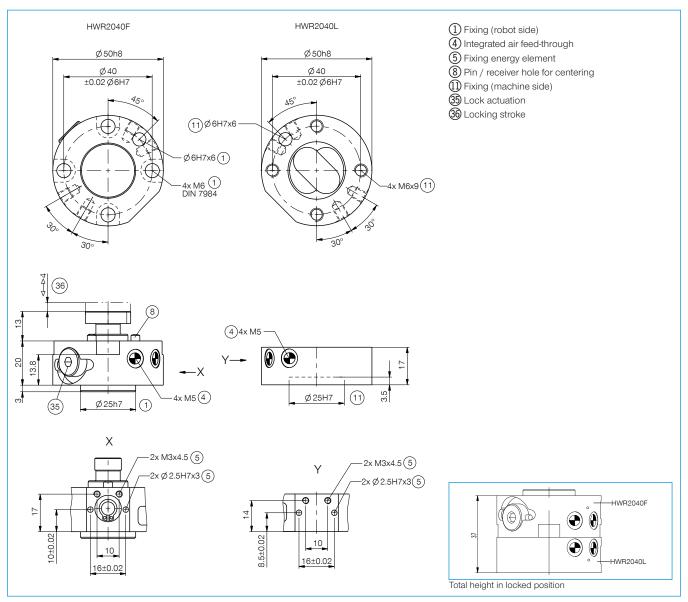


Straight Fittings - Quick Connect Style GVM5



Energy Elements see page 18

	Technical Data	
Order no.	HWR2040F	HWR2040L
Connecting flange according EN ISO 9409-1	TK40	TK40
Recommended handling weight [kg]	10	10
Pneumatic energy transfer [Quantity]	4	4
Electrical energy transfer	optional	optional
Self limitation when locking	mechanical	mechanical
Locking stroke [mm]	4	-
Repetition accuracy in Z [mm]	0.01	0.01
Repetition accuracy in X, Y [mm]	0.02	0.02
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Moment of inertia [kg/cm²]	0.33	0.26
Weight [kg]	0.145	0.07



▶ PRODUCT SPECIFICATIONS



Forces and moments

Shows static forces and moments which may impact on the tool changer when locked.



Mr [Nm]	80
My [Nm]	70
Fa [N]	1600

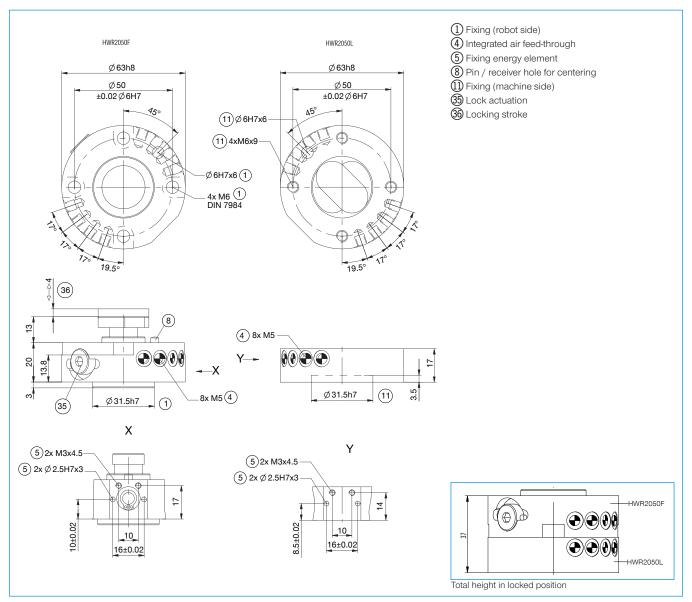


Straight Fittings - Quick Connect Style GVM5



Energy Elements see page 18

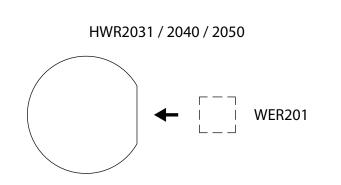
	► Technical Data	
Order no.	HWR2050F	HWR2050L
Connecting flange according EN ISO 9409-1	TK 50	TK 50
Recommended handling weight [kg]	20	20
Pneumatic energy transfer [Quantity]	8	8
Electrical energy transfer	optional	optional
Self limitation when locking	mechanical	mechanical
Locking stroke [mm]	4	-
Repetition accuracy in Z [mm]	0.01	0.01
Repetition accuracy in X, Y [mm]	0.02	0.02
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Moment of inertia [kg/cm²]	0.86	0.67
Weight [kg]	0.23	0.115



ENERGY ELEMENTS FOR TOOL CHANGER SIZES HWR2031 / HWR2040 / HWR2050

PRODUCT SPECIFICATIONS





ELECTRICAL

	Technical Data	
Order no.	WER201FF04	WER201LF04
compatible with	Fix part	Loose part
Connection type	Spring contact	Spring contact
Round Connector [Straight] *	KAG500B4	KAG500S4
Round Connector [Angle] *	KAW500B4	KAW500S4
Fixing thread	M8	M8
No. of contacts	4	4
Nominal current [A]	3	3
Supply voltage [V AC]	60	60
Supply voltage [V DC]**	75	75
Weight [kg]	0.03	0.03
Connection type	Male	Female

^{*}als Zubehör erhältlich see page 63

^{**}Specifications for on-site grounding, 60V without grounding

TOOL CHANGERS SERIES HWR

PRODUCT ADVANTAGES



Change in seconds

Reduce your start up costs and minimise downtimes by changing your tool in seconds

Integrated air transfer system

Integrated air transmission lets you activate your actuators. But power transmission is also possible

Replacing with no tools required

The locking lever fully integrated into the housing makes it possible to replace tools without any additional tools

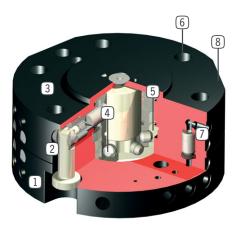
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BENEFITS IN DETAIL



- 1 Loose part
 - for tool side assembly
- 2 Locking lever
 - with spring supported snap in function
- 3 Fix part
 - for robot side assembly
- 4 Locking bolt
 - adapted to the clamping sleeve
- 5 Locking stroke
 - re-adjustable via locking sleeve
- 6 Robot flange
 - partial mounting circle in accordance with EN ISO 9409-1
- 7 Integrated air feed-through
 - air / vaccum transfer from fix to loose part, hoseless control possible
- 8 Mounting for energy element

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information

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▶ PRODUCT SPECIFICATIONS



Forces and moments

Shows static forces and moments which may impact on the tool changer when locked.



Mr [Nm]	200	
My [Nm]	200	
Fa [N]	1200	

► INCLUDED IN DELIVERY



O-Ring

COR0025100



Connect Style GVM5



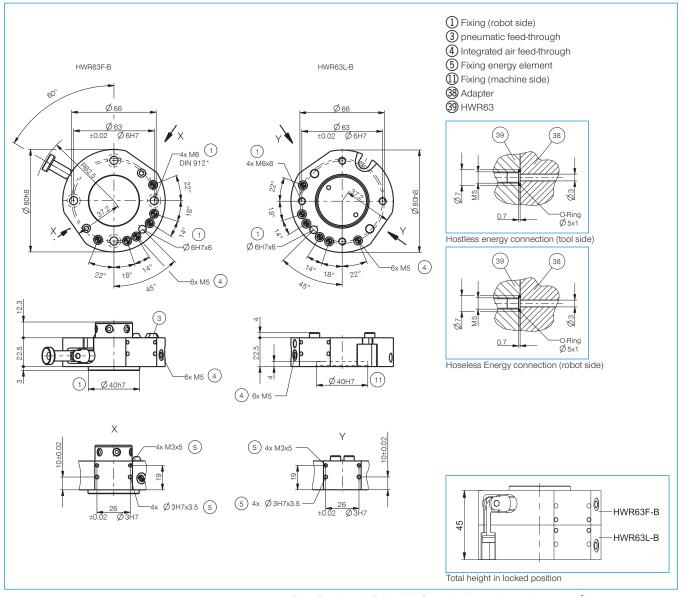
Angled Fittings - Quick Connect Style





Energy Elements see page 26

	► Technical Data	
Order no.	HWR63F-B	HWR63L-B
Connecting flange according EN ISO 9409-1	TK 63	TK 63
Recommended handling weight [kg]	50	50
Pneumatic energy transfer [Quantity]	6	6
Electrical energy transfer	optional	optional
Self limitation when locking	mechanical	mechanical
Locking stroke [mm]	1	-
Repetition accuracy in Z [mm]	0.01	0.01
Repetition accuracy in X, Y [mm]	0.02	0.02
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Moment of inertia [kg/cm²]	3.8	2.6
Weight [kg]	0.45	0.3



▶ PRODUCT SPECIFICATIONS



Forces and moments

Shows static forces and moments which may impact on the tool changer when locked.



Mr [Nm]	300	
My [Nm]	300	
Fa [N]	1500	

► INCLUDED IN DELIVERY



O-Ring

COR0025100

RECOMMENDED ACCESSORIES



Connect Style

Straight Fittings - Quick GVM5



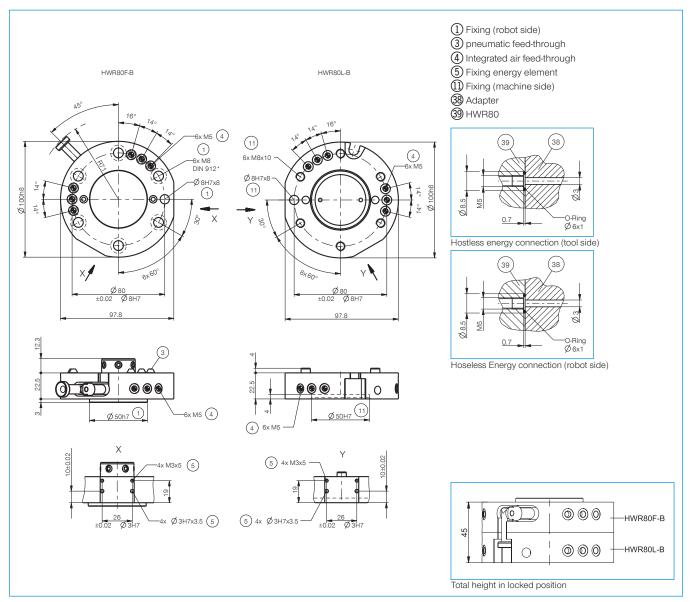
Angled Fittings - Quick Connect Style

WVM5



Energy Elements see page 26

	► Technical Data	
Order no.	HWR80F-B	HWR80L-B
Connecting flange according EN ISO 9409-1	TK 80	TK 80
Recommended handling weight [kg]	50	50
Pneumatic energy transfer [Quantity]	6	6
Electrical energy transfer	optional	optional
Self limitation when locking	mechanical	mechanical
Locking stroke [mm]	1	-
Repetition accuracy in Z [mm]	0.01	0.01
Repetition accuracy in X, Y [mm]	0.02	0.02
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Moment of inertia [kg/cm²]	3.36	2.8
Weight [kg]	0.66	0.48

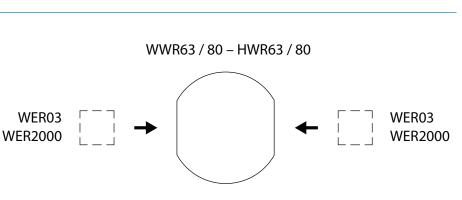


ENERGY ELEMENTS FOR TOOL CHANGER

SIZES HWR63 / HWR80

PRODUCT SPECIFICATIONS





► FLUIDIC

	► Technical D	► Technical Data				
Order no.	WER2000FPL06-00	WER2000LPL06-00	WER2000FPL02-06	WER2000LPL02-06	WER2000FPL01-03	WER2000LPL01-03
compatible with	Fix part	Loose part	Fix part	Loose part	Fix part	Loose part
Fixing thread	M5	M5	G1/8"	G1/8"	G1/4"	G1/4"
Number of fluid couplings	6	6	2	2	1	1
Operating pressure [bar]	-0.6 10	-0.6 10	-0.6 10	-0.6 10	-0.6 10	-0.6 10
Weight [kg]	0.05	0.05	0.06	0.07	0.06	0.06

► ELECTRICAL

	► Technical Data					
Order no.	WER2000FSI32-05	WER2000LSI32-05	WER03FF04	WER03LF04	WER03FF09-B	WER03LF09-B
compatible with	Fix part	Loose part	Fix part	Loose part	Fix part	Loose part
Connection type	Spring contact	Spring contact	FST	FST	Spring contact	Spring contact
Round Connector [Straight] *	-	-	-	-	-	-
Round Connector [Angle] *	-	-	-	-	-	-
Fixing thread	-	-	-	-	-	-
No. of contacts	32	32	4	4	9	9
Nominal current [A]	3	3	3	3	3	3
Supply voltage [V AC]	60	60	60	60	60	60
Supply voltage [V DC]* *	75	75	75	75	75	75
Weight [kg]	0.04	0.04	0.06	0.06	0.06	0.06
Connection type	Customizable	Customizable	Male	Female	Male/SUB-D	Female/SUB-D

^{*}als Zubehör erhältlich see page 63

^{**}Specifications for on-site grounding, 60V without grounding

TOOL CHANGERS PNEUMATIC OVERVIEW OF SERIES



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TOOL CHANGERS SERIES WWR

PRODUCT ADVANTAGES



Secure hold during pressure drop

A redundant system, created by the combination of spring accumulator and a self-locking mechanism, guarantees a safe machine

Extremely flat design

This structure reduces the moment load for your robot to a minimum and makes it possible to use smaller and more affordable sizes

Inexhaustible variety of media transfer systems

No matter which medium you would like to transmit, we will draw from our wealth of experience in implementing projects and find a solution to suit your needs!

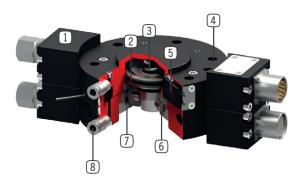
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Our products love the challenge!

Extreme conditions, all over the world-our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com

BENEFITS IN DETAIL



1 Energy element

- included in scope of delivery

2 Drive

- double-acting pneumatic cylinder

3 Integrated spring

- energy storage in case of drop in pressure

4 Robot flange

- partial mounting circle in accordance with EN ISO 9409-1

5 Piston position sensing

- via magnetic field sensors

6 Locking bolt

- adapted to the clamping sleeve

7 Locking sleeve

- high moment capacity

8 Integrated air feed-through

- air / vaccum transfer from fix to loose part, hoseless control possible

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information

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▶ PRODUCT SPECIFICATIONS



Forces and moments

Shows static forces and moments which may impact on the tool changer.



Mr [Nm]	70
My [Nm]	90
Fa [N]	3800

► INCLUDED IN DELIVERY



O-Ring

COR0025100

RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GVM5



Angled Fittings - Quick Connect Style

WVM5



Piston position sensing



Inductive Proximity Switch Cable 0,3 m - Connector

NJR04-E2SK



Storage station

ALSR1-40-B

ZUB0015



Inductive proximity switch

NJ5-E2



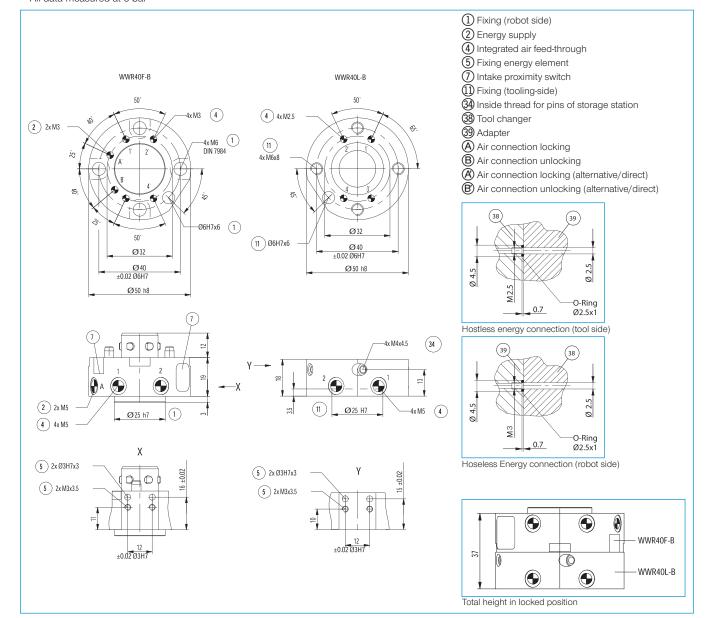
Inductive Proximity Switch Cable 0,3 m - Connector



Energy Elements see page 48

	► Technical Data*	
Order no.	WWR40F-B	WWR40L-B
Connecting flange according EN ISO 9409-1	TK40	TK40
Recommended handling weight [kg]	20	-
Pneumatic energy transfer [Quantity]	4	4
Electrical energy transfer	optional	optional
Hydraulic energy transfer	optional	optional
Self limitation when locking	mechanical	mechanical
Locking stroke [mm]	0.3	-
Repetition accuracy in Z [mm]	0.01	-
Repetition accuracy in X, Y [mm]	0.02	-
Joining force [N]	50	-
Release force [N]	30	-
Offset at coupling max. in X,Y [mm]	1.3	1.3
Operating pressure [bar]	4 10	4 10
Operating temperature [°C]	5 +80	5 +80
Air volume per cycle [cm³]	2.8	-
Moment of inertia [kg/cm²]	0.3	0.28
Weight [kg]	0.125	0.09

^{*}All data measured at 6 bar



▶ PRODUCT SPECIFICATIONS



Forces and moments

Shows static forces and moments which may impact on the tool changer.



Mr [Nm]	100
My [Nm]	105
Fa [N]	4000

► INCLUDED IN DELIVERY



O-Ring

COR0025100

RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GVM5



Angled Fittings - Quick Connect Style

WVM5



Piston position sensing



Inductive Proximity Switch Cable 0,3 m - Connector

NJR04-E2SK



Storage station

ALSR1-50-B

ZUB0016



Inductive proximity switch

NJ5-E2



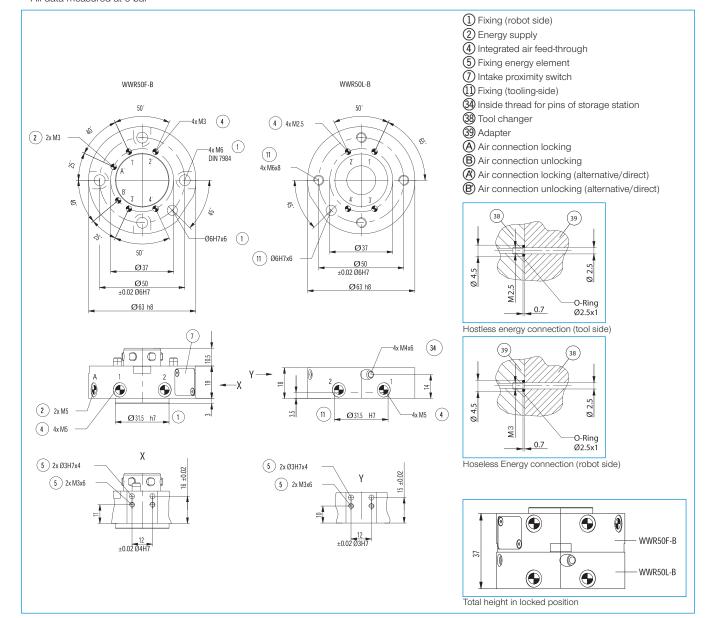
Inductive Proximity Switch Cable 0,3 m - Connector NJ5-E2SK



Energy Elements see page

	► Technical Data*	
Order no.	WWR50F-B	WWR50L-B
Connecting flange according EN ISO 9409-1	TK 50	TK 50
Recommended handling weight [kg]	30	-
Pneumatic energy transfer [Quantity]	4	4
Electrical energy transfer	optional	optional
Hydraulic energy transfer	optional	optional
Self limitation when locking	mechanical	mechanical
Locking stroke [mm]	0.3	-
Repetition accuracy in Z [mm]	0.01	-
Repetition accuracy in X, Y [mm]	0.02	-
Joining force [N]	50	-
Release force [N]	30	-
Offset at coupling max. in X,Y [mm]	1.5	1.5
Operating pressure [bar]	4 10	4 10
Operating temperature [°C]	5 +80	5 +80
Air volume per cycle [cm³]	3	-
Moment of inertia [kg/cm²]	0.8	0.7
Weight [kg]	0.19	0.15

*All data measured at 6 bar



▶ PRODUCT SPECIFICATIONS



Forces and moments

Shows static forces and moments which may impact on the tool changer.



Mr [Nm]	200
My [Nm]	300
Fa [N]	7600

► INCLUDED IN DELIVERY



O-Ring

COR0030100

RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

WVM5

Angled Fittings - Quick Connect Style



Piston position sensing



Inductive Proximity Switch Cable 0,3 m - Connector

NJR04-E2SK



Storage station

ALSR1-63-B

ZUB0017



Inductive proximity switch

NJ8-E2

GVM5



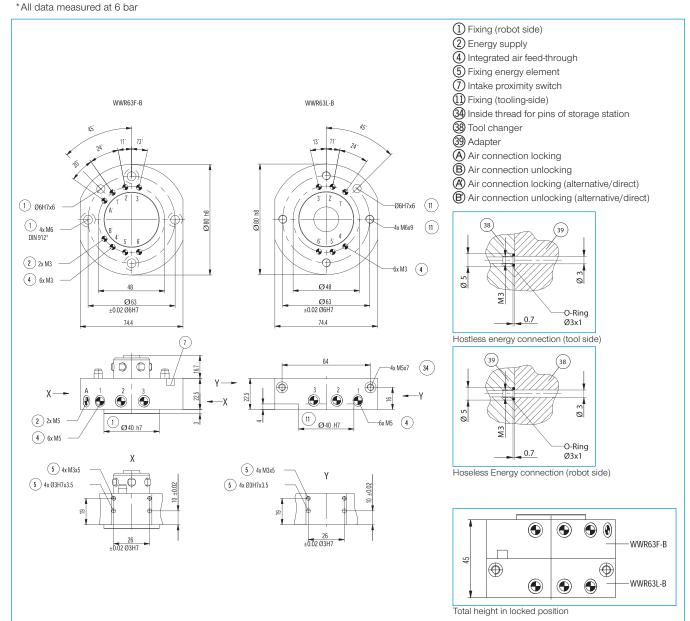
Inductive proximity switch

NJ8-E2S



Energy Elements see page 49

	► Technical Data*	
Order no.	WWR63F-B	WWR63L-B
Connecting flange according EN ISO 9409-1	TK 63	TK 63
Recommended handling weight [kg]	50	-
Pneumatic energy transfer [Quantity]	6	6
Electrical energy transfer	optional	optional
Hydraulic energy transfer	optional	optional
Self limitation when locking	mechanical	mechanical
Locking stroke [mm]	1	-
Repetition accuracy in Z [mm]	0.01	-
Repetition accuracy in X, Y [mm]	0.02	-
Joining force [N]	110	-
Release force [N]	60	-
Offset at coupling max. in X,Y [mm]	1.65	1.65
Operating pressure [bar]	4 10	4 10
Operating temperature [°C]	5 +80	5 +80
Air volume per cycle [cm³]	9	-
Moment of inertia [kg/cm²]	2.3	2.2
Weight [kg]	0.37	0.28



▶ PRODUCT SPECIFICATIONS



Forces and moments

Shows static forces and moments which may impact on the tool changer.



Mr [Nm]	300
My [Nm]	600
Fa [N]	9150

► INCLUDED IN DELIVERY



O-Ring

COR0030100

RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style



WVM5

Angled Fittings - Quick Connect Style



Piston position sensing



Inductive Proximity Switch Cable 0,3 m - Connector

NJR04-E2SK



Storage station

ALSR1-80-B

ZUB0018



Inductive proximity switch

NJ8-E2

GVM5



Inductive proximity switch

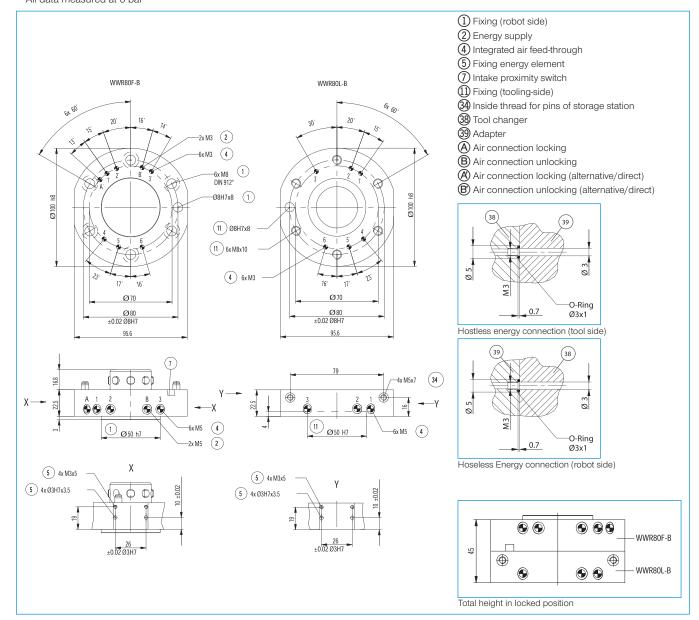
NJ8-E2S



Energy Elements see page 49

	► Technical Data*	
Order no.	WWR80F-B	WWR80L-B
Connecting flange according EN ISO 9409-1	TK 80	TK 80
Recommended handling weight [kg]	70	-
Pneumatic energy transfer [Quantity]	6	6
Electrical energy transfer	optional	optional
Hydraulic energy transfer	optional	optional
Self limitation when locking	mechanical	mechanical
Locking stroke [mm]	1	-
Repetition accuracy in Z [mm]	0.01	-
Repetition accuracy in X, Y [mm]	0.02	-
Joining force [N]	100	-
Release force [N]	60	-
Offset at coupling max. in X,Y [mm]	1.65	1.65
Operating pressure [bar]	4 10	4 10
Operating temperature [°C]	5 +80	5 +80
Air volume per cycle [cm³]	16	-
Moment of inertia [kg/cm²]	5.6	5.5
Weight [kg]	0.58	0.45

*All data measured at 6 bar



▶ PRODUCT SPECIFICATIONS



Forces and moments

Shows static forces and moments which may impact on the tool changer.



Mr [Nm]	600
My [Nm]	850
Fa [N]	16000

► INCLUDED IN DELIVERY



O-Ring

COR0070150

RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GV1-8X6



Angled Fittings - Quick Connect Style

WV1-8X6



Piston position sensing



Inductive Proximity Switch Cable 0,3 m - Connector

NJR04-E2SK



Base module for storage station

ALSR13100

ZUB0019



Inductive proximity switch

NJ8-E2



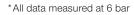
Inductive proximity switch

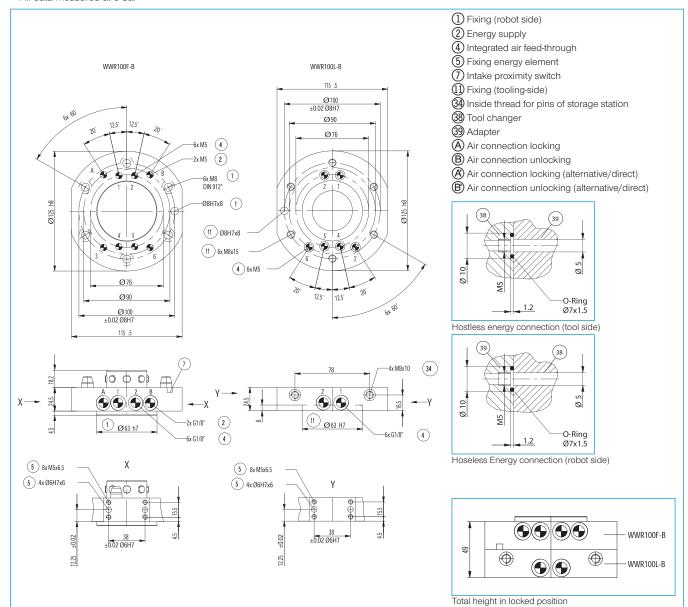
NJ8-E2S



Energy Elements see page 50

	► Technical Data*	
Order no.	WWR100F-B	WWR100L-B
Connecting flange according EN ISO 9409-1	TK 100	TK 100
Recommended handling weight [kg]	120	-
Pneumatic energy transfer [Quantity]	6	6
Electrical energy transfer	optional	optional
Hydraulic energy transfer	optional	optional
Self limitation when locking	mechanical	mechanical
Locking stroke [mm]	1.2	-
Repetition accuracy in Z [mm]	0.01	-
Repetition accuracy in X, Y [mm]	0.02	-
Joining force [N]	120	-
Release force [N]	75	-
Offset at coupling max. in X,Y [mm]	1.85	1.85
Operating pressure [bar]	4 10	4 10
Operating temperature [°C]	-	5 +80
Air volume per cycle [cm³]	25	-
Moment of inertia [kg/cm²]	14	13.9
Weight [kg]	0.96	0.725





▶ PRODUCT SPECIFICATIONS



Forces and moments

Shows static forces and moments which may impact on the tool changer.



Mr [Nm]	1500
My [Nm]	1700
Fa [N]	26000

► INCLUDED IN DELIVERY



O-Ring

COR0070150

RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GV1-8X6



Angled Fittings - Quick Connect Style

WV1-8X6



Piston position sensing



Inductive Proximity Switch Cable 0,3 m - Connector

NJR04-E2SK



Base module for storage station

ALSR13125

ZUB0020



Inductive proximity switch

NJ8-E2



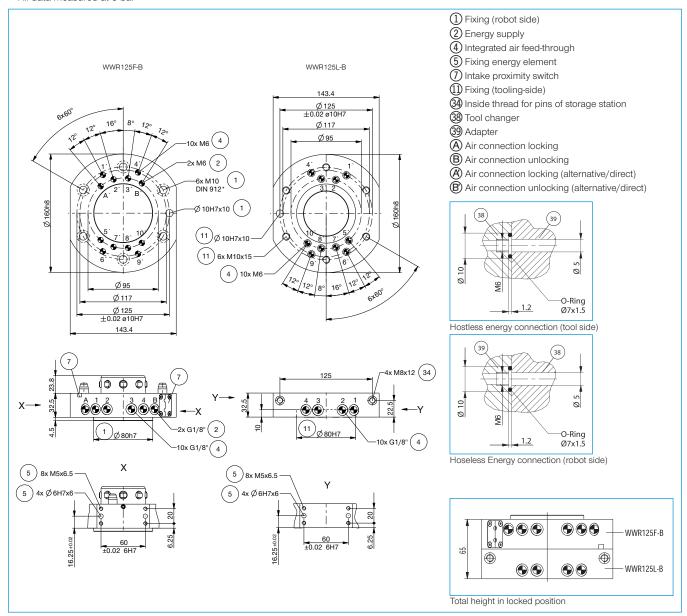
Inductive proximity switch NJ8-E2S



Energy Elements see page 52

	► Technical Data*	
Order no.	WWR125F-B	WWR125L-B
Connecting flange according EN ISO 9409-1	TK 125	TK 125
Recommended handling weight [kg]	230	-
Pneumatic energy transfer [Quantity]	10	10
Electrical energy transfer	optional	optional
Hydraulic energy transfer	optional	optional
Self limitation when locking	mechanical	mechanical
Locking stroke [mm]	1.3	-
Repetition accuracy in Z [mm]	0.01	-
Repetition accuracy in X, Y [mm]	0.02	-
Joining force [N]	150	-
Release force [N]	80	-
Offset at coupling max. in X,Y [mm]	2.85	2.85
Operating pressure [bar]	4 10	4 10
Operating temperature [°C]	5 +80	5 +80
Air volume per cycle [cm³]	80	-
Moment of inertia [kg/cm²]	48	42
Weight [kg]	2.1	1.45





▶ PRODUCT SPECIFICATIONS



Forces and moments

Shows static forces and moments which may impact on the tool changer.



Mr [Nm]	2000
My [Nm]	2200
Fa [N]	30000

► INCLUDED IN DELIVERY



O-Ring

COR0070150

RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GV1-4X8



Angled Fittings - Quick Connect Style

WV1-8X6



Piston position sensing



Inductive Proximity Switch Cable 0,3 m - Connector

NJR04-E2SK



Base module for storage station

ALSR13160

ZUB0021



Inductive proximity switch

NJ8-E2



Inductive proximity switch

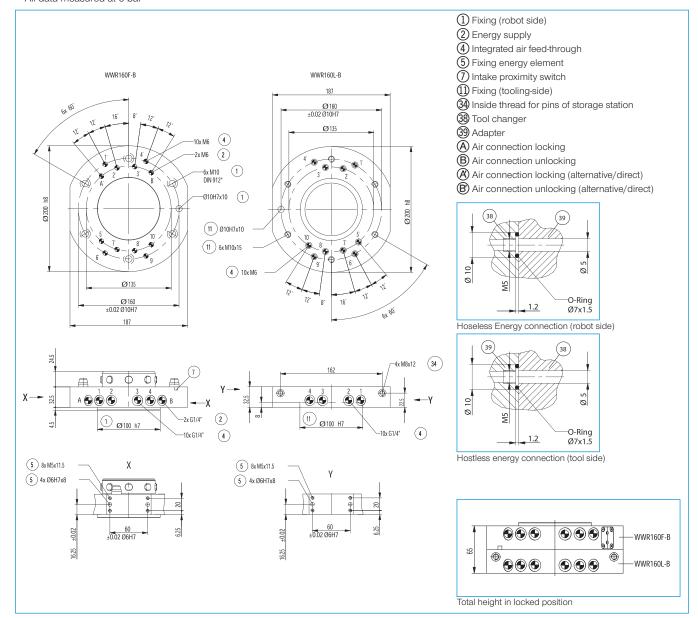
NJ8-E2S



Energy Elements see page 52

	► Technical Data*	
Order no.	WWR160F-B	WWR160L-B
Connecting flange according EN ISO 9409-1	TK 160	TK 160
Recommended handling weight [kg]	300	-
Pneumatic energy transfer [Quantity]	10	10
Electrical energy transfer	optional	optional
Hydraulic energy transfer	optional	optional
Self limitation when locking	mechanical	mechanical
Locking stroke [mm]	1.3	-
Repetition accuracy in Z [mm]	0.01	-
Repetition accuracy in X, Y [mm]	0.02	-
Joining force [N]	150	-
Release force [N]	80	-
Offset at coupling max. in X,Y [mm]	2.85	2.85
Operating pressure [bar]	4 10	4 10
Operating temperature [°C]	5 +80	5 +80
Air volume per cycle [cm³]	97	-
Moment of inertia [kg/cm²]	134	132
Weight [kg]	3.7	2.6

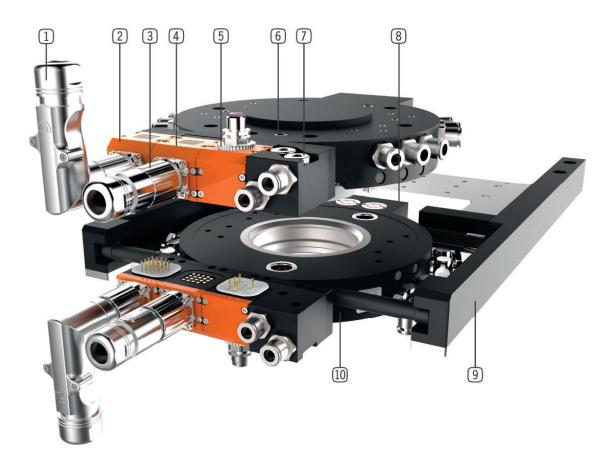
*All data measured at 6 bar



ENERGY ELEMENTS FOR TOOL CHANGER SERIES WER1000 / WER2000 / WER3000

▶ HOW TO ORDER CORRECTLY Order no. **WER** 1000 Series Series 2000 Series 3000 F Fixed part (robot side) Loose part (at tool) Profibus PB Profinet PN Pneumatic/vacuum PL LA Load current Signal current SI Number of connectors (fluidic, electrical) XXNo additional specifications 00 Sensor connection for WWR fixed part, outflow left 01 Sensor connection for WWR fixed part, outflow right 02 Fixing threads G1/4" 03 Fixing threads G3/8" 04 05 Solder cups Fixing threads G1/8" 06 Coding Pin 1 07 Coding Pin 8 08 Spring-loaded contacts 09

BENEFITS IN DETAIL



- 1 RSTV angled round plug
 - For producing customer-specific cables
 - Pre-made cables available on request
- 2 WER energy element RST plug-in connector
 - SI signal current for up to 150V and 6A
 - LA load current for up to 630V and 150A
- (3) RSTV straight round plug
 - For producing customer-specific cables
 - Pre-made cables available on request
- 4 WER energy element FST spring contact connection
 - SI signal current for up to 60V and 3A

- 5 WER field bus energy element
 - PN Industrial Ethernet, PB Profibus ad IL I/O link
- (6) WWR F tool changer fixed part
 - Without adapter, may be mounted on robot flange EN ISO 9409-1
- 7 WER energy element PL pneumatic/vacuum
 - Connection options for screw fittings M5 to G3/8"
- 8 WER energy element fluidic
 - Max. operating pressure 350 bar, max. coupling pressure 300 bar
- (9) ALSR storage station for WWR L loose part (10)
 - Includes 4 rack bolts for tool changer loose part

SERIES WER3000 - VARIABLE SPATIAL ORIENTATION OF THE PLUG









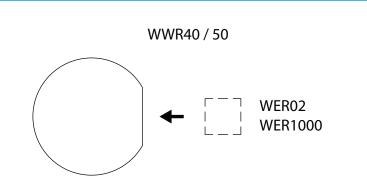
Axial plug orientation

ENERGY ELEMENTS FOR TOOL CHANGER

SIZES WWR40 / WWR50

PRODUCT SPECIFICATIONS





▶ ELECTRICAL

	Technical D	ata				
Order no.	WER02FS04	WER02LS04	WER02FF04	WER02LF04	WER1000FSI20-05	WER1000LSI20-05
compatible with	Fix part	Loose part	Fix part	Loose part	Fix part	Loose part
Connection type	Plug-in Connector	Plug-in Connector	Spring contact	Spring contact	Spring contact	Spring contact
Round Connector [Straight] *	KAG500B4	KAG500S4	KAG500B4	KAG500S4	-	-
Round Connector [Angle] *	KAW500B4	KAW500S4	KAW500B4	KAW500S4	-	-
Fixing thread	M8	M8	M8	M8	-	-
No. of contacts	4	4	4	4	20	20
Nominal current [A]	4	4	3	3	3	3
Supply voltage [V AC]	60	60	60	60	60	60
Supply voltage [V DC]**	75	75	75	75	75	75
Weight [kg]	0.03	0.03	0.03	0.03	0.02	0.02
Connection type	Male	Female	Male	Female	Customizable	Customizable

^{*}als Zubehör erhältlich see page 63

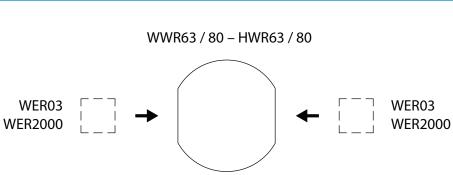
 $^{^{\}star\,\star}\text{Specifications}$ for on-site grounding, 60V without grounding

ENERGY ELEMENTS FOR TOOL CHANGER

SIZES WWR63 / WWR80

PRODUCT SPECIFICATIONS





> FLUIDIC

	▶ Technical Data					
Order no.	WER2000FPL06-00	WER2000LPL06-00	WER2000FPL02-06	WER2000LPL02-06	WER2000FPL01-03	WER2000LPL01-03
compatible with	Fix part	Loose part	Fix part	Loose part	Fix part	Loose part
Fixing thread	M5	M5	G1/8"	G1/8"	G1/4"	G1/4"
Number of fluid couplings	6	6	2	2	1	1
Operating pressure [bar]	-0.6 10	-0.6 10	-0.6 10	-0.6 10	-0.6 10	-0.6 10
Weight [kg]	0.05	0.05	0.06	0.07	0.06	0.06

ELECTRICAL

	Technical D	ata				
Order no.	WER03FS04	WER03LS04	WER2000FSI32-05	WER2000LSI32-05	WER03FF09-B	WER03LF09-B
compatible with	Fix part	Loose part	Fix part	Loose part	Fix part	Loose part
Connection type	Plug-in Connector	Plug-in Connector	Spring contact	Spring contact	Spring contact	Spring contact
Round Connector [Straight] *	KAG500B4	KAG500S4	-	-	-	-
Round Connector [Angle] *	KAW500B4	KAW500S4	-	-	-	-
Fixing thread	M8	M8	-	-	-	-
No. of contacts	4	4	32	32	9	9
Nominal current [A]	4	4	3	3	3	3
Supply voltage [V AC]	60	60	60	60	60	60
Supply voltage [V DC]* *	75	75	75	75	75	75
Weight [kg]	0.06	0.06	0.04	0.04	0.06	0.06
Connection type	Male	Female	Customizable	Customizable	Male/SUB-D	Female/SUB-D

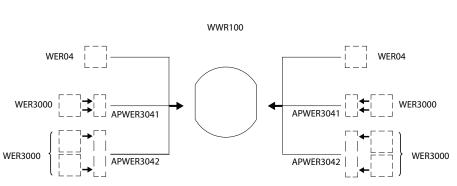
^{*}als Zubehör erhältlich see page 63

^{**}Specifications for on-site grounding, 60V without grounding

ENERGY ELEMENTS FOR TOOL CHANGER SIZE WWR100

PRODUCT SPECIFICATIONS





► FLUIDIC

	► Technic	cal Data						
Order no.	WER04FH1	WER04LH1	WER04FH2	WER04LH2	WER04FH1D	WER04LH1D	WER04FH2D	WER04LH2D
compatible with	Fix part	Loose part	Fix part	Loose part	Fix part	Loose part	Fix part	Loose part
Fixing thread	G1/4"	G1/4"	G1/4"	G1/4"	G1/4"	G1/4"	G1/4"	G1/4"
Number of fluid couplings	1	1	2	2	1	1	2	2
Operating pressure max. [bar]*	350	350	350	350	350	350	350	350
Operating pressure max. [bar]**	15	15	15	15	350	350	350	350
Weight [kg]	0.20	0.20	0.35	0.35	0.20	0.20	0.35	0.35

^{*}At pressures of approximately 50 bar and higher, there must be external locking of the elements.

^{* *}Observe coupling force

	Technical Data			
Order no.	WER3000FPL02-03	WER3000LPL02-03	WER3000FPL01-04	WER3000LPL01-04
compatible with	Fix part	Loose part	Fix part	Loose part
Fixing thread	G1/4"	G1/4"	G3/8"	G3/8"
Number of fluid couplings	2	2	1	1
Operating pressure [bar]	-0.6 10	-0.6 10	-0.6 10	-0.6 10
Weight [kg]	0.13	0.13	0.13	0.13

ELECTRICAL

	► Technical Data						
Order no.	WER3000FLA06-00	WER3000LLA06-00	WER3000FLA08-00	WER3000LLA08-00	WER3000FSI12-00	WER3000LSI12-00	
compatible with	Fix part	Loose part	Fix part	Loose part	Fix part	Loose part	
Connection type	Plug-in Connector						
Round Connector [Straight] *	RSTVLM23G06B-B	RSTVLM23G06S-B	RSTVLM23G08B-B	RSTVLM23G08S-B	RSTVSM23G12B-B	RSTVSM23G12S-B	
Round Connector [Angle] *	RSTVLM23W06B-B	RSTVLM23W06S-B	RSTVLM23W08B-B	RSTVLM23W08S-B	RSTVSM23W12B-B	RSTVSM23W12S-B	
Fixing thread	M23	M23	M23	M23	M23	M23	
No. of contacts	5+PE	5+PE	(3+PE) / 4	(3+PE) / 4	12	12	
Nominal current [A]	15	15	15/6	15/6	6	6	
Supply voltage [V AC]	600	600	600/150	600/150	150	150	
Weight [kg]	0.35	0.41	0.35	0.40	0.12	0.15	
Connection type	Male	Female	Male	Female	Male	Female	

^{*}als Zubehör erhältlich see page 63

ELECTRICAL

	Technical Data			
Order no.	WER3000FSI19-00	WER3000LSI19-00	WER3000FSI19-09	WER3000LSI19-09
compatible with	Fix part	Loose part	Fix part	Loose part
Connection type	Plug-in Connector	Plug-in Connector	Spring contact	Spring contact
Round Connector [Straight] *	RSTVSM23G19B-B	RSTVSM23G19S-B	RSTVSM23G19B-B	RSTVSM23G19S-B
Round Connector [Angle] *	RSTVSM23W19B-B	RSTVSM23W19S-B	RSTVSM23W19B-B	RSTVSM23W19S-B
Fixing thread	M23	M23	M23	M23
No. of contacts	19	19	19	19
Nominal current [A]	6	6	3	3
Supply voltage [V AC]	150	150	60	60
Weight [kg]	0.13	0.15	0.13	0.15
Connection type	Male	Female	Male	Female

^{*}als Zubehör erhältlich see page 63

► ELECTRICAL + 3 CONNECTION OPTIONS FOR WWR SENSORS

	► Technical Data		
Order no.	WER3000FSI19-01	WER3000FSI19-02	WER3000LSI19-00
compatible with	Fix part	Fix part	Loose part
Connection type	Plug-in Connector	Plug-in Connector	Plug-in Connector
Round Connector [Straight] *	RSTVSM23G19B-B	RSTVSM23G19B-B	RSTVSM23G19S-B
Round Connector [Angle] *	RSTVSM23W19B-B	RSTVSM23W19B-B	RSTVSM23W19S-B
Fixing thread	M23	M23	M23
No. of contacts	14+5 Sensoric	14+5 Sensoric	19
Nominal current [A]	6	6	6
Supply voltage [V AC]	150	150	150
Sensor linkage	Left	Right	-
Weight [kg]	0.16	0.16	0.15
Connection type	Male	Male	Female

^{*}als Zubehör erhältlich see page 63

► FIELDBUS

	▶ Technical Data					
Order no.	WER3000FPN01-00	WER3000LPN01-00	WER3000FPB01-00	WER3000LPB01-00	WER3000FIL01-00	WER3000LIL01-00
compatible with	Fix part	Loose part	Fix part	Loose part	Fix part	Loose part
Data transmission	Profinet/Industrial Ethernet	Profinet/Industrial Ethernet	Profibus	Profibus	IO-Link	IO-Link
Data rate	100	100	12	12	-	-
Fixing thread	M12	M12	M12	M12	M12	M12
Weight [kg]	0.11	0.11	0.13	0.12	0.11	0.11

► ADAPTER PLATES

	► Technical Data	
Order no.	APWER3041	APWER3042
compatible with	1xWER3000	2xWER3000
Weight [kg]	0.05	0.14

TECHNICAL INFORMATION



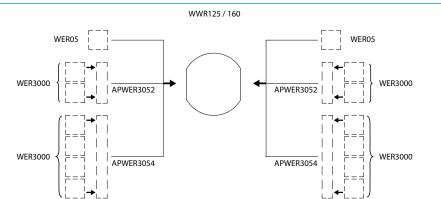
▶ Information about round plugs and plug-in connectors for the WER3000 is provided on page 63

ENERGY ELEMENTS FOR TOOL CHANGER

SIZES WWR125 / WWR160

PRODUCT SPECIFICATIONS





► FLUIDIC

	Technical Data			
Order no.	WER05FH2	WER05LH2	WER05FH2D	WER05LH2D
compatible with	Fix part	Loose part	Fix part	Loose part
Fixing thread	G1/4"	G1/4"	G1/4"	G1/4"
Number of fluid couplings	2	2	2	2
Operating pressure max. [bar]*	350	350	350	350
Operating pressure max. [bar]**	15	15	350	350
Weight [kg]	0.30	0.30	0.30	0.30

^{*}At pressures of approximately 50 bar and higher, there must be external locking of the elements.

^{* *}Observe coupling force

	Technical Data	► Technical Data								
Order no.	WER3000FPL02-03	WER3000LPL02-03	WER3000FPL01-04	WER3000LPL01-04						
compatible with	Fix part	Loose part	Fix part	Loose part						
Fixing thread	G1/4"	G1/4"	G3/8"	G3/8"						
Number of fluid couplings	2	2	1	1						
Operating pressure [bar]	-0.6 10	-0.6 10	-0.6 10	-0.6 10						
Weight [kg]	0.13	0.13	0.13	0.13						

ELECTRICAL

	Technical Da	ata				
Order no.	WER3000FLA06-00	WER3000LLA06-00	WER3000FLA08-00	WER3000LLA08-00	WER3000FSI12-00	WER3000LSI12-00
compatible with	Fix part	Loose part	Fix part	Loose part	Fix part	Loose part
Connection type	Plug-in Connector					
Round Connector [Straight] *	RSTVLM23G06B-B	RSTVLM23G06S-B	RSTVLM23G08B-B	RSTVLM23G08S-B	RSTVSM23G12B-B	RSTVSM23G12S-B
Round Connector [Angle] *	RSTVLM23W06B-B	RSTVLM23W06S-B	RSTVLM23W08B-B	RSTVLM23W08S-B	RSTVSM23W12B-B	RSTVSM23W12S-B
Fixing thread	M23	M23	M23	M23	M23	M23
No. of contacts	5+PE	5+PE	(3+PE) / 4	(3+PE) / 4	12	12
Nominal current [A]	15	15	15/6	15/6	6	6
Supply voltage [V AC]	600	600	600/150	600/150	150	150
Weight [kg]	0.35	0.41	0.35	0.40	0.12	0.15
Connection type	Male	Female	Male	Female	Male	Female

^{*}als Zubehör erhältlich see page 63

ELECTRICAL

	Technical Data			
Order no.	WER3000FSI19-00	WER3000LSI19-00	WER3000FSI19-09	WER3000LSI19-09
compatible with	Fix part	Loose part	Fix part	Loose part
Connection type	Plug-in Connector	Plug-in Connector	Spring contact	Spring contact
Round Connector [Straight] *	RSTVSM23G19B-B	RSTVSM23G19S-B	RSTVSM23G19B-B	RSTVSM23G19S-B
Round Connector [Angle] *	RSTVSM23W19B-B	RSTVSM23W19S-B	RSTVSM23W19B-B	RSTVSM23W19S-B
Fixing thread	M23	M23	M23	M23
No. of contacts	19	19	19	19
Nominal current [A]	6	6	3	3
Supply voltage [V AC]	150	150	60	60
Weight [kg]	0.13	0.15	0.13	0.15
Connection type	Male	Female	Male	Female

^{*}als Zubehör erhältlich see page 63

► ELECTRICAL + 3 CONNECTION OPTIONS FOR WWR SENSORS

	► Technical Data		
Order no.	WER3000FSI19-01	WER3000FSI19-02	WER3000LSI19-00
compatible with	Fix part	Fix part	Loose part
Connection type	Plug-in Connector	Plug-in Connector	Plug-in Connector
Round Connector [Straight] *	RSTVSM23G19B-B	RSTVSM23G19B-B	RSTVSM23G19S-B
Round Connector [Angle] *	RSTVSM23W19B-B	RSTVSM23W19B-B	RSTVSM23W19S-B
Fixing thread	M23	M23	M23
No. of contacts	14+5 Sensoric	14+5 Sensoric	19
Nominal current [A]	6	6	6
Supply voltage [V AC]	150	150	150
Sensor linkage	Left	Right	-
Weight [kg]	0.16	0.16	0.15
Connection type	Male	Male	Female

^{*}als Zubehör erhältlich see page 63

► FIELDBUS

	► Technical Data						
Order no.	WER3000FPN01-00	WER3000LPN01-00	WER3000FPB01-00	WER3000LPB01-00	WER3000FIL01-00	WER3000LIL01-00	
compatible with	Fix part	Loose part	Fix part	Loose part	Fix part	Loose part	
Data transmission	Profinet/Industrial Ethernet	Profinet/Industrial Ethernet	Profibus	Profibus	IO-Link	IO-Link	
Data rate	100	100	12	12	-	-	
Fixing thread	M12	M12	M12	M12	M12	M12	
Weight [kg]	0.11	0.11	0.13	0.12	0.11	0.11	

► ADAPTER PLATES

	► Technical Data	
Order no.	APWER3052	APWER3054
compatible with	2xWER3000	4xWER3000
Weight [kg]	0.07	0.13

TECHNICAL INFORMATION



▶ Information about round plugs and plug-in connectors for the WER3000 is provided on page 63

TOOL CHANGERS SERIES WWR1000

PRODUCT ADVANTAGES



Secure hold during pressure drop

A redundant system, created by the combination of spring accumulator and a self-locking mechanism, guarantees a safe machine

Handling weight from up to one tonne

Automated changes can be carried out by this changer with process reliability even with the largest robots

Inexhaustible variety of media transfer systems

No matter which medium you would like to transmit, we will draw from our wealth of experience in implementing projects and find a solution to suit your needs!

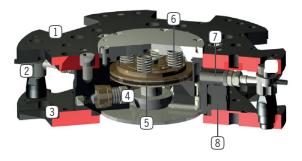
► THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!

Extreme conditions, all over the world-our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com

BENEFITS IN DETAIL



- 1 Fix part
 - for robot side assembly
- 2 Centering bolts
 - twist protection and positioning for loose part
- 3 Loose part
 - for tool side assembly
- 4 Locking bolt
 - adapted to the clamping sleeve
- (5) Drive
 - double-acting pneumatic cylinder
- 6 Integrated spring
 - energy storage in case of drop in pressure
- 7 Piston position sensing
 - via inductive proximity switch
- 8 Locking sleeve

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information

All information just a click away at: www.zimmer-group.com Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.



▶ PRODUCT SPECIFICATIONS



Forces and moments

Shows static forces and moments which may impact on the tool changer when locked.



Mr [Nm]	6000
My [Nm]	6000
Fa [N]	35000

► INCLUDED IN DELIVERY



Mounting bracket for proximity switch

ZUB0014

RECOMMENDED ACCESSORIES



Programming pins

ZUB0022



Plug-in connector Straight Cable 5m - Socket M8 KAG500



Straight Fittings - Quick Connect Style

GV1-8X8



Inductive proximity switch - Connector M8

NJ8-E2S-17



Storage station

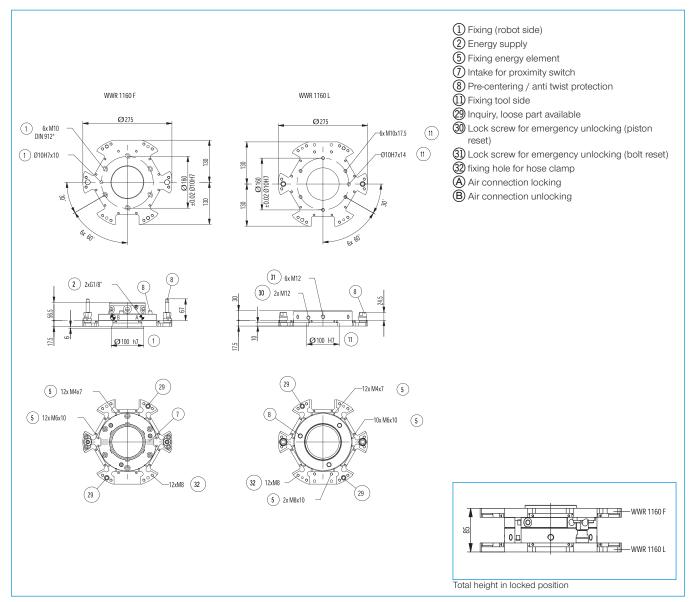
ALSR1-1200



Energy Elements see page 60

	► Technical Data*	
Order no.	WWR1160F	WWR1160L
Locking stroke [mm]	1	-
Recommended handling weight [kg]	500	-
Self limitation when locking	mechanical	mechanical
Fluid energy transfer	optional	optional
Electrical energy transfer	optional	optional
Operating pressure min. [bar]	6	6
Operating pressure max. [bar]	8	8
Repetition accuracy +/- [mm]	0.02	0.02
Offset at coupling max. in X,Y [mm]	3	3
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	48	-
Weight [kg]	9	6

^{*}All data measured at 6 bar



▶ PRODUCT SPECIFICATIONS



Forces and moments

Shows static forces and moments which may impact on the tool changer when locked.



Mr [Nm]	12000
My [Nm]	12000
Fa [N]	75000

► INCLUDED IN DELIVERY



Mounting bracket for proximity switch

ZUB0014

RECOMMENDED ACCESSORIES



Programming pins

ZUB0022



Plug-in connector Straight Cable 5m - Socket M8 KAG500



Straight Fittings - Quick Connect Style

GV1-8X8



Inductive proximity switch - Connector M8

NJ8-E2S-17



Storage station

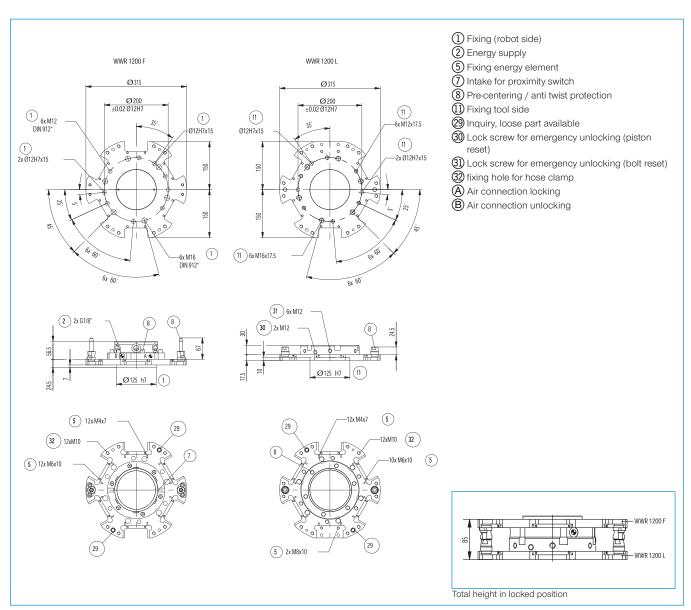
ALSR1-1200



Energy Elements see page 60

	► Technical Data*	
Order no.	WWR1200F	WWR1200L
Locking stroke [mm]	1	-
Recommended handling weight [kg]	1000	-
Self limitation when locking	mechanical	mechanical
Fluid energy transfer	optional	optional
Electrical energy transfer	optional	optional
Operating pressure min. [bar]	6	6
Operating pressure max. [bar]	8	8
Repetition accuracy +/- [mm]	0.02	0.02
Offset at coupling max. in X,Y [mm]	3	3
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	83	-
Weight [kg]	15	8.5

^{*}All data measured at 6 bar

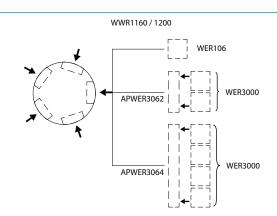


ENERGY ELEMENTS FOR TOOL CHANGER

SIZES WWR1160 / WWR1200

PRODUCT SPECIFICATIONS





► FLUIDIC

	► Technical Data							
Order no.	WER106FP06	WER106LP06	WER106FP15	WER106LP15	WER106FH1DNW8	WER106LH1DNW8		
compatible with	Fix part	Loose part	Fix part	Loose part	Fix part	Loose part		
Fixing thread	G1/8"	G1/8"	M5	M5	G1/2"	G1/2"		
Number of fluid couplings	6	6	15	15	1	1		
Nominal diameter	1/8"	1/8"	5	5	8	8		
Flow per connector max. [I/min]	-	-	-	-	25	25		
Operating pressure max. [bar]*	10	10	10	10	250	250		
Operating pressure max. [bar]**	-	-	-	-	10	10		
Weight [kg]	0.25	0.25	0.25	0.25	0.35	0.35		

^{*}At pressures of approximately 50 bar and higher, there must be external locking of the elements.

^{* *}Observe coupling force

	Technical D	► Technical Data						
Order no.	WER106FH2DNW5	WER106LH2DNW5	WER106FH2DNW8	WER106LH2DNW8	WER106FH4DNW8	WER106LH4DNW8		
compatible with	Fix part	Loose part	Fix part	Loose part	Fix part	Loose part		
Fixing thread	G1/4"	G1/4"	G1/2"	G1/2"	G1/2"	G1/2"		
Number of fluid couplings	2	2	2	2	4	4		
Nominal diameter	5	5	8	8	8	8		
Flow per connector max. [I/min]	12	12	25	25	25	25		
Operating pressure max. [bar]*	350	350	250	250	250	250		
Operating pressure max. [bar]**	15	15	10	10	10	10		
Weight [kg]	0.35	0.35	0.69	1.00	1.40	2.10		

^{*}At pressures of approximately 50 bar and higher, there must be external locking of the elements.

^{* *}Observe coupling force

	Technical Data			
Order no.	WER3000FPL02-03	WER3000LPL02-03	WER3000FPL01-04	WER3000LPL01-04
compatible with	Fix part	Loose part	Fix part	Loose part
Fixing thread	G1/4"	G1/4"	G3/8"	G3/8"
Number of fluid couplings	2	2	1	1
Operating pressure [bar]	-0.6 10	-0.6 10	-0.6 10	-0.6 10
Weight [kg]	0.13	0.13	0.13	0.13

► ELECTRICAL

	► Technical Data	
Order no.	WER106FL0335	WER106LL0335
compatible with	Fix part	Loose part
Connection type	Plug-in Connector	Plug-in Connector
Round Connector [Straight]	-	-
Round Connector [Angle]	-	-
Fixing thread	-	-
No. of contacts	3	3
Nominal current [A]	150	150
Supply voltage [V AC]	630	630
Weight [kg]	0.95	0.90
Connection type	Customizable	Customizable

	► Technical Da	ata				
Order no.	WER3000FLA06-00	WER3000LLA06-00	WER3000FLA08-00	WER3000LLA08-00	WER3000FSI12-00	WER3000LSI12-00
compatible with	Fix part	Loose part	Fix part	Loose part	Fix part	Loose part
Connection type	Plug-in Connector					
Round Connector [Straight] *	RST- VLM23G06B-B	RST- VLM23G06S-B	RST- VLM23G08B-B	RST- VLM23G08S-B	RST- VSM23G12B-B	RST- VSM23G12S-B
Round Connector [Angle] *	RSTVLM- 23W06B-B	RSTVLM- 23W06S-B	RSTVLM- 23W08B-B	RSTVLM- 23W08S-B	RSTVSM- 23W12B-B	RSTVSM- 23W12S-B
Fixing thread	M23	M23	M23	M23	M23	M23
No. of contacts	5+PE	5+PE	(3+PE) / 4	(3+PE) / 4	12	12
Nominal current [A]	15	15	15/6	15/6	6	6
Supply voltage [V AC]	600	600	600/150	600/150	150	150
Weight [kg]	0.35	0.41	0.35	0.40	0.12	0.15
Connection type	Male	Female	Male	Female	Male	Female

^{*}als Zubehör erhältlich see page 63

	Technical Data			
Order no.	WER3000FSI19-00	WER3000LSI19-00	WER3000FSI19-09	WER3000LSI19-09
compatible with	Fix part	Loose part	Fix part	Loose part
Connection type	Plug-in Connector	Plug-in Connector	Spring contact	Spring contact
Round Connector [Straight] *	RSTVSM23G19B-B	RSTVSM23G19S-B	RSTVSM23G19B-B	RSTVSM23G19S-B
Round Connector [Angle] *	RSTVSM23W19B-B	RSTVSM23W19S-B	RSTVSM23W19B-B	RSTVSM23W19S-B
Fixing thread	M23	M23	M23	M23
No. of contacts	19	19	19	19
Nominal current [A]	6	6	3	3
Supply voltage [V AC]	150	150	60	60
Weight [kg]	0.13	0.15	0.13	0.15
Connection type	Male	Female	Male	Female

^{*}als Zubehör erhältlich see page 63

ENERGY ELEMENTS FOR TOOL CHANGER SIZES WWR1160 / WWR1200

► ELECTRICAL + 3 CONNECTION OPTIONS FOR WWR SENSORS

	Technical Data		
Order no.	WER3000FSI19-01	WER3000FSI19-02	WER3000LSI19-00
compatible with	Fix part	Fix part	Loose part
Connection type	Plug-in Connector	Plug-in Connector	Plug-in Connector
Round Connector [Straight] *	RSTVSM23G19B-B	RSTVSM23G19B-B	RSTVSM23G19S-B
Round Connector [Angle] *	RSTVSM23W19B-B	RSTVSM23W19B-B	RSTVSM23W19S-B
Fixing thread	M23	M23	M23
No. of contacts	14+5 Sensoric	14+5 Sensoric	19
Nominal current [A]	6	6	6
Supply voltage [V AC]	150	150	150
Sensor linkage	Left	Right	-
Weight [kg]	0.16	0.16	0.15
Connection type	Male	Male	Female

^{*}als Zubehör erhältlich see page 63

FIELDBUS

	Technical Da	ata				
Order no.	WER3000FPN01-00	WER3000LPN01-00	WER3000FPB01-00	WER3000LPB01-00	WER3000FIL01-00	WER3000LIL01-00
compatible with	Fix part	Loose part	Fix part	Loose part	Fix part	Loose part
Data transmission	Profinet/Industrial Ethernet	Profinet/Industrial Ethernet	Profibus	Profibus	IO-Link	IO-Link
Data rate	100	100	12	12	-	-
Fixing thread	M12	M12	M12	M12	M12	M12
Weight [kg]	0.11	0.11	0.13	0.12	0.11	0.11

ADAPTER PLATES

	► Technical Data	
Order no.	APWER3062	APWER3064
compatible with	2xWER3000	4xWER3000
Weight [kg]	0.15	0.42

PLUG-IN CONNECTOR FOR ENERGY ELEMENTS SUITABLE FOR WER201 / WER02 / WER03 / WER3000

▶ PLUG-IN CONNECTOR FOR ENERGY ELEMENTS WER201 / WER02 / WER03

	Techni	cal Data						
Order no.	KAG500B4	KAW500B4	B8-G-4	B8-W-4	KAG500S4	KAW500S4	S8-G-4	S8-W-4
Fixing thread	M8	M8	M8	M8	M8	M8	M8	M8
No. of contacts	4	4	4	4	4	4	4	4
Cable length [m]	5	5	-	-	5	5	-	-
Cable-Ø [mm]	4.3	4.3	-	-	4.3	4.3	-	-
Cable sheath material	PUR	PUR	-	-	PUR	PUR	-	-
Bend radius	10xØ	10xØ	-	-	10xØ	10xØ	-	-
Protection to IEC 60529	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67
Connection type	Female	Female	Female	Female	Male	Male	Male	Male
Version [Type]	Straight	Angle	Straight	Angle	Straight	Angle	Straight	Angle

► ROUND PLUG FOR WER3000

	Technical Data			
Order no.	RSTVLM23G06B-B	RSTVLM23W06B-B	RSTVLM23G06S-B	RSTVLM23W06S-B
Fixing thread	M23	M23	M23	M23
No. of contacts	6	6	6	6
Protection to IEC 60529	IP67	IP67	IP67	IP67
Connection type	Female	Female	Male	Male

	Technical Data			
Order no.	RSTVLM23G08B-B	RSTVLM23W08B-B	RSTVLM23G08S-B	RSTVLM23W08S-B
Fixing thread	M23	M23	M23	M23
No. of contacts	8	8	8	8
Protection to IEC 60529	IP67	IP67	IP67	IP67
Connection type	Female	Female	Male	Male

	Technical Data			
Order no.	RSTVSM23G12B-B	RSTVSM23W12B-B	RSTVSM23G12S-B	RSTVSM23W12S-B
Fixing thread	M23	M23	M23	M23
No. of contacts	12	12	12	12
Protection to IEC 60529	IP67	IP67	IP67	IP67
Connection type	Female	Female	Male	Male

	Technical Data			
Order no.	RSTVSM23G19B-B	RSTVSM23W19B-B	RSTVSM23G19S-B	RSTVSM23W19S-B
Fixing thread	M23	M23	M23	M23
No. of contacts	19	19	19	19
Protection to IEC 60529	IP67	IP67	IP67	IP67
Connection type	Female	Female	Male	Male

ROTARY DISTRIBUTORS OVERVIEW OF SERIES



► ROTARY DISTRIBUTORS SERIES DVR	66
Installation size DVR40	68
Installation size DVR50	70
Installation size DVR63	72
Installation size DVR80	74
Installation size DVR100	76
Installation size DVR125	78
Installation size DVR160	80
► ROTARY DISTRIBUTORS SERIES DVR1000	82
Installation size DVR1125	84

ROTARY DISTRIBUTORS SERIES DVR

PRODUCT ADVANTAGES



Compact media transfer system

This D1 media exchanger makes cable breaks and undefined interference contours through the power supply line a thing of the past

Flat design

This structure reduces the moment load for your robot to a minimum and makes it possible to use smaller and more affordable sizes

Gold contact

Allows flexibility for transmission because you can transfer everything from the smallest flows up to 250 volts and 6 amps with process reliability

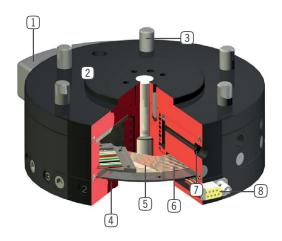
► THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!

Extreme conditions, all over the world-our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com

BENEFITS IN DETAIL



1 Torque brace

- supports the rotor during rotation (movement)

(2) Robust, lightweight housing

- Hard-coated aluminum alloy
- nitrated steel

(3) Robot flange

- partial mounting circle in accordance with EN ISO 9409-1

4 Direct air connection

- to WWR series

5 Spring system

- from size DVR63 double fitting

6 Collector ring

- hard gold coated
- transferable to finest currents

7 Up to 8 way integrated air feed-through

- for hoseless air transfer
- hose package does not have to be pivoted

8 Up to 12 pole energy transfer

- for cable-free signal transfer
- no cables are subjected to torsion

► FURTHER INFORMATION IS AVAILABLE ONLINE



Technical Information

All information just a click away at: www.zimmer-group.com Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.



ROTARY DISTRIBUTORS INSTALLATION SIZE DVR40

▶ PRODUCT SPECIFICATIONS



Forces and moments

Shows static forces and moments which may impact on the rotary distributor.



Mr [Nm] 60	
My [Nm] 60	
Fa [N] 800	

► INCLUDED IN DELIVERY



Cylinder Screw

O-Ring

C7984060129

COR0025100

► RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GVM5



Angled Fittings - Quick Connect Style

WVM5



Plug-in connector Angled Cable 5m - Socket M8

KAW500B4



Plug-in Connector Angled Cable 5m - Connector

KAW500S4



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500B4

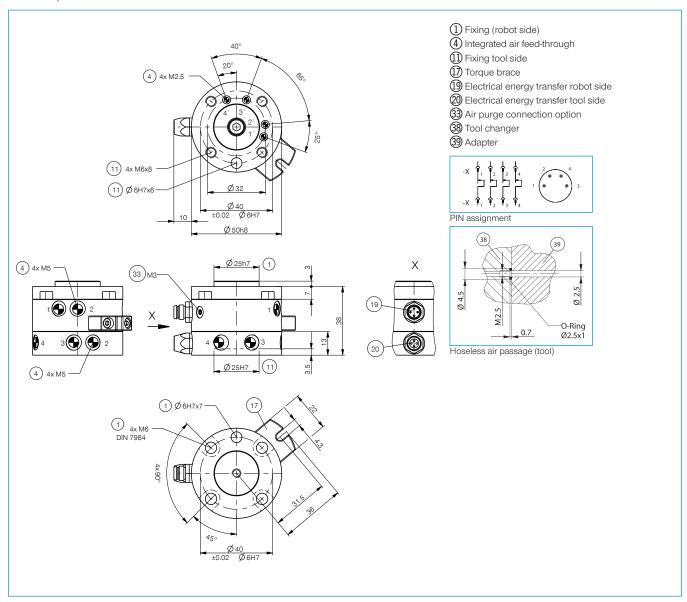


Plug-in Connector Straight Cable 5m - Connector M8

KAG500S4

	Tachuical Data
	► Technical Data
Order no.	DVR40I4
Connecting flange according EN ISO 9409-1	TK40
Recommended handling weight [kg]	15
Pneumatic energy transfer [Quantity]*	4
Electrical energy transfer	4-pole
Max. current [A]	3
Max. voltage [V]	24
Maximum acceleration [m/s²]	22
Maximum speed [1/min.]	120
Maximum speed [°/s]	720
Radial run out +/- [mm]	0.02
Axial run out +/- [mm]	0.02
Constant torque [Nm]	1
Loose torque [Nm]	1.5
Operating pressure max. [bar]	10
Operating temperature [°C]	5 +80
Moment of inertia [kg/cm²]	0.7
Protection to IEC 60529	IP40
Weight [kg]	0.2

^{*}Vacuum possible



▶ PRODUCT SPECIFICATIONS



Forces and moments

Shows static forces and moments which may impact on the rotary distributor.



Mr [Nm]	60
My [Nm]	60
Fa [N]	800
	800

► INCLUDED IN DELIVERY



Cylinder Screw

O-Ring

C7984060129

COR0025100

► RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GVM5



Angled Fittings - Quick Connect Style

WVM5



Plug-in connector Angled Cable 5m - Socket M8

KAW500B4



Plug-in Connector Angled Cable 5m - Connector

KAW500S4



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500B4

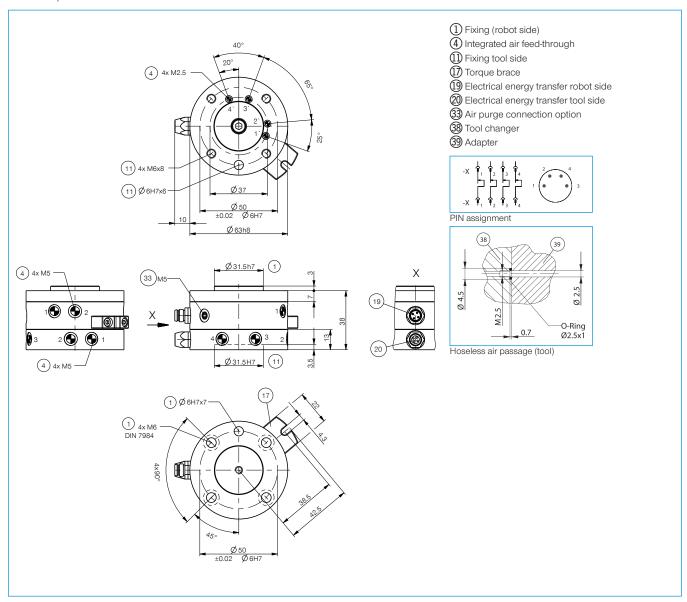


Plug-in Connector Straight Cable 5m - Connector M8

KAG500S4

	► Technical Data
Order no.	DVR50I4
Connecting flange according EN ISO 9409-1	TK 50
Recommended handling weight [kg]	15
Pneumatic energy transfer [Quantity]*	4
Electrical energy transfer	4-pole
Max. current [A]	3
Max. voltage [V]	24
Maximum acceleration [m/s ²]	22
Maximum speed [1/min.]	120
Maximum speed [°/s]	720
Radial run out +/- [mm]	0.02
Axial run out +/- [mm]	0.02
Constant torque [Nm]	1
Loose torque [Nm]	1.5
Operating pressure max. [bar]	10
Operating temperature [°C]	5 +80
Moment of inertia [kg/cm²]	8.1
Protection to IEC 60529	IP40
Weight [kg]	0.6

^{*}Vacuum possible



▶ PRODUCT SPECIFICATIONS



Forces and moments

Shows static forces and moments which may impact on the rotary distributor.



Mr [Nm]	300
My [Nm]	300
Fa [N]	1500

► INCLUDED IN DELIVERY



Cylinder Screw



O-Ring

C7984060129

COR0030100

► RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GVM5

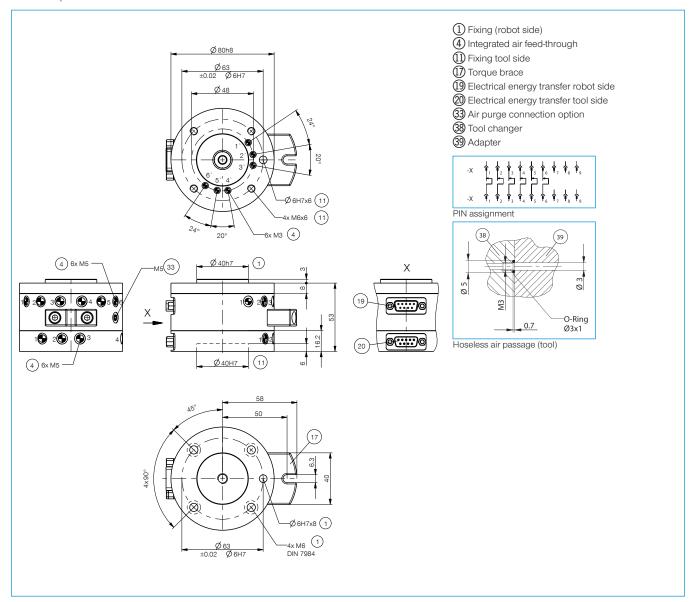


Angled Fittings - Quick Connect Style

WVM5

	► Technical Data
Order no.	DVR6316
Connecting flange according EN ISO 9409-1	TK 63
Recommended handling weight [kg]	50
Pneumatic energy transfer [Quantity]*	6
Electrical energy transfer	6-pole
Max. current [A]	6
Max. voltage [V]	250
Maximum acceleration [m/s²]	22
Maximum speed [1/min.]	120
Maximum speed [°/s]	720
Radial run out +/- [mm]	0.03
Axial run out +/- [mm]	0.03
Constant torque [Nm]	2
Loose torque [Nm]	3
Operating pressure max. [bar]	10
Operating temperature [°C]	5 +80
Moment of inertia [kg/cm²]	10.5
Protection to IEC 60529	IP64
Weight [kg]	1.2

^{*}Vacuum possible



▶ PRODUCT SPECIFICATIONS



Forces and moments

Shows static forces and moments which may impact on the rotary distributor.



Mr [Nm]	300
My [Nm]	300
Fa [N]	1500

► INCLUDED IN DELIVERY



Cylinder Screw

O-Ring

C7984080169

COR0030100

► RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GVM5

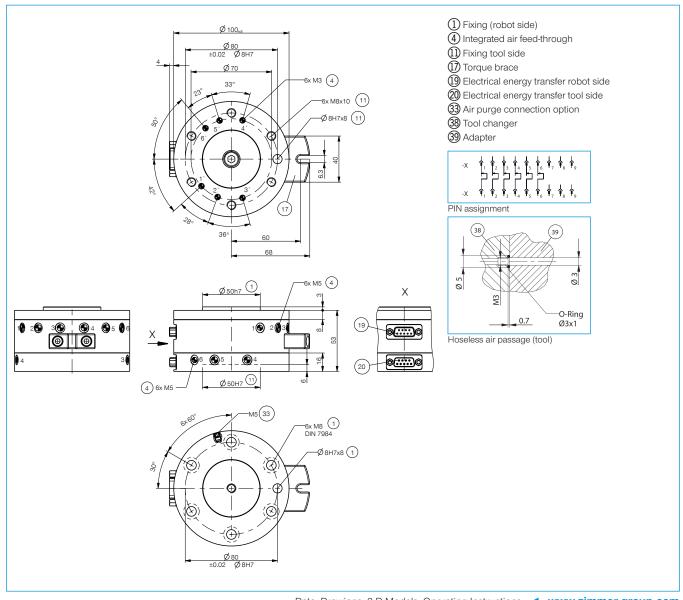


Angled Fittings - Quick Connect Style

WVM5

	► Technical Data
Order no.	DVR80I6
Connecting flange according EN ISO 9409-1	TK 80
Recommended handling weight [kg]	50
Pneumatic energy transfer [Quantity]*	6
Electrical energy transfer	6-pole
Max. current [A]	6
Max. voltage [V]	250
Maximum acceleration [m/s²]	22
Maximum speed [1/min.]	120
Maximum speed [°/s]	720
Radial run out +/- [mm]	0.03
Axial run out +/- [mm]	0.03
Constant torque [Nm]	2
Loose torque [Nm]	3
Operating pressure max. [bar]	10
Operating temperature [°C]	5 +80
Moment of inertia [kg/cm²]	27
Protection to IEC 60529	IP64
Weight [kg]	2

^{*}Vacuum possible



▶ PRODUCT SPECIFICATIONS



Forces and moments

Shows static forces and moments which may impact on the rotary distributor.



Mr [Nm]	500
My [Nm]	500
Fa [N]	2100

► INCLUDED IN DELIVERY



Cylinder Screw

O-Ring

C0912080169

COR0070150

► RECOMMENDED ACCESSORIES



Connect Style

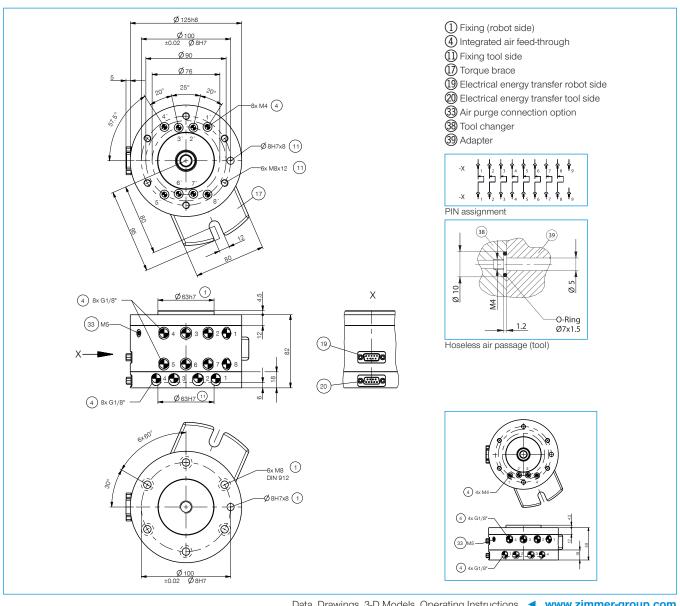




Angled Fittings - Quick Connect Style

	► Technical Data	
Order no.	DVR100I4	DVR100I8
Connecting flange according EN ISO 9409-1	TK 100	TK 100
Recommended handling weight [kg]	90	90
Pneumatic energy transfer [Quantity]*	4	8
Electrical energy transfer	8-pole	8-pole
Max. current [A]	6	6
Max. voltage [V]	250	250
Maximum acceleration [m/s²]	20	20
Maximum speed [1/min.]	100	100
Maximum speed [°/s]	600	600
Radial run out +/- [mm]	0.04	0.04
Axial run out +/- [mm]	0.04	0.04
Constant torque [Nm]	2	4
Loose torque [Nm]	4	6
Operating pressure max. [bar]	10	10
Operating temperature [°C]	5 +80	5 +80
Moment of inertia [kg/cm²]	86	100
Protection to IEC 60529	IP64	IP64
Weight [kg]	3.8	4.5

^{*}Vacuum possible



▶ PRODUCT SPECIFICATIONS



Forces and moments

Shows static forces and moments which may impact on the rotary distributor.



Mr [Nm]	900
My [Nm]	900
Fa [N]	7000

► INCLUDED IN DELIVERY



Cylinder Screw

O-Ring

C7984100209

COR0070150

► RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style GV1-8X6

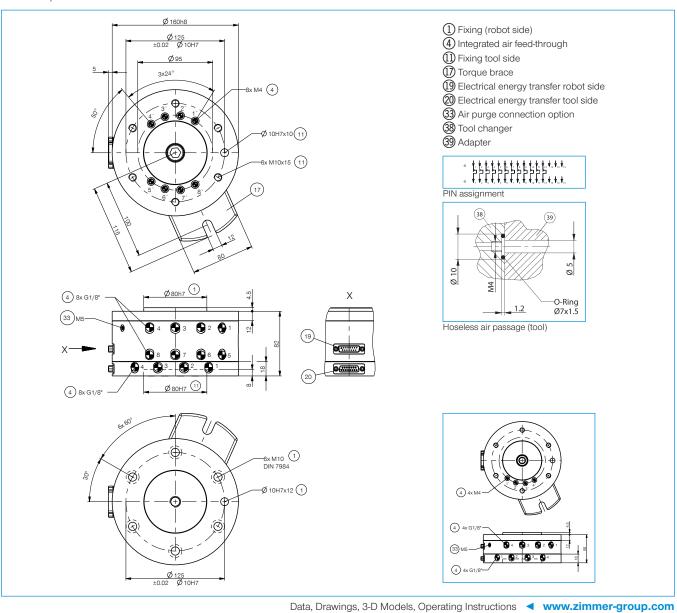




Angled Fittings - Quick Connect Style

	► Technical Data	
Order no.	DVR125I4	DVR125I8
Connecting flange according EN ISO 9409-1	TK 125	TK 125
Recommended handling weight [kg]	200	200
Pneumatic energy transfer [Quantity]*	4	8
Electrical energy transfer	12-pole	12-pole
Max. current [A]	6	6
Max. voltage [V]	250	250
Maximum acceleration [m/s²]	20	20
Maximum speed [1/min.]	100	100
Maximum speed [°/s]	600	600
Radial run out +/- [mm]	0.05	0.05
Axial run out +/- [mm]	0.05	0.05
Constant torque [Nm]	4	5
Loose torque [Nm]	5	6
Operating pressure max. [bar]	10	10
Operating temperature [°C]	5 +80	5 +80
Moment of inertia [kg/cm²]	220	225
Protection to IEC 60529	IP64	IP64
Weight [kg]	5.9	7

^{*}Vacuum possible



▶ PRODUCT SPECIFICATIONS



Forces and moments

Shows static forces and moments which may impact on the rotary distributor.



Mr [Nm]	900
My [Nm]	900
Fa [N]	7000

► INCLUDED IN DELIVERY



Cylinder Screw

O-Ring

C7984100209

COR0070150

► RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

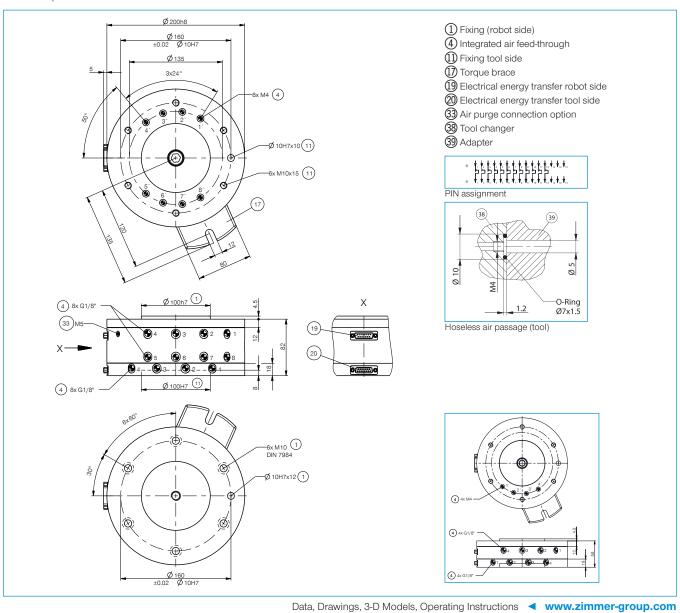
GV1-8X6



Angled Fittings - Quick Connect Style

	► Technical Data	
Order no.	DVR160I4	DVR160I8
Connecting flange according EN ISO 9409-1	TK 160	TK 160
Recommended handling weight [kg]	200	200
Pneumatic energy transfer [Quantity]*	4	8
Electrical energy transfer	12-pole	12-pole
Max. current [A]	6	6
Max. voltage [V]	250	250
Maximum acceleration [m/s²]	20	20
Maximum speed [1/min.]	100	100
Maximum speed [°/s]	600	600
Radial run out +/- [mm]	0.05	0.05
Axial run out +/- [mm]	0.05	0.05
Constant torque [Nm]	4	5
Loose torque [Nm]	5	6
Operating pressure max. [bar]	10	10
Operating temperature [°C]	5 +80	5 +80
Moment of inertia [kg/cm²]	480	580
Protection to IEC 60529	IP64	IP64
Weight [kg]	9.1	11

^{*}Vacuum possible



ROTARY DISTRIBUTORS SERIES DVR1000

PRODUCT ADVANTAGES



Rotary distributor with Industrial Ethernet

The integrated slip ring lets you transmit future-ready Industrial Ethernet to your machine for the first time with complete process reliability

8x integrated air-feed-through

Keep wear to a minimum and eliminate undefined interference contours from your hose package in order to use your machine's installation space more eff ectively

Double bearings

The integrated roller bearings provide high stiffness and allows you to maximize the operational dynamics of your robot, improving your cycle times

► THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!

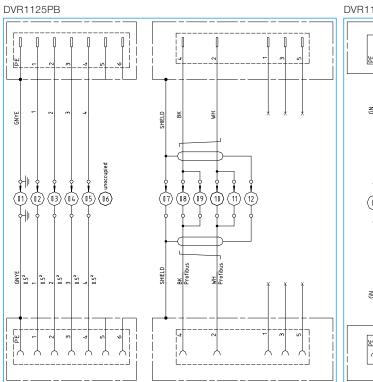
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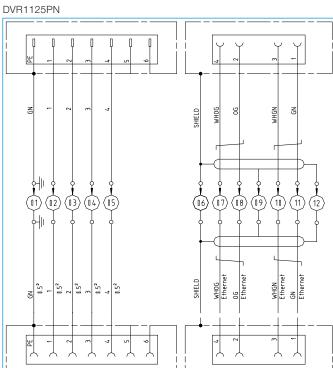
HOW TO ORDER **CORRECTLY**

The product order numbers are arranged according to this diagram:

Order no.	DVR1125		
Profibus		PB	
Industrial Ethernet		PN	

CONNECTION DIAGRAM





► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information

All information just a click away at: www.zimmer-group.com Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.



▶ PRODUCT SPECIFICATIONS



Forces and moments

Shows static forces and moments which may impact on the rotary distributor.



Mr [Nm]	900
My [Nm]	900
Fa [N]	7000

► INCLUDED IN DELIVERY



Cylinder Screw

C7984100209



O-Ring

COR0070150



O-ring 145x2.5

COR1450250

► RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

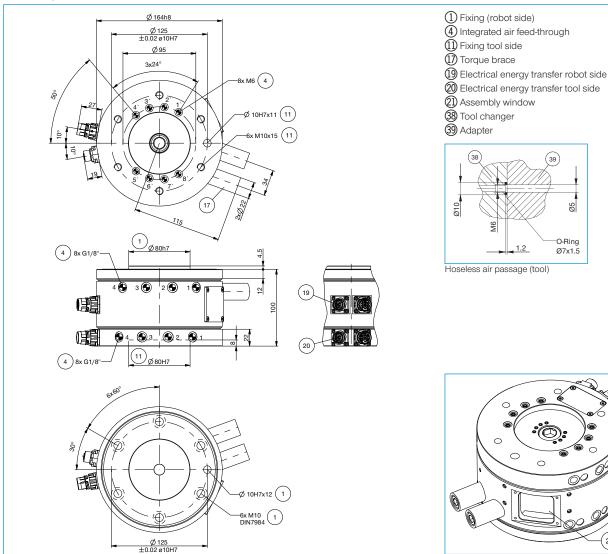
GV1-8X6

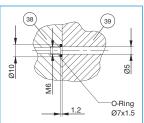


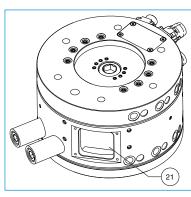
Angled Fittings - Quick Connect Style

	► Technical Data	
Order no.	DVR1125PB	DVR1125PN
Connecting flange according EN ISO 9409-1	TK 125	TK 125
Recommended handling weight [kg]	200	200
Pneumatic energy transfer [Quantity]*	8	8
Bus protocol	Profibus	Industrial Ethernet
Data rate	12	100
Electrical energy transfer	4 + PE	4 + PE
Max. current [A]	9	9
Max. voltage [V]	250	250
Maximum acceleration [m/s²]	20	20
Maximum speed [1/min.]	100	100
Maximum speed [°/s]	600	600
Radial run out +/- [mm]	0.05	0.05
Axial run out +/- [mm]	0.05	0.05
Constant torque [Nm]	4	4
Loose torque [Nm]	5	5
Operating pressure max. [bar]	10	10
Operating temperature [°C]	5 +80	5 +80
Moment of inertia [kg/cm²]	370	370
Protection to IEC 60529	IP64	IP64
Weight [kg]	8.5	8.5

*Vacuum possible







AXIS COMPENSATION MODULES OVERVIEW OF SERIES



► AXIS COMPENSATION MODULES SERIES FGR	88
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AXIS COMPENSATION MODULES SERIES FGR

PRODUCT ADVANTAGES



Effortless joining process

The ease of movement makes it possible to carry out even the finest joining processes in the shortest amount of time

Single-acting pneumatic cylinder

For easy control and a reduced amount of piping required

Can be fixed in place centrally or de-centrally

For the optimal process sequence, depending on the requirement, you can clamp or centrally lock the equalizer position

► THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!

Extreme conditions, all over the world-our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com

BENEFITS IN DETAIL



- 1 Energy supply
 - centering
- (2) Robust, lightweight housing
 - Hard-coated aluminum alloy
- 3 Robot flange
 - partial mounting circle in accordance with EN ISO 9409-1
- 4 Drive eccentric mounting
 - single-acting pneumatic cylinder with friction disc
- 5 Drive centering
 - three single-acting pneumatic cylinders with cone pistons at 120° distance
- 6 Energy supply
 - eccentric clamping
- 7 Force transfer
 - direct and low-loss via cone/friction disc
- 8 Compensation
 - force-free compensation of position inaccuracies
 - up to +/- 4 mm compensating stroke

► FURTHER INFORMATION IS AVAILABLE ONLINE



Technical Information

All information just a click away at: www.zimmer-group.com Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.



▶ PRODUCT SPECIFICATIONS



Forces and moments

Shows static forces and moments which may impact on the compensation module.



Mr [Nm]	5
My [Nm]	10
Fa [N]	1000

► INCLUDED IN DELIVERY



Cylinder Screw

C7984060129

► RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

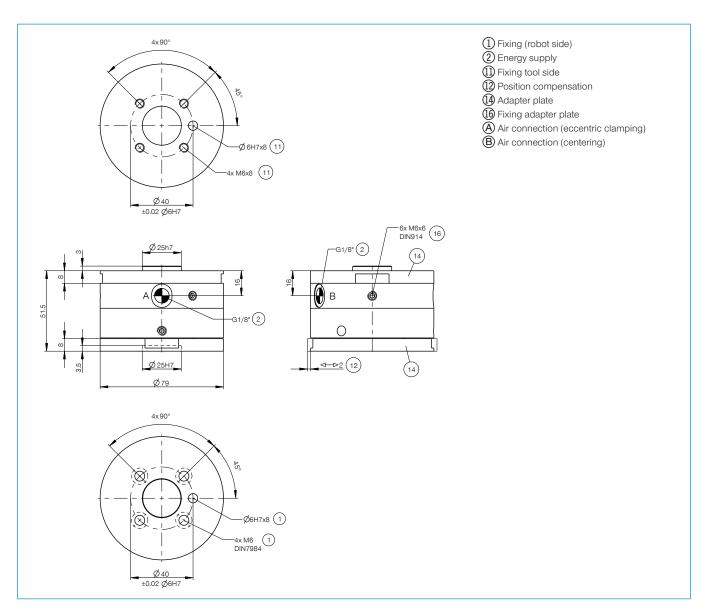
GV1-8X6



Angled Fittings - Quick Connect Style

	► Technical Data*
Order no.	FGR1040
Connecting flange according EN ISO 9409-1	TK40
Recommended handling weight [kg]**	10
Horizontal deviation +/- [mm]	2
Rotation angle max. [°]	12
Retention force centred [N]	120
Retention force decentred [N]	50
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Weight [kg]	0.9

^{*}All data measured at 6 bar



^{* *}with central attachment

▶ PRODUCT SPECIFICATIONS



Forces and moments

Shows static forces and moments which may impact on the compensation module.



Mr [Nm]	6
My [Nm]	13
Fa [N]	1000

► INCLUDED IN DELIVERY



Cylinder Screw

C0912060149

► RECOMMENDED ACCESSORIES



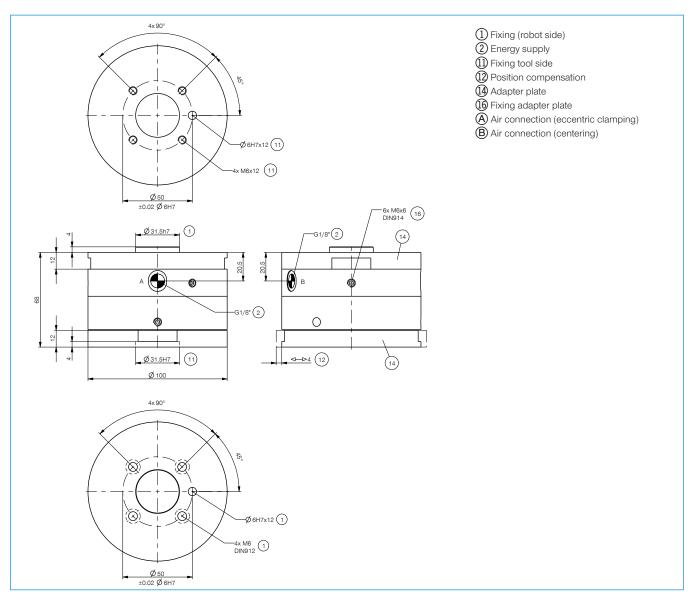
Straight Fittings - Quick Connect Style GV1-8X6



Angled Fittings - Quick Connect Style

	► Technical Data*
Order no.	FGR1050
Connecting flange according EN ISO 9409-1	TK 50
Recommended handling weight [kg]**	20
Horizontal deviation +/- [mm]	4
Rotation angle max. [°]	9
Retention force centred [N]	250
Retention force decentred [N]	200
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Weight [kg]	1.7

^{*}All data measured at 6 bar



^{* *}with central attachment

AXIS COMPENSATION MODULES SERIES XYR

PRODUCT ADVANTAGES



Adjustable balancing force and stroke

Using adjusting screws, you can adjust the properties of the equalizer optimally to your application in the shortest amount of time

Flat design

This structure reduces the moment load for your robot to a minimum and makes it possible to use smaller and more affordable sizes

Can be fixed in place centrally or de-centrally

Depending on the requirement, you can clamp or centrally lock the equalizer position. An aid for optimal processes

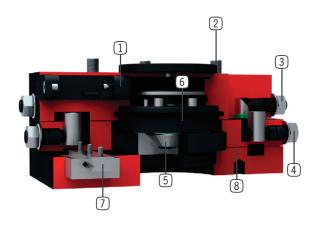
► THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!

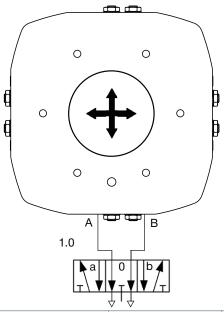
Extreme conditions, all over the world-our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com

BENEFITS IN DETAIL



- 1 Piston position sensing
 - via magnetic field sensors
 - included in scope of delivery
- 2 Robust, lightweight housing
 - Hard-coated aluminum alloy
 - partial mounting circle in accordance with EN ISO 9409-1
 - lowest overall height
- 3 Compensation force
 - adjustable via adjustment screw
- 4 Compensation stroke
 - infinitely variable
- 5 Locking piston
 - centrical via cone
- 6 Eccentrical locking
 - via pneumatic piston with frictional contact
- 7 Linear guide
 - for highest force and moments capacity
- 8 Compensation plate
 - to balance position errors in XY- direction

PNEUMATIC PLANS



Vá	alve	Status	Lo	ckin	g pi	ston	lock	ed	Loc	king	pist	on u	nloc	ked	Ed	cent ac	ric c ctiva	lam ted	ping	g	E	cce d	ntric eact	clan vate	nping d	3
		а																								
1	.0	0																								_
		b													L		_									

▶ PRODUCT SPECIFICATIONS



Forces and moments

Shows static forces and moments



Mr [Nm]	50
My [Nm]	50
Fa [N]	625

► INCLUDED IN DELIVERY



Mounting block

Cylinder Screw

KB8K

C7984060129

► RECOMMENDED ACCESSORIES



Alternate proximity

KHA1000-8



Inductive proximity switch - Connector M8

NJ8-E2S



Straight Fittings - Quick Connect Style

GVM5



Piston position sensing

ZUB0046



Inductive proximity switch - Cable 5 m

NJ8-E2

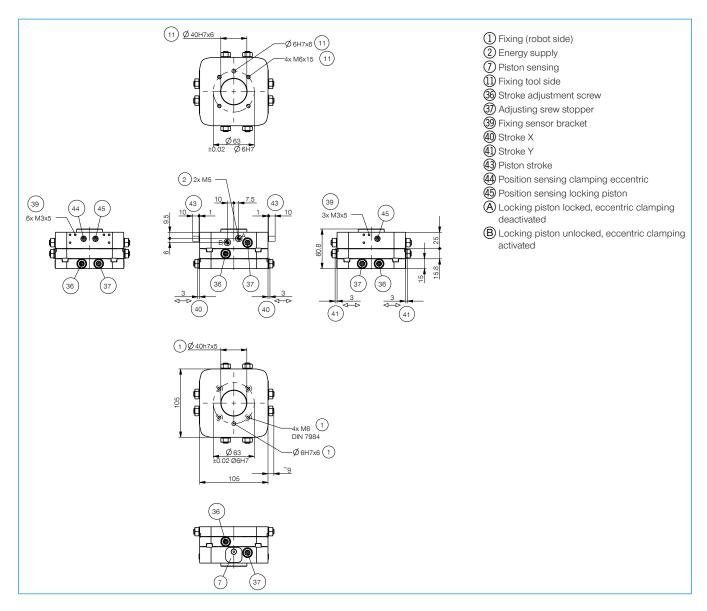


Angled Fittings - Quick

WVM5

	► Technical Data*
Order no.	XYR1063
Connecting flange according EN ISO 9409-1	TK 63
Recommended handling weight [kg]**	7
Stroke X/Y level +/- [mm]	3
Retention force centred [N]	300
Retention force decentred [N]	100
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	6.5
Moment of inertia [kg/cm²]	38.8
Weight [kg]	2

- *All data measured at 6 bar
- * * with central attachment



▶ PRODUCT SPECIFICATIONS



Forces and moments

Shows static forces and moments



Mr [Nm]	70
My [Nm]	70
Fa [N]	1150

► INCLUDED IN DELIVERY



Mounting block

Cylinder Screw

KB8K

C7984080169

► RECOMMENDED ACCESSORIES



Alternate proximity

KHA1000-8



Inductive proximity switch - Connector M8

NJ8-E2S



Straight Fittings - Quick Connect Style

GV1-8X6



Piston position sensing

ZUB0047



Inductive proximity switch - Cable 5 m

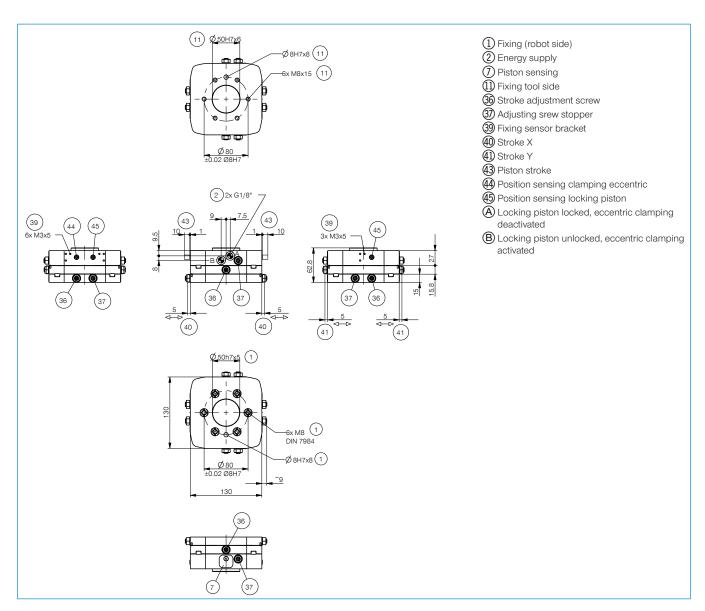
NJ8-E2



Angled Fittings - Quick

	► Technical Data*
Order no.	XYR1080
Connecting flange according EN ISO 9409-1	TK 80
Recommended handling weight [kg]**	15
Stroke X/Y level +/- [mm]	5
Retention force centred [N]	450
Retention force decentred [N]	200
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	10
Moment of inertia [kg/cm²]	82.5
Weight [kg]	3

- *All data measured at 6 bar
- * * with central attachment



▶ PRODUCT SPECIFICATIONS



Forces and moments

Shows static forces and moments



Mr [Nm]	100
My [Nm]	100
Fa [N]	2300

► INCLUDED IN DELIVERY



Mounting block



Cylinder Screw

KB8K

C7984080169

► RECOMMENDED ACCESSORIES



Alternate proximity

KHA1000-8



Inductive proximity switch - Connector M8

NJ8-E2S



Straight Fittings - Quick Connect Style

GV1-8X6



Piston position sensing

ZUB0048



Inductive proximity switch - Cable 5 m

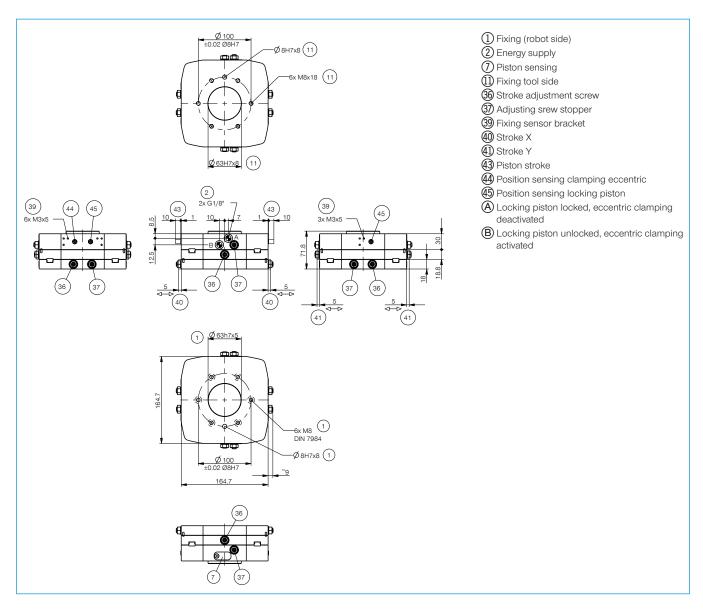
NJ8-E2



Angled Fittings - Quick

	► Technical Data*
Order no.	XYR1100
Connecting flange according EN ISO 9409-1	TK 100
Recommended handling weight [kg]**	28
Stroke X/Y level +/- [mm]	5
Retention force centred [N]	600
Retention force decentred [N]	350
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	16
Moment of inertia [kg/cm²]	231
Weight [kg]	5.3

- *All data measured at 6 bar
- * * with central attachment



▶ PRODUCT SPECIFICATIONS



Forces and moments

Shows static forces and moments



Mr [Nm]	150
My [Nm]	150
Fa [N]	3600

► INCLUDED IN DELIVERY



Mounting block



Cylinder Screw

KB8K

C7984100209

► RECOMMENDED ACCESSORIES



Alternate proximity

KHA1000-8



Inductive proximity switch - Connector M8

NJ8-E2S



Straight Fittings - Quick Connect Style

GV1-8X6



Piston position sensing

ZUB0049



Inductive proximity switch - Cable 5 m

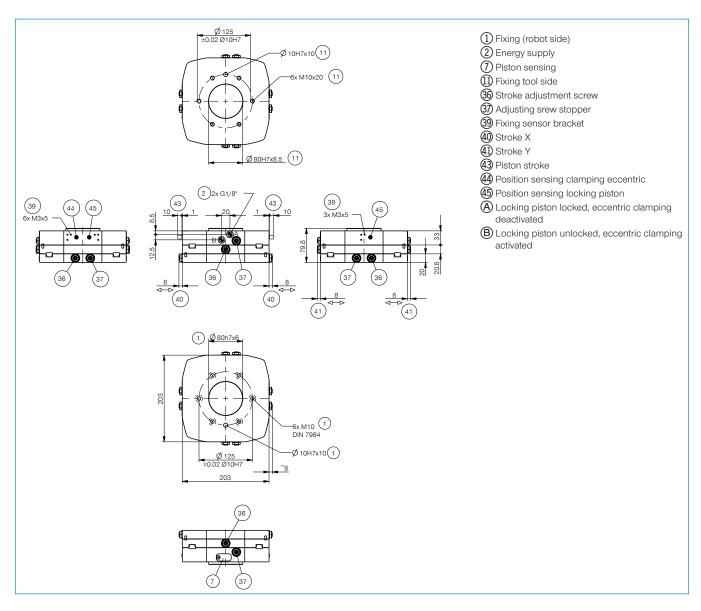
NJ8-E2



Angled Fittings - Quick

	► Technical Data*
Order no.	XYR1125
Connecting flange according EN ISO 9409-1	TK 125
Recommended handling weight [kg]**	45
Stroke X/Y level +/- [mm]	8
Retention force centred [N]	900
Retention force decentred [N]	500
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	31
Moment of inertia [kg/cm²]	585
Weight [kg]	8.9

^{*}All data measured at 6 bar



^{* *} with central attachment

▶ PRODUCT SPECIFICATIONS



Forces and moments

Shows static forces and moments



Mr [Nm]	250
My [Nm]	250
Fa [N]	3600

► INCLUDED IN DELIVERY



Mounting block



Cylinder Screw

KB8K

C7984100209

► RECOMMENDED ACCESSORIES



KHA1000-8



Inductive proximity switch - Connector M8

NJ8-E2S



Straight Fittings - Quick Connect Style

GV1-8X6



Piston position sensing

ZUB0050



Inductive proximity switch - Cable 5 m

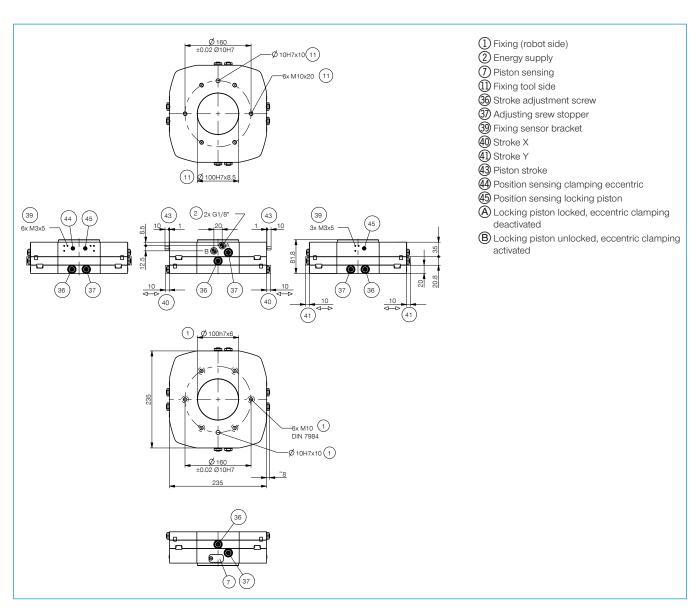
NJ8-E2



Angled Fittings - Quick

	► Technical Data*
Order no.	XYR1160
Connecting flange according EN ISO 9409-1	TK 160
Recommended handling weight [kg]**	75
Stroke X/Y level +/- [mm]	10
Retention force centred [N]	1200
Retention force decentred [N]	800
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	48
Moment of inertia [kg/cm²]	1005
Weight [kg]	11.7

^{*}All data measured at 6 bar



^{* *} with central attachment

AXIS COMPENSATION MODULES SERIES ARP

PRODUCT ADVANTAGES



Lockable centre placement

When moving your robot, you can fix the equalizer in place so that uncontrolled movements of the workpiece do not take place

Extremely flat design

This structure reduces the moment load for your robot to a minimum and makes it possible to use smaller and more affordable sizes

Variable balancing force and moment

Adjust the equaliser to your handling weight by mounting a spring package based on desired rigidity

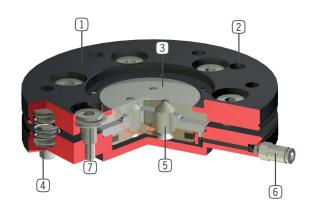
► THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!

Extreme conditions, all over the world-our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com

BENEFITS IN DETAIL



- 1 Robust, lightweight housing
 - Hard-coated aluminum alloy
- (2) Robot connecting flange
 - partial mounting circle in accordance with EN ISO 9409-1
- 3 Locking
 - 3 locking pistons
 - nitrated steel
- 4 Spring package
 - version size 63, stronger one is available
 - version size 100, 3 springs can be removed
- (5) Locking drive
 - single-acting pneumatic cylinder
- 6 Energy supply
- 7 Guiding bolts with ball cup

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information

All information just a click away at: www.zimmer-group.com Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.

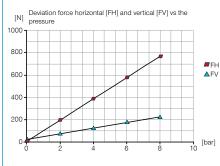


AXIS COMPENSATION MODULES INSTALLATION SIZE AR40P

PRODUCT SPECIFICATIONS



Spring Pack 1 (pre-assembled)



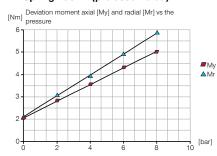
Forces and moments

Shows static forces and moments which may impact on the axis compensation module.



Mr [Nm]	60
My [Nm]	60
Fa [N]	800

Spring Pack 1 (pre-assembled)



► INCLUDED IN DELIVERY



Cylinder Screw

Spring Pack 1 (pre-as-

C7984060129

CFED11180

► RECOMMENDED ACCESSORIES



Angled Fittings - Barb Style Connection wvмз

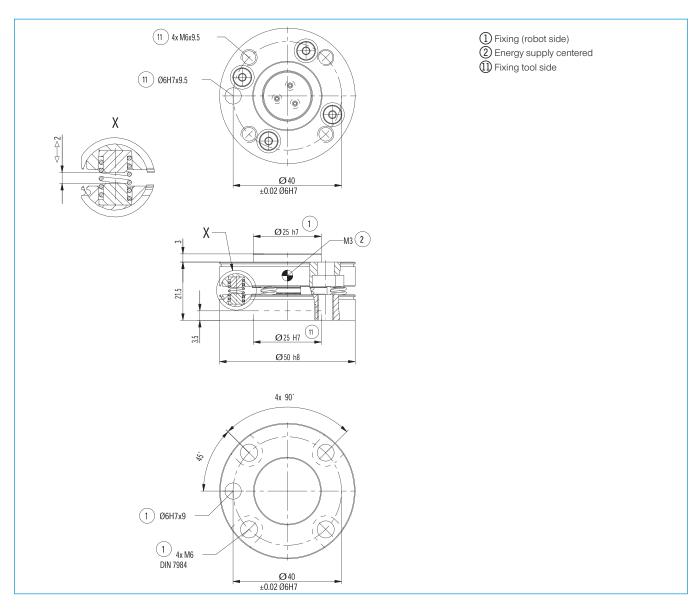


Straight Fittings - Barb Style Connection

GVM3

	► Technical Data*
Order no.	AR40P
Connecting flange according EN ISO 9409-1	TK40
Installation Height [mm]	21.5
Recommended handling weight [kg]	3
Horizontal deviation +/- [mm]	2
Horizontal deviation +/- [°]	1
Vertical deviation [mm]	2
Vertical deviation [°]	1
Centering force when locking [N]	170
Repetition accuracy Horizontal +/- [mm/°]	0.05
Repetition accuracy Vertical +/- [mm/°]	0.05
Air volume per cycle [cm³]	2
Operating pressure min. [bar]	1
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Moment of inertia [kg/cm²]	0.5
Weight [kg]	0.15

^{*}All data measured at 6 bar

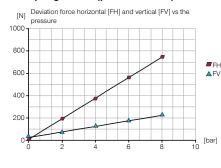


AXIS COMPENSATION MODULES INSTALLATION SIZE AR50P

PRODUCT SPECIFICATIONS

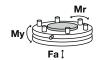


Spring Pack 1 (pre-assembled)



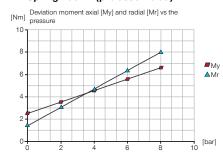
Forces and moments

Shows static forces and moments which may impact on the axis compensation module.



Mr [Nm]	60	
My [Nm]	60	
Fa [N]	800	

Spring Pack 1 (pre-assembled)



► INCLUDED IN DELIVERY



Cylinder Screw

C7984060129



Spring Pack 1 (pre-as-sembled)

CFED11180

RECOMMENDED ACCESSORIES



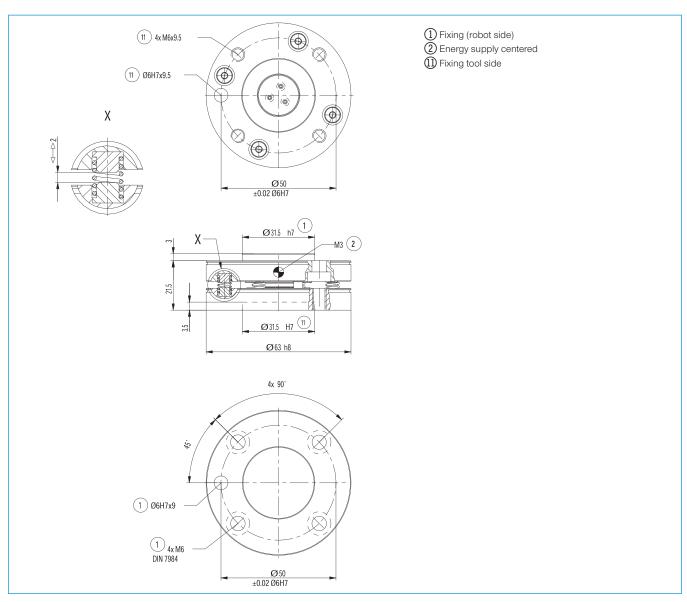
Angled Fittings - Barb Style Connection WVM3



Straight Fittings - Barb

	► Technical Data*
Order no.	AR50P
Connecting flange according EN ISO 9409-1	TK 50
Installation Height [mm]	21.5
Recommended handling weight [kg]	4
Horizontal deviation +/- [mm]	2
Horizontal deviation +/- [°]	1
Vertical deviation [mm]	2
Vertical deviation [°]	1
Centering force when locking [N]	170
Repetition accuracy Horizontal +/- [mm/°]	0.05
Repetition accuracy Vertical +/- [mm/°]	0.05
Air volume per cycle [cm³]	2
Operating pressure min. [bar]	1
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Moment of inertia [kg/cm²]	1.1
Weight [kg]	0.22

^{*}All data measured at 6 bar



AXIS COMPENSATION MODULES INSTALLATION SIZE AR63P

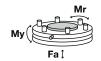
PRODUCT SPECIFICATIONS



Spring Pack 1 (pre-assembled) Deviation force horizontal [FH] and vertical [FV] vs the [N] 3000 2400 1800 _ FV 1200 600

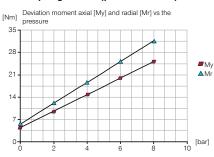
Forces and moments

Shows static forces and moments which may impact on the axis compensation module.

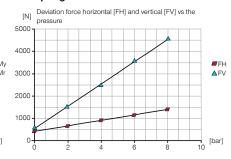


Mr [Nm]	300	
My [Nm]	300	
Fa [N]	1500	

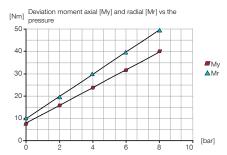
Spring Pack 1 (pre-assembled)



Spring Pack 2



Spring Pack 2



► INCLUDED IN DELIVERY



Cylinder Screw

C7984060149



Spring Pack 1 (pre-as-

CFED63000



Spring Pack 2

CFED63010

► RECOMMENDED ACCESSORIES



Angled Fittings - Barb Style Connection

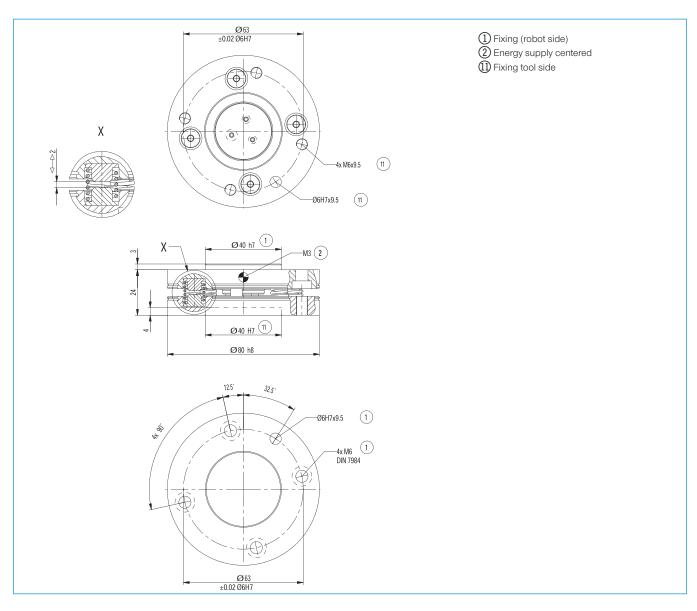
wvмз



Straight Fittings - Barb Style Connection

	► Technical Data*
Order no.	AR63P
Connecting flange according EN ISO 9409-1	TK 63
Installation Height [mm]	24
Recommended handling weight [kg]	15
Horizontal deviation +/- [mm]	2
Horizontal deviation +/- [°]	1
Vertical deviation [mm]	2
Vertical deviation [°]	1
Centering force when locking [N]	600
Repetition accuracy Horizontal +/- [mm/°]	0.05
Repetition accuracy Vertical +/- [mm/°]	0.05
Air volume per cycle [cm³]	3.6
Operating pressure min. [bar]	1
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Moment of inertia [kg/cm²]	2.8
Weight [kg]	0.36

^{*}All data measured at 6 bar



AXIS COMPENSATION MODULES INSTALLATION SIZE AR80P

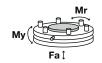
PRODUCT SPECIFICATIONS



Spring Pack 1 (pre-assembled) Deviation force horizontal [FH] and vertical [FV] vs the [N] 3000 2400 1800 1200 600

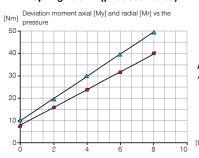
Forces and moments

Shows static forces and moments which may impact on the axis compensation module.

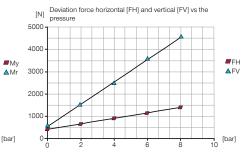


Mr [Nm]	300	
My [Nm]	300	
Fa [N]	1500	

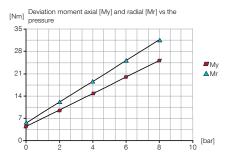
Spring Pack 1 (pre-assembled)



Spring Pack 2



Spring Pack 2



► INCLUDED IN DELIVERY



Cylinder Screw

C7984080169



Spring Pack 1 (pre-as-CFED63000



Spring Pack 2

CFED63010

► RECOMMENDED ACCESSORIES



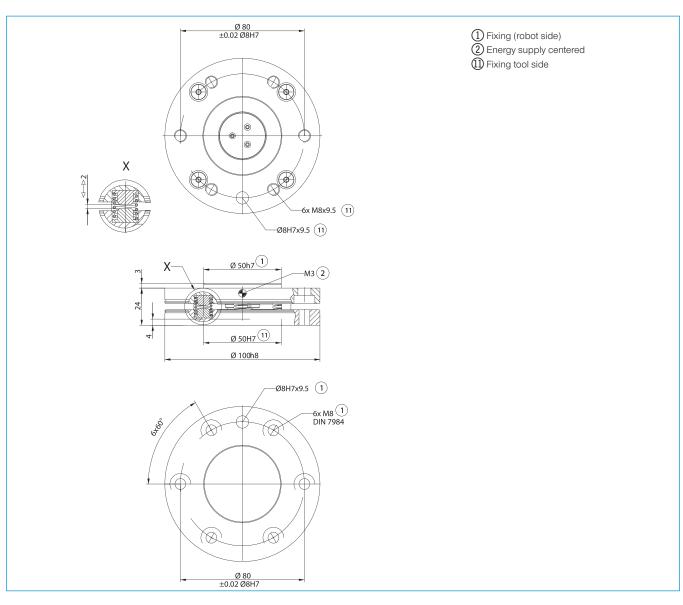
Angled Fittings - Barb Style Connection wvмз



Straight Fittings - Barb Style Connection

	► Technical Data*
Order no.	AR80P
Connecting flange according EN ISO 9409-1	TK 80
Installation Height [mm]	24
Recommended handling weight [kg]	15
Horizontal deviation +/- [mm]	2
Horizontal deviation +/- [°]	1
Vertical deviation [mm]	2
Vertical deviation [°]	1
Centering force when locking [N]	600
Repetition accuracy Horizontal +/- [mm/°]	0.05
Repetition accuracy Vertical +/- [mm/°]	0.05
Air volume per cycle [cm³]	3.6
Operating pressure min. [bar]	1
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Moment of inertia [kg/cm²]	6.2
Weight [kg]	0.5

^{*}All data measured at 6 bar



AXIS COMPENSATION MODULES INSTALLATION SIZE AR100P

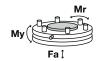
PRODUCT SPECIFICATIONS



Spring Pack 1 (pre-assembled) Deviation force horizontal [FH] and vertical [FV] vs the 10000 8000 **■** FH 3 **▲** FV 3 **○** FH 6 6000 4000 2000 [bar]

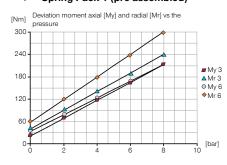
Forces and moments

Shows static forces and moments which may impact on the axis compensation module.

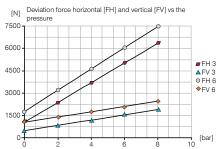


Mr [Nm]	500
My [Nm]	500
Fa [N]	2100

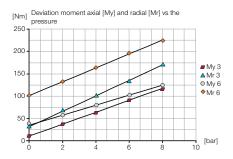
Spring Pack 1 (pre-assembled)



Spring Pack 2



Spring Pack 2



► INCLUDED IN DELIVERY



Cylinder Screw

C7984080169



Spring Pack 1 (pre-as-

CFED10050



Spring Pack 2

CFED10060

► RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style GVM5

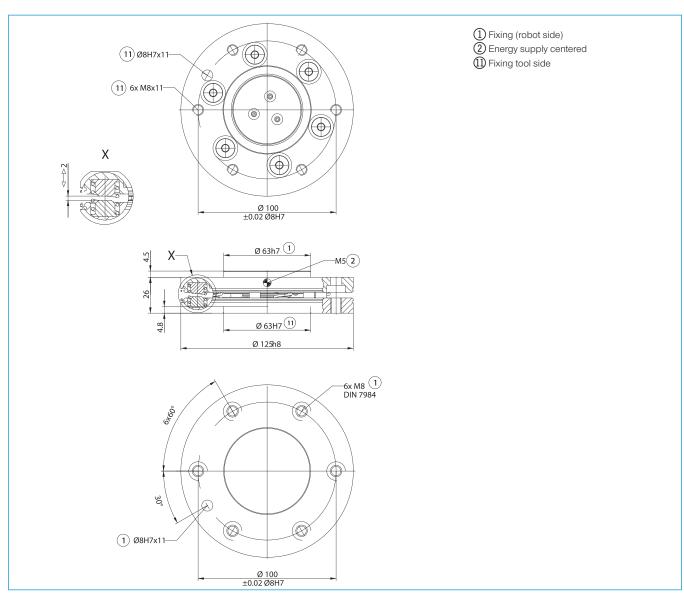


Angled Fittings - Quick Connect Style

WVM5

	► Technical Data*
Order no.	AR100P
Connecting flange according EN ISO 9409-1	TK 100
Installation Height [mm]	26
Recommended handling weight [kg]	30
Horizontal deviation +/- [mm]	2
Horizontal deviation +/- [°]	1
Vertical deviation [mm]	2
Vertical deviation [°]	1
Centering force when locking [N]	1400
Repetition accuracy Horizontal +/- [mm/°]	0.05
Repetition accuracy Vertical +/- [mm/°]	0.05
Air volume per cycle [cm³]	8.5
Operating pressure min. [bar]	1
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Moment of inertia [kg/cm²]	17
Weight [kg]	0.85

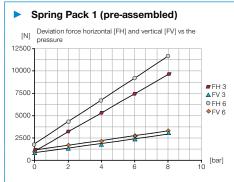
^{*}All data measured at 6 bar



AXIS COMPENSATION MODULES INSTALLATION SIZE AR125P

PRODUCT SPECIFICATIONS





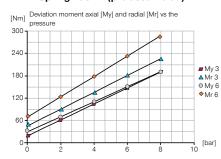
Forces and moments

Shows static forces and moments which may impact on the axis compensation module.

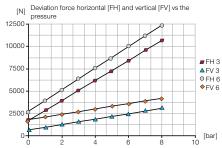


Mr [Nm]	900
My [Nm]	900
Fa [N]	7000

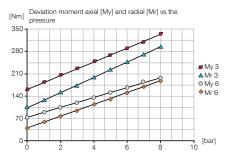
Spring Pack 1 (pre-assembled)



Spring Pack 2



Spring Pack 2



► INCLUDED IN DELIVERY



C7984100209



Spring Pack 2 CFED12510



Spring Pack 1 (pre-as-

CFED12500

► RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style GVM5

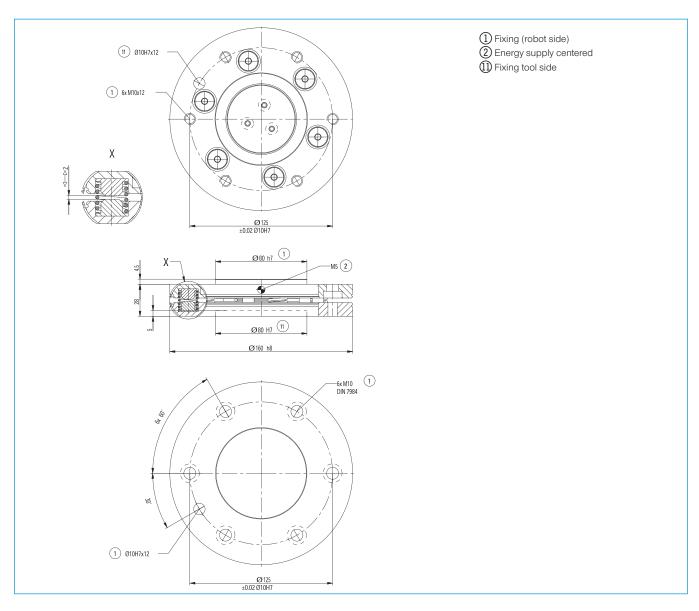


Angled Fittings - Quick Connect Style

WVM5

	► Technical Data*
Order no.	AR125P
Connecting flange according EN ISO 9409-1	TK 125
Installation Height [mm]	28
Recommended handling weight [kg]	50
Horizontal deviation +/- [mm]	2
Horizontal deviation +/- [°]	1
Vertical deviation [mm]	2
Vertical deviation [°]	1
Centering force when locking [N]	3000
Repetition accuracy Horizontal +/- [mm/°]	0.05
Repetition accuracy Vertical +/- [mm/°]	0.05
Air volume per cycle [cm³]	14
Operating pressure min. [bar]	1
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Moment of inertia [kg/cm²]	61
Weight [kg]	1.9

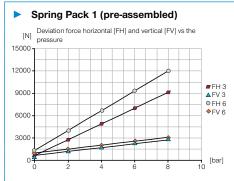
^{*}All data measured at 6 bar



AXIS COMPENSATION MODULES INSTALLATION SIZE AR160P

PRODUCT SPECIFICATIONS





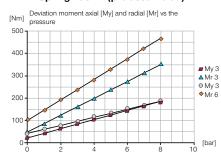
Forces and moments

Shows static forces and moments which may impact on the axis compensation module.

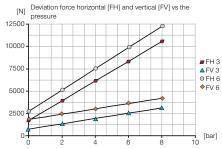


Mr [Nm]	900
My [Nm]	900
Fa [N]	7000

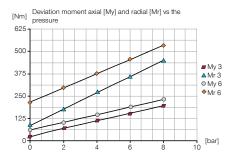
Spring Pack 1 (pre-assembled)



Spring Pack 2



Spring Pack 2



► INCLUDED IN DELIVERY



C7984100209



Spring Pack 1 (pre-as-

CFED12500



Spring Pack 2

CFED12510

► RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style GVM5

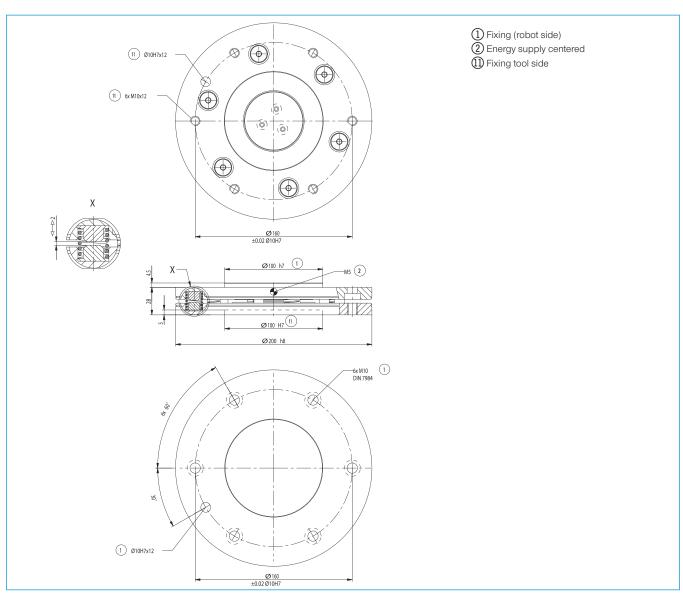


Angled Fittings - Quick Connect Style

WVM5

	► Technical Data*
Order no.	AR160P
Connecting flange according EN ISO 9409-1	TK 160
Installation Height [mm]	28
Recommended handling weight [kg]	60
Horizontal deviation +/- [mm]	2
Horizontal deviation +/- [°]	1
Vertical deviation [mm]	2
Vertical deviation [°]	1
Centering force when locking [N]	3000
Repetition accuracy Horizontal +/- [mm/°]	0.05
Repetition accuracy Vertical +/- [mm/°]	0.05
Air volume per cycle [cm³]	14
Operating pressure min. [bar]	1
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Moment of inertia [kg/cm²]	115
Weight [kg]	5.6

^{*}All data measured at 6 bar



CRASH PROTECTION OVERVIEW OF SERIES



CRASH PROTECTION SERIES CSR	124
Installation size CSR50	126
Installation size CSR63	128
Installation size CSR80	130
Installation size CSR100	132
Installation size CSR125	134
Installation size CSR160	136

CRASH PROTECTION SERIES CSR

PRODUCT ADVANTAGES



Adjustable triggering sensitivity

By controlling the air pressure, you can optimally match the sensitivity to your application

Integrated sensors

If there is a collision, the integrated sensor gives a signal to the control system to trigger an emergency stop.

More safety due to manual return

We forgo an automatic return and ensure that the operator inspects the machine and the reason for the emergency stop

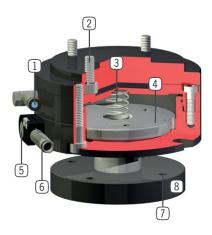
► THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!

Extreme conditions, all over the world-our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com

BENEFITS IN DETAIL



1 Energy supply

(2) Robot connecting flange

- partial mounting circle in accordance with EN ISO 9409-1

- single-acting pneumatic cylinder
- response sensitivity adjustable via operating pressure
- with integrated spring

4 Force transfer

- direct and low-loss at piston surface

5 Pressure differential switch

- indirect overload recognition

6 Sensors

- inductive proximity switch generates a signal which can be used to recognise an overload situation
- generates an automatic emergency off system situation
- included in the delivery inductive proximity switch Ø 8 mm with cable connection M8x1

7 Connecting flange

(8) Overload recognition and compensation

- in Z-direction up to 28 mm stroke
- angular defection up to 12.5°
- on rotation around the Z-axis 360°

► FURTHER INFORMATION IS AVAILABLE ONLINE



Technical Information

All information just a click away at: www.zimmer-group.com Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.

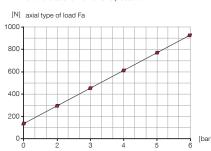


PRODUCT SPECIFICATIONS



Air pressurization

shows force and moments vs pressure

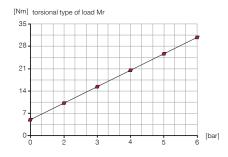


Forces and moments

See diagram for max. forces and torques

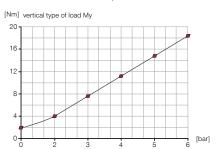
Air pressurization

shows force and moments vs pressure



Air pressurization

shows force and moments vs pressure



INCLUDED IN DELIVERY



Inductive proximity switch

NJ8-E2S-05



Cylinder Screw

C0912060169

RECOMMENDED ACCESSORIES



Straight Fittings - Quick

GVM5



Plug-in connector Angled Cable 5m - Socket M8 KAW500



Cable 5m - Socket M8 KAG500

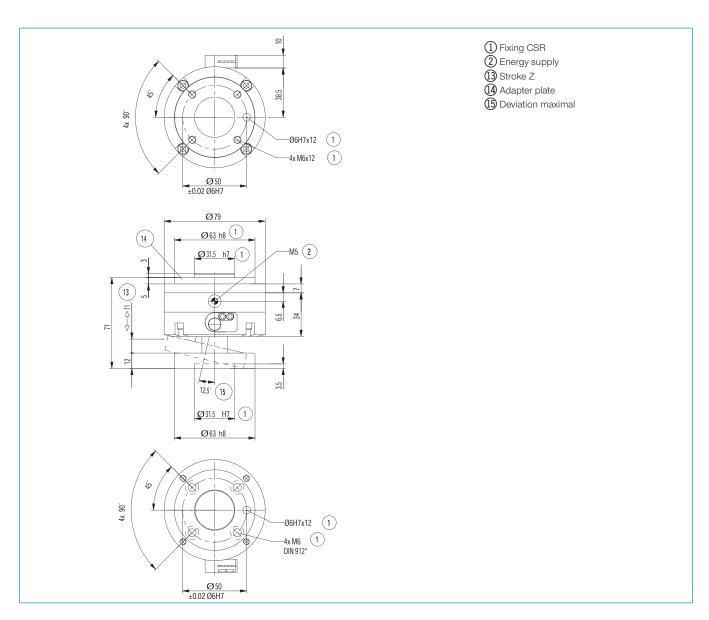


Angled Fittings - Quick Connect Style

WVM5

	► Technical Data*
Order no.	CSR50
Connecting flange according EN ISO 9409-1	TK 50
Installation Height [mm]	71
Recommended handling weight [kg]**	6
Z-axis deviation [mm]	12.5
Repetition accuracy Axial +/- [mm]	0.05
Horizontal deviation +/- [°]	12.5
Repetition accuracy Radial +/- [mm]	0.05
Operating pressure min. [bar]	1
Operating pressure max. [bar]	6
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Weight [kg]	0.7

- *All data measured at 6 bar
- * *with central attachment

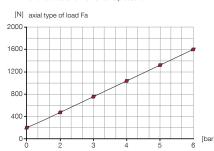


PRODUCT SPECIFICATIONS



Air pressurization

shows force and moments vs pressure

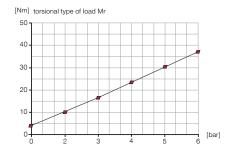


Forces and moments

See diagram for max. forces and torques

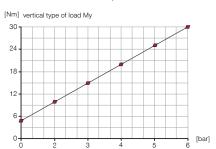
Air pressurization

shows force and moments vs pressure



Air pressurization

shows force and moments vs pressure



INCLUDED IN DELIVERY



Inductive proximity switch

NJ8-E2S-05



Cylinder Screw

C0912060169

RECOMMENDED ACCESSORIES



Straight Fittings - Quick



Plug-in connector Angled Cable 5m - Socket M8 KAW500



Plug-in connector Straight Cable 5m - Socket M8 KAG500

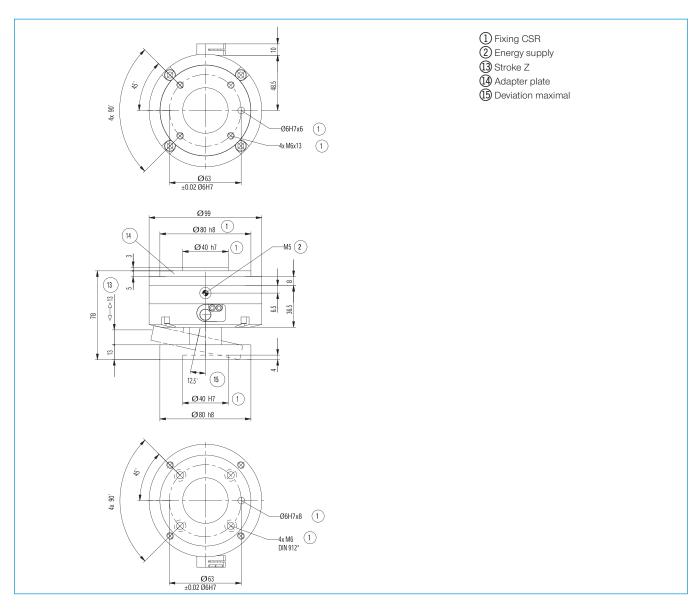


Angled Fittings - Quick Connect Style

WVM5

	► Technical Data*
Order no.	CSR63
Connecting flange according EN ISO 9409-1	TK 63
Installation Height [mm]	78
Recommended handling weight [kg] * *	12
Z-axis deviation [mm]	10.5
Repetition accuracy Axial +/- [mm]	0.05
Horizontal deviation +/- [°]	12.5
Repetition accuracy Radial +/- [mm]	0.05
Operating pressure min. [bar]	1
Operating pressure max. [bar]	6
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Weight [kg]	1.1

- *All data measured at 6 bar
- * *with central attachment

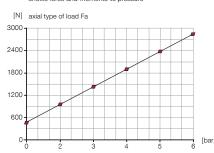


PRODUCT SPECIFICATIONS



Air pressurization

shows force and moments vs pressure

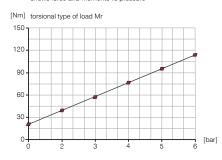


Forces and moments

See diagram for max. forces and torques

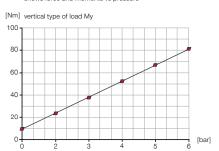
Air pressurization

shows force and moments vs pressure



Air pressurization

shows force and moments vs pressure



INCLUDED IN DELIVERY



Inductive proximity switch

NJ8-E2S-05



Cylinder Screw

C0912080169

RECOMMENDED ACCESSORIES



Straight Fittings - Quick

GVM5



Cable 5m - Socket M8





Plug-in connector Straight Cable 5m - Socket M8 KAG500

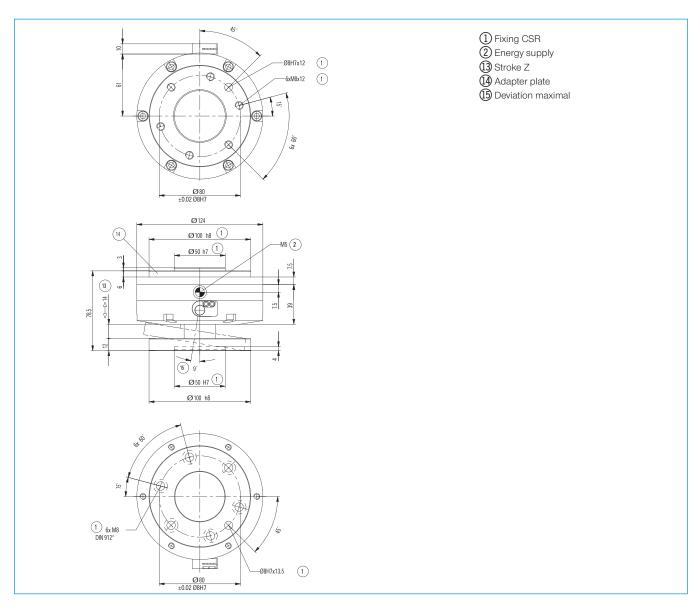


Angled Fittings - Quick Connect Style

WVM5

	Technical Data*
Order no.	CSR80
Connecting flange according EN ISO 9409-1	TK 80
Installation Height [mm]	78.5
Recommended handling weight [kg]**	35
Z-axis deviation [mm]	14
Repetition accuracy Axial +/- [mm]	0.05
Horizontal deviation +/- [°]	9
Repetition accuracy Radial +/- [mm]	0.05
Operating pressure min. [bar]	1
Operating pressure max. [bar]	6
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Weight [kg]	1.5

- *All data measured at 6 bar
- * *with central attachment

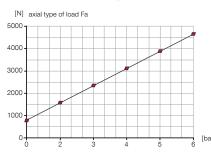


PRODUCT SPECIFICATIONS



Air pressurization

shows force and moments vs pressure

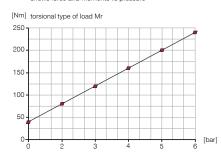


Forces and moments

See diagram for max. forces and torques

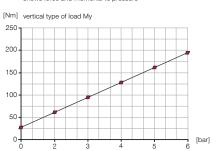
Air pressurization

shows force and moments vs pressure



Air pressurization

shows force and moments vs pressure



INCLUDED IN DELIVERY



Inductive proximity switch

NJ8-E2S-05



Cylinder Screw

C0912080209

RECOMMENDED ACCESSORIES



Straight Fittings - Quick

GV1-8X8



Plug-in connector Angled Cable 5m - Socket M8

KAW500



Plug-in connector Straight Cable 5m - Socket M8

KAG500

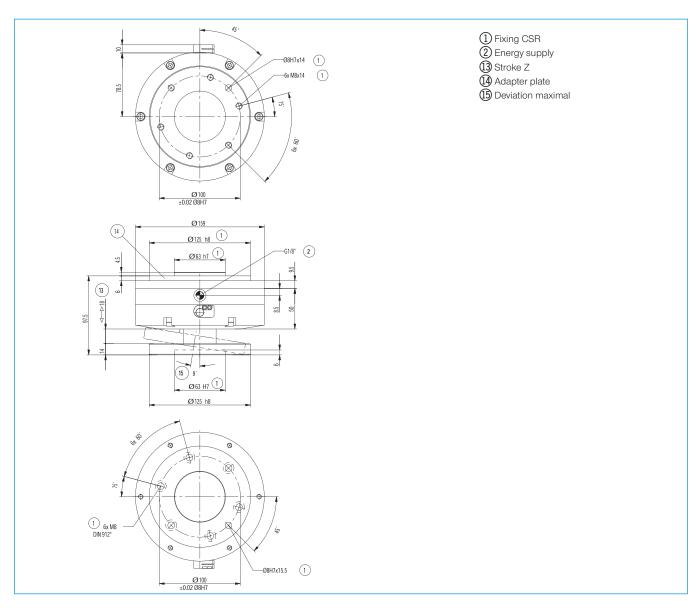


Angled Fittings - Quick Connect Style

WV1-8X6

	► Technical Data*
Order no.	CSR100
Connecting flange according EN ISO 9409-1	TK 100
Installation Height [mm]	97.5
Recommended handling weight [kg] * *	60
Z-axis deviation [mm]	18
Repetition accuracy Axial +/- [mm]	0.05
Horizontal deviation +/- [°]	9
Repetition accuracy Radial +/- [mm]	0.05
Operating pressure min. [bar]	1
Operating pressure max. [bar]	6
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Weight [kg]	3.3

- *All data measured at 6 bar
- * *with central attachment

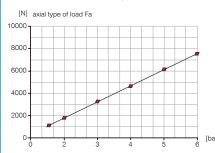


PRODUCT SPECIFICATIONS



Air pressurization

shows force and moments vs pressure

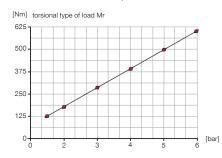


Forces and moments

See diagram for max. forces and torques

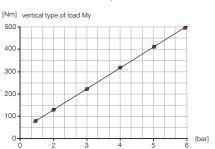
Air pressurization

shows force and moments vs pressure



Air pressurization

shows force and moments vs pressure



INCLUDED IN DELIVERY



Inductive proximity switch

NJ8-E2S-05



Cylinder Screw

C0912100309

RECOMMENDED ACCESSORIES



Straight Fittings - Quick

GV1-8X8



Plug-in connector Angled Cable 5m - Socket M8 KAW500



Plug-in connector Straight Cable 5m - Socket M8 KAG500

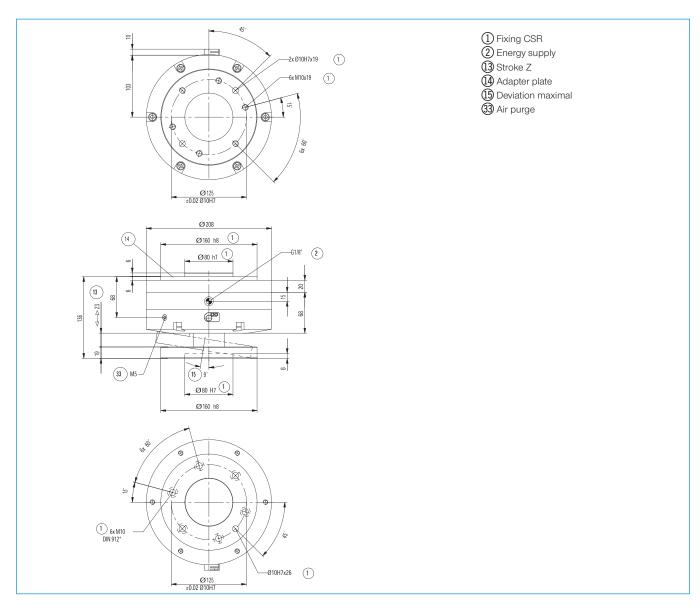


Angled Fittings - Quick Connect Style

WV1-8X6

	► Technical Data*
Order no.	CSR125
Connecting flange according EN ISO 9409-1	TK 125
Installation Height [mm]	136
Recommended handling weight [kg] * *	100
Z-axis deviation [mm]	23
Repetition accuracy Axial +/- [mm]	0.05
Horizontal deviation +/- [°]	9
Repetition accuracy Radial +/- [mm]	0.05
Operating pressure min. [bar]	1
Operating pressure max. [bar]	6
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Weight [kg]	8

- *All data measured at 6 bar
- * *with central attachment

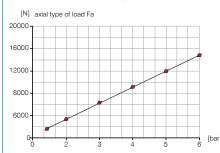


PRODUCT SPECIFICATIONS



Air pressurization

shows force and moments vs pressure

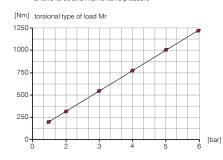


Forces and moments

See diagram for max. forces and torques

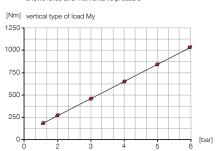
Air pressurization

shows force and moments vs pressure



Air pressurization

shows force and moments vs pressure



INCLUDED IN DELIVERY



Inductive proximity switch

NJ8-E2S-05



Cylinder Screw

C0912100309

RECOMMENDED ACCESSORIES



Straight Fittings - Quick

GV1-8X8



Plug-in connector Angled Cable 5m - Socket M8

KAW500



Plug-in connector Straight Cable 5m - Socket M8 KAG500

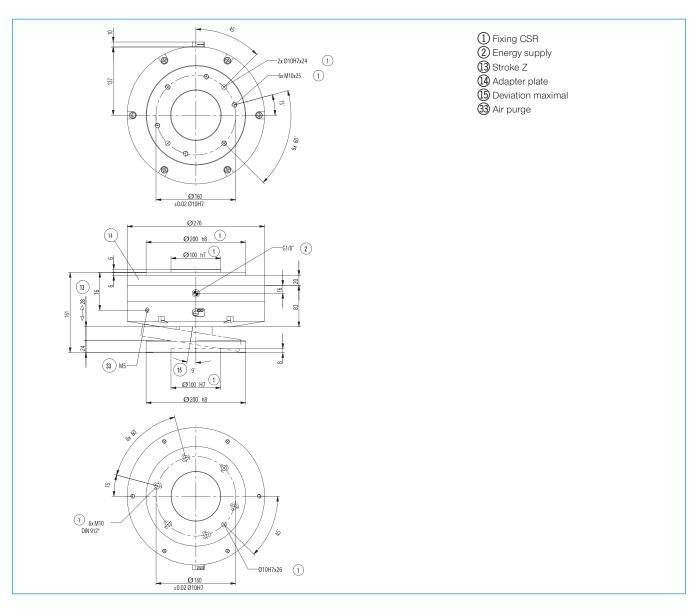


Angled Fittings - Quick Connect Style

WV1-8X6

	► Technical Data*
Order no.	CSR160
Connecting flange according EN ISO 9409-1	TK 160
Installation Height [mm]	161
Recommended handling weight [kg]**	150
Z-axis deviation [mm]	28
Repetition accuracy Axial +/- [mm]	0.05
Horizontal deviation +/- [°]	9
Repetition accuracy Radial +/- [mm]	0.05
Operating pressure min. [bar]	1
Operating pressure max. [bar]	6
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Weight [kg]	15.2

- *All data measured at 6 bar
- * *with central attachment



ROBOT ACCESSORIES ANGLE FLANGE



Flexible connection to your robot

Adapter plate manufactured according to EN ISO 9409-1 matches for a variety of 40 different types of robot manufacturers. In addition, also available for robots with hollow axle.

1st step: Select adapter plate

Simply define the type of robot and you get the appropriate adapter plate.



About 100 different variants

Adapter plates and angle flanges can be combined with 16 different grippers - with the result of more than 100 different varieties. Choose from our main catalog your appropriate gripper. There you will find the most diverse designs: some with other without gripping force safety device, protected from dust or temperature resistant.

2nd step: Select Angle flange

Choose a gripper and there follows the right angle flange.



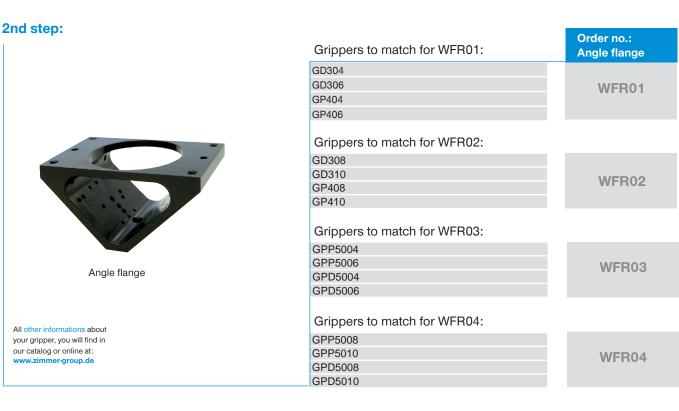
Extend the functionality of your Angle flange

Cover plate, discharge nozzle or programming pins, with the extensive accessory, you can quickly and individually integrate additional functions.



3rd step: Select accessories







USAGE NOTE GENERAL

The contents of this catalog are not legally binding and are intended solely for informational purposes. Any final agreement will be in the form of a written order confirmation from ZIMMER GMBH, which occurs only subject to the respective current General Terms and Conditions of Sale and Delivery of ZIMMER GMBH. These can be found online at www.zimmer-group. com.

All of the products listed in this catalog are designed for their intended use, e.g. machines for automation. The recognized technical regulations for safety and professional work must be followed for use and installation.

Furthermore, the respective laws, guidelines from TÜV, guidelines from the respective trade association and VDE stipulations shall apply.

The technical data listed in this catalog must be observed by the user. The conditions of use may not fall below or exceed the specified data. If information is missing, it cannot be assumed that there are no upper or lower limits or no limitations for specific use cases. Consultation is required in these cases.

Disposal is not included in the price, which would have to be taken into account accordingly in the event of return to or disposal by ZIMMER GMBH.

TECHNICAL DATA AND FIGURES

The technical data and figures have been compiled with great care and to the best of our knowledge. We cannot guarantee that the information is up to date, correct or complete.

The specifications and information—such as figures, drawings, descriptions, dimensions, weights, materials, technical and other performance data and the described products and services - contained in general product descriptions, ZIMMER GMBH catalogs, brochures and price lists in any form are subject to change and may be modified or updated at any time without prior notification. They are binding only to the extent expressly specified in a contract or order confirmation. Slight deviations from such descriptive product information shall be considered approved and shall not affect fulfillment of agreements insofar as they are reasonable for the customer.

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Zimmer Group has a quality management system certified in accordance with ISO 9001:2008. Zimmer Group has an environmental management system certified in accordance with ISO 14001:2004.

USAGE NOTE INDIVIDUAL

DECLARATION OF INCORPORATION IN TERMS OF THE EC DIRECTIVE 2006/42/EC ON MACHINERY (AN-NEX II 1 B)

We hereby declare that our elements meet the following basic requirements of the Machinery Directive 2006/42/EC as an incomplete machine

No.1.1.2., No.1.1.3., No.1.1.5., No.1.3.2, No. 1.3.4, No. 1.3.7, No.1.5.3, No.1.5.4, No.1.5.8., No.1.6.4, No.1.7.1, No.1.7.3, No.1.7.4.

We also declare that the specific technical documents were produced in accordance with Annex VII Part B of this Directive. We undertake to provide the market supervisory bodies with electronic versions of the incomplete machine's special documents via our documentation department should they have reason to request them.

The incomplete machine may only be commissioned if the machine or system in which the incomplete machine is to be installed has been determined to satisfy the conditions of the Machinery Directive 2006/42/EC and the EC Declaration of Conformity has been produced in accordance with Annex II A.

USAGE NOTE INDIVIDUAL

DECLARATION OF INCORPORATION IN TERMS OF THE EC DIRECTIVE 2006/42/EC ON MACHINERY (ANNEX II 1 B)

We hereby declare that our elements meet the following basic requirements of the Machinery Directive 2006/42/EC as an incomplete machine

No.1.1.2., No.1.1.3., No.1.1.5., No.1.3.2, No. 1.3.4, No. 1.3.7, No.1.5.3, No.1.5.4, No.1.5.8., No.1.6.4, No.1.7.1, No.1.7.3, No.1.7.4.

We also declare that the specific technical documents were produced in accordance with Annex VII Part B of this Directive. We undertake to provide the market supervisory bodies with electronic versions of the incomplete machine's special documents via our documentation department should they have reason to request them.

The incomplete machine may only be commissioned if the machine or system in which the incomplete machine is to be installed has been determined to satisfy the conditions of the Machinery Directive 2006/42/EC and the EC Declaration of Conformity has been produced in accordance with Annex II A.