MANIFOLD VALVES
Series G

G6

20 mm - G 1/8 Valves and solenoid valves

- G1/8 threaded valve body with traditional Univer spool system
- Version with integrated electrical connection and esternal connection
- Compact design
- High flow rate
- Versions available: 5/2 - 5/3 - 3/2+3/2

TECHNICAL CHARACTERISTICS

Ambient temperature	-20 ÷ +50 °C
Fluid temperature	max +50 °C
Fluid	filtered air 50 µm, lubricated or not
Commutation system	spool
Ways/Positions	**5/2, 5/3, 3/2+3/2**
Pressure	1,5 ÷ 9 bar
Control	indirect electro-pneumatic, pneumatic
Return	mechanical spring, pneumomechanical spring
Connections	G1/8
Nominal Ø	5 mm
Nominal flow rate (Nl/min)	5/2 = **770** 5/3 = **700** 3/2+3/2 = **670**

CONSTRUCTIVE CHARACTERISTICS

Valve body	zamak
Seals	nitrile rubber
Subbase and actuators	self-extinguishing technopolymes
Spool	aluminum

ELECTRIC CHARACTERISTICS

Electropilot/coil	A/U05 series
Voltage	24 V DC standard, upon request 12 V DC
	24 V AC - 110 V AC - 230 V AC
	(only for version with integrated electrical connection)
Power consumption	for direct current 2 W (2,3 VA)
Protection degree	IP65
Manual override	with button with tool 1 position

CODIFICATION KEY

G	6	6	4	4	D
1		2	3	4	5

1 Series

G6 = G1/8 threaded body (except coils and connectors)

2 Type

2 = 5/2
3 = 5/3 c.c.
4 = 5/3 o.c.
5 = 5/3 p.c.
6 = 3/2+3/2 NC-NC
7 = 3/2+3/2 NC-NO
8 = 3/2+3/2 NO-NO

3 Control 14

3 = pneumatic amplified
4 = electrical amplified DC
5 = electrical amplified DC/AC

4 Return 12

0 = pneumomechanical spring
1 = mechanical spring
3 = pneumatic amplified
4 = electrical amplified DC
5 = electrical amplified DC/AC

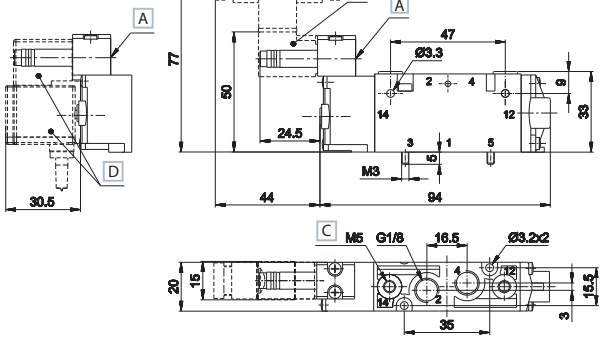
5 Option

D = external servoassisted pilot

o.c. = open centres **c.c.** = closed centres **p.c.** = pressurized centres

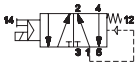
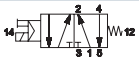
(2020/10)

Single **electric** impulse

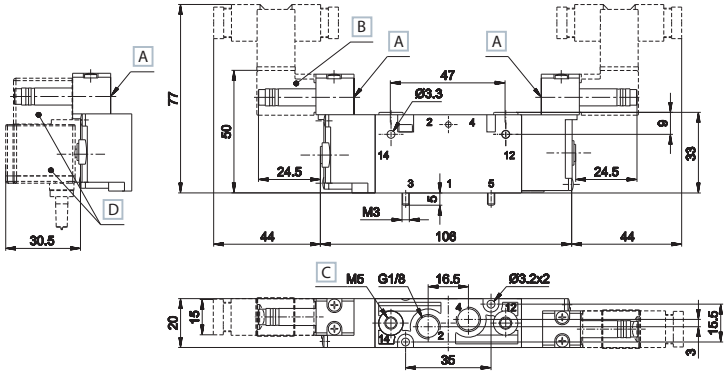


A Manual override
B Coil with connector for single connection
C External servoassisted pilot
D Coil with intergrated connector for multipolar version **DD-051**C**

1 = Supply port
2 - 4 = Use
3 - 5 = Exhaust
14 = Control
12 = Return

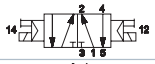
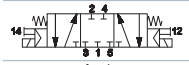
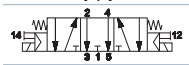
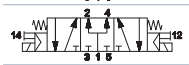
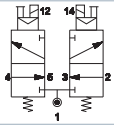
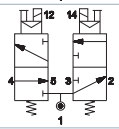
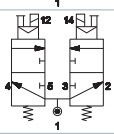
	Symbol	Control	Return	Flow rate (Nl/min)	Pressure bar	Times (ms) En.	Times (ms) De-en.	Weight Kg	Part no.
5/2		electrical amplified	pneumomechanical spring	770	1,5÷9	21	30	0,112	**G-6240 G-6250**
5/2		electrical amplified	mechanical spring	770	1,5÷9	18	64	0,112	**G-6241 G-6251**

Double **electric** impulse



A Manual override
B Coil with connector for single connection
C External servoassisted pilot
D Coil with intergrated connector for multipolar version **DD-051**C**

1 = Supply port
2 - 4 = Use
3 - 5 = Exhaust
14 = Control
12 = Return

	Symbol	Control	Return	Flow rate (Nl/min)	Pressure bar	Times (ms) En.	Times (ms) De-en.	Weight Kg	Part no.
5/2		electrical amplified	electrical amplified	770	0,6÷9	16	16	0,143	**G-6244 G-6255**
5/3 c.c.		electrical amplified	electrical amplified	700	1,9÷9	16	47	0,148	**G-6344 G-6355**
5/3 o.c.		electrical amplified	electrical amplified	700	2,0÷9	16	47	0,148	**G-6444 G-6455**
5/3 p.c.		electrical amplified	electrical amplified	700	1,9÷9	16	47	0,148	**G-6544 G-6555**
3/2 NC + 3/2 NC		electrical amplified	electrical amplified	670	1,5÷9	14	17	0,140	**G-6644 G-6655**
3/2 NC + 3/2 NO		electrical amplified	electrical amplified	670	1,5÷9	14	17	0,140	**G-6744 G-6755**
3/2 NO + 3/2 NO		electrical amplified	electrical amplified	670	1,5÷9	14	17	0,140	**G-6844 G-6855**

o.c. = open centres **c.c.** = closed centres **p.c.** = pressurized centres

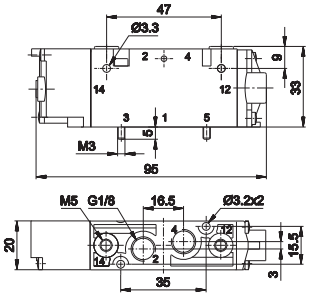
Solenoid valves are supplied without coil and connector

(2020/10)

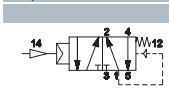
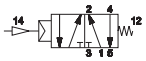
☎ +32 3 355 32 20

20 mm - G1/8 Valves and solenoid valves

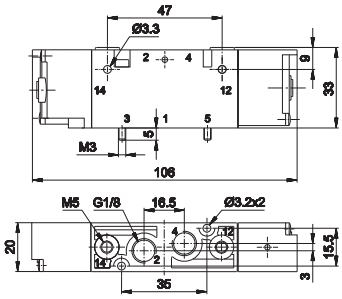
Single **pneumatic** impulse



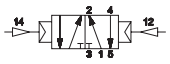
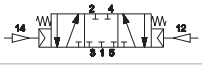
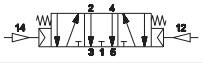
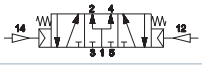
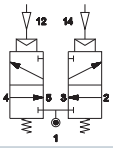
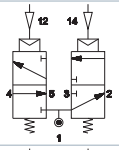
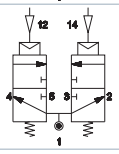
1 = Supply port
2 - 4 = Use
3 - 5 = Exhaust
14 = Control
12 = Return

	Symbol	Control	Return	Flow rate (Nl/min)	Pressure bar	Times (ms) En.	Times (ms) De-en.	Weight Kg	Part no.
5/2		pneumatic amplified	pneumomechanical spring	770	1,5÷10	7	16	0,092	**G-6230**
5/2		pneumatic amplified	mechanical spring	770	1,5÷10	6	18	0,092	**G-6231**

Double **pneumatic** impulse



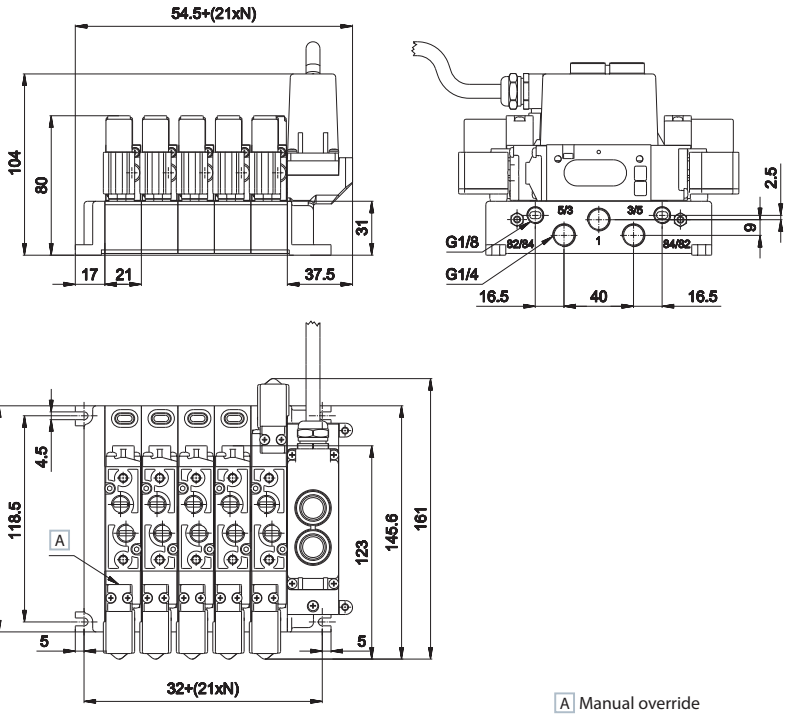
1 = Supply port
2 - 4 = Use
3 - 5 = Exhaust
14 = Control
12 = Return

	Symbol	Control	Return	Flow rate (Nl/min)	Pressure bar	Times (ms) En.	Times (ms) De-en.	Weight Kg	Part no.
5/2		pneumatic amplified	pneumatic amplified	770	0,7÷10	5	5	0,103	**G-6233**
5/3 c.c.		pneumatic amplified	pneumatic amplified	700	1,9÷9	6	19	0,192	**G-6333**
5/3 o.c.		pneumatic amplified	pneumatic amplified	700	2,0÷9	6	19	0,192	**G-6433**
5/3 p.c.		pneumatic amplified	pneumatic amplified	700	1,9÷9	6	19	0,192	**G-6533**
3/2 NC + 3/2 NC		pneumatic amplified	pneumatic amplified	670	1,5÷9	3	14	0,188	**G-6633**
3/2 NC + 3/2 NO		pneumatic amplified	pneumatic amplified	670	1,5÷9	3	14	0,188	**G-6733**
3/2 NO + 3/2 NO		pneumatic amplified	pneumatic amplified	670	1,5÷9	3	14	0,188	**G-6833**

o.c. = open centres **c.c.** = closed centres **p.c.** = pressurized centres

(2020/10)

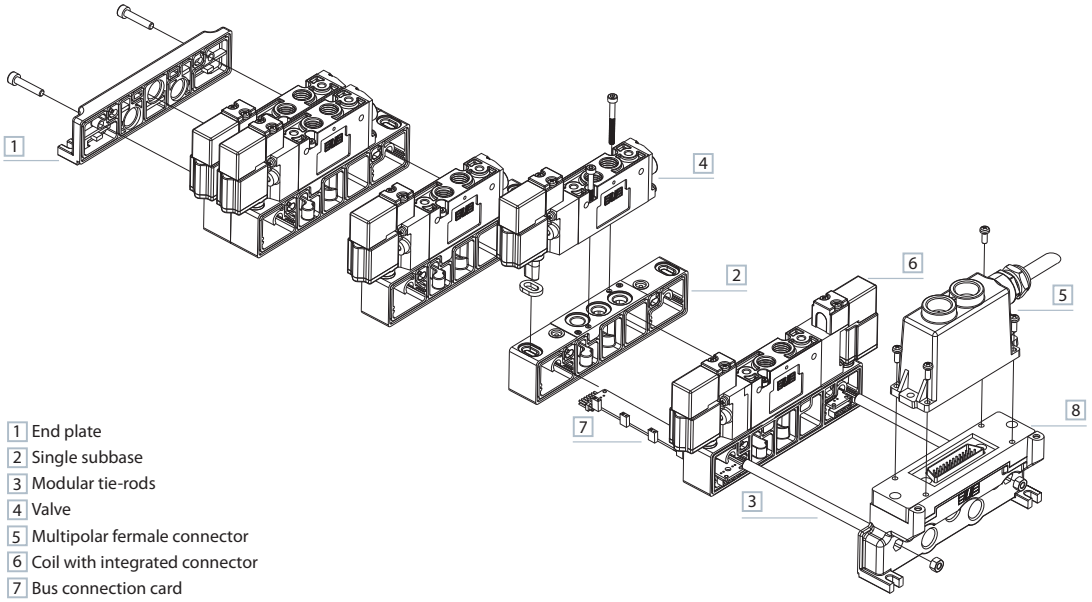
Multipolar electrical connection



A Manual override

1 = Supply port
5/3 - 3/5 = Exhaust G1/4
82/84 - 84/82 = Electropilot exhaust G1/8

N = Number of valve positions



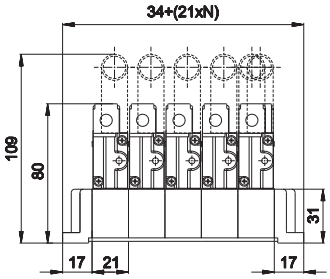
1 End plate
2 Single subbase
3 Modular tie-rods
4 Valve
5 Multipolar fermale connector
6 Coil with integrated connector
7 Bus connection card
8 End plate with modular connection

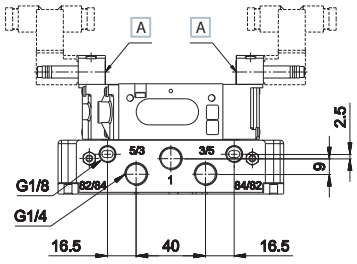
Tightening torque for fittings

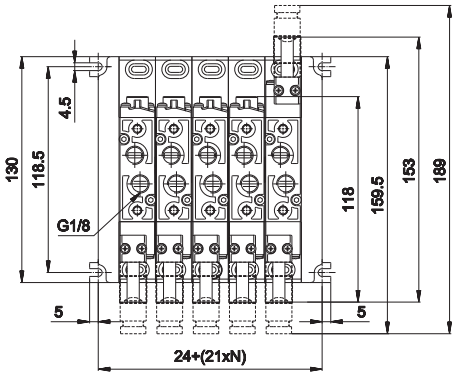
Thread	max pair (Nm)
M5	3
M7	3
G1/8	3
G1/4	10

☎ +32 3 355 32 20

Electrical connection with external connector



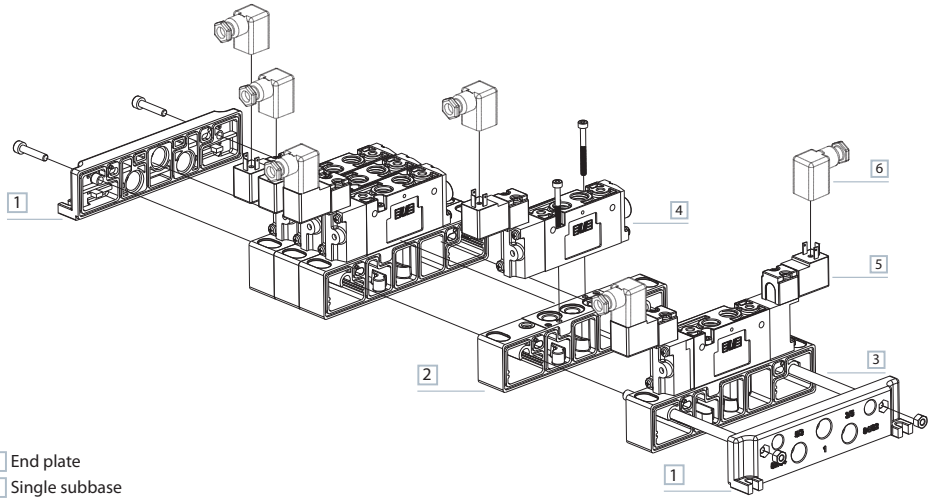




A Manual override

1 = Supply port
5/3 - 3/5 = Exhaust G1/4
82/84 - 84/82 = Electropilot exhaust G1/8

N = Number of valve positions

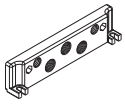


1 End plate
2 Single subbase
3 Modular tie-rods
4 Valve
5 Coil
6 Single connector

Tightening torque for fittings

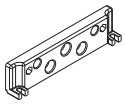
Thread	max pair (Nm)
M5	3
M7	3
G1/8	3
G1/4	10

GP-6100



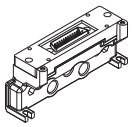
threaded end plate
weight: 0,046 Kg

GP-6110



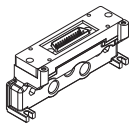
blank end plate
weight: 0,050 Kg

GP-611212



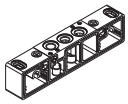
threaded end plate with
male connector
25 poles 12+12 coils
control 12-14
weight: 0,100 Kg

GP-611806



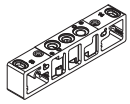
threaded end plate with
male connector
25 poles
18 coils control 14
6 coils control 12
(only for control 14
more than 12 coils max 18)
weight: 0,102 Kg

GP-6310/1/2



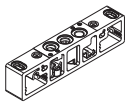
sub-base with
open diaphragms
GP-6310 without
electrical connection
GP-6311 monostable
GP-6312 bistable
weight: 0,060 Kg

GP-6320/1/2



sub-base with
closed diaphragms
GP-6320 without
electrical connection
GP-6321 monostable
GP-6322 bistable
weight: 0,062 Kg

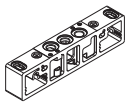
GP-6330/1/2



3 1 5

sub-base with
closed supply and
open exhausts
GP-6330 without
electrical connection
GP-6331 mostable
GP-6332 bistable
weight: 0,062 Kg

GP-6340/1/2



3 1 5

sud-base with
open supply and
closed exhausts
GP-6340 without
electrical connection
GP-6341 mostable
GP-6342 bistable
weight: 0,062 Kg

GP-6380

intermediate supply plate
(to be used only with
GP-63... series) sub-base
weight: 0,036 Kg

GP-6385

closing plate for
unused station
weight: 0,018 Kg

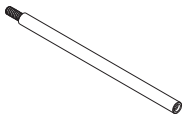
GP-6400-1

modular tie-rod
1 valve place
weight: 0,004 Kg
(package100 pcs.)

GP-6400-2

modular tie-rod
2 valve places
weight: 0,010 Kg
(package100 pcs.)

GP-6400-5



modular tie-rod
5 valve places
weight: 0,022 Kg
(package100 pcs.)

AZ4-VN0416 screw M04x16 for tie-rods (package100 pcs.)
AZ4-SN004A hexagonal nut M4 (package100 pcs.)

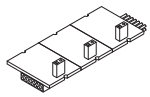
GP-6512-01/..MF

BUS connection card
control side 12 with 12 pin
GP-6512-01MF 1 place
GP-6512-02MF 2 places
GP-6512-03MF 3 places
GP-6512-05MF 5 places
GP-6512-06MF 6 places
weight: 0,003 Kg
(for each place)

GP-6514-01/..MF

BUS connection card
control side 14 with 12 pin
GP-6514-01MF 1 place
GP-6514-02MF 2 places
GP-6514-03MF 3 places
GP-6514-05MF 5 places
GP-6514-06MF 6 places
weight: 0,003 Kg
(for each place)

GP-651418



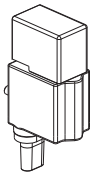
BUS connection card
control side 14 with 18 pin
(only12 places)
for manifolds with
control 14 and more than 12
coils up to 18 coils use
GP-651418 card 12 places
and then **GP-6514**-...
weight: 0,003 Kg
(for each place)

upon request customized solutions up to 12 places

DD-051

24 V CC 2 W coil
for single connection
weight: 0,019 Kg

DD-051**C



24 V CC 2 W coil
with integrated connector
for multipolar version
weight: 0,028 Kg

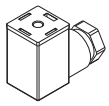
Technical modifications keep in reserve !

(2020/10)

☎ +32 3 355 32 20

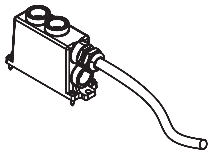
Electrical connections

AM-5109



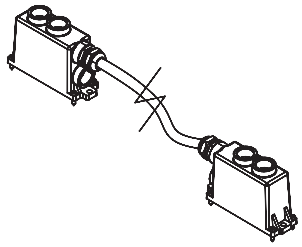
- 15 mm connector

TSCF24S0300
TSCF24S0500
TSCF24S1000



- flying fermale connector sub D according to CEI 20-22 O.R. II (upon request) prewired for 24 coils M3 x 12 fixing screws

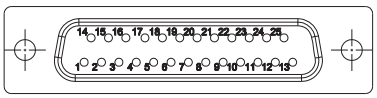
TSCF16D0300
TSCF16D0500
TSCF16D1000



- flying male/fermale connector sub D according to CEI 20-22 O.R. II (upon request) prewired for 24 coils with cable Ø8 mm of 3-5-10 m length suitable for mobile laying M3 x 12 fixing screws

Colour identification according to standard **DIN 47100**

Female connector **D-SUB 25 poles**
for **12+12 coils**



PIN No.	Colour	Coil	Control side GP-11212	Control side GP-611806	Valve No.
1	white	1	14	14	1
2	brown	2	12	12	1
3	green	3	14	14	2
4	yellow	4	12	12	2
5	grey	5	14	14	3
6	pink	6	12	12	3
7	blue	7	14	14	4
8	red	8	12	12	4
9	black	9	14	14	5
10	violet	10	12	12	5
11	grey-pink	11	14	14	6
12	red-blue	12	12	12	6
13	white-green	13	14	14	7
14	brown-green	14	12	14	7
15	white-yellow	15	14	14	8
16	yellow-brown	16	12	14	8
17	white-grey	17	14	14	9
18	grey-brown	18	12	14	9
19	white-pink	19	14	14	10
20	pink-brown	20	12	14	10
21	white-blue	21	14	14	11
22	brown-blue	22	12	14	11
23	white-red	23	14	14	12
24	brown-red brown-black shield		-	-	-
25	white-black	24	12	14	12

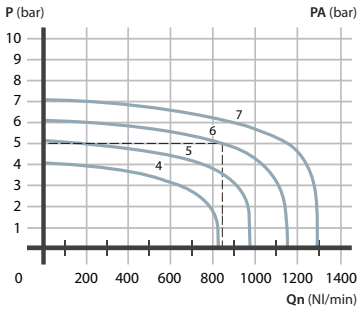
(2020/10)

G7

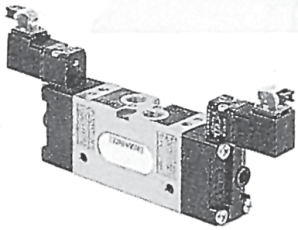
26 mm G1/8 valves and solenoid valves

- G1/8 threaded valve body with traditional Univer spool system
- Versions available 5/2-5/3
- Aluminium multiple sub-base

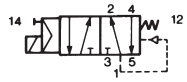
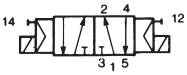
Flow rate characteristics



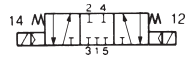
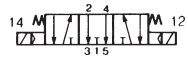
P = Working pressure
PA = Supply pressure
Qn = Flow rate

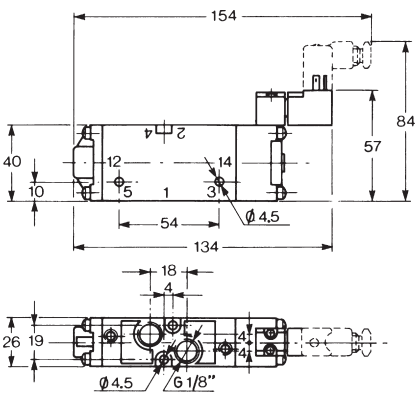


5/2 single/double electrical pulse 90° solenoid

Symbol	Control (14)	Recovery (12)	Ø mm	Capacity Nl/min	Pressure bar	Energ. (14) ms	De-ener. (12) ms	Manual inter-vention	Mass kg	Part number	Coil
	electrical amplified	pneu-mech. spring	6	860	1,5÷9	16	34	← *	0,190	G-7240	U05
	electrical amplified	electrical amplified	6	860	0,7÷9	10	10		0,243	G-7244	

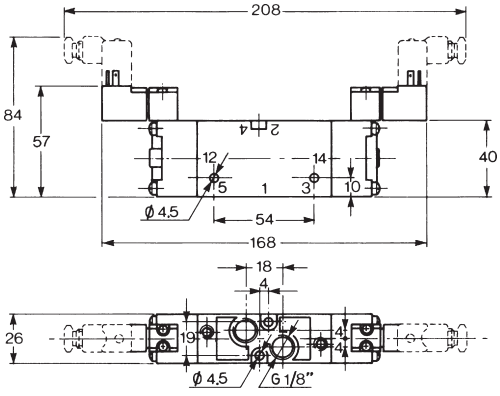
5/3 closed centres - open centres - centres under pressure single/double electrical pulse 90° solenoid

Symbol	Function	Ø mm	Capacity Nl/min	Pressure bar	Energ. (14-12) ms	De-ener. (14-12) ms	Manual inter-vention	Mass kg	Part number	Coil
	closed centers electrical control	6	860	2,5÷9	14	18	← *	0,255	**G-7344**	U05
	open centers electrical control	6	860	2,5÷9	14	18		0,255	**G-7444**	
	centers under pressure electrical control	6	860	2,5÷9	14	18		0,255	**G-7544**	



G-7 single electrical ←

G-7 double electrical →

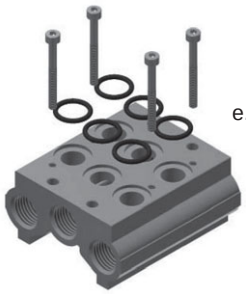


Technical modifications keep in reserve !

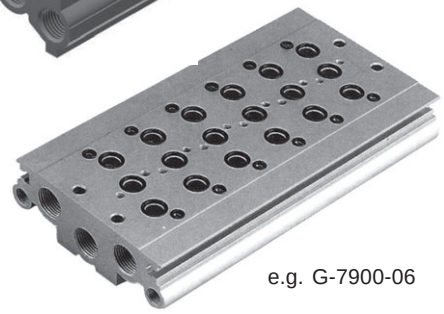
(2020/10)

☎ +32 3 355 32 20

EXTRUDED SUBBASES
G-6 / G-7 Series 1/8"



e.g. GP-6900-02



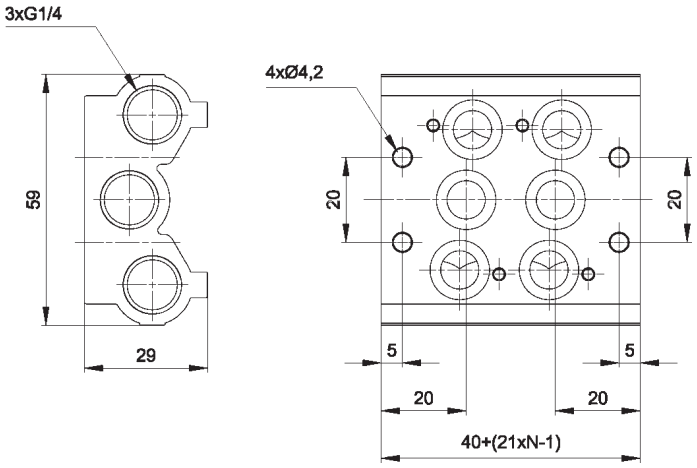
e.g. G-7900-06

Multiple subbase

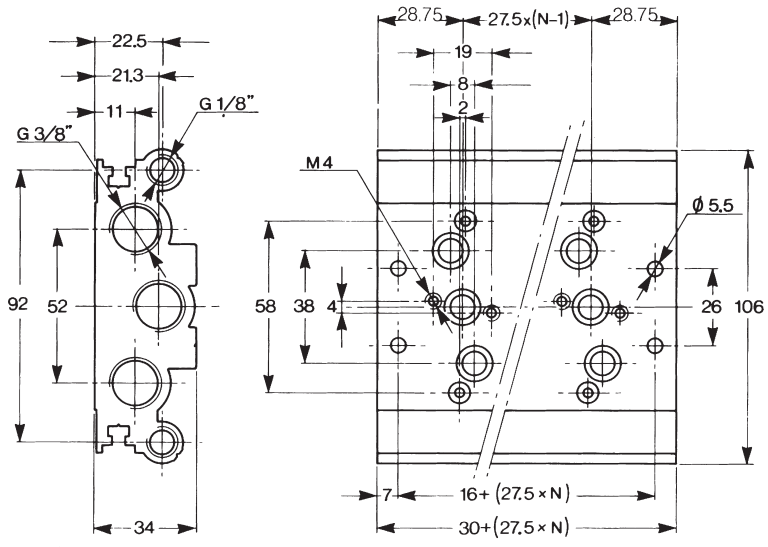
The multiple subbase in extruded aluminium is characterized by compactness and strength and is suitable for the assembly in series of a predetermined number of valves.
This subbase makes the separate conveyance of the pilot exhausts possible.

For modular subbases (only G-6 Series), see page 1.20.06

Dimensions



Material	Places N.	Mass kg	Part number
aluminium	2	0,237	GP-6900-02
	4	0,375	GP-6900-04
	6	0,513	GP-6900-06
	8	0,651	GP-6900-08
	10	0,789	GP-6900-10
	12	0,927	GP-6900-12



Material	Places N.	Mass kg	Part number
aluminium	2	0,455	G-7900-02
	4	0,733	G-7900-04
	6	1,011	G-7900-06
	8	1,289	G-7900-08
	10	1,567	G-7900-10
	12	1,845	G-7900-12

Seals and screws are included.

Blanking plate for unused valve place

Part number	
GP-6385	for G-6 series
G-7885	for G-7 series