

## ISO VALVES 5599/1 Series 1000

### General

5 ways 2 or 3 positions distributors and electric distributors can be used mounted on individual or ganged bases.

A special feature of these devices is that some of their dimensional and functional characteristics comply with international standards, which require that distributors manufactured by different makers be interchangeable.

These standards are ISO 5599/1, according to which certain dimensions are mandatory, namely, the mounting surface, the pitch of the fastening screws, the characteristic of the electric pilot, the flow rate, the pneumatic connections, and so on.


The design is based on the balanced spool principle with pneumatic or electropneumatic actuators and resetting by mechanically or pneumatically operated spring.

The 3 position closed centres, are obtained by spring operation.

The feed to the actuators on the distributors can be provided either by pressure intake from inlet 1 (autofeed) or through the base from inlets 12 and 14 (external feed); there are two separate types of these distributors: one is the Series 1000 and the other is the Series 1010.

The Serie 1000 includes size 1 and 2 and are built of die-cast aluminium. The selection is made by turning a seal fitted between body and operator by 180°, so to utilize external-feed pilot or with internal feed.

**Ordering codes are referring to distributors with "M2" mechanics or solenoid valves "S" mounted (see Series 300). (M2 coil are not included and have to be ordering separately).**

**Coil for M2 and solenoid "S" C  US homologated are available (see Series 300).**

The series 1010 includes 3 sizes: 1, 2 and 3. The body and operators of distributor size 1 and 2 are built of acetal resin protected by an anodized aluminium cap, while size 3 is made of die-cast aluminium with protection cap as well. The selection is made as above. For the electro-distributors it is used the electro-pilots CNOMO Series M with possibility to instal the coils ISO 4400 (DIN 43650) or the coil MB 22x22.



### Construction characteristics

Series 1000	Size 1	Size 2	
Body	Zinc alloy	Aluminium	
Operators	Zinc alloy	Aluminium	
Spools	Stainless steel	Steel	
Seals	NBR	NBR	
Spacers	Technopolymer	Aluminium	
Springs	Spring steel	Spring steel	
Selectors	NBR	NBR	
Series 1010	Size 1	Size 2	Size 3
Body	Technopolymer	Technopolymer	Technopolymer
Operators	Technopolymer	Technopolymer	Technopolymer
Spools	Steel	Steel	Steel
Seals	NBR	NBR	NBR
Spacers	Technopolymer	Technopolymer	Technopolymer
Control pistons	Aluminium	Aluminium	Aluminium
Springs	Spring steel	Spring steel	Spring steel





		Symbol	Description	Code	Max. pressure	Flow at 6 bar, Δp=1	Orifice size
Size 1	5/2		Pneumatic - Spring	STD	1001.52.1.9	2,5-10 bar	840NI/min
			Pneumatic - Differential		1001.52.1.6	2-10 bar	
			Pneumatic - Pneumatic	STD	1001.52.1.8	1,5-10 bar	
			Solenoid - Spring	STD	1051.52.3.9.M2	2,5-10 bar	
			Solenoid - Differential		1051.52.3.6.M2	2-10 bar	
			Solenoid - Solenoid	STD	1051.52.3.5.M2	1,5-10 bar	
	5/3		Pneumatic - Pneumatic C.C.		1001.53.31.1.8	3-10 bar	720NI/min
			Pneumatic - Pneumatic O.C.		1001.53.32.1.8		
			Pneumatic - Pneumatic P.C.		1001.53.33.1.8		
			Solenoid - Solenoid C.C.		1051.53.31.3.5.M2		
			Solenoid - Solenoid O.C.		1051.53.32.3.5.M2		
			Solenoid - Solenoid P.C.		1051.53.33.3.5.M2		
Technopolymer	5/2		Pneumatic - Spring	STD	1011.52.1.9	2,5-10 bar	900NI/min
			Pneumatic - Differential		1011.52.1.6	2-10 bar	
			Pneumatic - Pneumatic	STD	1011.52.1.8	1,5-10 bar	
			Solenoid - Spring	STD	1011.52.3.9.M**	2,5-10 bar	
			Solenoid - Differential		1011.52.3.6.M**	2-10 bar	
			Solenoid - Solenoid	STD	1011.52.3.5.M**	1,5-10 bar	
	5/3		Pneumatic - Pneumatic C.C.	STD	1011.53.31.1.8	3-10 bar	900NI/min
			Pneumatic - Pneumatic O.C.		1011.53.32.1.8		
			Pneumatic - Pneumatic P.C.		1011.53.33.1.8		
			Solenoid - Solenoid C.C.	STD	1011.53.31.3.5.M**		
			Solenoid - Solenoid O.C.	STD	1011.53.32.3.5.M**		
			Solenoid - Solenoid P.C.	STD	1011.53.33.3.5.M**		

M2 = Use MB-coil (not included, see page 1.07.05)

M3R/M\*\* (CNOMO-pilot) = Use MC-coil (not included, see page 1.07.06)

### Use and maintenance

These distributors have an average life span ranging between 10 and 15 million cycles, depending on operating conditions. Proper lubrication cuts down the wear of the seals drastically, in the same way as proper filtering prevents the build-up of dirt and consequent malfunctioning of the distributors.

Make sure that the conditions of use comply with the pressure, temperature etc. limits indicated and that the fastening screws are tightened with the following maximum torques on distributors Serie 1010.

**Size 1 = 4 Nm**

**Size 2 = 5 Nm**

**Size 3 = 8 Nm**

Assembly kits, including the spool and seals subject to wear, are available for servicing, which can be carried out by anyone provided proper care is taken when reassembling the distributors.

ATTENTION : use only class H Hydraulic oils for lubrication. e.g. MAGNA GC 32 (CASTROL).





# DISTRIBUTORS AND ELECTRODISTRIBUTORS ISO 5599/1

(series 1000, section 2)

**PNEUMAX**

		Symbol	Description	Code	Max. pressure	Flow at 6 bar, $\Delta p=1$	Orifice size
<b>Size 2</b>		5/2		Pneumatic - Differential	1002.52.16	2-10 bar	1700NI/min
		5/2		Pneumatic - Pneumatic	1002.52.18	1,5-10 bar	
		5/3		Solenoid - Differential <b>STD</b>	1052.52.3.6.M2	2-10 bar	
		5/3		Solenoid - Solenoid <b>STD</b>	1052.52.3.5.M2	1,5-10 bar	
		5/3		Pneumatic - Pneumatic C.C.	1002.53.31.1.8	3-10 bar	/
		5/3		Pneumatic - Pneumatic O.C.	1002.53.32.1.8		
		5/3		Pneumatic - Pneumatic P.C.	1002.53.33.1.8		
		5/3		Solenoid - Solenoid C.C.	1052.53.31.3.5.M2		
<b>Technopolymer</b>		5/2		Pneumatic - Spring <b>STD</b>	1012.52.1.9	2,5-10 bar	1600NI/min
		5/2		Pneumatic - Differential	1012.52.1.6	2-10 bar	
		5/2		Pneumatic - Pneumatic <b>STD</b>	1012.52.1.8	1,5-10 bar	
		5/2		Solenoid - Spring <b>STD</b>	1012.52.3.9.M**	2,5-10 bar	
		5/2		Solenoid - Differential	1012.52.3.6.M**	2-10 bar	
		5/2		Solenoid - Solenoid <b>STD</b>	1012.52.3.5.M**	1,5-10 bar	
		5/3		Pneumatic - Pneumatic C.C. <b>STD</b>	1012.53.31.1.8	3-10 bar	/
		5/3		Pneumatic - Pneumatic O.C.	1012.53.32.1.8		
		5/3		Pneumatic - Pneumatic P.C.	1012.53.33.1.8		
		5/3		Solenoid - Solenoid C.C. <b>STD</b>	1012.53.31.3.5.M**		
		5/3		Solenoid - Solenoid O.C. <b>STD</b>	1012.53.32.3.5.M**		
		5/3		Solenoid - Solenoid P.C.	1012.53.33.3.5.M**		

M2 = Use MB-coil (not included, see page 1.07.05)

M3R/M\*\* (CNOMO-pilot) = Use MC-coil (not included, see page 1.07.06)

<b>Size 3</b>		5/2		Pneumatic - Spring <b>STD</b>	1013.52.1.9	2,5-10 bar	3600NI/min
		5/2		Pneumatic - Differential	1013.52.1.6	2-10 bar	
		5/2		Pneumatic - Pneumatic <b>STD</b>	1013.52.1.8	1,5-10 bar	
		5/2		Solenoid - Spring <b>STD</b>	1013.52.3.9.M**	2,5-10 bar	
		5/2		Solenoid - Differential	1013.52.3.6.M**	2-10 bar	
		5/2		Solenoid - Solenoid <b>STD</b>	1013.52.3.5.M**	1,5-10 bar	
		5/3		Pneumatic - Pneumatic C.C. <b>STD</b>	1013.53.31.1.8	3-10 bar	3000NI/min
		5/3		Pneumatic - Pneumatic O.C.	1013.53.32.1.8		
		5/3		Pneumatic - Pneumatic P.C.	1013.53.33.1.8		
		5/3		Solenoid - Solenoid C.C. <b>STD</b>	1013.53.31.3.5.M**		
		5/3		Solenoid - Solenoid O.C. <b>STD</b>	1013.53.32.3.5.M**		
		5/3		Solenoid - Solenoid P.C.	1013.53.33.3.5.M**		

M2 = Use MB-coil (not included, see page 1.07.05)













M3R/M\*\* (CNOMO-pilot) = Use MC-coil (not included, see page 1.07.06)



Technical modifications keep in reserve !

(2021/08)



		Description	Code	Max. pressure	Flow at 6 bar, $\Delta p=1$	Orifice size
<b>Inlet blocks</b>      	size 1	Size 1	1101.09 <b>STD</b>	/	/	/
		Universal	1101.10 <b>STD</b>			
		Aligned connections	1101.11			
		Top connections	1101.12			
		Bottom connections	1101.13			
	size 2	Universal	1102.10 <b>STD</b>			
		Aligned connections	1102.11			
		Top connections	1102.12			
		Bottom connections	1102.13			
	size 3	Aligned connections	1103.11 <b>STD</b>			
<b>Modular bases with side and bottom connections</b>  		Size 1	1101.00 <b>STD</b>			
		Size 2	1102.00 <b>STD</b>			
		Size 3	1103.00 <b>STD</b>			
<b>Individual base</b>           	size 1	Shape "A"	1101.14 <b>STD</b>			
		Shape "B"	1101.15			
		Closing plate	1101.16 <b>STD</b>			
	size 2	Shape "A"	1102.14 <b>STD</b>			
		Shape "B"	1102.15			
		Closing plate	1102.16			
	size 3	Shape "A"	1103.14 <b>STD</b>			
		Closing plate	1103.16			
		Interbase 2-1	1100.2-1 <b>STD</b>			
		Interbase 3-2	1100.3-2 <b>STD</b>			





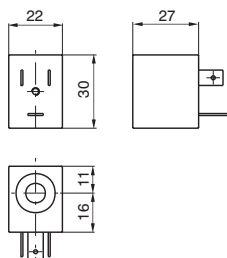
## Coil



Weight 54 gr.

\* Use only with M2/9

## Coil type U1



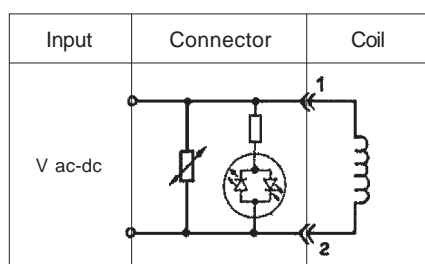
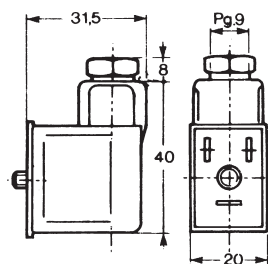
Ordering code	Available voltages Coils	
<b>MB 4</b>	12 D.C.	Direct current
<b>MB 5</b>	24 D.C.	
<b>MB 6</b>	48 D.C.	
<b>MB 9*</b>	24 D.C. (2 Watt) (Direct current, low consumption)	
<b>MB 17</b>	24/50	Alternating current 50 Hz
<b>MB 21</b>	48/50	
<b>MB 22</b>	110/50	
<b>MB 24</b>	230/50	
<b>MB 37</b>	24/60	Alternating current 60 Hz
<b>MB 39</b>	110/60	
<b>MB 41</b>	230/60	
<b>MB 56</b>	24/50-60	Alternating current 50/60 Hz
<b>MB 57</b>	110/50-60	
<b>MB 58</b>	230/50-60	
<b>MB 66</b>	24/50-60	Alternating current (low consumption) 50/60 Hz
<b>MB 67</b>	110/50-60	
<b>MB 68</b>	230/50-60	

## Connector for coil (DIN 43650)



Ordering code	Supply voltage until	Coil type	Protection class	Remarks
<b>MP1</b>	0-250V~/300V=	U1	IP 65	CONNECTOR
<b>MP1-LED-24V</b>	24V	U1	IP 65	+LED
<b>MP1-LED-24V-5M</b>	24V	U1	IP 65	+LED+CABLE
<b>MP1-LED-230V</b>	230V	U1	IP 65	+LED

## Electronic circuit for MP-LED



Bipolar LED and VDR to protect supply and switch.  
(The energy in the coil is limited by the VDR).  
Voltage: 24 or 230V.





## Coil

Ordering code	Available voltages Coil
<b>MC5</b>	24 D.C.
<b>MC9</b>	24 D.C. (2 Watt)
<b>MC56</b>	24/50-60 Hz
<b>MC57</b>	110/50-60 Hz
<b>MC58</b>	230/50-60 Hz

STD

STD

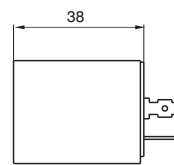
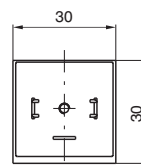
STD

STD



Weight 110 gr.

Coil type U3

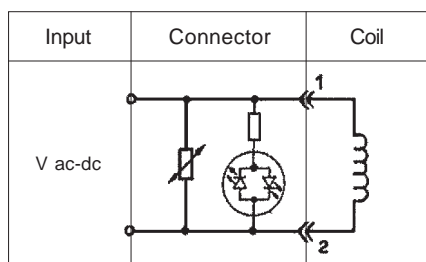
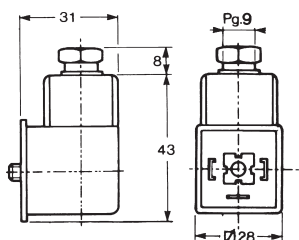


## Connector for coil (DIN 43650)



Ordering code	Supply voltage until	Coil type	Protection class	Remarks
<b>MP2</b>	0-250V~/300V=	U2/U3	IP 65	CONNECTOR
<b>MP2-LED-24V</b>	24V	U2/U3	IP 65	+LED
<b>MP2-LED-230V</b>	230V	U2/U3	IP 65	+LED

## Electronic circuit for MP-LED



Bipolar LED and VDR to protect supply and switch.  
(The energy in the coil is limited by the VDR).  
Voltage: 24 or 230V.





**PNEUMAX**

## General

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**Coil for M2 and solenoid "S" C  US homologated are available (see Series 300).**

The series 1010 includes 3 sizes: 1, 2 and 3. The body and operators of distributor size 1 and 2 are built of acetal resin protected by an anodized aluminium cap, while size 3 is made of die-cast aluminium with protection cap as well. The selection is made as above. For the electro-distributors it is used the electro-pilots CNOMO Series M with possibility to instal the coils ISO 4400 (DIN 43650) or the coil MB 22x22.

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**Size 2 = 5 Nm**

**Size 3 = 8 Nm**

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**ATTENTION :** use only class H Hydraulic oils for lubrication. e.g. MAGNA GC 32 (CASTROL).

## Construction characteristics

Series 1000	Size 1	Size 2	
Body	Zinc alloy	Aluminium	
Operators	Zinc alloy	Aluminium	
Spools	Stainless steel	Steel	
Seals	NBR	NBR	
Spacers	Technopolymer	Aluminium	
Springs	Spring steel	Spring steel	
Selectors	NBR	NBR	
Series 1010	Size 1	Size 2	Size 3
Body	Technopolymer	Technopolymer	Technopolymer
Operators	Technopolymer	Technopolymer	Technopolymer
Spools	Steel	Steel	Steel
Seals	NBR	NBR	NBR
Spacers	Technopolymer	Technopolymer	Technopolymer
Control pistons	Aluminium	Aluminium	Aluminium
Springs	Spring steel	Spring steel	Spring steel



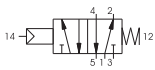

Pneumatic - Spring - 5/2

Ordering code

1001.52.1.9

Weight gr. 780

Minimum operating pressure 2,5 bar



Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)
	Filtered and lubricated air	10	-5 - +70	840

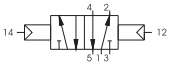

Pneumatic - Differential - 5/2

Ordering code

1001.52.1.6

Weight gr. 790

Minimum operating pressure 2 bar



Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)
	Filtered and lubricated air	10	-5 - +70	840

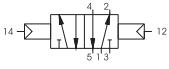

Pneumatic - Pneumatic - 5/2

Ordering code

1001.52.1.8

Weight gr. 800

Minimum operating pressure 1,5 bar



Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)
	Filtered and lubricated air	10	-5 - +70	840

Pneumatic - Pneumatic - 5/3

Ordering code

1001.53.Ⓕ.1.8

FUNCTION

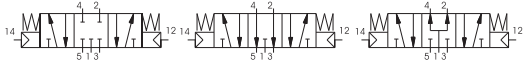

Ⓕ 31=Closed centres

32=Open centres

33=Pressured centres

Weight gr. 800

Minimum operating pressure 3 bar



Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)
	Filtered and lubricated air	10	-5 - +70	720

Overall dimensions and technical information are provided solely for informative purposes and may be modified without notice.

2.114

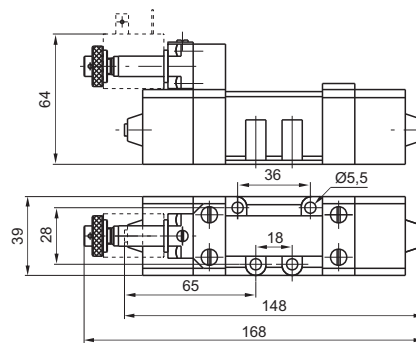
**Solenoid - Spring - 5/2**

Ordering code

**1051.52.3.9.M2**



Weight gr. 890  
Minimum operating pressure 2,5 bar



**Operational characteristic**

Fluid

Max working pressure (bar)

Temperature °C

Flow rate at 6 bar with  $\Delta p=1$  (NI/min)

Filtered and lubricated air

10

-5 - +50

840

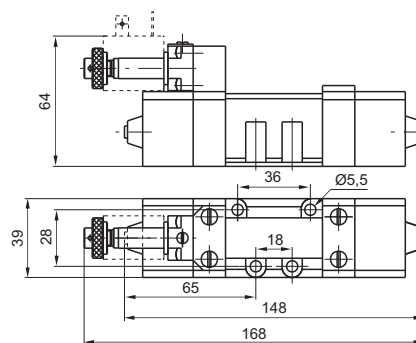
**Solenoid - Differential - 5/2**

Ordering code

**1051.52.3.6.M2**



Weight gr. 900  
Minimum operating pressure 2 bar



**Operational characteristic**

Fluid

Max working pressure (bar)

Temperature °C

Flow rate at 6 bar with  $\Delta p=1$  (NI/min)

Filtered and lubricated air

10

-5 - +50

840

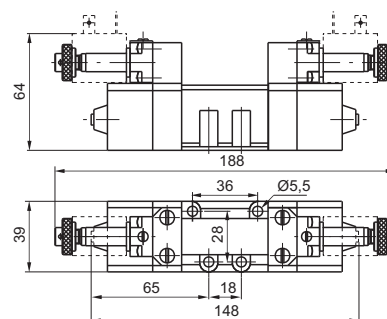
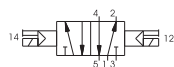
**Solenoid - Solenoid - 5/2**

Ordering code

**1051.52.3.5.M2**



Weight gr. 1040  
Minimum operating pressure 1,5 bar



**Operational characteristic**

Fluid

Max working pressure (bar)

Temperature °C

Flow rate at 6 bar with  $\Delta p=1$  (NI/min)

Filtered and lubricated air

10

-5 - +50

840

**Solenoid - Solenoid - 5/3**

Ordering code

**1051.53.3.5.M2**

FUNCTION

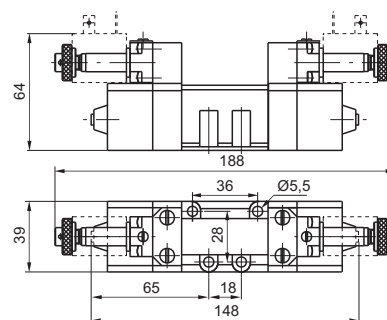
31=Closed centres

32=Open centres

33=Pressured centres



Weight gr. 1040  
Minimum operating pressure 3 bar



**Operational characteristic**

Fluid

Max working pressure (bar)

Temperature °C

Flow rate at 6 bar with  $\Delta p=1$  (NI/min)

Filtered and lubricated air

10


-5 - +50

720

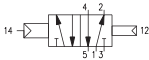
Pneumatic - Differential - 5/2

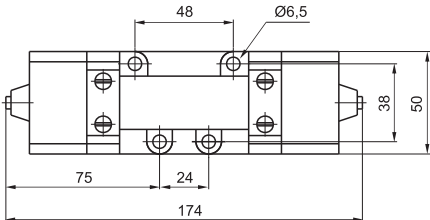
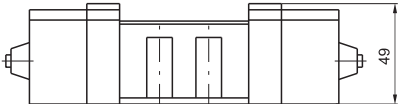
Ordering code

1002.52.1.6



Weight gr. 730  
Minimum operating pressure 2 bar






Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)
	Filtered and lubricated air	10	-5 - +70	1700


Pneumatic - Pneumatic - 5/2

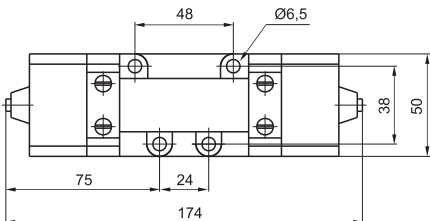
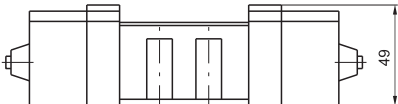
Ordering code

1002.52.1.8



Weight gr. 800  
Minimum operating pressure 1,5 bar





Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)
	Filtered and lubricated air	10	-5 - +70	1700

Pneumatic - Pneumatic - 5/3


Ordering code

1002.53.F.1.8

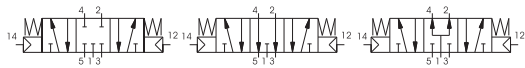
FUNCTION

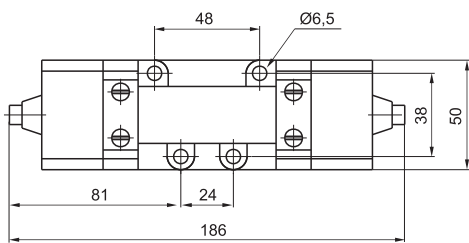
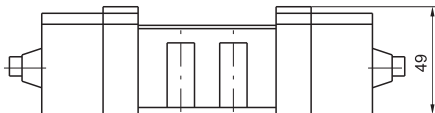
F

31=Closed centres  
32=Open centres  
33=Pressured centres



Weight gr. 740  
Minimum operating pressure 3 bar





Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)
	Filtered and lubricated air	10	-5 - +70	1700

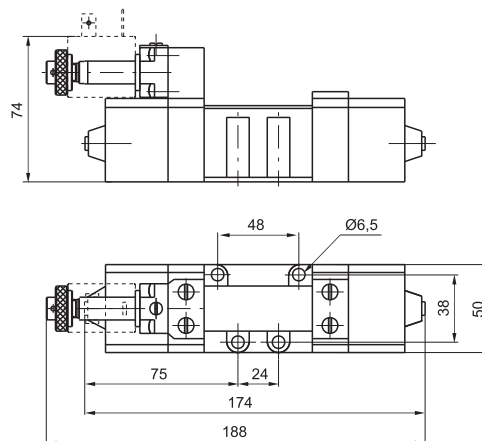
Overall dimensions and technical information are provided solely for informative purposes and may be modified without notice.

2.116

**Solenoid - Differential - 5/2**

Ordering code

**1052.52.3.6.M2**



Weight gr. 850  
Minimum operating pressure 2 bar



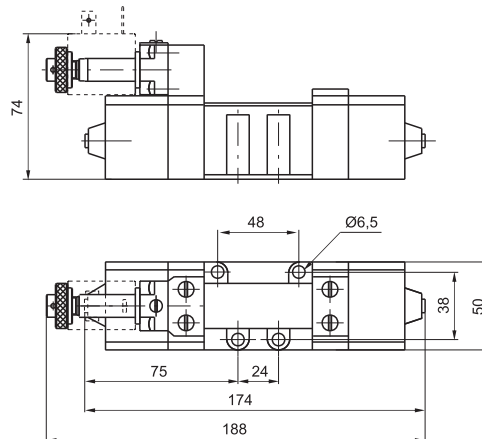
**Operational characteristic**

Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with $\Delta p=1$ (NI/min)
Filtered and lubricated air	10	-5 - +50	1700

**Solenoid - Solenoid - 5/2**

Ordering code

**1052.52.3.5.M2**



Weight gr. 980  
Minimum operating pressure 1,5 bar



**Operational characteristic**

Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with $\Delta p=1$ (NI/min)
Filtered and lubricated air	10	-5 - +50	1700

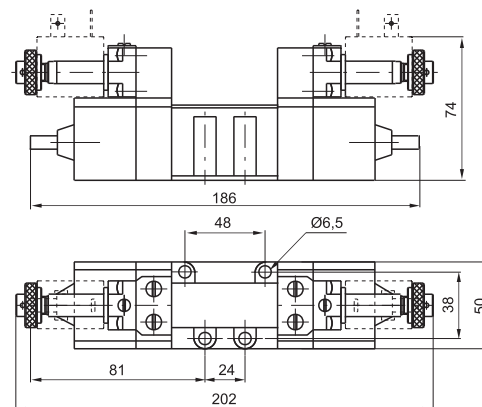
**Solenoid - Solenoid - 5/3**

Ordering code

**1052.53.Ⓢ.3.5.M2**

FUNCTION

- Ⓢ
- 31=Closed centres
  - 32=Open centres
  - 33=Pressured centres

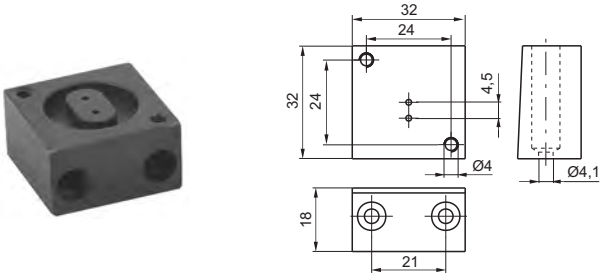
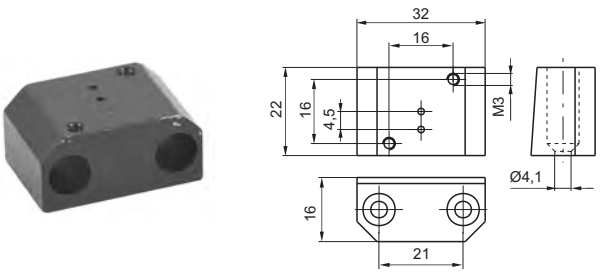
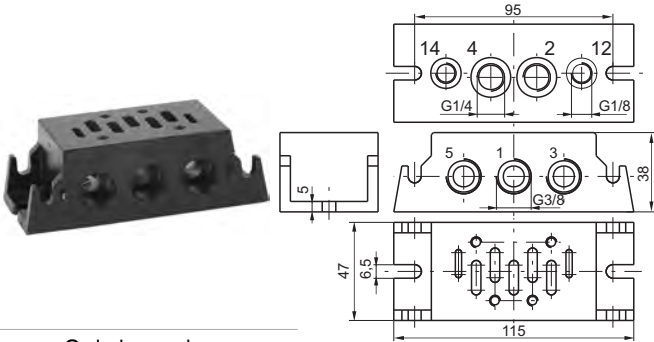
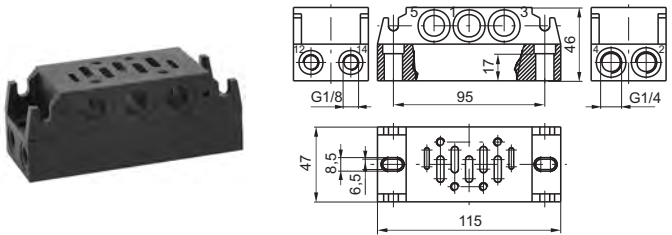
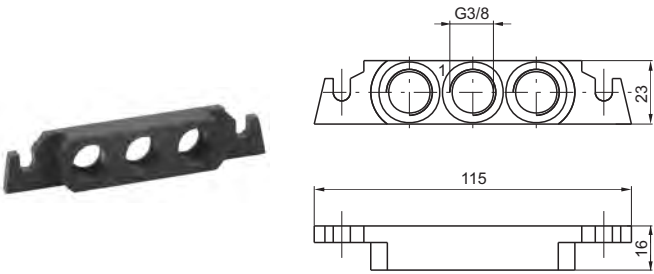
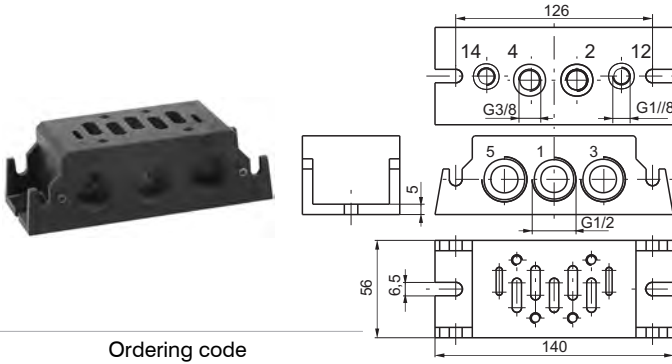


Weight gr. 980  
Minimum operating pressure 3 bar



**Operational characteristic**

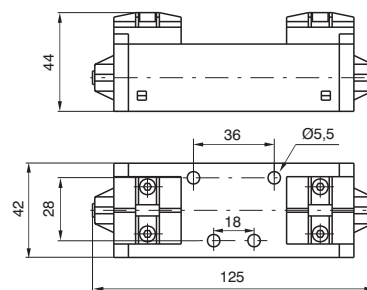
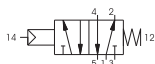
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with $\Delta p=1$ (NI/min)
Filtered and lubricated air	10	-5 - +50	1700

Base CNOMO for 32 mm Solenoid valve		Base for 32 mm Solenoid valve	
			
Ordering code		Ordering code	
1001.04		1001.05	
Weight gr. 90		Weight gr. 60	
Base with bottom connections size 1		Base with side connections size 1	
			
Ordering code		Ordering code	
1001.00		1001.01	
Weight gr. 320 1=INLET PORT 2-4=OUTLET PORTS 3-5=EXHAUST PORTS 12-14=PILOT PORTS		Weight gr. 445 1=INLET PORT 2-4=OUTLET PORTS 3-5=EXHAUST PORTS 12-14=PILOT PORTS	
Inlet blocks		Base with bottom connections size 2	
			
Ordering code		Ordering code	
1001.02		1002.00	
Weight gr. 55		Weight gr. 520 1=INLET PORT 2-4=OUTLET PORTS 3-5=EXHAUST PORTS 12-14=PILOT PORTS	

## Pneumatic - Spring - 5/2

Ordering code

**1011.52.1.9**

Weight gr. 230  
Minimum operating pressure 2,5 bar


## Operational characteristic

Fluid

Max working pressure (bar)

Temperature °C

Flow rate at 6 bar with  $\Delta p=1$  (NI/min)

Filtered and lubricated air

10

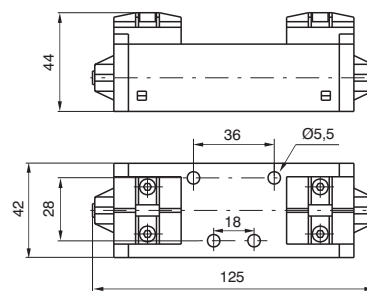
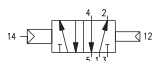
-5 - +50

900

## Pneumatic - Differential - 5/2

Ordering code

**1011.52.1.6**

Weight gr. 240  
Minimum operating pressure 2 bar


## Operational characteristic

Fluid

Max working pressure (bar)

Temperature °C

Flow rate at 6 bar with  $\Delta p=1$  (NI/min)

Filtered and lubricated air

10

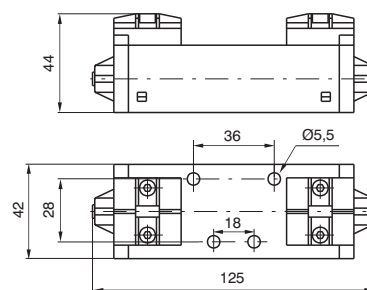
-5 - +50

900

## Pneumatic - Pneumatic - 5/2

Ordering code

**1011.52.1.8**

Weight gr. 240  
Minimum operating pressure 1,5 bar


## Operational characteristic

Fluid

Max working pressure (bar)

Temperature °C

Flow rate at 6 bar with  $\Delta p=1$  (NI/min)

Filtered and lubricated air

10

-5 - +50

900

## Pneumatic - Pneumatic - 5/3

Ordering code

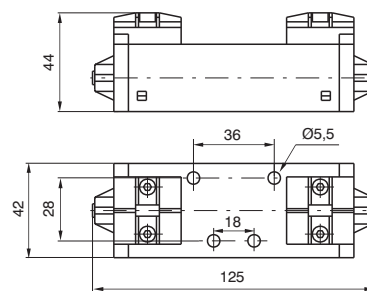
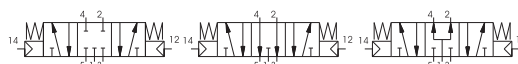
**1011.53.F.1.8**

FUNCTION

31=Closed centres

32=Open centres

33=Pressured centres


Weight gr. 240  
Minimum operating pressure 3 bar


## Operational characteristic

Fluid

Max working pressure (bar)

Temperature °C

Flow rate at 6 bar with  $\Delta p=1$  (NI/min)

Filtered and lubricated air

10

-5 - +50

900



2

Solenoid - Spring - 5/2

Ordering code

1011.52.3.9.M

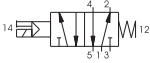

M

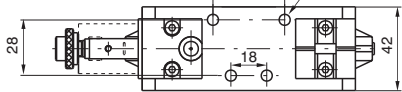
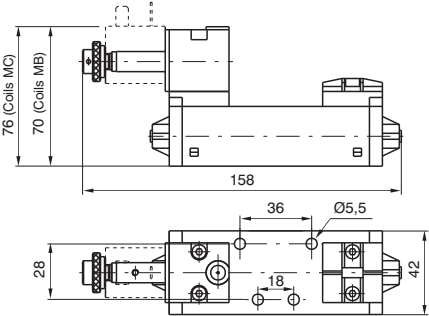
MECHANICAL CODE

See Valves Series 300 CNOMO

Weight gr. 290

Minimum operating pressure 2,5 bar





Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)
	Filtered and lubricated air	10	-5 - +50	900

Solenoid - Differential - 5/2

Ordering code

1011.52.3.6.M



M

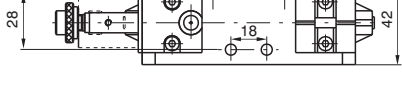
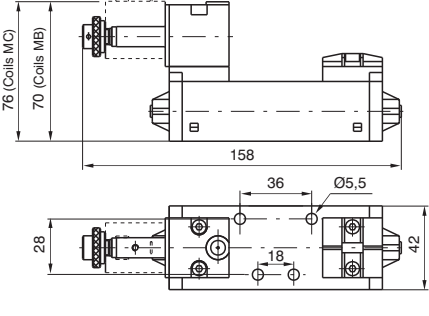
MECHANICAL CODE

See Valves Series 300 CNOMO

Weight gr. 290

Minimum operating pressure 2 bar





Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)
	Filtered and lubricated air	10	-5 - +50	900

Solenoid - Solenoid - 5/2

Ordering code

1011.52.3.5.M



M

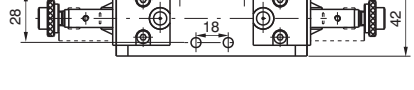
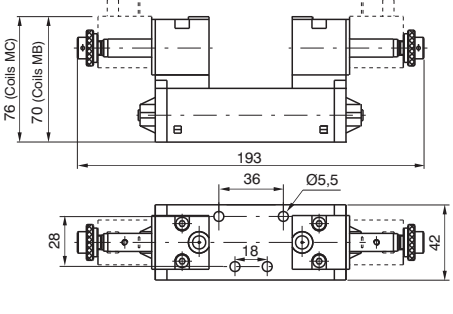
MECHANICAL CODE

See Valves Series 300 CNOMO

Weight gr. 350

Minimum operating pressure 1,5 bar





Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)
	Filtered and lubricated air	10	-5 - +50	900

Solenoid - Solenoid - 5/3

Ordering code

1011.53.F.3.5.M

F

FUNCTION

31=Closed centres  
32=Open centres  
33=Pressured centres



M

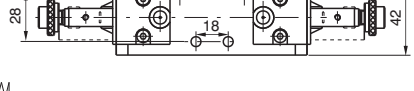
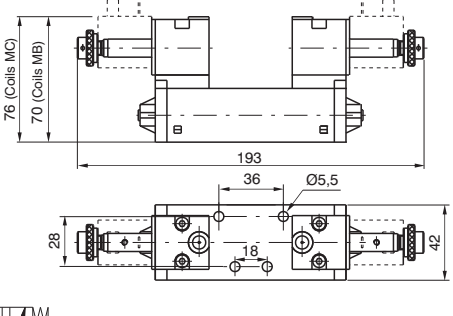
MECHANICAL CODE

See Valves Series 300 CNOMO

Weight gr. 350

Minimum operating pressure 3 bar





Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)
	Filtered and lubricated air	10	-5 - +50	900

Overall dimensions and technical information are provided solely for informative purposes and may be modified without notice.

2.120

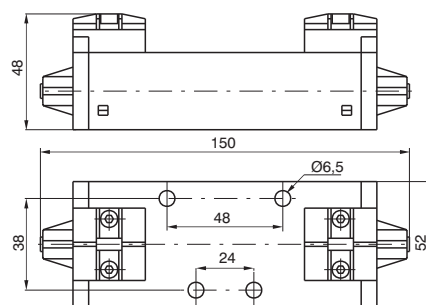
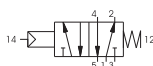
**Pneumatic - Spring - 5/2**

Ordering code

**1012.52.1.9**



Weight gr. 300  
Minimum operating pressure 2,5 bar



**Operational characteristic**

Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with $\Delta p=1$ (NI/min)
Filtered and lubricated air	10	-5 - +50	1600

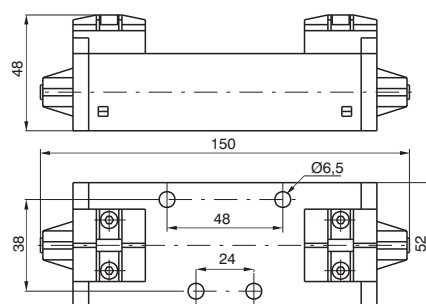
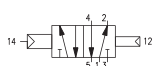
**Pneumatic - Differential - 5/2**

Ordering code

**1012.52.1.6**



Weight gr. 310  
Minimum operating pressure 2 bar



**Operational characteristic**

Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with $\Delta p=1$ (NI/min)
Filtered and lubricated air	10	-5 - +50	1600

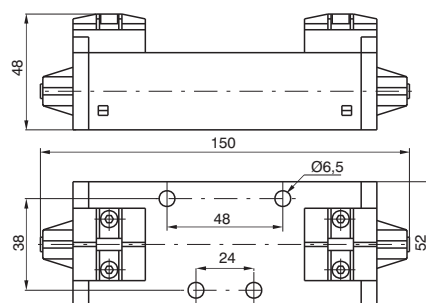
**Pneumatic - Pneumatic - 5/2**

Ordering code

**1012.52.1.8**



Weight gr. 310  
Minimum operating pressure 1,5 bar



**Operational characteristic**

Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with $\Delta p=1$ (NI/min)
Filtered and lubricated air	10	-5 - +50	1600

**Pneumatic - Pneumatic - 5/3**

Ordering code

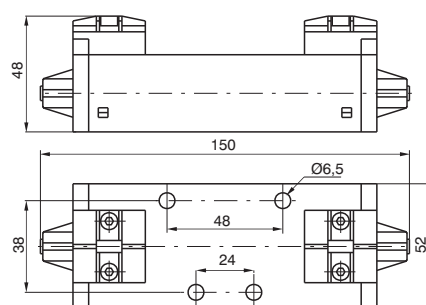
**1012.53.F.1.8**

FUNCTION

- 31=Closed centres
- 32=Open centres
- 33=Pressured centres



Weight gr. 310  
Minimum operating pressure 3 bar



**Operational characteristic**

Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with $\Delta p=1$ (NI/min)
Filtered and lubricated air	10	-5 - +50	1600



Solenoid - Spring - 5/2

Ordering code

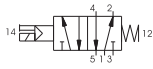

1012.52.3.9.M

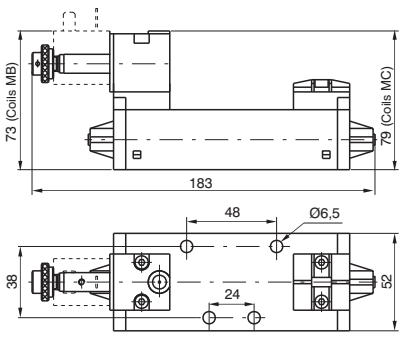
M

MECHANICAL CODE  
See Valves Series 300 CNOMO

Weight gr. 360

Minimum operating pressure 2,5 bar





Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)
	Filtered and lubricated air	10	-5 - +50	1600

Solenoid - Differential - 5/2

Ordering code

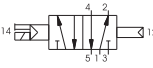

1012.52.3.6.M

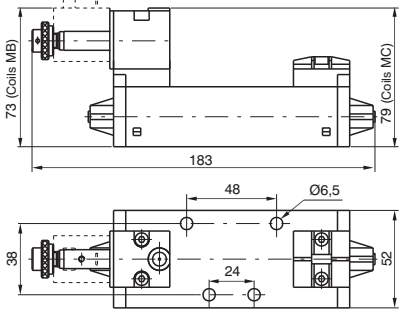
M

MECHANICAL CODE  
See Valves Series 300 CNOMO

Weight gr. 360

Minimum operating pressure 2 bar





Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)
	Filtered and lubricated air	10	-5 - +50	1600

Solenoid - Solenoid - 5/2

Ordering code



1012.52.3.5.M

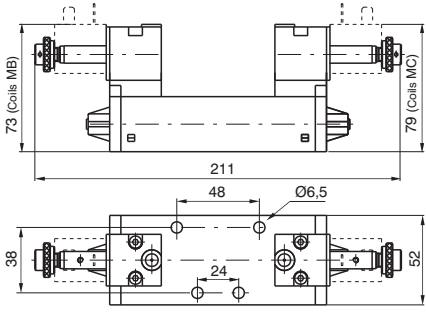
M

MECHANICAL CODE  
See Valves Series 300 CNOMO

Weight gr. 420

Minimum operating pressure 1,5 bar





Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)
	Filtered and lubricated air	10	-5 - +50	1600

Solenoid - Solenoid - 5/3

Ordering code

1012.53.F.3.5.M

F



FUNCTION  
31 = Closed centres  
32 = Open centres  
33 = Pressured centres  

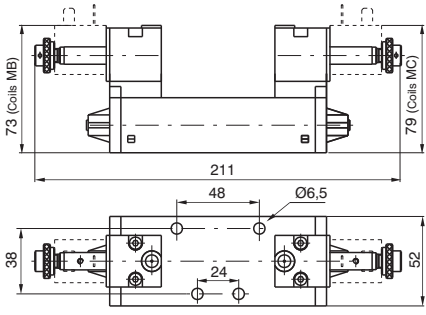
M

MECHANICAL CODE  
See Valves Series 300 CNOMO

Weight gr. 420

Minimum operating pressure 3 bar





Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)
	Filtered and lubricated air	10	-5 - +50	1600

Overall dimensions and technical information are provided solely for informative purposes and may be modified without notice.

2.122

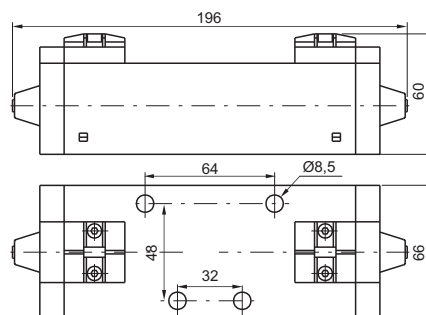
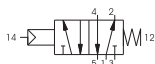
**Pneumatic - Spring - 5/2**

Ordering code

**1013.52.1.9**



Weight gr. 1000  
Minimum operating pressure 2,5 bar



**Operational characteristic**

Fluid

Max working pressure (bar)

Temperature °C

Flow rate at 6 bar with  $\Delta p=1$  (NI/min)

Filtered and lubricated air

10

-5 - +50

3600

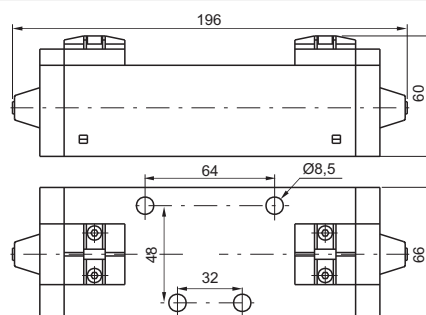
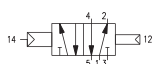
**Pneumatic - Differential - 5/2**

Ordering code

**1013.52.1.6**



Weight gr. 1020  
Minimum operating pressure 2 bar



**Operational characteristic**

Fluid

Max working pressure (bar)

Temperature °C

Flow rate at 6 bar with  $\Delta p=1$  (NI/min)

Filtered and lubricated air

10

-5 - +50

3600

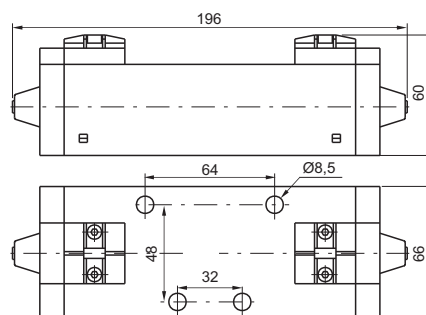
**Pneumatic - Pneumatic - 5/2**

Ordering code

**1013.52.1.8**



Weight gr. 1050  
Minimum operating pressure 1,5 bar



**Operational characteristic**

Fluid

Max working pressure (bar)

Temperature °C

Flow rate at 6 bar with  $\Delta p=1$  (NI/min)

Filtered and lubricated air

10

-5 - +50

3600

**Pneumatic - Pneumatic - 5/3**

Ordering code

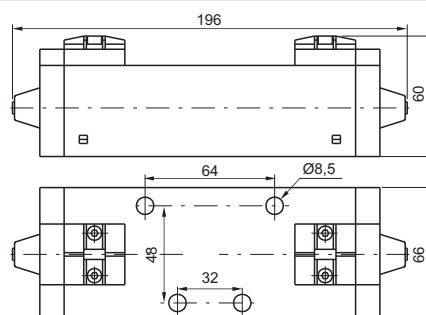
**1013.53.F.1.8**

FUNCTION

- 31=Closed centres
- 32=Open centres
- 33=Pressured centres



Weight gr. 1050  
Minimum operating pressure 3 bar



**Operational characteristic**

Fluid

Max working pressure (bar)

Temperature °C

Flow rate at 6 bar with  $\Delta p=1$  (NI/min)

Filtered and lubricated air

10

-5 - +50

3000



2

Solenoid - Spring - 5/2

Ordering code

1013.52.3.9.M

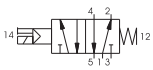

M

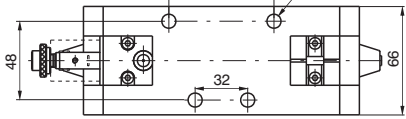
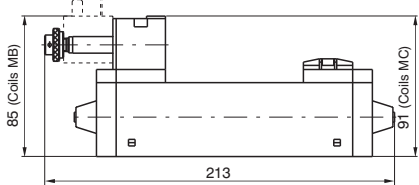
MECHANICAL CODE

See Valves Series 300 CNOMO

Weight gr. 1060

Minimum operating pressure 2,5 bar





Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)
	Filtered and lubricated air	10	-5 - +50	3600

Solenoid - Differential - 5/2

Ordering code

1013.52.3.6.M

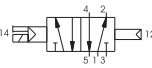

M

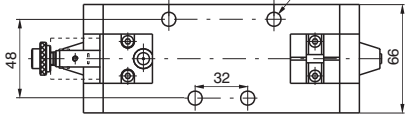
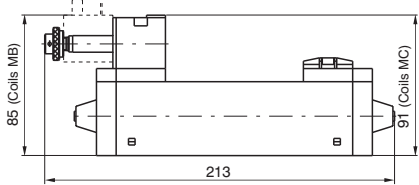
MECHANICAL CODE

See Valves Series 300 CNOMO

Weight gr. 1080

Minimum operating pressure 2 bar





Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)
	Filtered and lubricated air	10	-5 - +50	3600

Solenoid - Solenoid - 5/2

Ordering code

1013.52.3.5.M

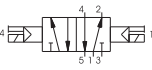

M

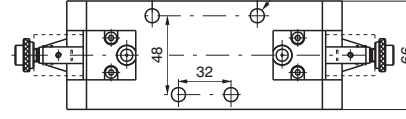
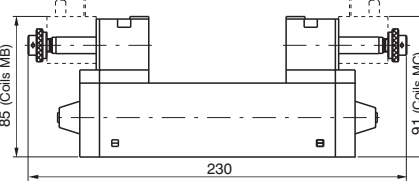
MECHANICAL CODE

See Valves Series 300 CNOMO

Weight gr. 1170

Minimum operating pressure 1,5 bar





Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)
	Filtered and lubricated air	10	-5 - +50	3600

Solenoid - Solenoid - 5/3

Ordering code

1013.53.F.3.5.M

F

FUNCTION

31=Closed centres  
32=Open centres  
33=Pressured centres



M

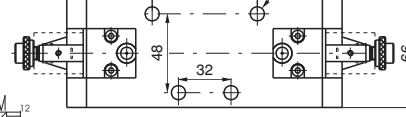
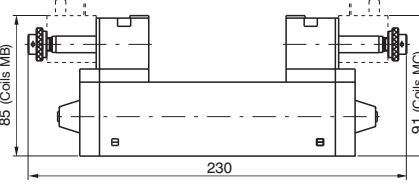
MECHANICAL CODE

See Valves Series 300 CNOMO

Weight gr. 1170

Minimum operating pressure 3 bar





Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)
	Filtered and lubricated air	10	-5 - +50	3000

Overall dimensions and technical information are provided solely for informative purposes and may be modified without notice.

2.124



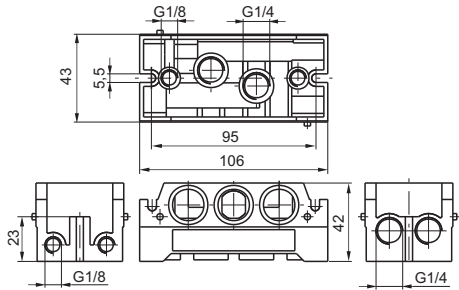
These bases are manufactured with the outlet and pilot ports on both the sides and the bottom faces giving the option for use with any application. Unused ports must be blanked off using threaded plugs which are not included in the part number or price. To isolate bases from each other for use with different supply pressures ports 1, 3 & 5 should be plugged underneath the seal.

The codes are:

**1101.17** (size 1) - **1102.17** (size 2) - **1103.17** (size 3)



Size 1

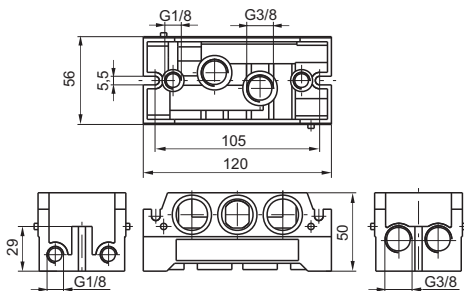


Ordering code

**1101.00**

Weight gr. 240

Size 2

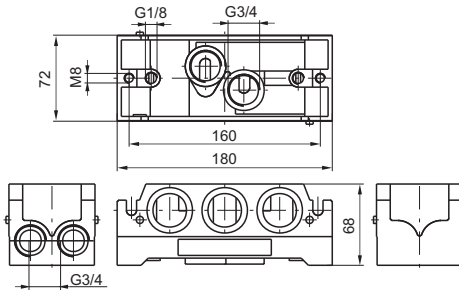


Ordering code

**1102.00**

Weight gr. 340

Size 3

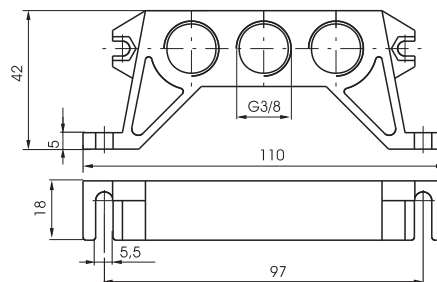


Ordering code

**1103.00**

Weight gr. 950

Size 1



Ordering code

**1101.09**

Weight gr. 100

Size 1

Ordering code

**1101.C**

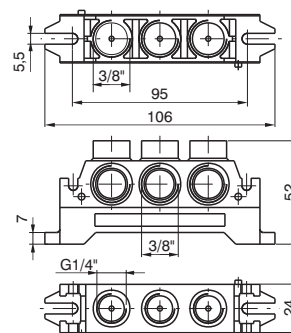
CONNECTIONS

10=Universal

**C** 11=Aligned connections

12=Top connections

13=Bottom connections



Weight gr. 160

Size 2

Ordering code

**1102.C**

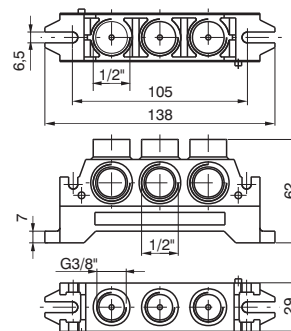
CONNECTIONS

10=Universal

**C** 11=Aligned connections

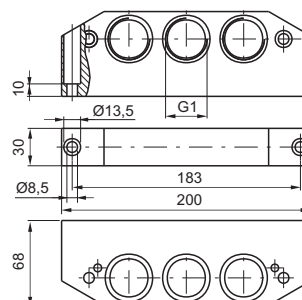
12=Top connections

13=Bottom connections



Weight gr. 230

Size 3



Ordering code

**1103.11**

Weight gr. 840

Size 1 - shape "A"

Ordering code

1101.14

Weight gr. 160





Size 1 - shape "B"

Ordering code

1101.15

Weight gr. 190





Size 1 - closing plate

Ordering code

1101.16





Size 2 - shape "A"

Ordering code

1102.14

Weight gr. 190





Size 2 - shape "B"

Ordering code

1102.15

Weight gr. 220

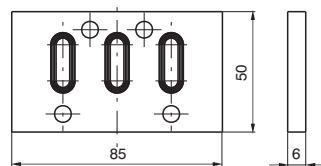




**Size 2- closing plate**

Ordering code

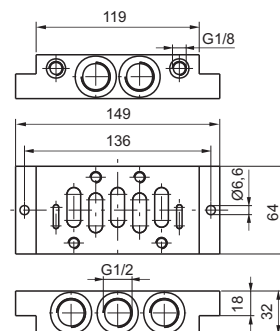
**1102.16**



**Size 3 - shape "A"**

Ordering code

**1103.14**

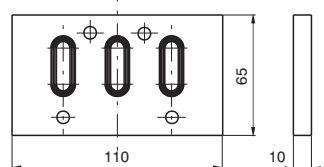


Weight gr. 600

**Size 3- closing plate**

Ordering code

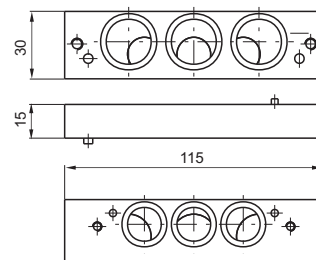
**1103.16**



**Base adaptor Size 2-1**

Ordering code

**1100.2-1**

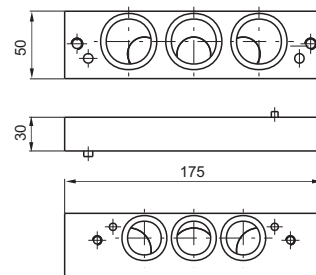


Weight gr. 110

**Base adaptor Size 3-2**

Ordering code

**1100.3-2**



Weight gr. 590



## General

To Increase the range of ISO 5599/1 Solenoid valves, we have added the new ISO-M12 series.

These are available in three sizes, size 1, size 2 and size 3 with flow rates from 900 NI/min for size 1 up to the 3600 NI/min for size 3.

The standard features of the ISO valves are still included, however, they are now combined with a M12 electrical connector located in the middle of the valve to manage the electrical signals.

Versions are available to suit valves with both single and double 24VDC solenoids complete with IP65 protection, in addition all version are supplied with LED indicators

**"Shifting time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001, Pneumatic fluid power - Directional control valves - Measurement of shifting time"**

## Electrical characteristics

Electrical connector M12x1

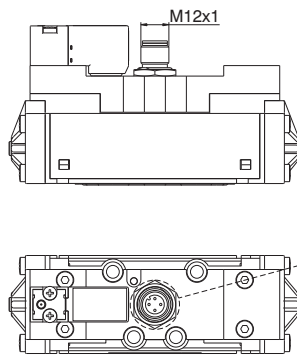
Protection degree IP65

Input voltage 24VDC

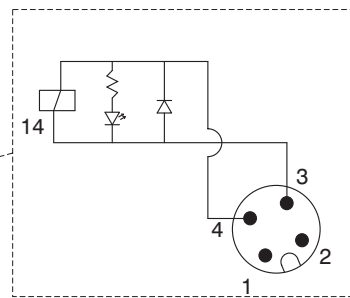
Nominal power 2,3W

LED identification

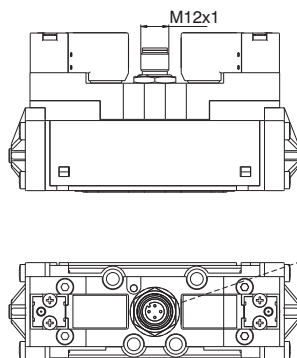
### Monostable version



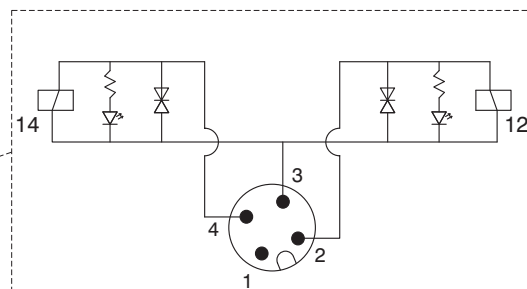
Electrical diagram



### Bistable version

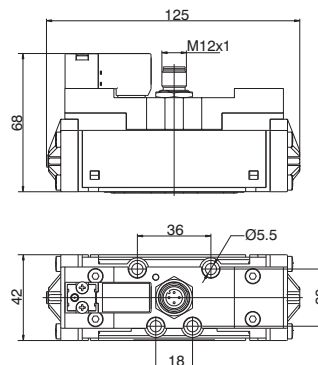


Electrical diagram



### Solenoid - Spring-5/2

Ordering code

**1111.52.3.9.T**
**T** COIL VOLTAGE  
12P=24VDC


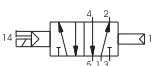
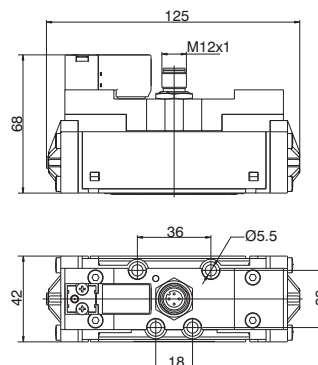
Shifting time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001, Pneumatic fluid power - Directional control valves - Measurement of shifting time.

#### Operational characteristic

Fluid	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Max working pressure (bar)	Minimum piloting pressure (bar)	Weight (gr.)	Temperature °C
Filtered and lubricated air	900	16	122	10	2,5	350	-5 ÷ +50

### Solenoid - Differential-5/2

Ordering code

**1111.52.3.6.T**
**T** COIL VOLTAGE  
12P=24VDC


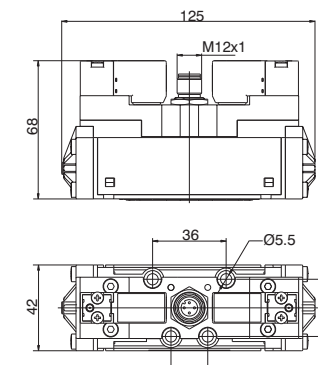
Shifting time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001, Pneumatic fluid power - Directional control valves - Measurement of shifting time.

#### Operational characteristic

Fluid	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Max working pressure (bar)	Minimum piloting pressure (bar)	Weight (gr.)	Temperature °C
Filtered and lubricated air	900	32	51	10	2	356	-5 ÷ +50

### Solenoid-Solenoid-5/2

Ordering code

**1111.52.3.5.T**
**T** COIL VOLTAGE  
12P=24VDC


Shifting time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001, Pneumatic fluid power - Directional control valves - Measurement of shifting time.

#### Operational characteristic

Fluid	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Max working pressure (bar)	Minimum piloting pressure (bar)	Weight (gr.)	Temperature °C
Filtered and lubricated air	900	13	14	10	1,5	390	-5 ÷ +50



Solenoid-Solenoid-5/3 (Closed centres)

Ordering code

1111.53.31.3.5.T

T

COIL VOLTAGE  
12P=24VDC

Shifting time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001, Pneumatic fluid power - Directional control valves - Measurement of shifting time.

Operational characteristic							
Fluid	Flow rate at 6 bar with Δp=1 (Nl/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Max working pressure (bar)	Minimum piloting pressure (bar)	Weight (gr.)	Temperature °C
Filtered and lubricated air	900	18	19	10	3	392	-5 ÷ +50

Solenoid-Solenoid-5/3 (Open centres)

Ordering code

1111.53.32.3.5.T

T

COIL VOLTAGE  
12P=24VDC

Shifting time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001, Pneumatic fluid power - Directional control valves - Measurement of shifting time.

Operational characteristic							
Fluid	Flow rate at 6 bar with Δp=1 (Nl/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Max working pressure (bar)	Minimum piloting pressure (bar)	Weight (gr.)	Temperature °C
Filtered and lubricated air	900	18	20	10	3	392	-5 ÷ +50

Solenoid-Solenoid-5/3 (Pressured centres)

Ordering code

1111.53.33.3.5.T

T

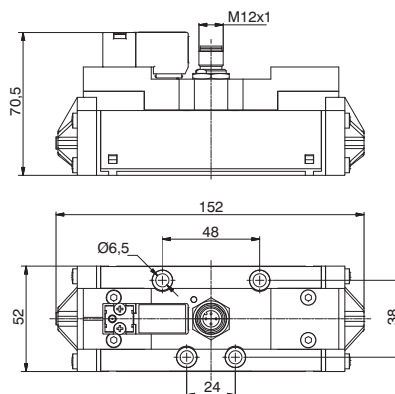
COIL VOLTAGE  
12P=24VDC

Shifting time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001, Pneumatic fluid power - Directional control valves - Measurement of shifting time.

Operational characteristic							
Fluid	Flow rate at 6 bar with Δp=1 (Nl/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Max working pressure (bar)	Minimum piloting pressure (bar)	Weight (gr.)	Temperature °C
Filtered and lubricated air	900	19	18	10	3	392	-5 ÷ +50

**Solenoid - Spring-5/2**

Ordering code

**1112.52.3.9.1**
**T** COIL VOLTAGE  
12P=24VDC


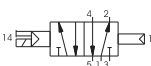
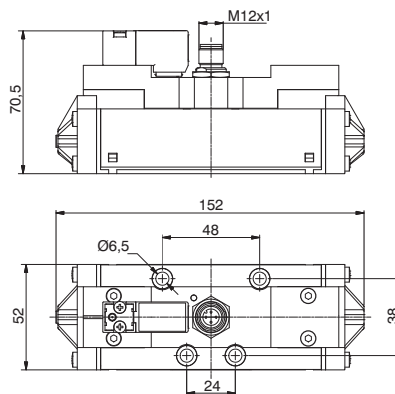
Shifting time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001, Pneumatic fluid power - Directional control valves - Measurement of shifting time.

**Operational characteristic**

Fluid	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Max working pressure (bar)	Minimum piloting pressure (bar)	Weight (gr.)	Temperature °C
Filtered and lubricated air	1600	24	124	10	2,5	510	-5 ÷ +50

**Solenoid - Differential-5/2**

Ordering code

**1112.52.3.6.1**
**T** COIL VOLTAGE  
12P=24VDC


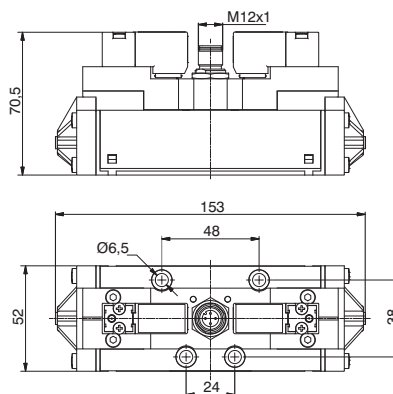
Shifting time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001, Pneumatic fluid power - Directional control valves - Measurement of shifting time.

**Operational characteristic**

Fluid	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Max working pressure (bar)	Minimum piloting pressure (bar)	Weight (gr.)	Temperature °C
Filtered and lubricated air	1600	37	90	10	2	515	-5 ÷ +50

**Solenoid-Solenoid-5/2**

Ordering code

**1112.52.3.5.1**
**T** COIL VOLTAGE  
12P=24VDC


Shifting time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001, Pneumatic fluid power - Directional control valves - Measurement of shifting time.

**Operational characteristic**

Fluid	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Max working pressure (bar)	Minimum piloting pressure (bar)	Weight (gr.)	Temperature °C
Filtered and lubricated air	1600	17	20	10	1,5	550	-5 ÷ +50

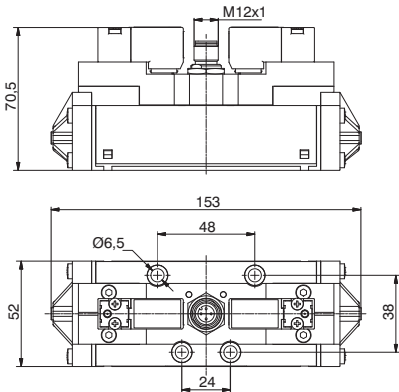
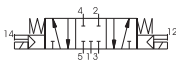


Solenoid-Solenoid-5/3 (Closed centres)

Ordering code

1112.53.31.3.5.T

T COIL VOLTAGE  
12P=24VDC



Shifting time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001, Pneumatic fluid power - Directional control valves - Measurement of shifting time.

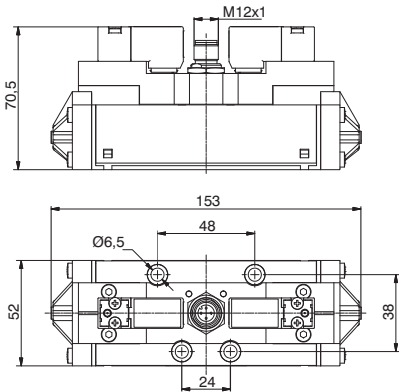
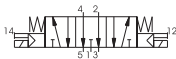
Operational characteristic							
Fluid	Flow rate at 6 bar with $\Delta p=1$ (Nl/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Max working pressure (bar)	Minimum piloting pressure (bar)	Weight (gr.)	Temperature °C
Filtered and lubricated air	1600	18	112	10	3	560	-5 ÷ +50

Solenoid-Solenoid-5/3 (Open centres)

Ordering code

1112.53.32.3.5.T

T COIL VOLTAGE  
12P=24VDC



Shifting time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001, Pneumatic fluid power - Directional control valves - Measurement of shifting time.

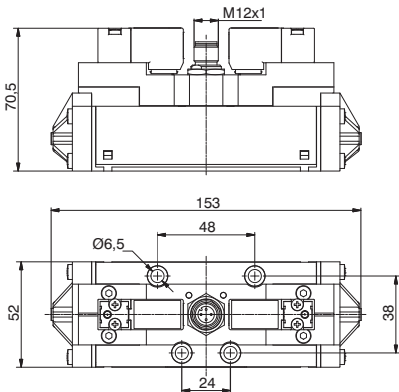
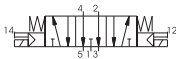
Operational characteristic							
Fluid	Flow rate at 6 bar with $\Delta p=1$ (Nl/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Max working pressure (bar)	Minimum piloting pressure (bar)	Weight (gr.)	Temperature °C
Filtered and lubricated air	1600	18	106	10	3	560	-5 ÷ +50

Solenoid-Solenoid-5/3 (Pressured centres)

Ordering code

1112.53.33.3.5.T

T COIL VOLTAGE  
12P=24VDC

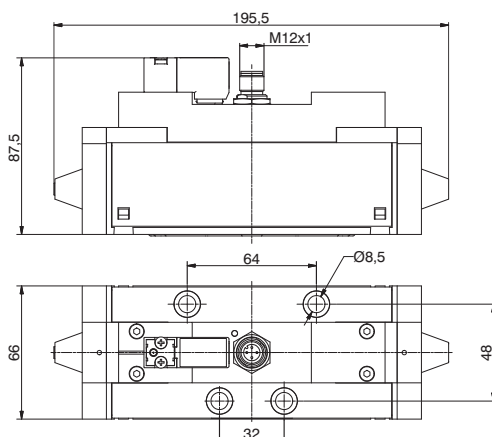


Shifting time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001, Pneumatic fluid power - Directional control valves - Measurement of shifting time.

Operational characteristic							
Fluid	Flow rate at 6 bar with $\Delta p=1$ (Nl/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Max working pressure (bar)	Minimum piloting pressure (bar)	Weight (gr.)	Temperature °C
Filtered and lubricated air	1600	20	118	10	3	560	-5 ÷ +50

### Solenoid - Spring-5/2

Ordering code

**1113.52.3.9.1**
**T** COIL VOLTAGE  
12P=24VDC


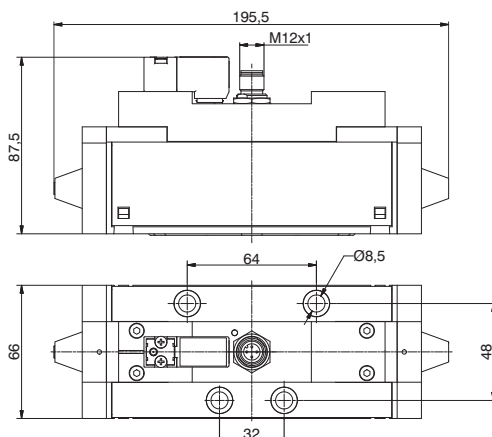
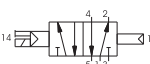
Shifting time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001, Pneumatic fluid power - Directional control valves - Measurement of shifting time.

#### Operational characteristic

Fluid	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Max working pressure (bar)	Minimum piloting pressure (bar)	Weight (gr.)	Temperature °C
Filtered and lubricated air	3600	46	254	10	2,5	1360	-5 ÷ +50

### Solenoid - Differential-5/2

Ordering code

**1113.52.3.6.1**
**T** COIL VOLTAGE  
12P=24VDC


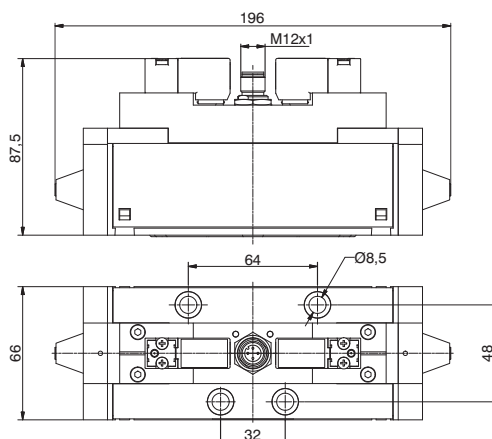
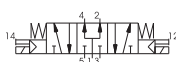
Shifting time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001, Pneumatic fluid power - Directional control valves - Measurement of shifting time.

#### Operational characteristic

Fluid	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Max working pressure (bar)	Minimum piloting pressure (bar)	Weight (gr.)	Temperature °C
Filtered and lubricated air	3600	78	180	10	2	1360	-5 ÷ +50

### Solenoid-Solenoid-5/2

Ordering code

**1113.52.3.5.1**
**T** COIL VOLTAGE  
12P=24VDC


Shifting time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001, Pneumatic fluid power - Directional control valves - Measurement of shifting time.

#### Operational characteristic

Fluid	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Max working pressure (bar)	Minimum piloting pressure (bar)	Weight (gr.)	Temperature °C
Filtered and lubricated air	3600	32	37	10	1,5	1370	-5 ÷ +50

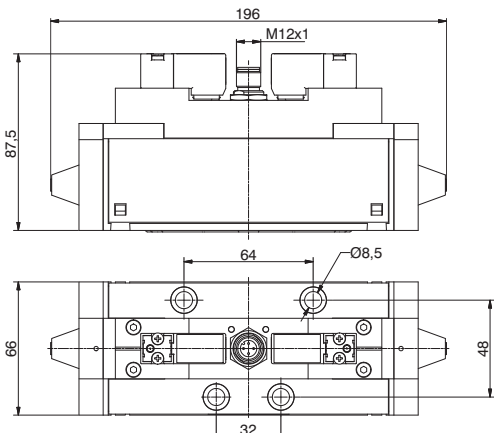
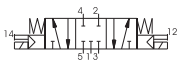


Solenoid-Solenoid-5/3 (Closed centres)

Ordering code

1113.53.31.3.5.T

COIL VOLTAGE  
12P=24VDC



Shifting time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001, Pneumatic fluid power - Directional control valves - Measurement of shifting time.

Operational characteristic

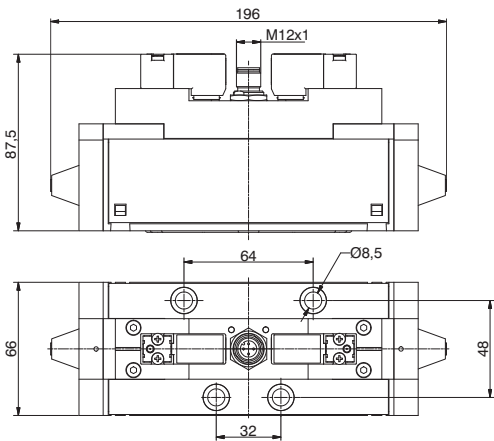
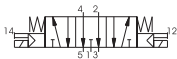
Fluid	Flow rate at 6 bar with $\Delta p=1$ (Nl/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Max working pressure (bar)	Minimum piloting pressure (bar)	Weight (gr.)	Temperature °C
Filtered and lubricated air	3600	30	305	10	3	1380	-5 ÷ +50

Solenoid-Solenoid-5/3 (Open centres)

Ordering code

1113.53.32.3.5.T

COIL VOLTAGE  
12P=24VDC



Shifting time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001, Pneumatic fluid power - Directional control valves - Measurement of shifting time.

Operational characteristic

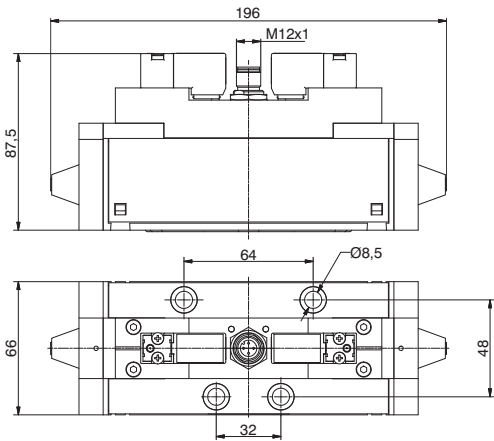
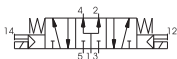
Fluid	Flow rate at 6 bar with $\Delta p=1$ (Nl/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Max working pressure (bar)	Minimum piloting pressure (bar)	Weight (gr.)	Temperature °C
Filtered and lubricated air	3600	30	230	10	3	1380	-5 ÷ +50

Solenoid-Solenoid-5/3 (Pressured centres)

Ordering code

1113.53.33.3.5.T

COIL VOLTAGE  
12P=24VDC



Shifting time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001, Pneumatic fluid power - Directional control valves - Measurement of shifting time.

Operational characteristic

Fluid	Flow rate at 6 bar with $\Delta p=1$ (Nl/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Max working pressure (bar)	Minimum piloting pressure (bar)	Weight (gr.)	Temperature °C
Filtered and lubricated air	3600	32	270	10	3	1380	-5 ÷ +50