



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.

The polyurethane seals are available for oil free operation. In this case, the ordering code becomes::

1001.. becomes 1031 1051.. becomes 1071 1011.. becomes 1021
1002.. becomes 1032 1052.. becomes 1072 1012..becomes 1022
1 013.. becomes 1023

Important: on this type of valves a temperature higher than 40°C along with water or high humidity are causing a progressive reduction of mechanical characteristics of the seals. This chemical reaction (hydrolysis) duration depends by the ambient temperature and in some cases the seal becomes brittle and falls to pieces.

The valves equipped with polyurethane seals are not suitable for tropical climate.

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).

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

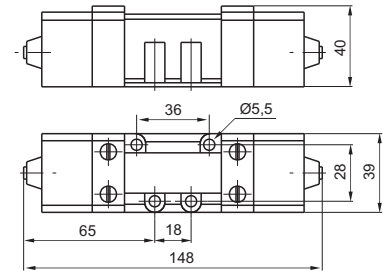
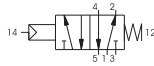


Pneumatic - Spring - 5/2

Ordering code
1001.52.1.9



Weight gr. 780
Minimum operating pressure 2,5 bar



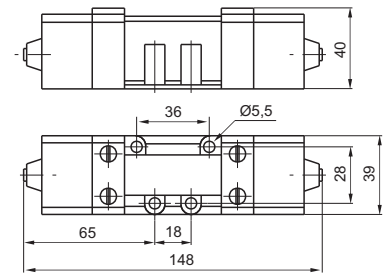
Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)
	Filtered and lubricated air	10	-5 - +70	840

Pneumatic - Differential - 5/2

Ordering code
1001.52.1.6



Weight gr. 790
Minimum operating pressure 2 bar



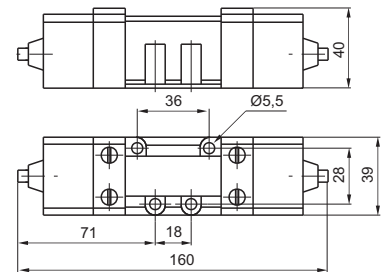
Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)
	Filtered and lubricated air	10	-5 - +70	840

Pneumatic - Pneumatic - 5/2

Ordering code
1001.52.1.8



Weight gr. 800
Minimum operating pressure 1,5 bar



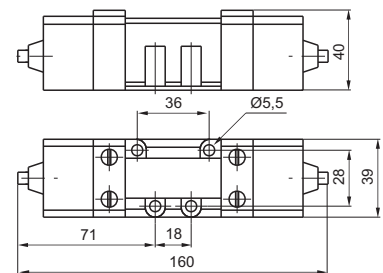
Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)
	Filtered and lubricated air	10	-5 - +70	840

Pneumatic - Pneumatic - 5/3

Ordering code
1001.53.1.8



Weight gr. 800
Minimum operating pressure 3 bar



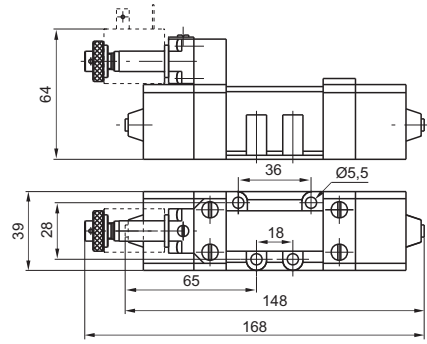
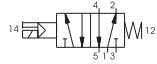
Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)
	Filtered and lubricated air	10	-5 - +70	720

Solenoid - Spring - 5/2

Ordering code
1051.52.3.9.M2



Weight gr. 890
Minimum operating pressure 2,5 bar



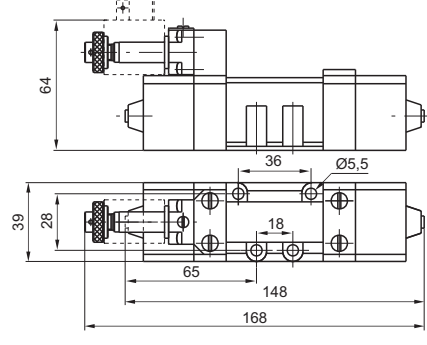
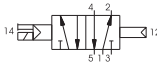
Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)
	Filtered and lubricated air	10	-5 - +50	840

Solenoid - Differential - 5/2

Ordering code
1051.52.3.6.M2



Weight gr. 900
Minimum operating pressure 2 bar



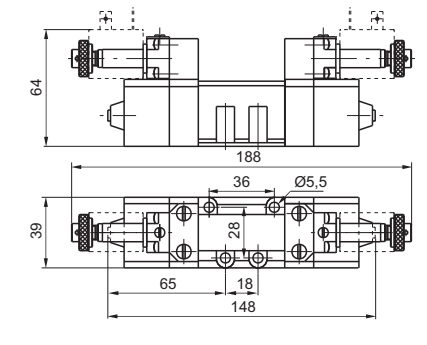
Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)
	Filtered and lubricated air	10	-5 - +50	840

Solenoid - Solenoid - 5/2

Ordering code
1051.52.3.5.M2



Weight gr. 1040
Minimum operating pressure 1,5 bar



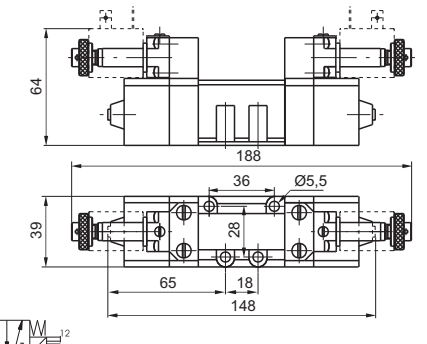
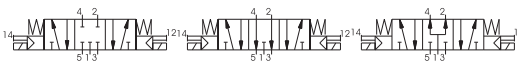
Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)
	Filtered and lubricated air	10	-5 - +50	840

Solenoid - Solenoid - 5/3

Ordering code
1051.53.F.3.5.M2
FUNCTION
F 31 = Closed centres
32 = Open centres
33 = Pressured centres



Weight gr. 1040
Minimum operating pressure 3 bar



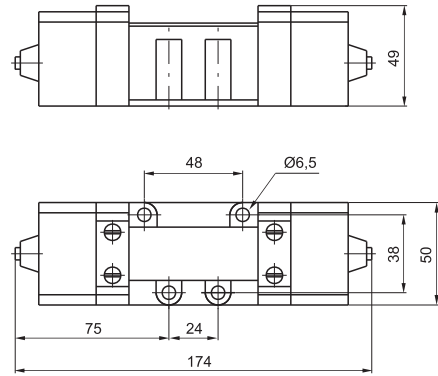
Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)
	Filtered and lubricated air	10	-5 - +50	720

2

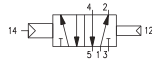
Pneumatic - Differential - 5/2

Ordering code

1002.52.1.6



Weight gr. 730
Minimum operating pressure 2 bar



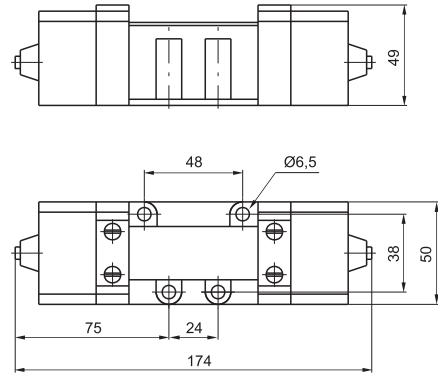
Operational characteristic

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

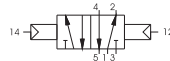
Pneumatic - Pneumatic - 5/2

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 (NI/min)
Filtered and lubricated air	10	-5 - +70	1700

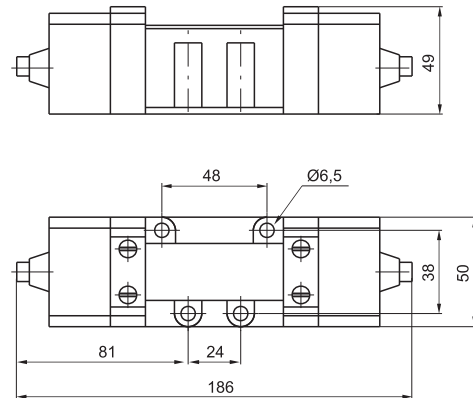
Pneumatic - Pneumatic - 5/3

Ordering code

1002.53.1.8

FUNCTION

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



Weight gr. 740
Minimum operating pressure 3 bar

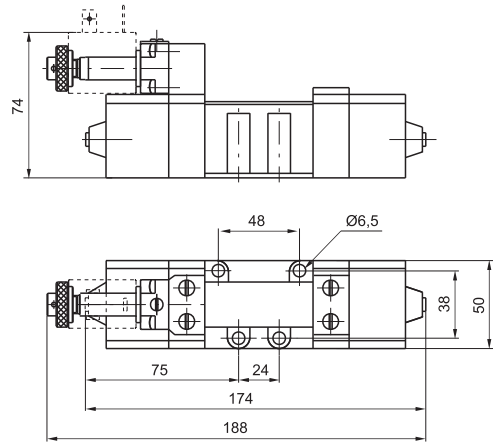


Operational characteristic

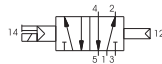
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)
Filtered and lubricated air	10	-5 - +70	1700

Solenoid - Differential - 5/2

Ordering code
1052.52.3.6.M2



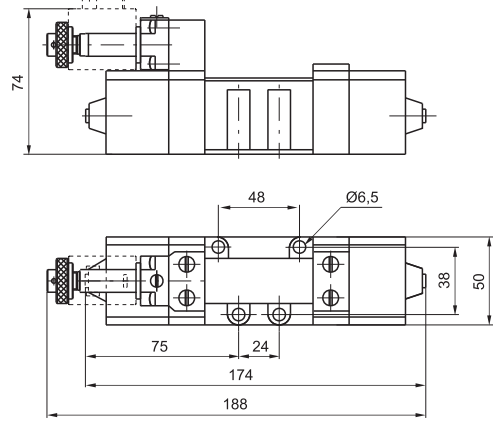
Weight gr. 850
Minimum operating pressure 2 bar



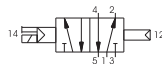
Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)
	Filtered and lubricated air	10	-5 - +50	1700

Solenoid - Solenoid - 5/2

Ordering code
1052.52.3.5.M2



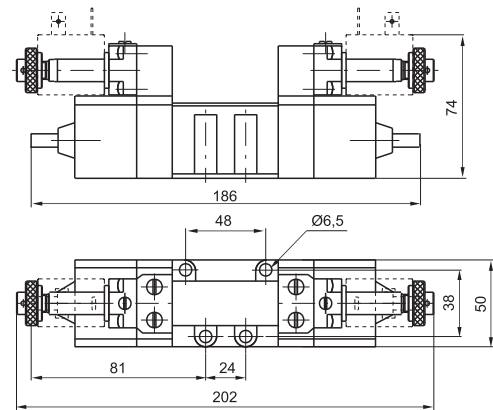
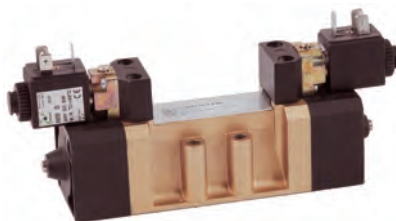
Weight gr. 980
Minimum operating pressure 1,5 bar



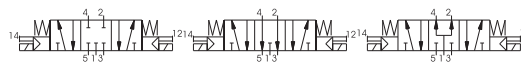
Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)
	Filtered and lubricated air	10	-5 - +50	1700

Solenoid - Solenoid - 5/3

Ordering code
1052.53.3.5.M2
FUNCTION
F 31 = Closed centres
32 = Open centres
33 = Pressured centres



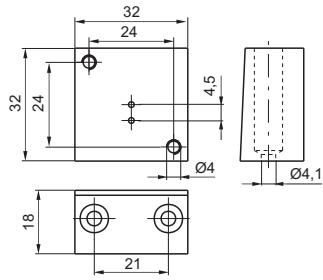
Weight gr. 980
Minimum operating pressure 3 bar



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

2

Base CNOMO for 32 mm Solenoid valve

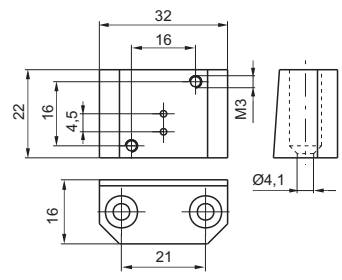


Ordering code

1001.04

Weight gr. 90

Base for 32 mm Solenoid valve

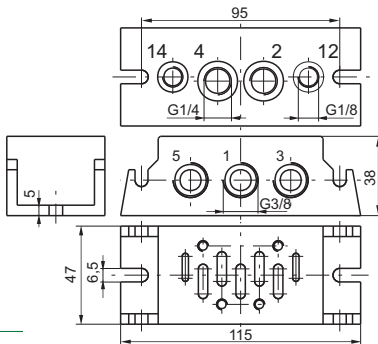


Ordering code

1001.05

Weight gr. 60

Base with bottom connections size 1

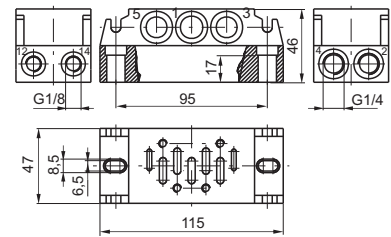


Ordering code

1001.00

Weight gr. 320
1 = INLET PORT 2-4 = OUTLET PORTS
3-5 = EXHAUST PORTS 12-14 = PILOT PORTS

Base with side connections size 1

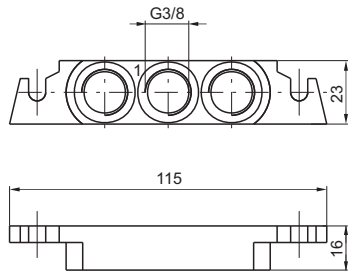


Ordering code

1001.01

Weight gr. 445
1 = INLET PORT 2-4 = OUTLET PORTS
3-5 = EXHAUST PORTS 12-14 = PILOT PORTS

Inlet blocks

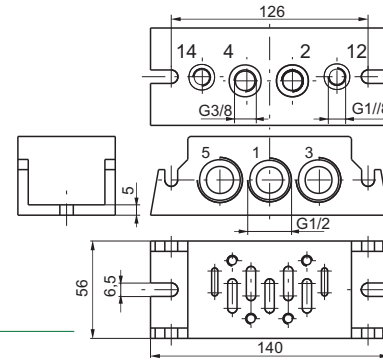


Ordering code

1001.02

Weight gr. 55

Base with bottom connections size 2



Ordering code

1002.00

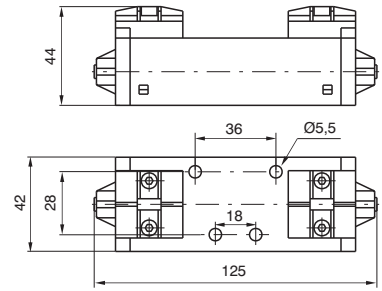
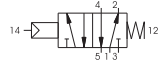
Weight gr. 520
1 = INLET PORT 2-4 = OUTLET PORTS
3-5 = EXHAUST PORTS 12-14 = PILOT PORTS

Pneumatic - Spring - 5/2

Ordering code
1011.52.1.9



Weight gr. 230
Minimum operating pressure 2,5 bar



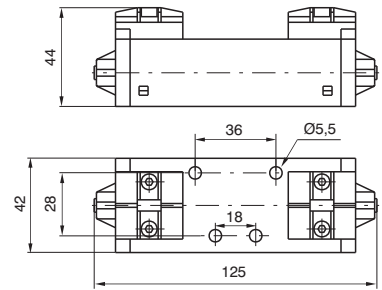
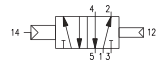
Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)
	Filtered and lubricated air	10	-5 - +50	900

Pneumatic - Differential - 5/2

Ordering code
1011.52.1.6



Weight gr. 240
Minimum operating pressure 2 bar



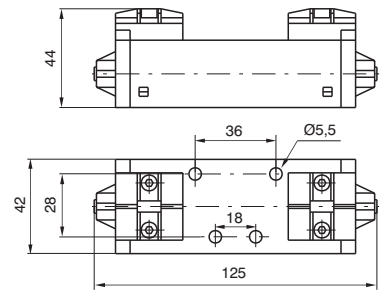
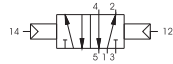
Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)
	Filtered and lubricated air	10	-5 - +50	900

Pneumatic - Pneumatic - 5/2

Ordering code
1011.52.1.8



Weight gr. 240
Minimum operating pressure 1,5 bar



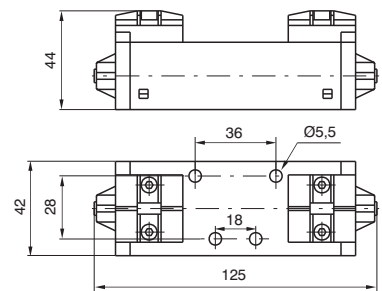
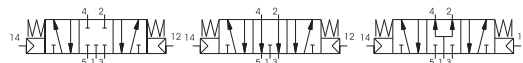
Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)
	Filtered and lubricated air	10	-5 - +50	900

Pneumatic - Pneumatic - 5/3

Ordering code
1011.53.F.1.8
FUNCTION
F 31 = Closed centres
32 = Open centres
33 = Pressured centres



Weight gr. 240
Minimum operating pressure 3 bar

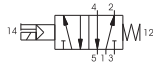


Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)
	Filtered and lubricated air	10	-5 - +50	900

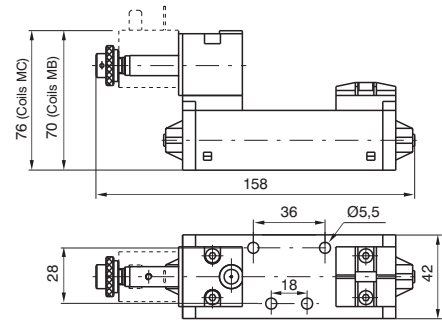
2

Solenoid - Spring - 5/2

Ordering code
1011.52.3.9.M
M MECHANICAL CODE See Valves Series 300 CNOMO



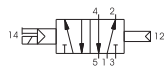
Weight gr. 290
Minimum operating pressure 2,5 bar



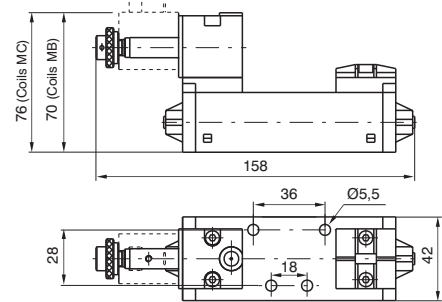
Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)
	Filtered and lubricated air	10	-5 - +50	900

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



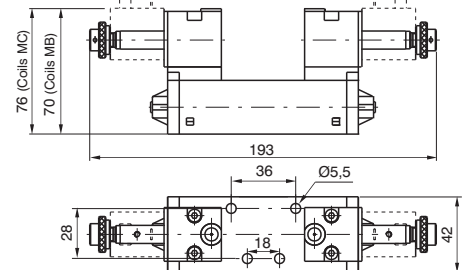
Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)
	Filtered and lubricated air	10	-5 - +50	900

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



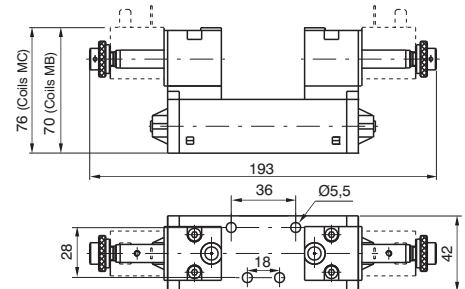
Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)
	Filtered and lubricated air	10	-5 - +50	900

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



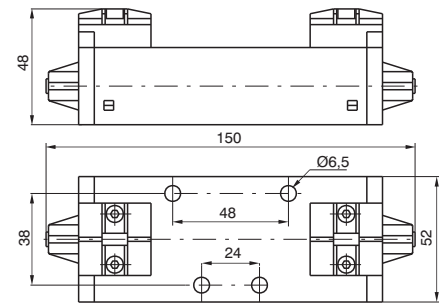
Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)
	Filtered and lubricated air	10	-5 - +50	900

Pneumatic - Spring - 5/2

Ordering code
1012.52.1.9



Weight gr. 300
Minimum operating pressure 2,5 bar



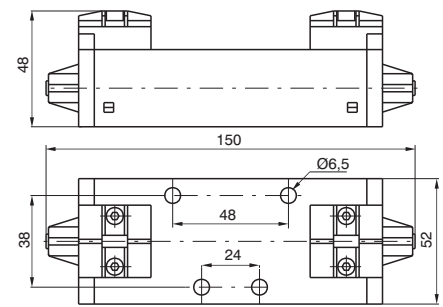
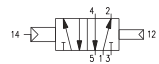
Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)
	Filtered and lubricated air	10	-5 - +50	1600

Pneumatic - Differential - 5/2

Ordering code
1012.52.1.6



Weight gr. 310
Minimum operating pressure 2 bar



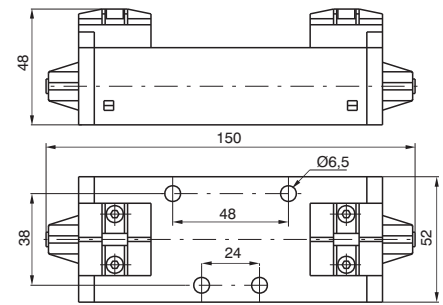
Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)
	Filtered and lubricated air	10	-5 - +50	1600

Pneumatic - Pneumatic - 5/2

Ordering code
1012.52.1.8



Weight gr. 310
Minimum operating pressure 1,5 bar



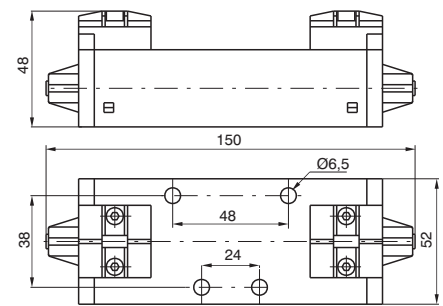
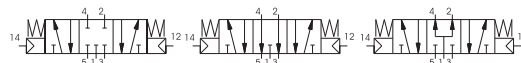
Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)
	Filtered and lubricated air	10	-5 - +50	1600

Pneumatic - Pneumatic - 5/3

Ordering code
1012.53.Ⓢ.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 Δp=1 (NI/min)
	Filtered and lubricated air	10	-5 - +50	1600

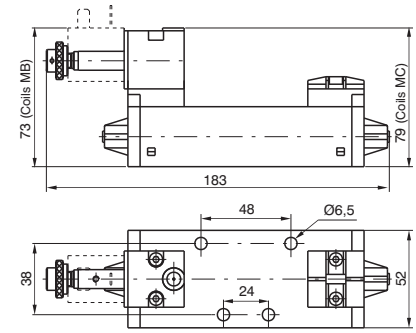
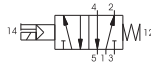
2

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



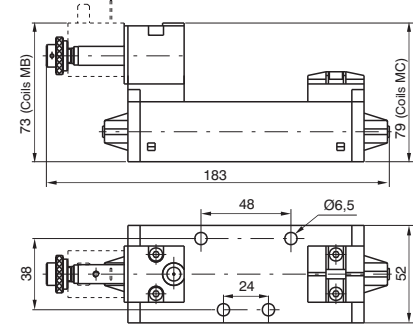
Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)
	Filtered and lubricated air	10	-5 - +50	1600

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



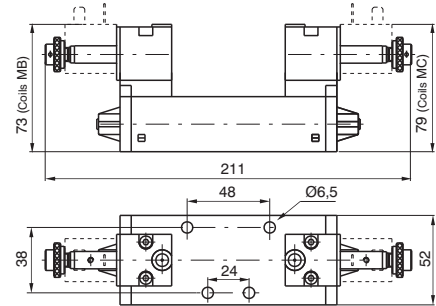
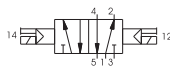
Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)
	Filtered and lubricated air	10	-5 - +50	1600

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



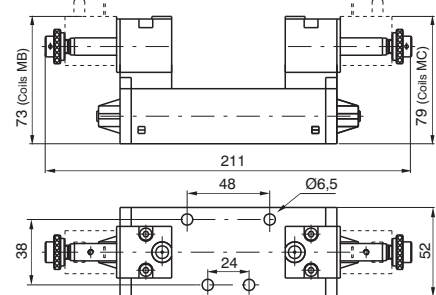
Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)
	Filtered and lubricated air	10	-5 - +50	1600

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



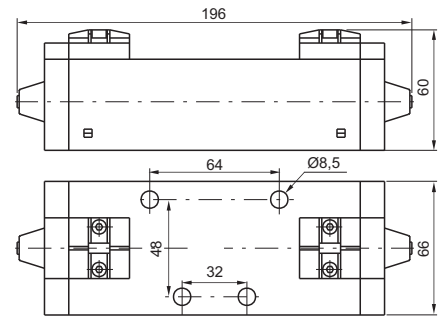
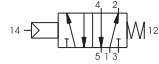
Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)
	Filtered and lubricated air	10	-5 - +50	1600

Pneumatic - Spring - 5/2

Ordering code
1013.52.1.9



Weight gr. 1000
Minimum operating pressure 2,5 bar



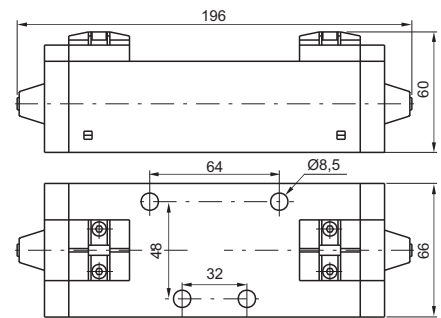
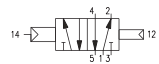
Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)
	Filtered and lubricated air	10	-5 - +50	3600

Pneumatic - Differential - 5/2

Ordering code
1013.52.1.6



Weight gr. 1020
Minimum operating pressure 2 bar



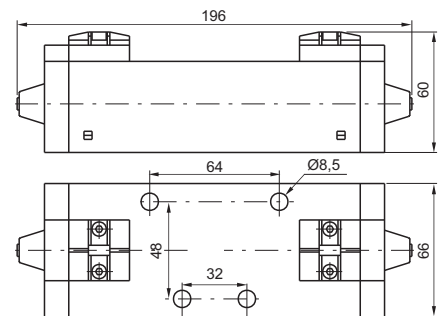
Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)
	Filtered and lubricated air	10	-5 - +50	3600

Pneumatic - Pneumatic - 5/2

Ordering code
1013.52.1.8



Weight gr. 1050
Minimum operating pressure 1,5 bar



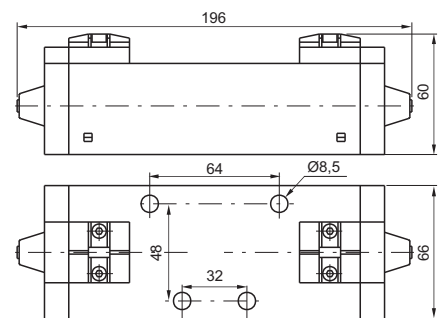
Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)
	Filtered and lubricated air	10	-5 - +50	3600

Pneumatic - Pneumatic - 5/3

Ordering code
1013.53.F.1.8
FUNCTION
F 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 Δp=1 (NI/min)
	Filtered and lubricated air	10	-5 - +50	3000

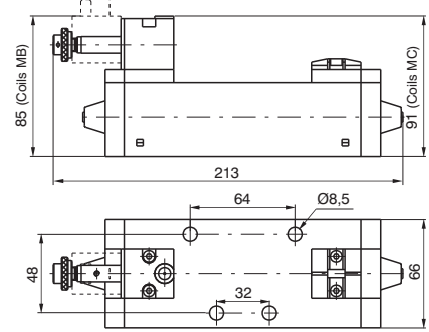
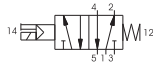
2

Pneumatic - 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



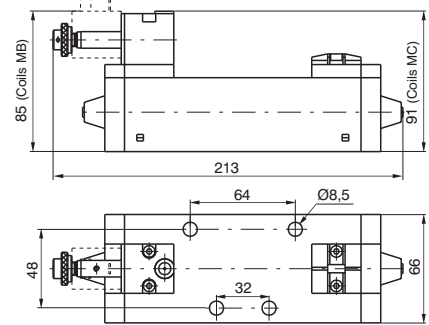
Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)
	Filtered and lubricated air	10	-5 - +50	3600

Pneumatic - 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



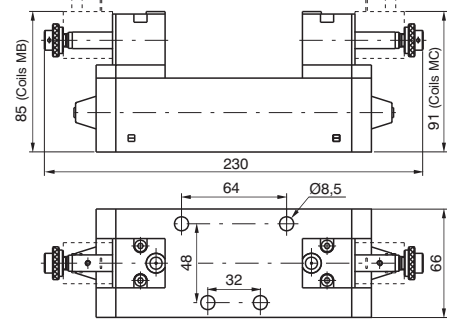
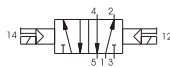
Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)
	Filtered and lubricated air	10	-5 - +50	3600

Pneumatic - Pneumatic - 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



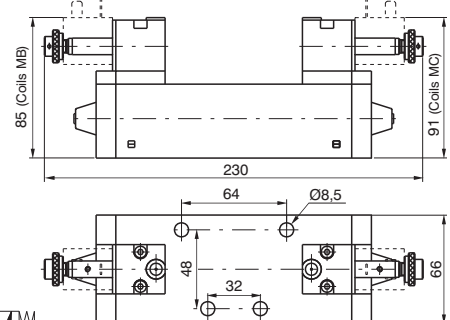
Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)
	Filtered and lubricated air	10	-5 - +50	3600

Pneumatic - Pneumatic - 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 (NI/min)
	Filtered and lubricated air	10	-5 - +50	3000

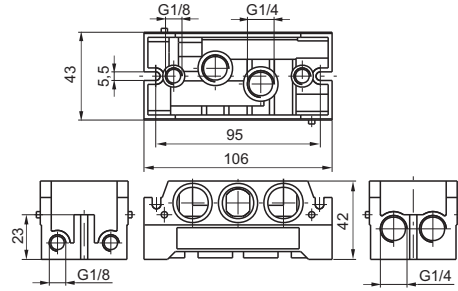


These bases are manufactured with the outlet and pilot ports on both the sides and the bottom faces giving the option for use with any application. Unused ports must be blanked off using threaded plugs which are not included in the part number or price. To isolate bases from each other for use with different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

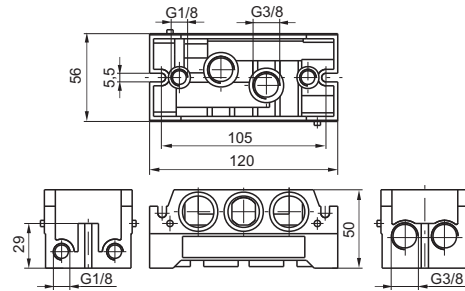


Ordering code

1101.00

Weight gr. 240

Size 2

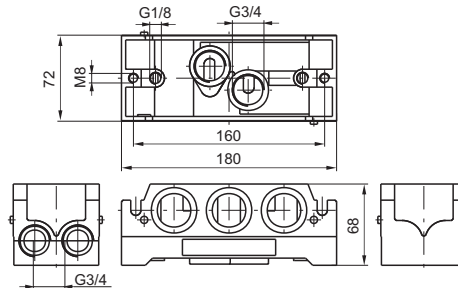


Ordering code

1102.00

Weight gr. 340

Size 3



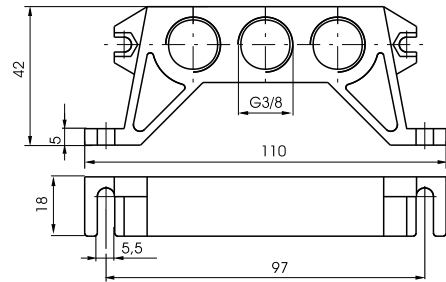
Ordering code

1103.00

Weight gr. 950

2

Size 1



Ordering code

1101.09

Weight gr. 100

Size 1

Ordering code

1101.N

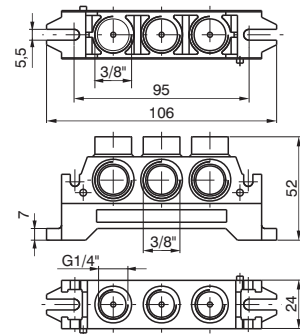
CONNECTIONS

10 = Universal

N 11 = Aligned connections

12 = Top connections

13 = Bottom connections



Size 2

Ordering code

1102.N

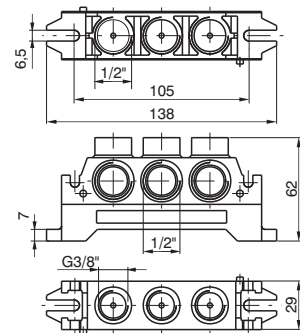
CONNECTIONS

10 = Universal

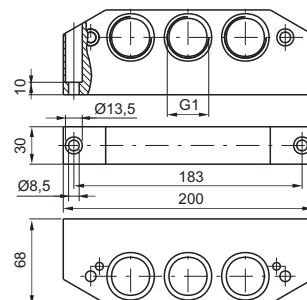
N 11 = Aligned connections

12 = Top connections

13 = Bottom connections



Size 3



Ordering code

1103.11

Weight gr. 840

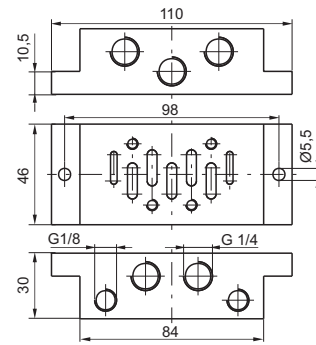
Size 1 - shape "A"

Ordering code

1101.14



Weight gr. 160



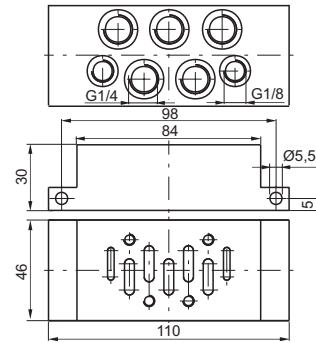
Size 1 - shape "B"

Ordering code

1101.15



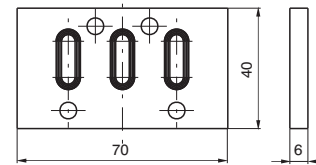
Weight gr. 190



Size 1 - closing plate

Ordering code

1101.16



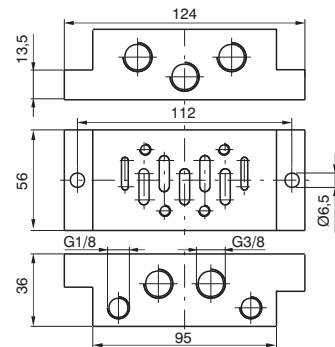
Size 2 - shape "A"

Ordering code

1102.14



Weight gr. 190



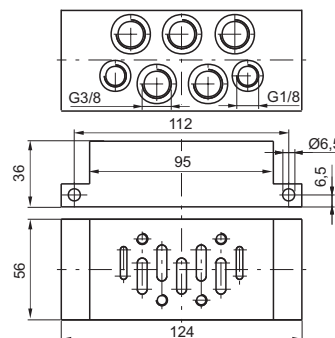
Size 2 - shape "B"

Ordering code

1102.15

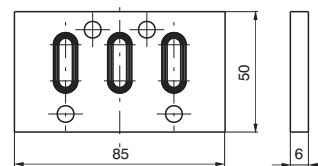


Weight gr. 220



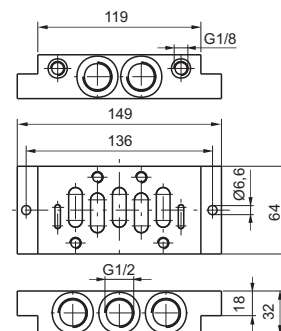
Size 2- closing plate

Ordering code
1102.16



Size 3 - shape "A"

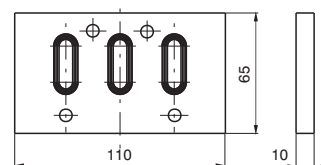
Ordering code
1103.14



Weight gr. 600

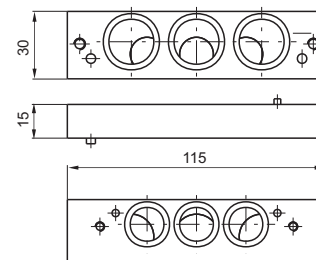
Size 3- closing plate

Ordering code
1103.16



Base adaptor Size 2-1

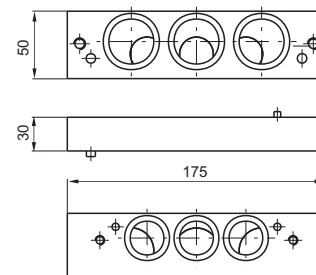
Ordering code
1100.2-1



Weight gr. 110

Base adaptor Size 3-2

Ordering code
1100.3-2



Weight gr. 590

2