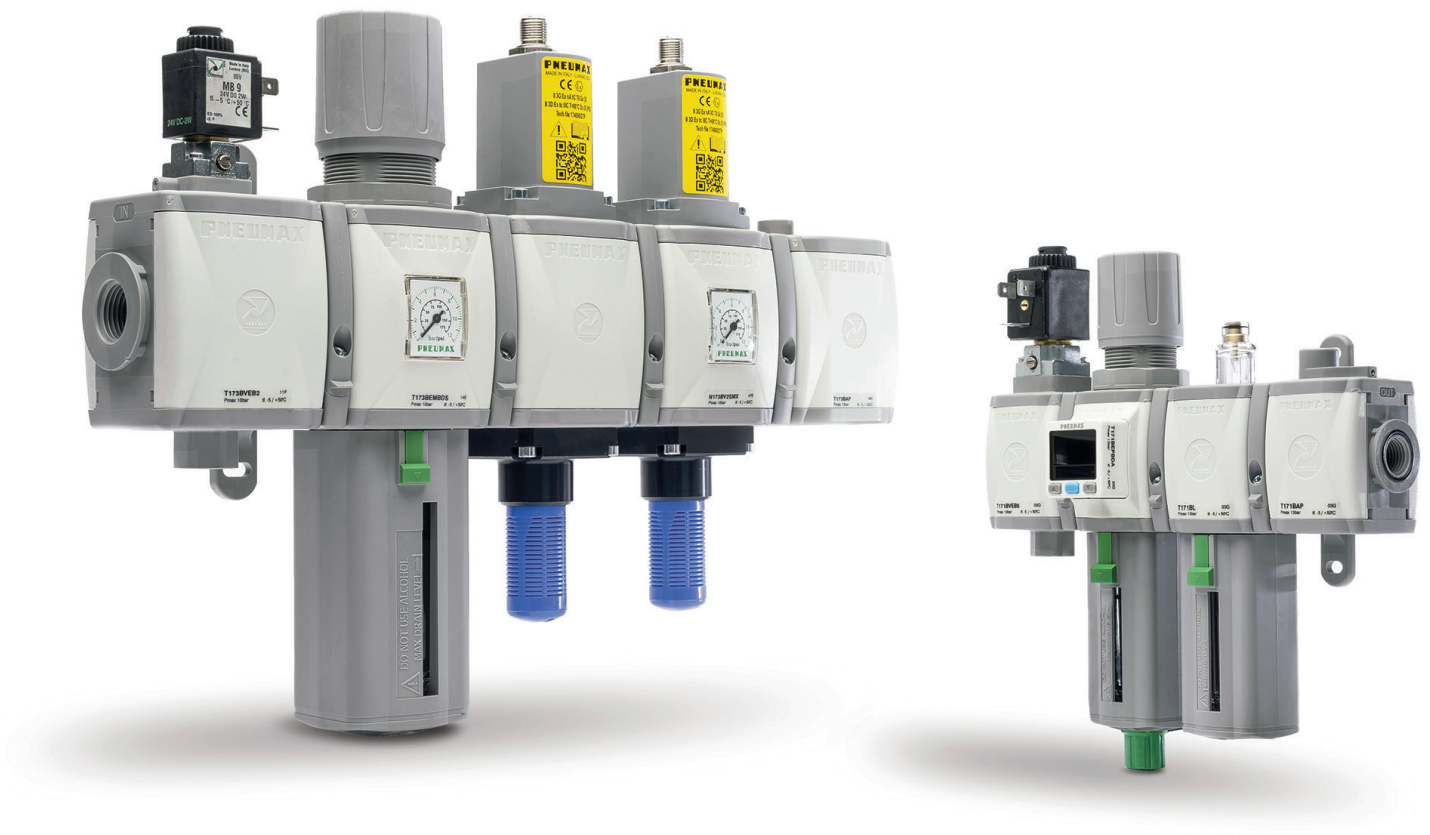




PNEUMAX



SERIES 1700 AIR TREATMENT

Air service units, series 1700

- Modular system
- Available for 4 sizes with connections from 1/8" to 1"
- ATEX certification (II 2GD o II 3GD) on request



2

AIR TREATMENT

Construction and working characteristics

1700 air treatment series includes a wide range of elements for individual use or modular assembling.

Available in 4 sizes e connections from 1/8" to 1".

The bowls are made in zinc alloy body with zinc alloy integrated connections, technopolymer with integrated metal connections for size 1 and aluminium with integrated aluminium connections for sizes 2, 3 and 4.

The bowls are in Nylon, with technopolymer protection for sizes 1, 2, 3 (also available for size 1 without protection). The bowls are in metal with condensation drain display for size 4.

Filters can be equipped with manual or semiautomatic condensation drain; furthermore it's possible to install the automatic draining device inside the bowl.

Wall mounting by means of screws directly through the body and hidden by protective covers.

The pressure regulator handle is lockable in the desired position, the shut-off valves are lockable with a maximum of three pad-locks to prevent accidents or damages due to unauthorized operation.

The lubricator oil flow is adjustable with proper handle and it is visibly checked through the sight dome.

The progressive start-up valve, pneumatically or electropneumatically controlled, allows air supply to the circuit progressively and with adjustable time. The accessories like panel mounted brackets, pressure gauges with different scales and diameters and the air intake blocks are completing the range. They are assembled between the elements to get filtered or filtered non-lubricated air in the system.

Instruction for installation and operation

Pay attention to install a group or a single component with air flow direction according to the arrows and to the following sequence: filter, pressure regulator, lubricator and with bowls downwards. The group can be fixed to the wall by removing the covers, which can be installed again after fixing for covering the screws. Do not exceed the recommended torque while assembling the connectors.

Do not exceed the recommended air pressure and temperature limits. The moisture should not exceed the level marked on the bowl and it can be drawn off and carried by a flexible tube of Ø 6/4 directly connected to the discharge valve handle.

The pressure should be set from minimum to maximum, rotating the adjusting handle clockwise.

As lubricant, we suggest to use oil class FD22 or HG32. Verify that the lubricator is not fed with a flow lower than the minimum operational.

To set the oil flow rotate the proper adjusting handle in order to get one drop of oil every 300-600 liters of air.

The oil flow will be kept automatically and proportionally to the air flow. The oil can be refilled by mean of proper plug or directly into the bowl after having de-pressurized the system. Do not exceed the maximum level indicated on the bowl. For opening the shut-off valve push and rotate clockwise the operating handle. For closing it and consequently discharging the down stream line, rotate the handle counter-clockwise.

Maintenance

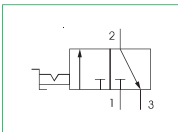
Clean the bowls with water and detergent. Do not use alcohol.

The filter element made with HPDE is reusable by blowing and cleaning it with proper detergent. For replacing or cleaning it, remove the bowl and unscrew the baffle spins.

Replace the pressure regulator diaphragm whenever the operation is not correct or there is a continuous air leaking through the relieving (over pressure discharge); reinstall the adjusting mechanism support, locking it with about 8 Nm torque. In case it is necessary to replace the lubricator transparent dome, tight it at 5 Nm torque maximum.

Shut-off valve


- ▶ 3/2 N.C. poppet valve for opening and exhausting the circuit
- ▶ Allows to pneumatically supply the part of the system downstream of the valve
- ▶ Manual adjusting lockable handle (in shut-off position) with a maximum of three pad-locks
- ▶ Atex certification (II 2GD o II 3GD) on request

2
AIR TREATMENT


Technical characteristics	Size			
	Size 1	Size 2	Size 3	Size 4
Body and connections type	Zinc alloy body, Zinc alloy integrated connections Technopolymer body, metal connections	Aluminium body, integrated aluminium connections		
Operated type	Manual			
IN / OUT connections	G1/4"	G3/8"	G1/2"	G1"
Discharge connections	G1/8"	G1/4"	G3/8"	G1/4"
Assembly configuration	Stand alone Panel mounted with M4 screws	Stand alone Panel mounted with M5 screws	Stand alone Panel mounted with M6 screws	Stand alone Panel mounted with M8 screws
Assembly position	Indifferent			
Max. fittings torque IN / OUT connections	G1/4" metal: 20	G3/8" metal: 25	G1/2" metal: 30	G1" metal: 35

Operational characteristics	Size			
	Size 1	Size 2	Size 3	Size 4
Maximum working pressure (bar)	13			10
Minimum working pressure (bar)	0,5			
Nominal flow rate at 6 bar with Δp=1 (NI/min)	1000	2100	2500	8000
Working temperature (°C)	-5 ÷ +50			

Weights	Size			
	Size 1	Size 2	Size 3	Size 4
Zinc alloy body version (g)	280	/	/	/
Technopolymer body version (g)	155	/	/	/
Aluminium body version (g)	/	380	550	1600

Order codes

17 330 . A

Size, body and connections

030	: Zinc alloy body, connections G1/4" (only for size 1)
130	: Technopolymer body, connections G1/4" (only for size 1)
230	: Aluminium body, connections G3/8" (only for size 2)
330	: Aluminium body, connections G1/2" (only for size 3)
430	: Aluminium body, connections G1" (only for size 4)

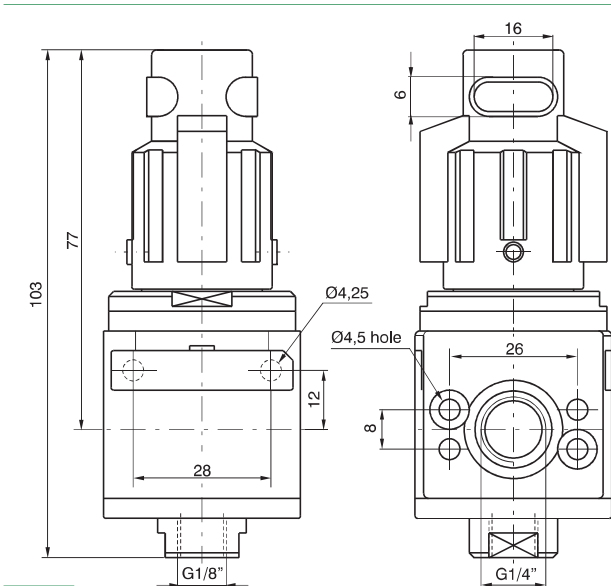
Type

A	: Not lockable handle
B	: Lockable handle

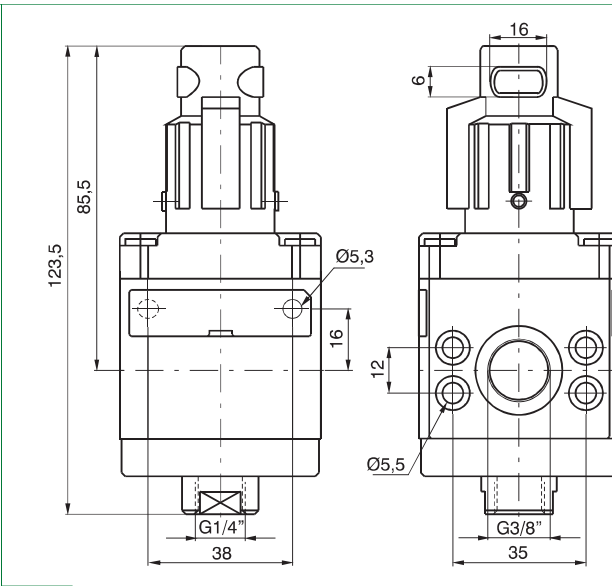
Example: 17330.A

Shut-off valve Size 3, Aluminium body, G1/2" connections, with not lockable handle

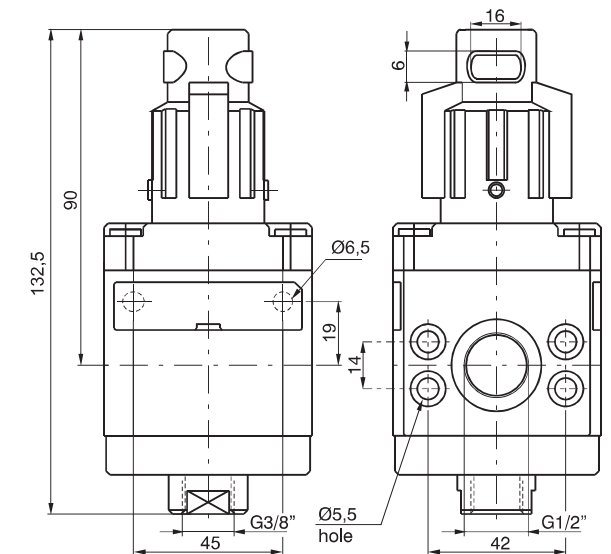
Dimensions



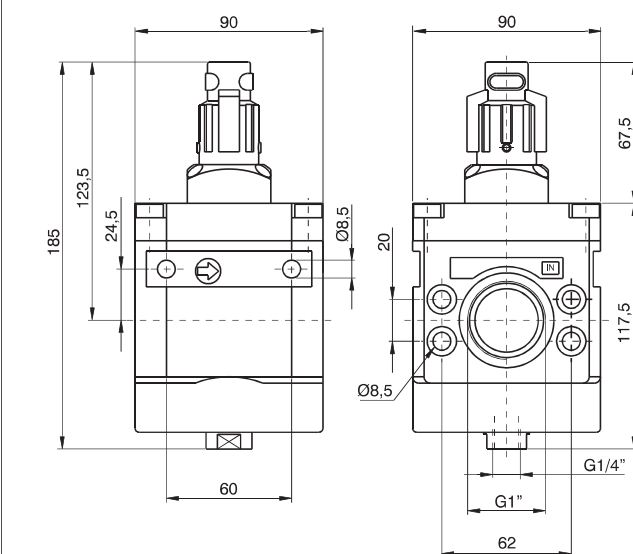
Size 1



Size 2



Size 3

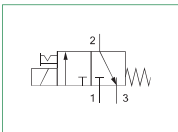


Size 4

2
AIR TREATMENT

Electric shut-off valve


- ▶ 3/2 N.C. poppet valve for entering and exhausting the circuit
- ▶ It allows to pneumatically supply the part of the system downstream of the valve
- ▶ Opening and closing of the valve via solenoid operator
- ▶ The supply pressure must be minimum 2 bars or higher
- ▶ It is possible to produce the external supplied solenoid version by mounting the 305.10.05 between the valve main body and the solenoid pilot valve.
- ▶ The air supply can only be done via port 1
- ▶ Ensure that the downstream air consumption will not cause a pressure drop which could result in the pressure falling below the minimum operating values.
- ▶ If the pressure inside the valve falls below 2 bars , the valve might shut off.
- ▶ Atex certification (II 2GD o II 3GD) on request

2
AIR TREATMENT


Technical characteristics	Size		
	Size 1	Size 2	Size 3
Body and connections type	Zinc alloy body, Zinc alloy integrated connections Technopolymer body, metal connections	Aluminium body, integrated aluminium connections	
Operated type	Electric		
IN / OUT connections	G1/4"	G3/8"	G1/2"
Discharge connections	G1/8"	G1/4"	G3/8"
Assembly configuration	Stand alone Panel mounted with M4 screws	Stand alone Panel mounted with M5 screws	Stand alone Panel mounted with M6 screws
Assembly position	Indifferent		
Max. fittings torque IN / OUT connections	G1/4" metal: 20	G3/8" metal: 25	G1/2" metal: 30

Operational characteristics	Size		
	Size 1	Size 2	Size 3
Maximum working pressure (bar)	10		
Minimum working pressure (bar)	2		
Nominal flow rate at 6 bar with Δp=1 (NI/min)	1000	2100	3200
Working temperature (°C)	-5 ÷ +50		

Weights	Size		
	Size 1	Size 2	Size 3
Zinc alloy body version (g)	345	/	/
Technopolymer body version (g)	215	/	/
Aluminium body version (g)	/	440	680

Order codes

17 330 . M2

Size, body and connections

030 : Zinc alloy body, connections G1/4" (only for size 1)

130 : Technopolymer body, connections G1/4" (only for size 1)

230 : Aluminium body, connections G3/8" (only for size 2)

330 : Aluminium body, connections G1/2" (only for size 3)

Type

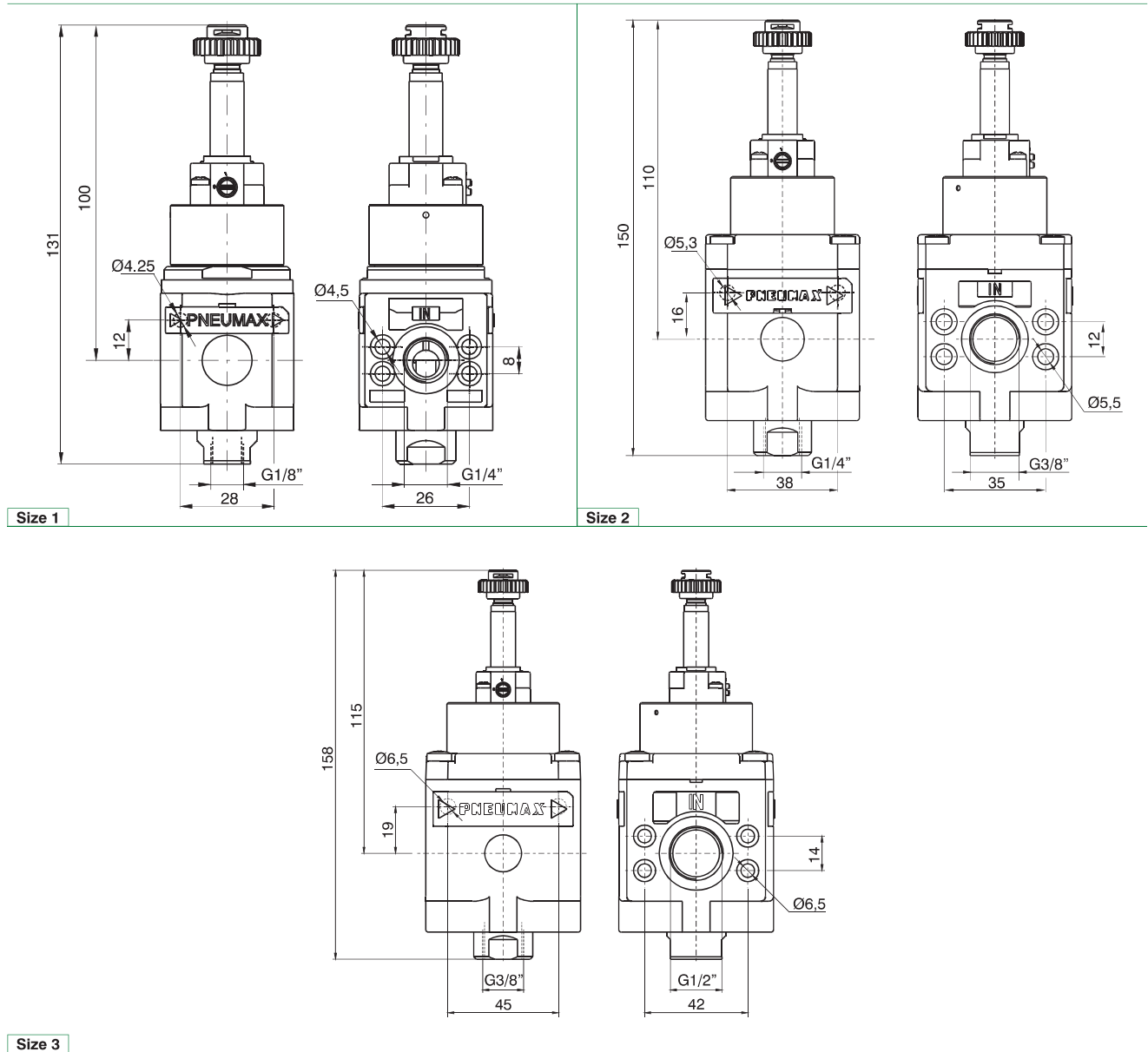
M2 : Electric with M2

M2/9 : Electric with M2/9

Example: 17330.M2

Electric shut-off valve Size 3, Aluminium body, G1/2" connections, electric with M2

Dimensions

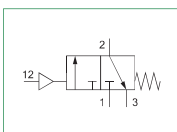


2

AIR TREATMENT


Pneumatic shut-off valve


- ▶ 3/2 N.C. poppet valve for entering and exhausting the circuit
- ▶ It allows to pneumatically supply the part of the system downstream of the valve
- ▶ Opening and closing of the valve via pneumatic operator
- ▶ The piloting pressure must be minimum 2 bar or higher
- ▶ The air supply can only be done via port 1
- ▶ Ensure that the downstream air consumption will not cause a pressure drop which could result in the pressure falling below the minimum operating values
- ▶ If the pressure inside the valve falls below 2 bars , the valve might shut off
- ▶ Atex certification (II 2GD o II 3GD) on request

2
AIR TREATMENT


Technical characteristics	Size		
	Size 1	Size 2	Size 3
Body and connections type	Zinc alloy body, Zinc alloy integrated connections Technopolymer body, metal connections	Aluminium body, integrated aluminium connections	
Operated type	Pneumatic		
IN / OUT connections	G1/4"	G3/8"	G1/2"
Discharge connections	G1/8"	G1/4"	G3/8"
Pilot connections	G1/8"		
Assembly configuration	Stand alone Panel mounted with M4 screws	Stand alone Panel mounted with M5 screws	Stand alone Panel mounted with M6 screws
Assembly position	Indifferent		
Max. fittings torque IN / OUT connections	G1/4" metal: 20	G3/8" metal: 25	G1/2" metal: 30

Operational characteristics	Size		
	Size 1	Size 2	Size 3
Maximum working pressure (bar)	13		
Minimum working pressure (bar)	2		
Piloting pressure (bar)	2		
Nominal flow rate at 6 bar with Δp=1 (NI/min)	1000	2100	3200
Working temperature (°C)	-5 ÷ +50		

Weights	Size		
	Size 1	Size 2	Size 3
Zinc alloy body version (g)	310	/	/
Technopolymer body version (g)	180	/	/
Aluminium body version (g)	/	405	645

Order codes

17 **330** . PN

Size, body and connections

030 : Zinc alloy body, connections G1/4" (only for size 1)

130 : Technopolymer body, connections G1/4" (only for size 1)

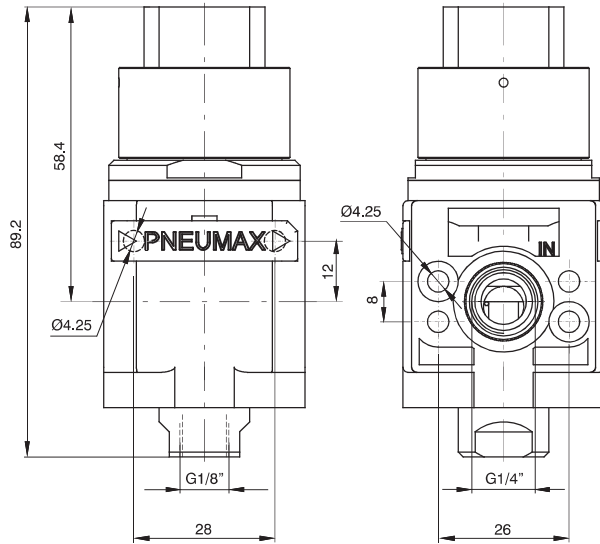
230 : Aluminium body, connections G3/8" (only for size 2)

330 : Aluminium body, connections G1/2" (only for size 3)

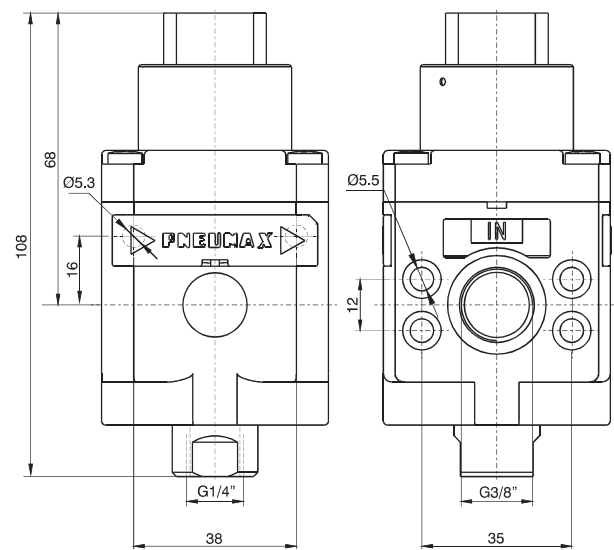
Example: 17330.PN

Pneumatic shut-off valve Size 3, Aluminium body, G1/2" connections, with pneumatic pilot

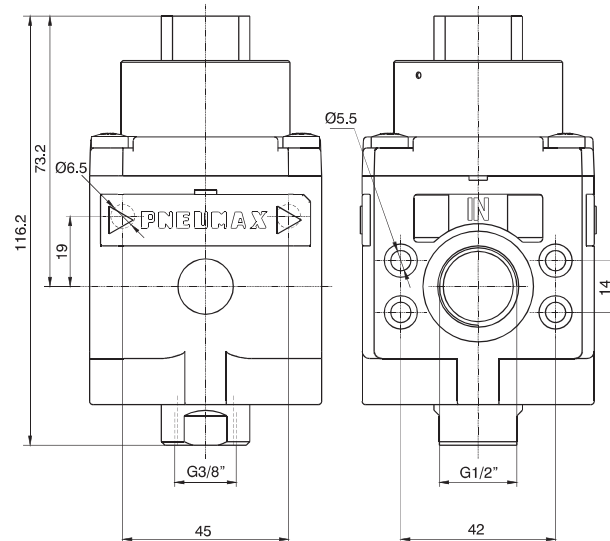
Dimensions



Size 1



Size 2



Size 3

2
AIR TREATMENT