



## Size 4

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### Construction and working characteristics

The modular air service units groups of the size 4, as the other size, allow a wide selection of combinations.

The threaded connections are machined directly on the valve body made with light alloy, so that each components can be used individually.

The wall fixing is done directly with screws through the holes on the body they can be wall mounted.

The bowls are made of transparent technopolymer, always supplied with shock resistant technopolymer protection, allowing the moisture and oil level control from any angle.

The filter can be equipped with manual or semiautomatic water drain valve; furthermore it's possible to install the automatic draining device inside the bowl.

The pressure regulator handle is lockable in the desired position.

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

The shut-off valve can be equipped with pad-lock to prevent accidents or damages due to unauthorized operation.

The progressive start-up valve, pneumatically or electropneumatically controlled, allows air supply to the circuit progressively and with adjustable time.

### 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.

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 away by a flexible tube of  $\varnothing 6/4$  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

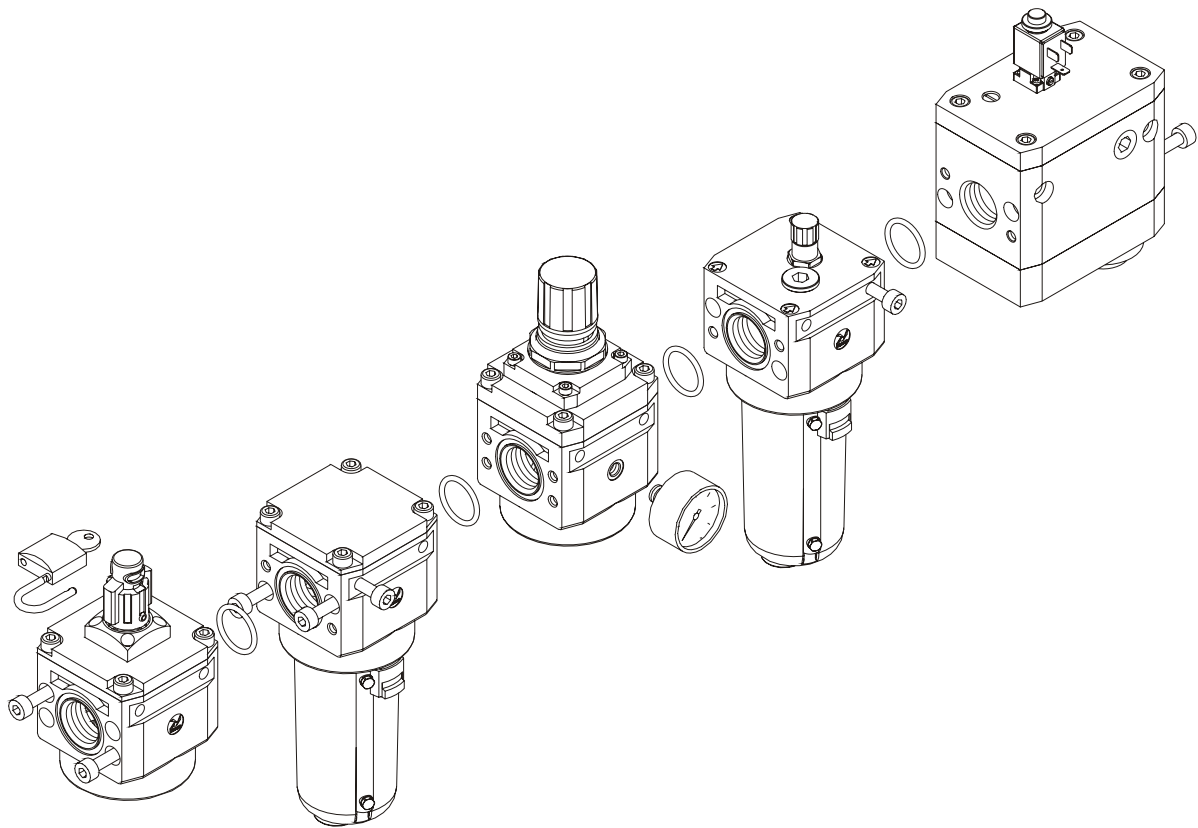
Clean the bowls with water and detergent. Do not use alcohol.

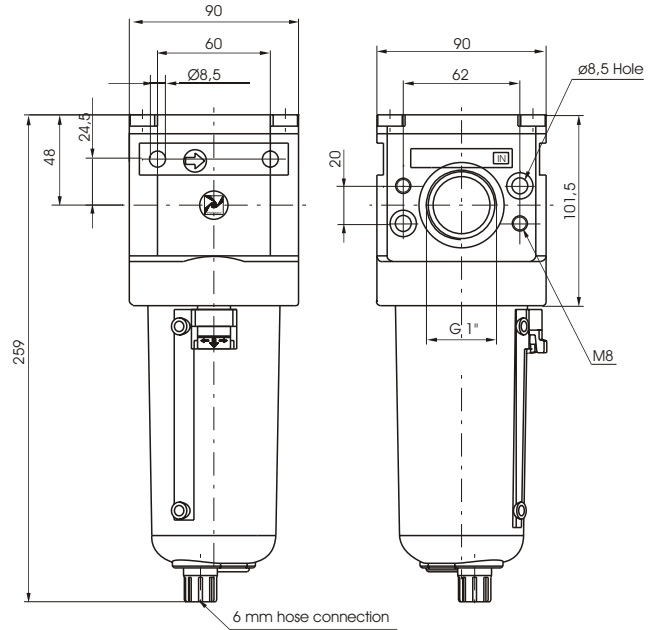
The filter element made with HPDE is reusable by blowing and cleaning it with proper detergent. For replacing or cleaning it, remove the bowl and unscrew the baffle spins.

In case it is necessary to replace the lubricator transparent dome, tight it at 5 Nm torque maximum.



### Assembling





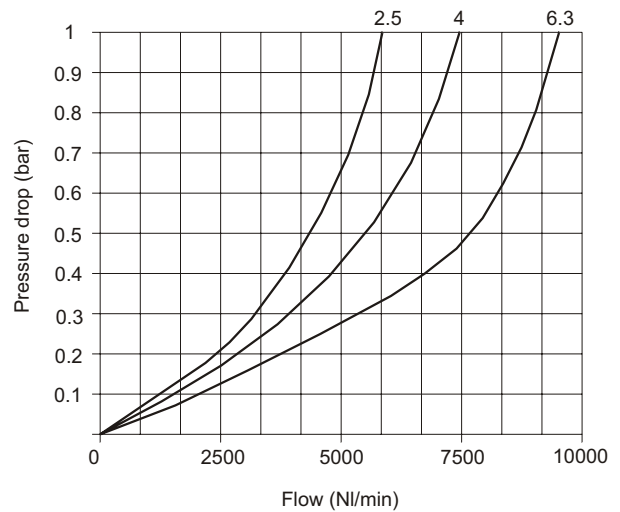
### Construction and working characteristics

- Body made with light alloy.
- Wall mounting possibility with M8 screws protected by covers.
- Double filtering action: by air centrifuging and by replaceable and reusable HDPE porous filter element.
- Light alloy bowl c/w level indicator connected to the body with bayonet cap and safety button.
- Manual and semi-automatic water drain valve; in the semi-automatic version the drainage happens when there is no pressure or by pushing the valve up-wards.
- Automatic water drainage bowl available on request.

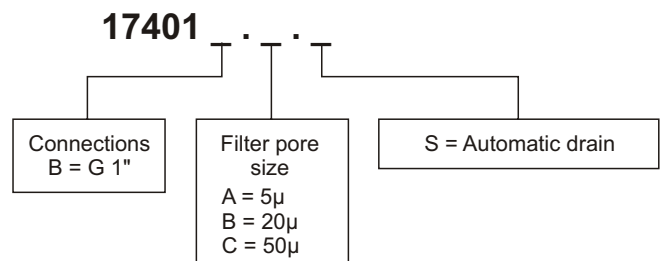
### Technical characteristics

Connections	G 1"
Max. Inlet pressure	13 bar - 1,3 Mpa
Max. ambient temperature (at 10bar)	50°C
Weight	gr. 1700
Filter	5 μ
	20 μ
	50 μ
Bowl capacity	160l
Assembly position	Vertical
Wall fixing screw	M8

Flow rate curves  
Inlet pressure (bar)

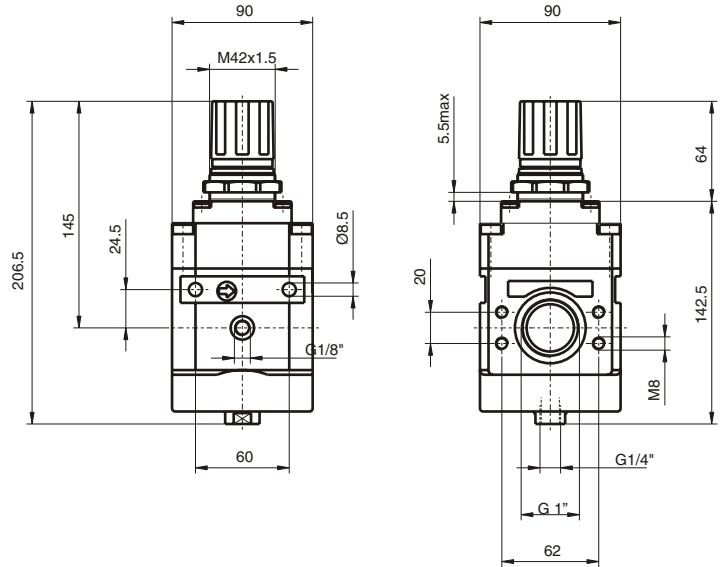


### Ordering code



Example: **17401B.B**  
Filter size 3 with G 1" connections and filter pore size 20μ.





### Construction and working characteristics

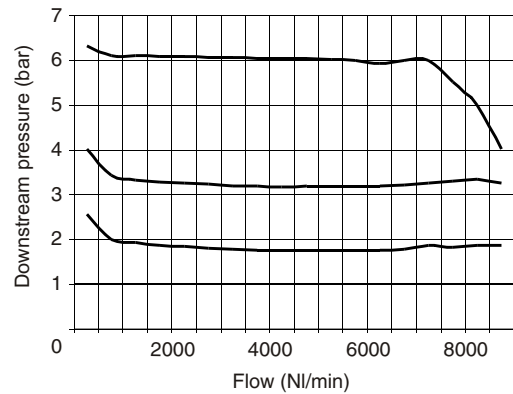
- Sensitivity combined with high relieving rates.
- High flow rate with extremely low pressure drop.
- Pressure adjusting lockable handle by simply pressing it downwards in the desired position.
- Body made with light alloy.
- Two pressure gauge connections with plug complete of seal.
- Ring nut for panel mounting.

### Technical characteristics

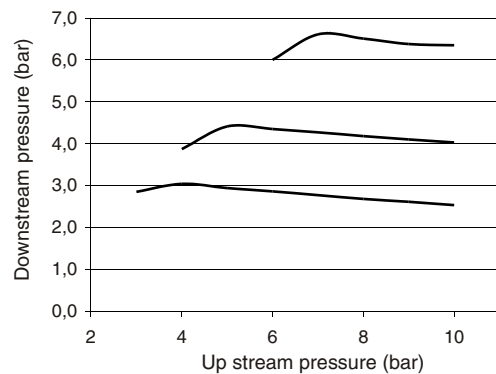
Connections	G 1"
Max. inlet pressure	13 bar - 1,3 MPa
Max. ambient temperature	50°C
Pressure gauge connections	G1/8"
Weight	gr.1900
Pressure range	0 - 2 bar 0 - 4 bar 0 - 8 bar 0 - 12 bar
Assembly position	Any
Wall fixing screws	M8

Flow rate curves

Inlet pressure (7 bar)



Adjustment characteristics



Ordering code

**17402N**

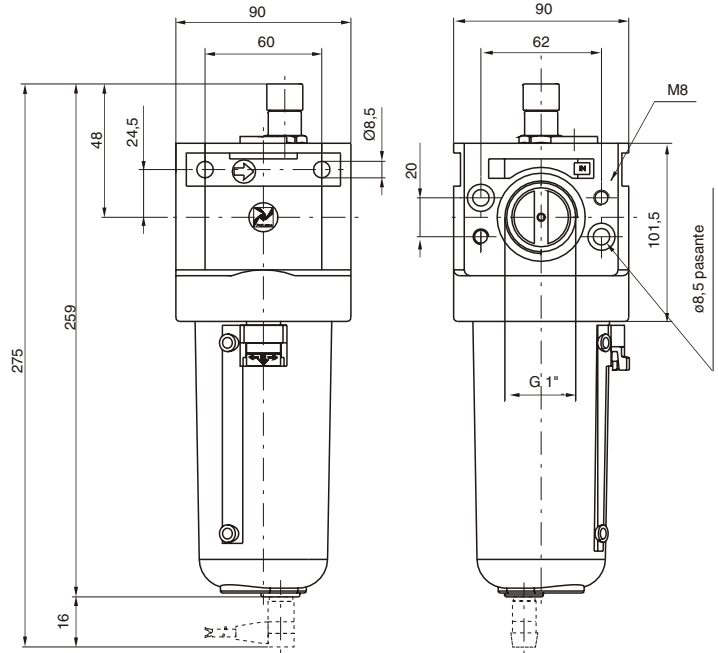
Connections  
B = G 1"

Adjusting range

- A = 0 - 2 bar
- B = 0 - 4 bar
- C = 0 - 8 bar
- D = 0 - 12 bar

Example: **17402NB.C**

Pressure regulator with G 1" connections, adjusting range 0 - 8 bar with relieving.



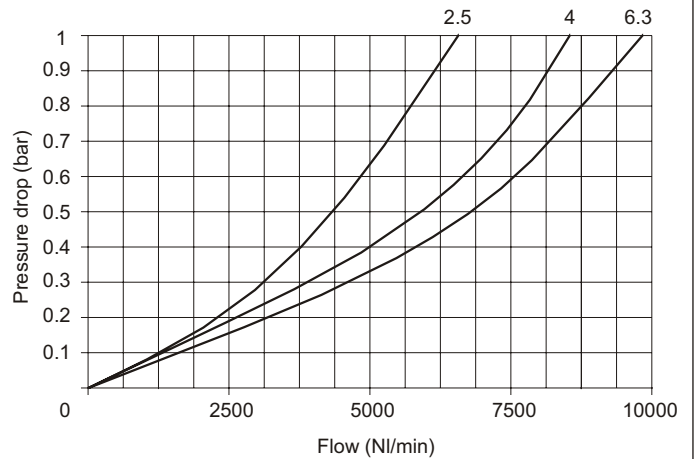
### Construction and working characteristics

- Fog type lubrication with variable section orifice according to the flow.
- Body made with light alloy.
- Wall mounting possibility with M8 screws protected by covers.
- Light alloy bowl c/w level indicator connected to the body with bayonet cap and safety button.
- Transparent technopolymer sight dome with adjusting handle.
- Oil filling plug.
- Electrical connector for low level indication. Use the C1, C2 or C3 lead for connection ( see section 8, catalogue 4 "Cylinders").

### Technical characteristics

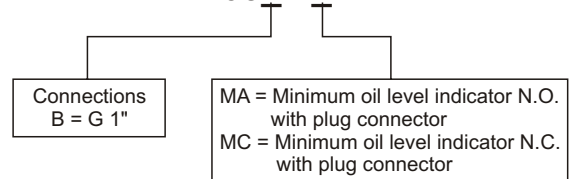
Connections	G 1"
Max. inlet pressure	13 bar - 1,3 MPa
Max. ambient temperature (at 10 bar)	50°C
Weight	gr. 1500
Indicative oil drip rate	1 drop every 300/600 NI
Oil Type	FD22 - Hg32
Bowl capacity	300 cm <sup>3</sup>
Assembly position	Vertical
Wall mounting screws	M8
Min. operational flow (at 6,3 bar)	100 NI/min

Flow rate curves  
Inlet pressure (bar)



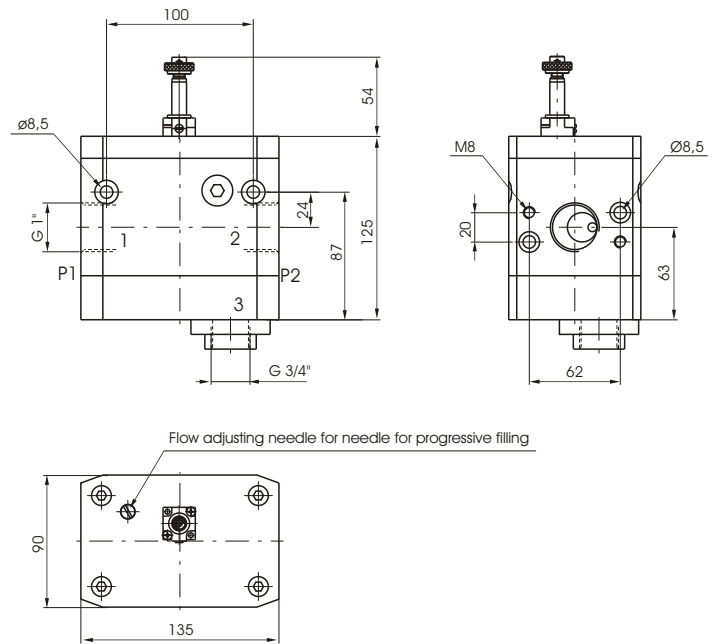
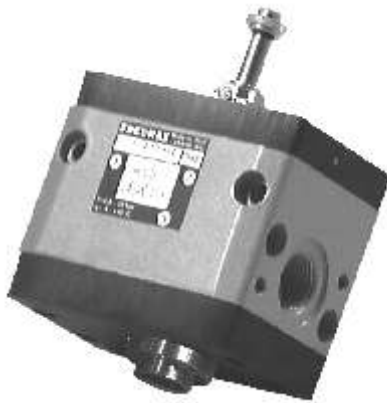
### Ordering code

**17403**



Note: on MA version the contact is open when the bowl is filled  
on MC version the contact is closed when the bowl is filled

Example: **17403B**  
Lubricator with G 1" connections.



### Construction and working characteristics

- 3 way valve with double poppet.
- Possibility to adjust the down stream circuit filling time by the enclosed adjustable metering screw.
- Quick down stream circuit discharge.
- Possibility for a pneumatic or electric piloting control.
- Body made with anodized 2011 aluminum alloy.
- Wall mounting possibility with M8 screws.

**Important note:** the preventive or programmed maintenance of this product is not foreseen considering the elaborated assembling and the specific "PNEUMAX" testing; therefore, call the producer or its representative in case of necessity.

### Technical characteristics

Connections	G 1"
Max. inlet pressure	10 bar - 1 MPa
Max ambient temperature	50°C
Weight	gr. 2300
Assembly position	Any
Wall mounting screws	M8
Min. operating pressure	2.5 bar - 0.25 Mpa
Nominal flow at 6 bar with Dp=1	8000 NI/min
Flow with adjustable metering screw fully open	3000 NI/min

Ordering code

#### 17410.M2

Electrically controlled progressive start-up valve size 4, complete with mechanic for M2 microsolenoid valve.

#### 17420

Progressive start-up valve size 4 with pneumatic control.

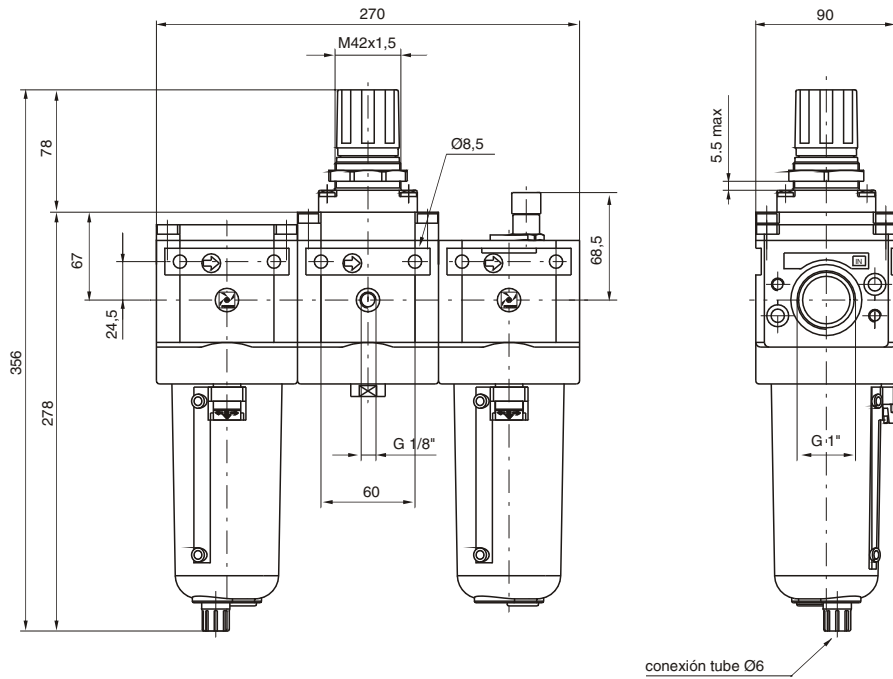


### Construction and working characteristics

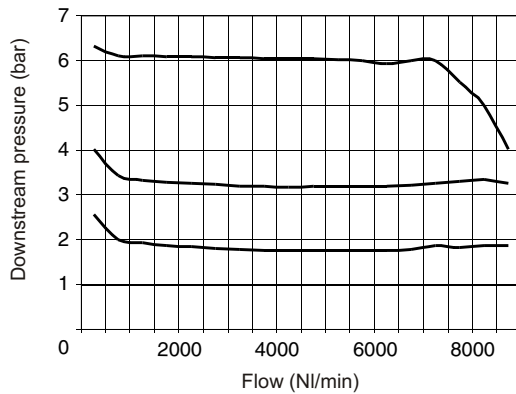
- Filter - diaphragm pressure regulator with relieving.
- Double filtering action: by air centrifuging and by replaceable and reusable HDPE porous filter element.
- Body made with light alloy.
- Wall mounting possibility with M6 screws protected by covers.
- Pressure adjusting lockable handle by simply pressing it downwards in the desired position
- Light alloy bowl c/w level indicator connected to the body with bayonet cap and safety button.
- Manual and semi-automatic water drain valve; in the semi-automatic version the drainage happens when there is no pressure or by pushing the valve up-wards.
- Automatic water drainage bowl available on request.
- Two pressure gauge connections with plug complete of seal.
- Fog type lubrication with variable section orifice according to the flow.
- Transparent technopolymer sight dome with adjusting handle.
- Oil filling plug.

### Technical characteristics

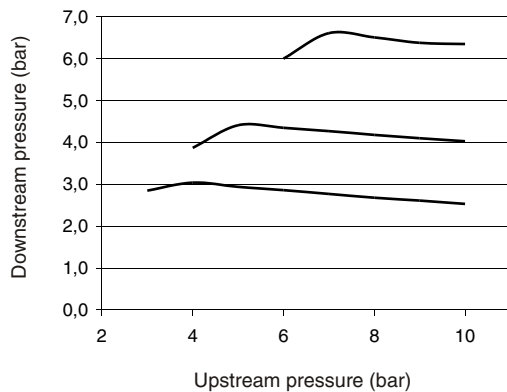
Connections	G 1"
Max inlet pressure	13 bar - 1,3 MPa
Max. ambient temperature (at 10 bar)	50°C
Pressure gauge connections	G 1/8"
Weight	gr. 5300
Pressure range	0 - 2 bar 0 - 4 bar 0 - 8 bar 0 - 12 bar
Filter pore size	5µ 20µ 50µ
Bowl capacity	160 cm <sup>3</sup>
Oil type	FD22 - HG32
Indicative oil drip rate	1 drop every 300/600 NI
Bowl capacity	300 cm <sup>3</sup>
Min operational flow at 6,3 bar	100 NI/min
Assembly position	Vertical
Wall mounting screws	M8



Flow rate curves  
 Inlet Pressure (7 bar)

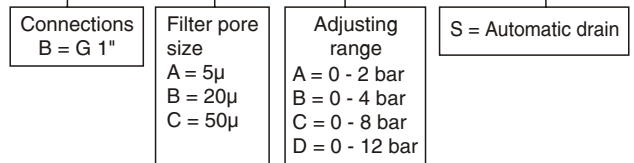


Adjustment characteristics



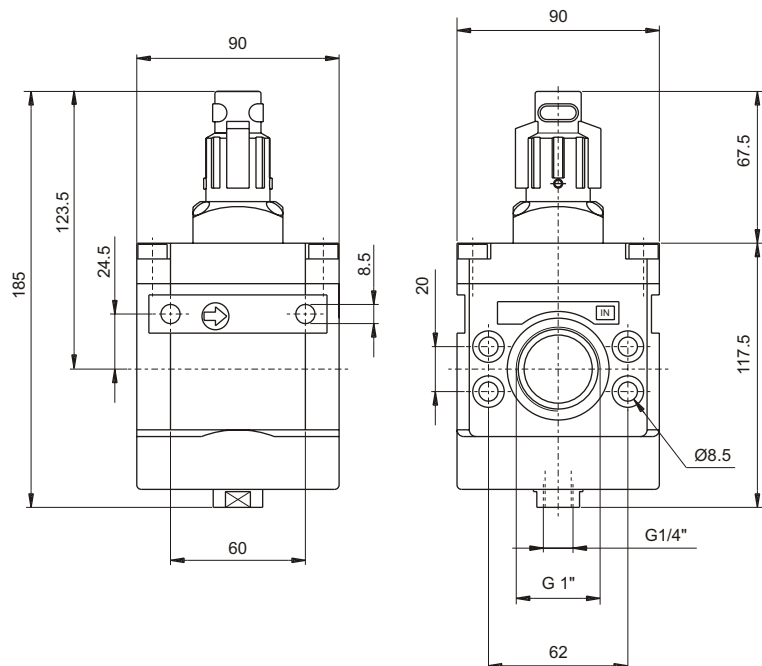
Ordering code

**17407N**



Example: **17407NB.C.S**

Service unit combination complete with filter - pressure regulator and lubricator size 4. G 1" connections, filter pore size 20µ, adjusting range 0-8 bar and automatic drain.



### Construction and working characteristics

- 3 ways poppet valve.
- Body made with light alloy.
- Wall mounting possibility with M8 screws protected by covers.
- Double action handle for valve opening: pushing and rotating (clockwise).
- Simple rotate the valve handle counter clockwise for valve closing and down stream circuit discharging.
- Possibility to lock the valve in the discharging position by fitting in a padlock in the proper seat.

**Important note:** the preventive or programmed maintenance of this product is not foreseen considering the elaborated assembling and the specific "PNEUMAX" testing; therefore, call the producer or its representative in case of necessity.

### Technical characteristics

Connections	G 1"
Max. inlet pressure	13 bar - 1,3 MPa
Max. ambient temperature	50°C
Weight	gr. 1600
Assembly position	Any
Nominal flow at 6 bar with DP=1	8000 NI/min
Wall mounting screws	M8
Handle opening and closing angle	90°
Max. fitting torque	40 Nm

Ordering code

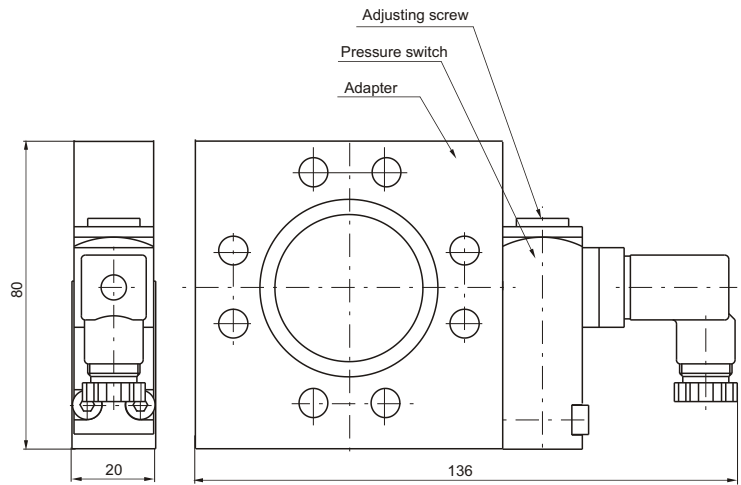
**17430 .**

A = Not lockable handle  
B = Lockable handle

Example: **17430.B**  
Shut-off valve size 4 complete with lockable handle.



**Pressure switch complete with adapter**



**Construction and working characteristics**

The pressure switch complete of adapter has to be assembled between two elements of the FRL group. It cannot be utilized separately or at the end of the FRL group.

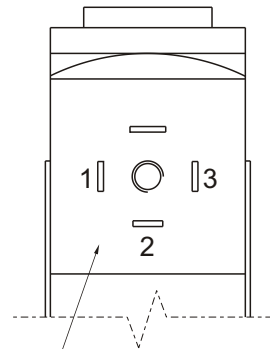
The pressure switch can be set at desired pressure (pressure range from 2 to 10 bar) by rotating the adjusting screw.

The electrical connection is made by mean of a 15 mm connector DIN 43650 type C.

The microswitch contact could be normally closed or open (change over switch).

**Connection**

- 1 = Neutral
- 2 = N.C. contact
- 3 = N.O. contact



Din 43650 type C connector

**Technical characteristics**

Max. inlet pressure	13 bar 1,3 MPa
Max. temperature	50°C
Weight	gr. 450
Microswitch capacity	5A
Grade of protection (with connector assembled)	IP65
Adjusting range	2 - 10 bar
assembly position	Any

**Ordering code**

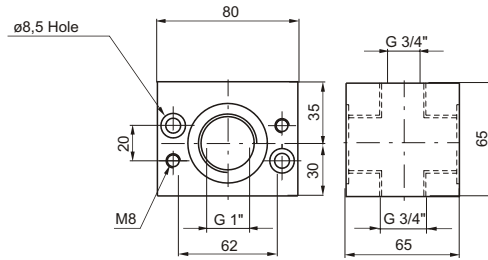
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- 44A = Pressure switch adapter
- 14B = Pressure switch
- 44C = Pressure switch complete with adapter

Example: **1744C**  
Pressure switch complete with adapter.



**Air intake**

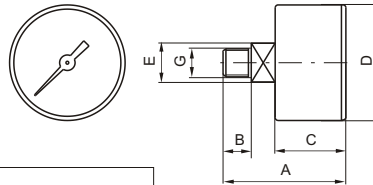


Weight 450 gr.

Ordering code

**17440**

**Pressure gauge**



DIMENSIONS							
CODE	A	B	C	D	E	G	Weight gr.
17070A	44	10	26	41	14	G1/8"	60
17070B	45	10	27	49	14	G1/8"	80

Ordering code

**17070**

A = Dial ø40  
B = Dial ø50

A = Scale 0-4 bar  
B = Scale 0-6 bar  
C = Scale 0-12 bar

**Assembling kit**



Weight 45 gr.

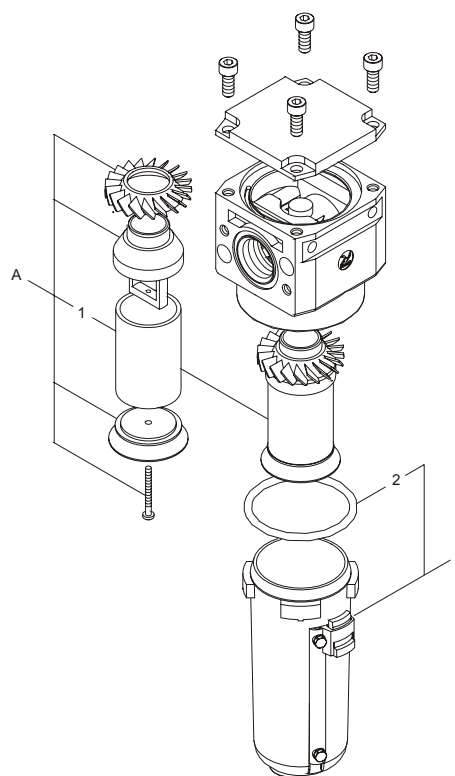
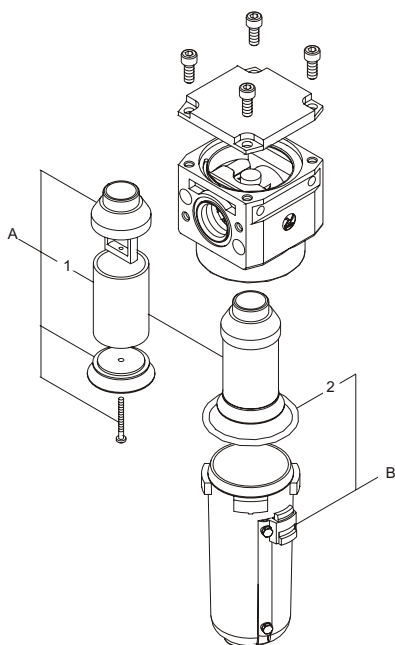
Ordering code

**17460**  
(standard)

**17465**  
(for progressive start-up valve)

### Filter

Pos.	Code	Description
1	RS/1704/13	Porous filter elements 20 $\mu$
1	RS/1704/21	Porous filter elements 5 $\mu$
1	RS/1704/22	Porous filter elements 50 $\mu$
2	RS/OR 6275	Seal
A	RK1704A/004	Filter group assembly 20 $\mu$
A	RK1704A/007	Filter group assembly 5 $\mu$
A	RK1704A/008	Filter group assembly 50 $\mu$
B	RK1704A/002	Filter bowl c/w drain valve



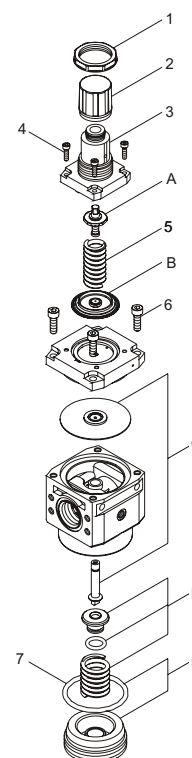
### Coalescing Filter

Pos	Code	Description
1	RS/1704/31	Porous filter element 0,1 $\mu$
2	RS/OR6275	Seal
A	RK1704A/015	Coalescent group 0.1 $\mu$
B	RK1704A/002	Filter bowl c/w drain valve

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### Pressure regular

Pos.	Code	Descrizione
1	RS/1702/12	Lock nut
2	RS/1702/3	Adjusting knob
3	RS/1703/2	Adjusting support
4	RS/TCEI5x18	Screw
5	RS/1703/21	Spring 0 -2 bar range
5	RS/1703/20	Spring 0 -4 bar range
5	RS/1703/19	Spring 0 -8 bar range
5	RS/1703/22	Spring 0 -12 bar range
6	RS/TCIEZ8x25	Central support screws
7	RS/OR 6275	Seal
A	RK1702A/005	Adjusting screw assembly
B	RK1704A/005	Top diaphragm assembly
C	RK1704A/001	Low diaphragm assembly
D	RK1704A/022	Poppet c/w spring
E	RK1704A/023	Plug



## Lubricator

Pos	Code	Descrizione
1	RK1701A/026	Lubricator sight dome assembly
2	RS/OR 2075	Seal
3	RS/1704/19	Venturi diaphragm
4	RS/1704/23	Venturi diaphragm screw
5	RS/1704/28	Oil tube
6	RS/OR 6275	Seal
A	RK1704A/003	Lubricator bowl

