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.

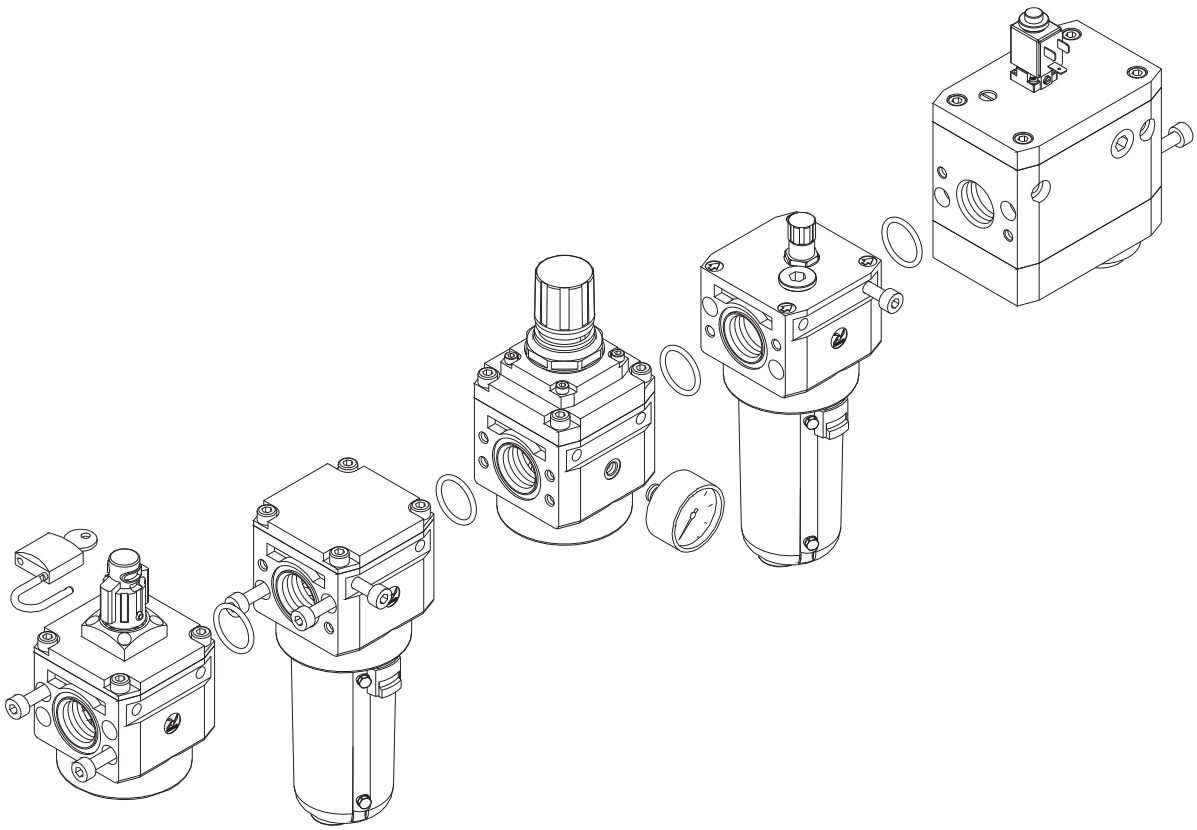
Instruction for installation and operation

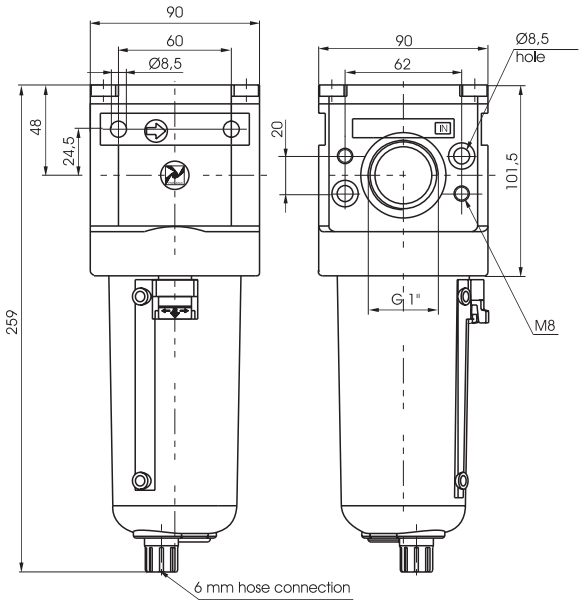
Pay attention to install a group or a single component with air flow direction according to the arrows and to the following sequence: filter, pressure regulator, lubricator and with bowls downwards.
Do not exceed the recommended air pressure and temperature limits.
The moisture should not exceed the level marked on the bowl and it can be drawn off and carried away by a flexible tube of 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.
In case it is necessary to replace the lubricator transparent dome, tight it at 5 Nm torque maximum.

Assembling



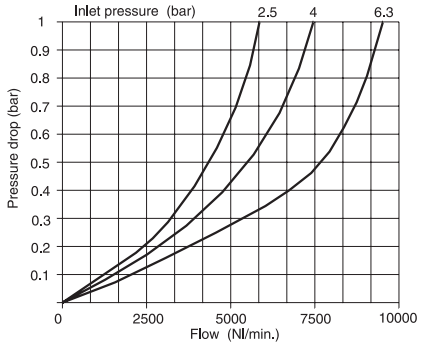


Ordering code	
17401Ⓒ.Ⓢ.Ⓣ	
Ⓒ	CONNECTIONS
	B = G 1"
Ⓢ	Filter pore size
	A = 5
	B = 20
	C = 50
Ⓣ	TYPE
	S = Automatic drain

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

3

Flow rate curves

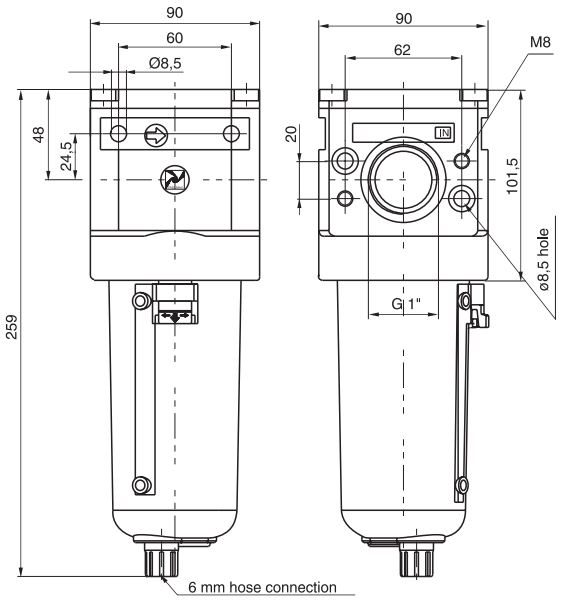


Construction and working characteristics

- 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.

Techical characteristics

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



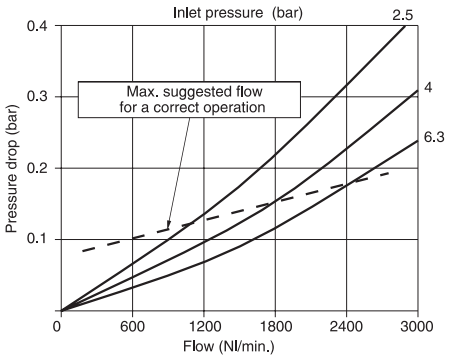
Ordering code

17408Ⓒ.Ⓔ.Ⓣ

Ⓒ	CONNECTIONS
	B = G 1"
Ⓔ	FILTER EFFICIENCY
	E = 99,97%
Ⓣ	TYPE
	S = Automatic drain

Example: 17408B.E
Coalescing filter size 4 with G 1" connections and filter efficiency of 99,97%.

Flow rate curves

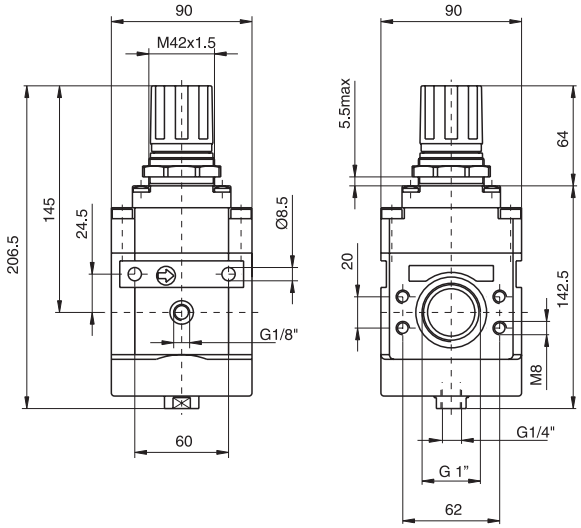


Construction and working characteristics

- Coalescing filter element remove 0,1 particles equivalent to 99,97%.
- 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.
- 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.

Techical characteristics

Connections	G 1"
Max. Inlet pressure	13 bar - 1,3 MPa
Max. ambient temperature (at 10 bar)	50°C
Weight	gr. 1700
Filter efficiency with 0,1 particle	99,97%
Bowl capacity	160 cm^3
Assembly position	Vertical
Wall fixing screw	M8

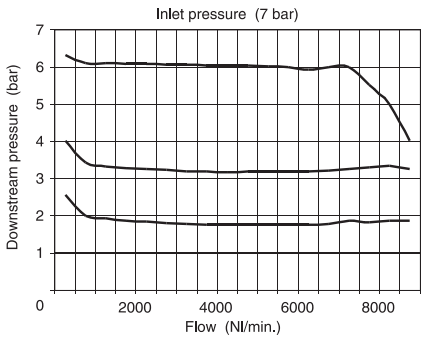


Ordering code	
17402NⒸ.Ⓖ	
Ⓒ	CONNECTIONS
	B = G 1"
Ⓖ	ADJUSTING RANGE
	A = 0 - 2 bar
	B = 0 - 4 bar
	C = 0 - 8 bar
	D = 0 - 12 bar

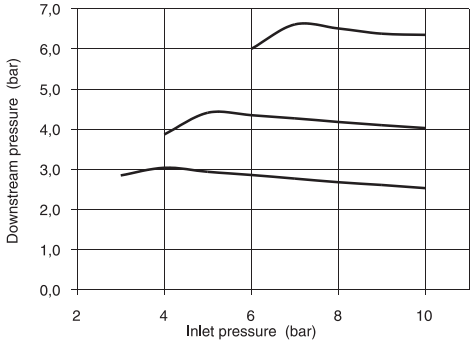
Example: 17402NB.C
Pressure regulator with G 1" connections, adjusting range 0 - 8 bar with relieving.

3

Flow rate curves



Adjustment characteristics

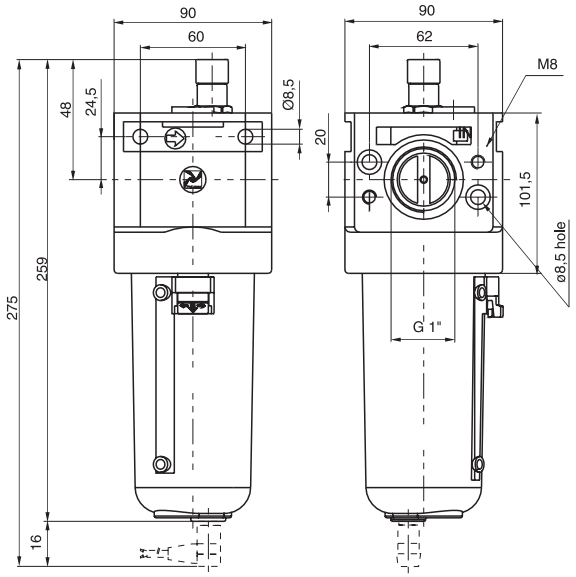


Construction and working characteristics

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

Techical characteristics

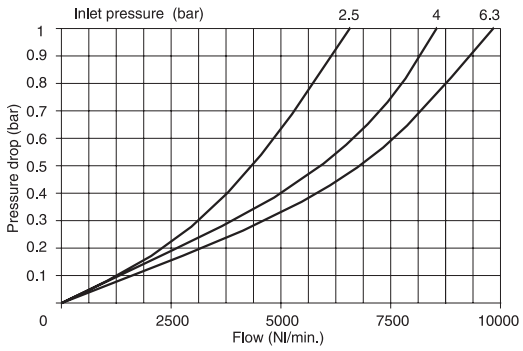
Connections	G 1"
Max. Inlet pressure	13 bar - 1,3 MPa
Max. Inlet pressure	50°C
Pressure gauge connections	G 1/8"
Weight	gr. 1900
Pressure range	0 - 2 bar / 0 - 4 bar 0 - 8 bar / 0 - 12 bar
Assembly position	Any
Wall fixing screw	M8



Ordering code	
17403Ⓒ.Ⓣ	
Ⓒ	CONNECTIONS
	B = G 1"
Ⓣ	TYPE
	MA = Min. oil level indicator N.O.
	MC = Min. oil level indicator N.C.

Example: 17403B
Lubricator with G 1" connections.

Flow rate curves

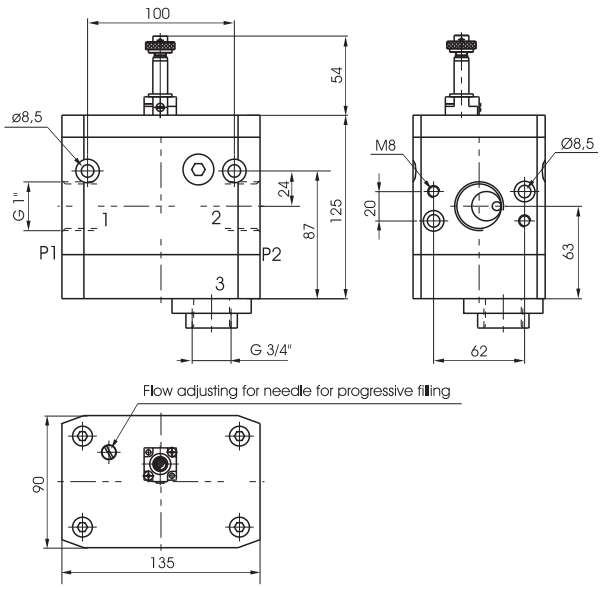


Construction and working characteristics

- 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 "Cylinders").

Techical characteristics

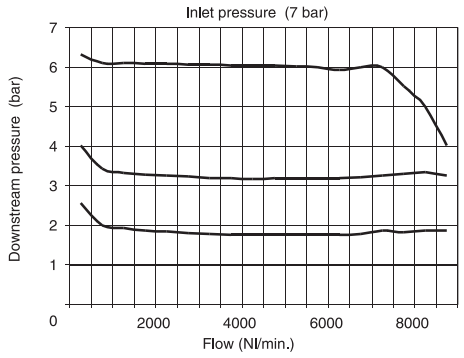
Connections	G 1"
Max. Inlet pressure	13 bar - 1,3 MPa
Max. Inlet pressure	50°C
Weight	gr. 1500
Indicative oil drip rate	1 drop every 300/600 Nl
Oil type	FD22 - HG32
Bowl capacity	300 cm^3
Assembly position	Vertical
Wall fixing screw	M8
Min. operational flow at 6,3 bar	100 Nl/min



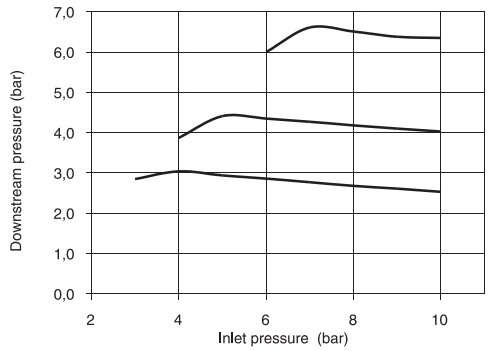
Ordering code	
174.T	
T	TYPE
	10.M2 = Electric control complete wih M2 mechanic
	20 = with pneumatic control

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.

Flow rate curves



Adjustment characteristics

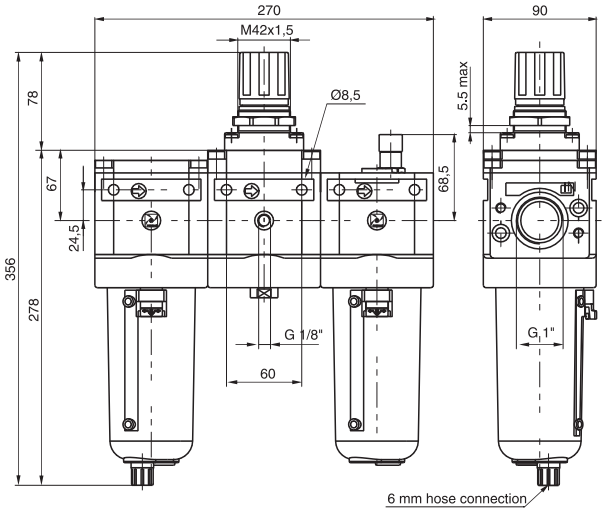


Construction and working characteristics

- 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.

Techical characteristics

Connections	G 1"
Max. Inlet pressure	10 bar - 1 MPa
Max. Inlet pressure	50°C
Weight	gr. 2300
Assembly position	Any
Wall fixing screw	M8
Min. operating pressure	2,5 bar - 0,25 MPa
Nominal flow at 6 bar with p=1	80000 Nl/min.
Flow with adjustable metering screw fully open	3000 Nl/min.



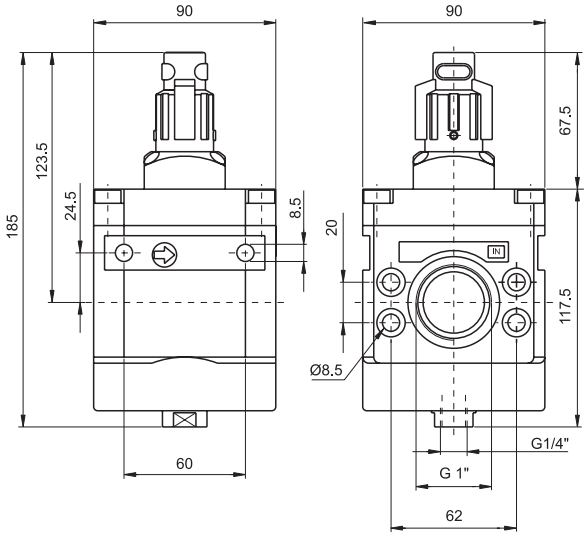
Ordering code	
17407NⒸ.Ⓢ.Ⓖ.Ⓣ	
Ⓒ	CONNECTIONS
	B = G 1"
Ⓢ	Filter pore size
	A = 5
	B = 20
	C = 50
Ⓖ	ADJUSTING RANGE
	A = 0 - 2 bar
	B = 0 - 4 bar
	C = 0 - 8 bar
	D = 0 - 12 bar
Ⓣ	TYPE
	S = Automatic drain

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.

Techical characteristics

Connections	G 1"
Max. Inlet pressure	13 bar - 1,3 MPa
Max. Inlet pressure	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	5 - 20 - 50
Bowl capacity	160 cm^3
Indicative oil drip rate	1 drop every 300/600 Nl
Oil type	FD22 - HG32
Bowl capacity	300 cm^3
Assembly position	Vertical
Wall fixing screw	M8
Min. operational flow at 6,3 bar	100 Nl/min



Ordering code
17430.Ⓣ

Ⓣ	TYPE
	A = Not lockable handle
	B = Lockable handle

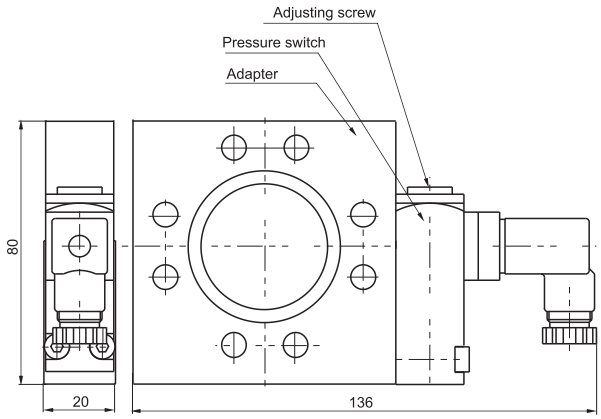
3

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.

Techical characteristics

Connections	G 1"
Max. Inlet pressure	13 bar - 1,3 MPa
Max. Inlet pressure	50°C
Weight	gr. 1600
Assembly position	Any
Nominal flow at 6 bar with p=1	80000 Nl/min.
Wall fixing screw	M8
Handle opening and closing angle	90°

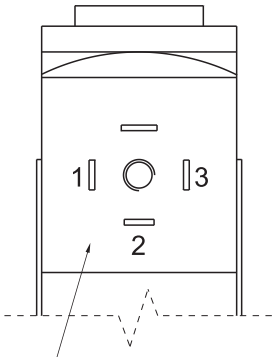


Ordering code	
17T	
T	TYPE 44A = Pressure switch adapter 14B = Pressure switch 44C = Pressure switch complete

Example: 1744C
Pressure switch complete with adapter.

Connection

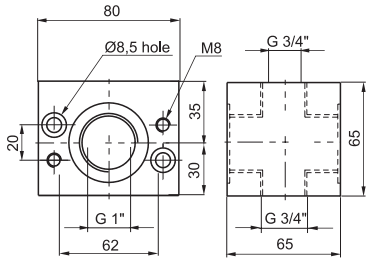
1 = Neutral
2 = N.C contact
3 = N.O contact



DIN 43650 type C Connector

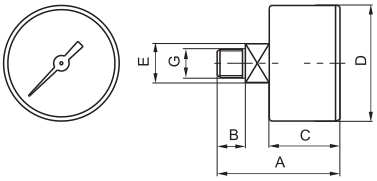
Construction and working characteristics	Techical characteristics	
- The pressure switch complete of adapter has to be assembled between two elements of the FRL group. - It cannot be utilized separately or at the end of the FRL group. - The pressure switch can be set at desired pressure (pressure range 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).	Max. Inlet pressure	13 bar - 1,3 MPa
	Max. ambient temperature	50°C
	Weight	gr. 450
	Microswitch capacity	5A
	Grade of protection (with connector assembled)	IP 65
	Pressure range	2 - 10 bar
	Assembly position	Any

Air Intake



Ordering code
17440

Pressure gauge



DIMENSIONS

CODE	A	B	C	D	E	G	Weight gr.
17070A	44	10	26	41	14	1/8”	60
17070B	45	10	27	49	14	1/8”	80

Ordering code

17070Ⓥ.Ⓢ

Ⓥ	VERSION
	A = Dial ø40
	B = Dial ø50
Ⓢ	SCALE
	A = Scale 0-4 bar
	B = Scale 0-6 bar
	C = Scale 0-12 bar

Assembling kit for manifold regulators

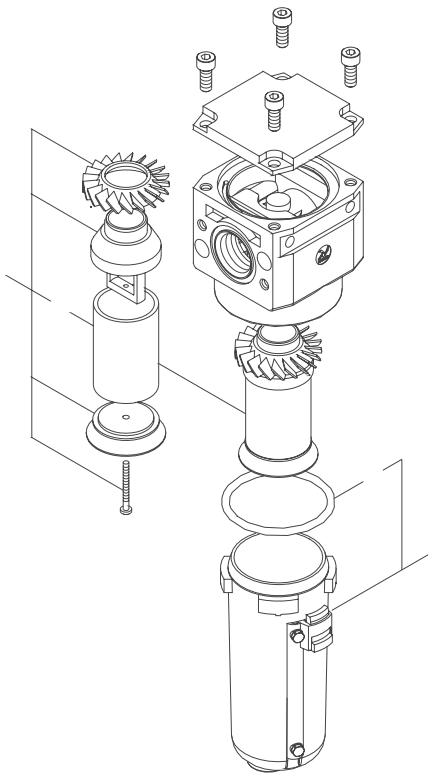
Ordering code

1746Ⓥ

Ⓥ	VERSION
	0 = Standard
	5 = for progressive start-up valve

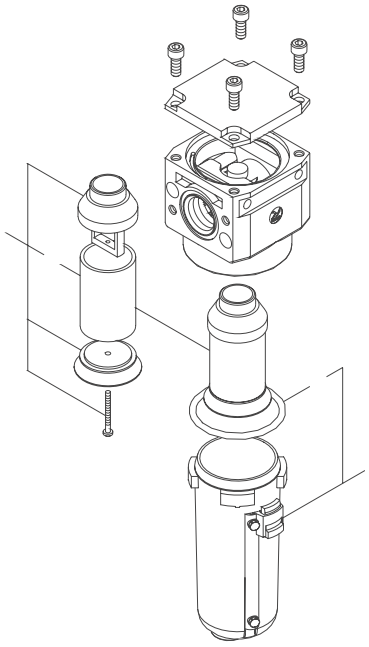
Filter

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



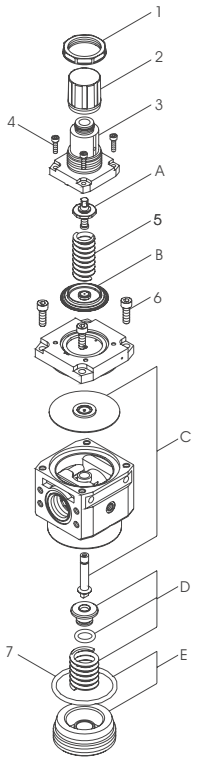
Coalescing filter

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



Pressure regulator

Pos.	Code	Description
1	**RS/1702/12**	Lock nut
2	**RS/1702/3**	Adjusting knob
3	**RS/1703/2**	Adjusting support
4	**RS/TCEI5x18**	Adjusting support screw
5	**RS/1703/21**	Spring 0- 2 bar range
	RS/1703/20	Spring 0- 4 bar range
	RS/1703/19	Spring 0- 8 bar range
	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	Description
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