

Construction and working characteristics

The modular air service units groups size 2, as the ones of size 1, 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.

They can be wall mounted with head-guard screws masked by covers.

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.

Some accessories like the wall fixing bracket, pressure gauges with different scales and diameters, air intake block that assembled between the elements allows to get in the system filtered or filtered non-lubricated air, are completing the range.

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. It's possible to fix the group to the wall by removing the covers, which can be installed again for covering the screw after fixing.

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 away by a flexible tube of \emptyset 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.

Manutenzione

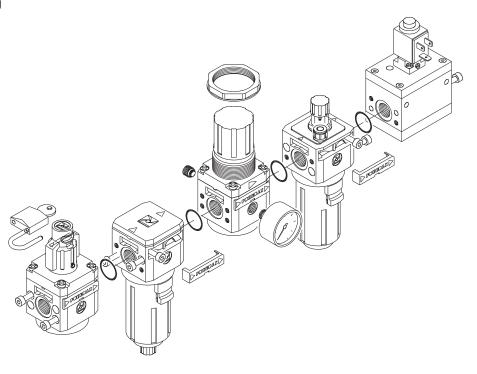
Clean the bowls with water and detergent. Do not use alcohol.

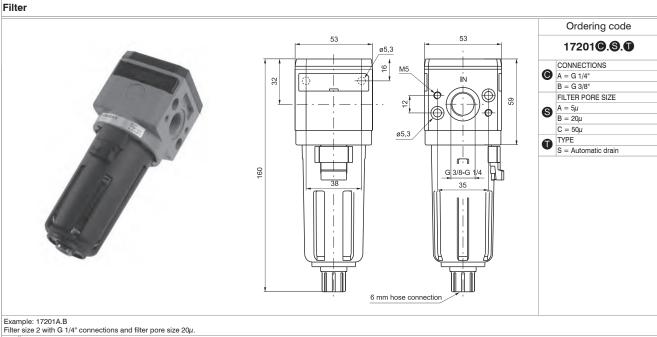
The filter element made with HPDE is reusable by blowing and cleaning it with proper detergent. For replacing or cleaning it, remove the bowl and unscrew the baffle spins.

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.

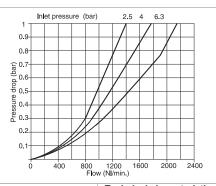
In case it is necessary to replace the lubricator transparent dome, tight it at 5 Nm torque maximum.

Assembling





Flow rate curves



Operational characteristic

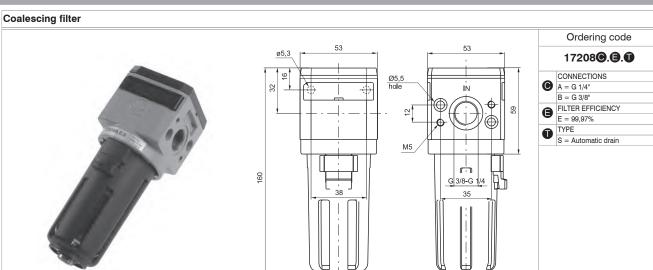
- Body made with light alloy.

 Wall mounting possibility with M5 screws protected by covers.

 Double filtering action: by air centrifuging and by replaceable and reusable HDPE porous filter element.
- Transparent technopolymer bowl with shock resistant technopolymer protection connected to the body with bayonet cap and safety button.
- Manual and semi-automatic water drain valve; in the semi-automatic version the drainage hap-pens when there is no pressure or by pushing the valve up-wards. Possibility to see the water level on 360°. Automatic water drainage bowl available on request.

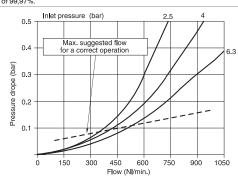
	rediffical characteristic	
_	Connections	G 1/4" - G 3/8"
	Max working pressure (bar)	13 bar - 1,3 MPa
	Minimum working pressure with automatic drain (bar)	0,5
	Maximum working pressure with automatic drain (bar)	10
	Temperature °C	50°C
	Weight	gr. 255
	Filter pore size	5μ - 20μ - 50μ
	Bowl capacity	30 cm ³
	Assembly position	Vertical
	Wall fixing screw	M5
	Max. fittings torque	25 Nm

Flow rate curves



Example: 17208A.E

Coalescing filter size 2 with G 1/4" connections and filter efficiency of 99,97%



Operational characteristic

- Coalescing filter element remove 0,01µ particles equivalent to 99,97%.

 Body made with light alloy.

 Wall mounting possibility with M5 screw protected by covers.

 Transparent technopolymer bowl with shock resistant technopolymer protection connected to the body with bayonet cap and safety button.

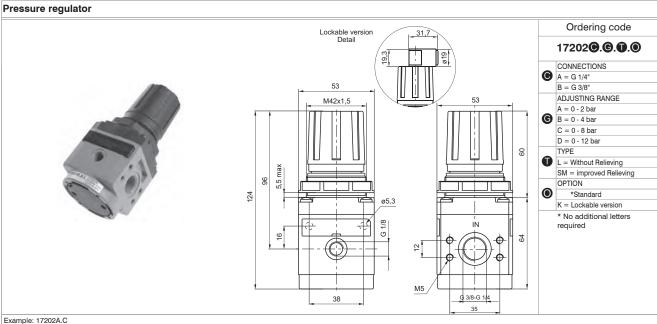
 Manual and semi-automatic water drain valve; in the semi-automatic version the drainage hap-
- pens when there is no pressure or by pushing the valve up-wards.

 Possibility to see the water level on 360° also with Bowl protection assembled.
- Automatic water drainage bowl available on request.

Technical characteristic

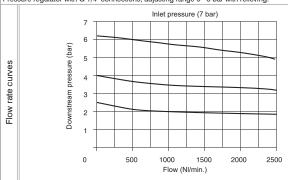
6 mm hose connection

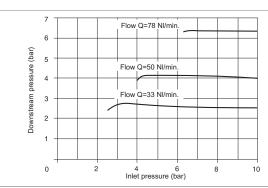
1 Continual Characteristic		
Connections	G 1/4" - G 3/8"	
Max working pressure (bar)	13 bar - 1,3 MPa	
Minimum working pressure with automatic drain (bar)	0,5	
Maximum working pressure with automatic drain (bar)	10	
Temperature °C	50°C	
Weight	gr. 255	
Filter efficiency with $0,01\mu$ particle	99,97%	
Bowl capacity	30 cm ³	
Assembly position	Vertical	
Wall fixing screw	M5	
Max. fittings torque	25 Nm	



Adjustment characteristics

Example: 17202A.C
Pressure regulator with G 1/4" connections, adjusting range 0 - 8 bar with relieving.





Operational characteristic

- Diaphragm pressure regulator with relieving.
- Dispiringin pressure regulator with relieving.

 Balanced poppet.

 Lockable handle by simply pressing it downwards in the desired position.

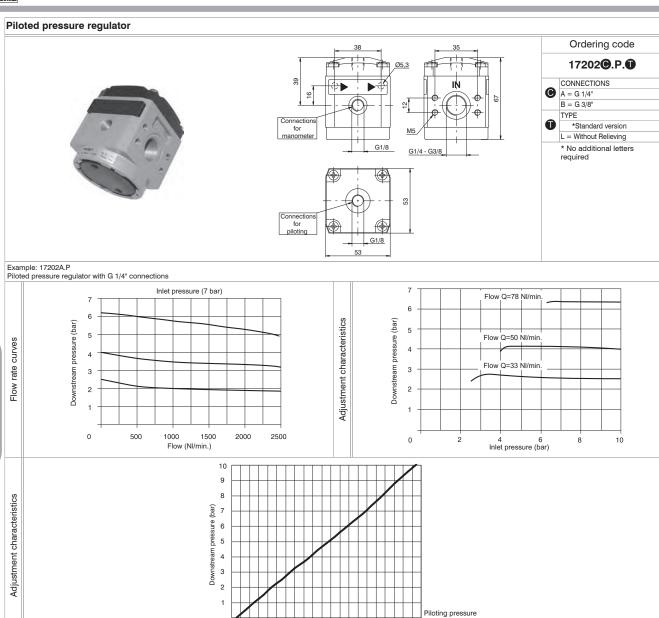
 Body made with light alloy.

 Wall mounting possibility with M5 screws protected by covers.

 Two pressure gauge connections with plug complete of seal.

 Panel mounting bracket.

Connections	G 1/4" - G 3/8"
Max working pressure (bar)	13 bar - 1,3 MPa
Temperature °C	50°C
Pressure gauge connections	G 1/8"
Weight	gr. 390
Pressure range (bar)	0 - 2 / 0 - 4 / 0 - 8 / 0 - 12
Assembly position	Any
Wall fixing screw	M5
Max. fittings torque	25 Nm



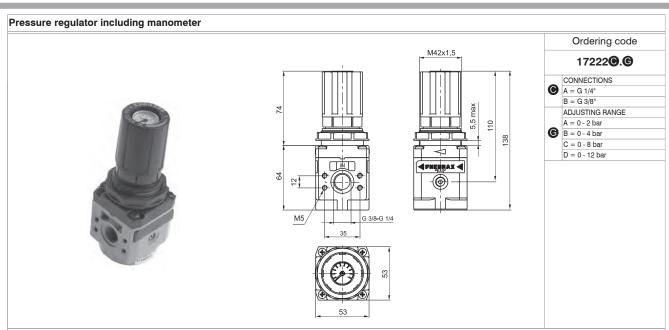
Operational characteristic

- Diaphragm pressure regulator with relieving.

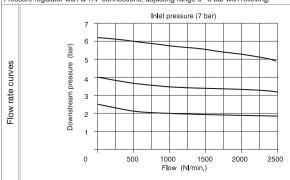
- Balanced poppet.
 Body made with light alloy.
 Wall mounting possibility with M5 screws protected by covers.
 Two pressure gauge connections with plug complete of seal.
 Panel mounting bracket.

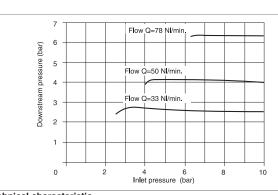
Technical characteristic	
Connections	G 1/4" - G 3/8"
Max working pressure (bar)	13 bar - 1,3 MPa
Temperature °C	50°C
Assembly position	Any
Wall fixing screw	M5
Max. fittings torque	25 Nm
Weight	gr. 313

10 (bar)



Example: 17222A.C Pressure regulator with G 1/4" connections, adjusting range 0 - 8 bar with relieving.



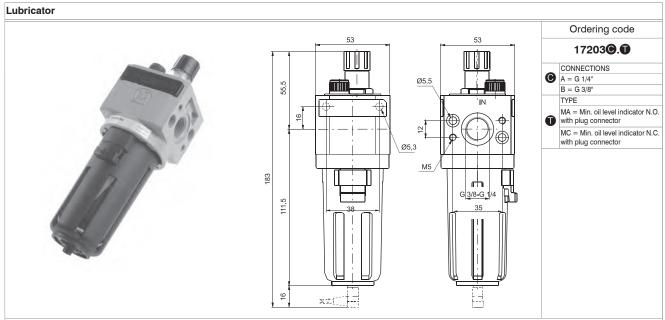


Operational characteristic

- Construction and working characteristics
 Diaphragm pressure regulator with relieving.
 Pressure gauge included on the top of adjusting knob.
 Balanced poppet.
 Lockable handle by simply pressing it downwards in the desired position.
- Body made with light alloy.
 Wall mounting possibility with M5 screws protected by covers.
- Panel mounting bracket.

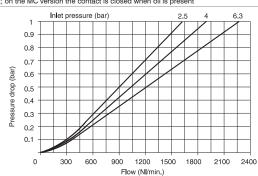
Connections	G 1/4" - G 3/8"
Max working pressure (bar)	13 bar - 1,3 MPa
Temperature °C	50°C
Pressure gauge connections	G 1/8"
Weight	gr. 440
Pressure range (bar)	0 - 2 / 0 - 4 / 0 - 8 / 0 - 12
Assembly position	Any
Wall fixing screw	M5
Max. fittings torque	25 Nm

Flow rate curves



Example: 17203A : Lubricator with G 1/4" connections.

Note: on the MA version the contact is open when oil is present; on the MC version the contact is closed when oil is present



Operational characteristic

- Fog type lubrication with variable section orifice according to the flow.

 Body made with light alloy.

 Wall mounting possibility with M5 screws protected by covers.

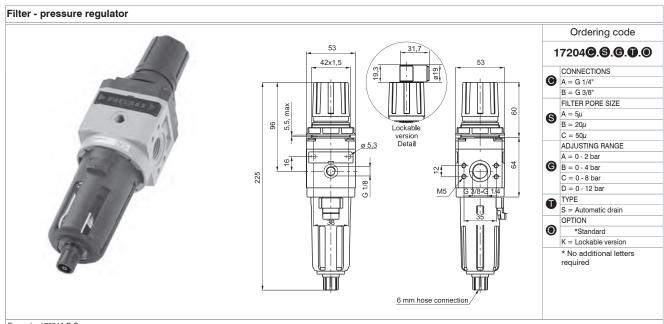
 Transparent technopolymer bowl with shock resistant technopolymer protection

 Possibility to see the min. and max. level on 360° also with bowl protection assembled.

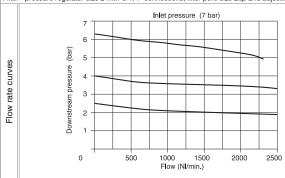
 Bowl assembled to the body with bayonet cap and safety button.
- Transparent technopolymer sight dome with adjusting handle. Oil filling plug.

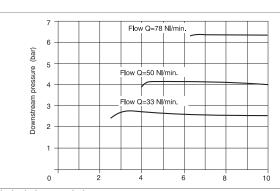
- Electrical connector for low level indication.
 Use the C1, C2 or C3 lead for connection (see section 6 "Sensors").

Temperature °C 50°C Pressure gauge connections G 1/8" Weight gr. 280 Indicative oil drip rate 1 drop every 300/600 NI Oil type FD22 - HG32 Bowl capacity 52 cm³ Assembly position Vertical Wall fixing screw M5 Min. operational flow at 6,3 bar 20 NI/min	Connections	G 1/4" - G 3/8"
Pressure gauge connections G 1/8" Weight gr. 280 Indicative oil drip rate 1 drop every 300/600 NI Oil type FD22 - HG32 Bowl capacity 52 cm³ Assembly position Vertical Wall fixing screw M5 Min. operational flow at 6,3 bar 20 Nl/min	Max working pressure (bar)	13 bar - 1,3 MPa
Weight gr. 280 Indicative oil drip rate 1 drop every 300/600 NI Oil type FD22 - HG32 Bowl capacity 52 cm³ Assembly position Vertical Wall fixing screw M5 Min. operational flow at 6,3 bar 20 Nl/min	Temperature °C	50°C
Indicative oil drip rate 1 drop every 300/600 NI Oil type FD22 - HG32 Bowl capacity 52 cm³ Assembly position Vertical Wall fixing screw M5 Min. operational flow at 6,3 bar 20 Nl/min	Pressure gauge connections	G 1/8"
Oil type FD22 - HG32 Bowl capacity 52 cm³ Assembly position Vertical Wall fixing screw M5 Min. operational flow at 6,3 bar 20 Nl/min	Weight	gr. 280
Bowl capacity 52 cm³ Assembly position Vertical Wall fixing screw M5 Min. operational flow at 6,3 bar 20 Nl/min	Indicative oil drip rate	1 drop every 300/600 NI
Assembly position Vertical Wall fixing screw M5 Min. operational flow at 6,3 bar 20 Nl/min	Oil type	FD22 - HG32
Wall fixing screw M5 Min. operational flow at 6,3 bar 20 Nl/min	Bowl capacity	52 cm ³
Min. operational flow at 6,3 bar 20 Nl/min	Assembly position	Vertical
·	Wall fixing screw	M5
Max. fittings torque 25 Nm	Min. operational flow at 6,3 bar	20 NI/min
	Max. fittings torque	25 Nm



Example: 17204A.B.C Filter - pressure regulator size 2 with G 1/4" connections, filter pore size 20μ and adjusting range 0-8 bar





Operational characteristic

- Filter diaphragm pressure regulator with relieving.
- Balanced poppet.

 Lockable handle by simply pressing it downwards in the desired position.

 Body made with light alloy.

 Wall mounting possibility with M5 screws protected by covers.

- Double filtering action: by air centrifuging and by replaceable and reusable HDPE porous filter
- Transparent technopolymer bowl with shock resistant technopolymer protection connected to the body with bayonet cap and safety button.
- 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.

 Possibility to see the water level on 360° also with bowl protection assembled.

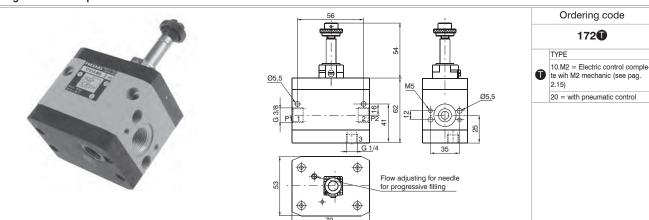
 Automatic water drainage bowl available on request.

 Two pressure gauge connections with plug complete of seal.

	Technical characteristic	
	Connections	G 1/4" - G 3/8"
	Max working pressure (bar)	13 bar - 1,3 MPa
	Minimum working pressure with automatic drain (bar)	0,5
	Maximum working pressure with automatic drain (bar)	10
er	Temperature °C	50°C
	Pressure gauge connections	G 1/8"
0	Weight with technopolymer body	gr. 450
	Pressure range (bar)	0 - 2 / 0 - 4 / 0 - 8 / 0 - 12
)-	Filter pore size	5μ - 20μ - 50μ
	Bowl capacity	30 cm ³
	Assembly position	Vertical
	Wall fixing screw	M5
	Max. fittings torque	25 Nm

340 NI/min.

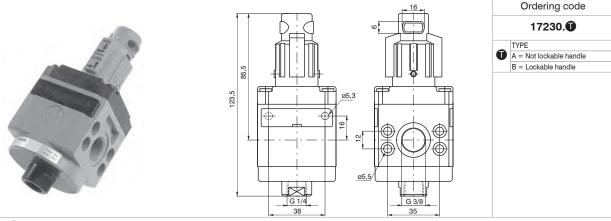
Progressive start-up valve



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.

Operational characteristic Technical characteristic 3-way valve with double poppet. Possibility to adjust the down stream circuit filling time by the enclosed adjustable metering Max working pressure (bar) G 3/8" 10 bar - 1 MPa Temperature °C 50°C Ouick down stream circuit discharge. Possibility for a pneumatic or electric piloting control. Body made with anodized 2011 aluminum alloy. Weight gr. 595 Assembly position Any Wall mounting possibility with M5 screws. Wall fixing screw M5 Min. working pressure 2,5 bar - 0,25 MPa Nominal flow at 6 bar with Δp=1 1700 NI/min.

Shut-off valve



Flow with adjustable

metering screw fully open

Example: 17230.B

Example: 17200.05
Shut-off valves size 2 complete with lockable handle.
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.

Operational characteristic	Technical characteristic	
3 ways poppet valve.	Connections	G 3/8"
Body made with anodized aluminum alloy 2011.	Max working pressure (bar)	10 bar - 1,3 MPa
Wall mounting possibility with M5 screws protected by covers.	Temperature °C	50°C
simple rotate the valve handle counter clockwise for valve closing and down stream circuit di- scharging.	Weight	gr. 380
	Weight	gr. 380
	Nominal flow at 6 bar with Δp=1	2100 NI/min.
	Wall fixing screw	M5
	Handle opening and closing angle	90°
	Max. fittings torque	25 Nm
	Min. operational flow at 6,3 bar	10 NI/min.

Electrically operated shut-off valve



Ordering code all distribution in the contract of the contra 17230. TYPE M2 = Electric with M2 0 M2/9 = Electric with M2/9 ocecica z 🕃 G 3/8

Example: 17230.M2: Shut-off valve size 2 with electric control complete wih M2 mechanic

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.

Operational characteristic

- 3 ways poppet valve, electric control.
- Sways popper varies, electric controls.

 Zinc alloy body or reinforced technopolymer body with threaded brass insert connections.

 Opening and closing of the valve via solenoid operator.

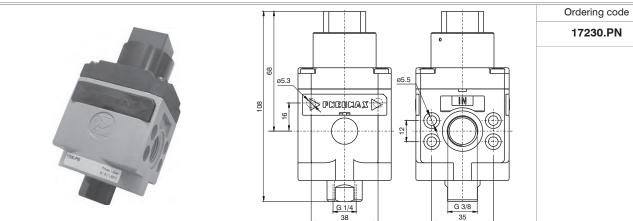
 The correct flow direction is indicated by the arrows stamped on the valve body.

- The supply pressure must be minimum 2 bars or higher for the solenoid operated version. The piloting pressure must be minimum 2 bars or higher for the solenoid operated version. (inlet pressure can be lower than 2 bar). 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.
 Wall mounting possibility with M5 screws protected by covers.

Technical characteristic

Inlet connections	G 3/8"
Exhaust connections	G 1/4"
Temperature °C	-5 °C - 50°C
Weight with anodized aluminium alloy 2011 body	gr. 440
Assembly position	Any
Wall fixing screw	M5
Max. fittings torque	25 Nm
Min. working pressure	2 bar
Max working pressure (bar)	13 bar
Flow rate at 6 bar with Δp=1	2100 NI/min

Pneumatically operated shut-off valve



Example: 17230.PN: Shut-off valve size 2 with Pneumatic pilot.

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.

Operational characteristic

- 3 ways poppet valve, pneumatic pilot.

- 3 ways poppet valve, pneumatic pilot.

 Zinc alloy body or reinforced technopolymer body with threaded brass insert connections.

 Opening and closing of the valve via pneumatic operator

 The correct flow direction is indicated by the arrows stamped on the valve body.

 The supply pressure must be minimum 2 bars or higher for the solenoid operated version.

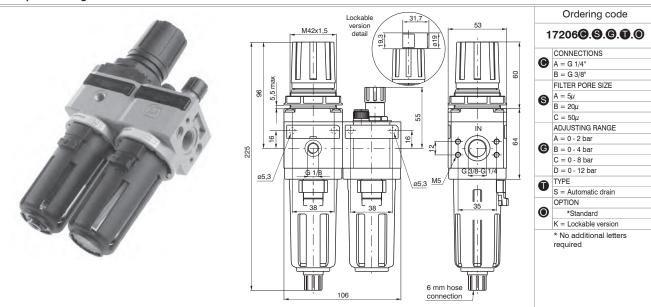
 The piloting pressure must be minimum 2bar or higher for the pneumatic operated version.

 (inlet pressure can be lower than 2 bar).

 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.
- Wall mounting possibility with M5 screws protected by covers.

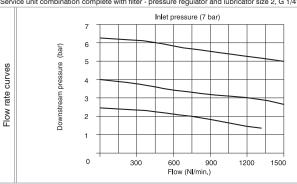
	recillical characteristic	
	Piloting connections	G 1/8"
	Temperature °C	-5 - + 50
	Assembly position	Any
	Weight with anodized aluminium alloy 2011 body	gr. 405
	Wall fixing screw	M5
	Max. fittings torque	25 Nm
5	Min. working pressure	2 bar
	Max working pressure (bar)	13 bar
lt	Piloting pressure	2 bar
S	Flow rate at 6 bar with Δp=1	2100 NI/min

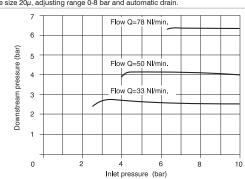




Max. fittings torque

Example: 17206A.B.C.S
Service unit combination complete with filter - pressure regulator and lubricator size 2, G 1/4" connections, filter pore size 20µ, adjusting range 0-8 bar and automatic drain.





Operational characteristic

- Filter diaphragm pressure regulator with relieving.
- Balanced poppet.
- Double filtering action: by air centrifuging and by replaceable and reusable HDPE porous filter
- Body made with light alloy.

 Wall mounting possibility with M5 screws protected by covers.

 Lockable handle by simply pressing it downwards in the desired position.
- Transparent technopolymer bowl with shock resistant technopolymer protection 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.

 Possibility to see the water level on 360° also with bowl protection assembled.

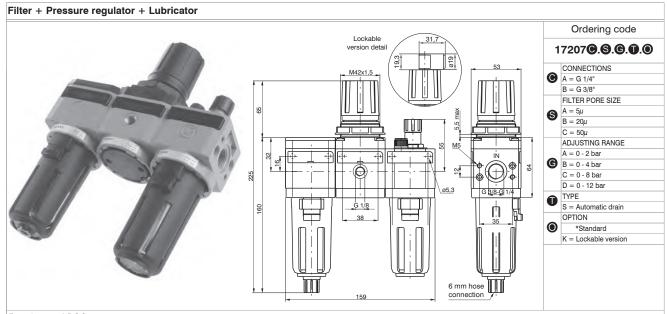
- rossibility to see the water level of soo also with bow protection assistant water drainage bowl available on request.

 Two pressure gauge connections with plug complete of seal.

 Fog type lubrication with variable section orifice according to the flow.

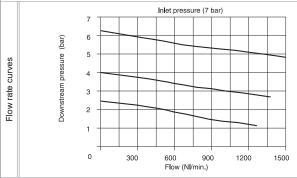
 Transparent technopolymer sight dome with adjusting handle.
- Oil filling plug.

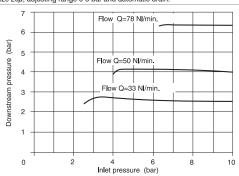
	Technical characteristic	
	Connections	G 1/4" - G 3/8"
	Max working pressure (bar)	13 bar - 1,3 MPa
1	Temperature °C	50°C
	Pressure gauge connections	G 1/8"
	Weight	gr. 750
	Pressure range (bar)	0 - 2 / 0 - 4 / 0 - 8 / 0 - 12
)	Filter pore size	5μ - 20μ - 50μ
	Bowl capacity	30 cm ³
	Indicative oil drip rate	1 drop every 300/600 NI
	Oil type	FD22 - HG32
	Bowl capacity	52 cm ³
	Min. operational flow at 6,3 bar	20 NI/min
	Assembly position	Vertical
	Wall fixing screw	M5



Example: 17207A.B.C.S

Service unit combination complete with filter - pressure regulator and lubricator size 2, G 1/4" connections, filter pore size 20µ, adjusting range 0-8 bar and automatic drain.





Operational characteristic

- Filter diaphragm pressure regulator with relieving with balanced poppet.
- Double filtering action: by air centrifuging and by replaceable and reusable HDPE porous filter

- element.

 Body made with light alloy.

 Wall mounting possibility with M5 screws protected by covers.

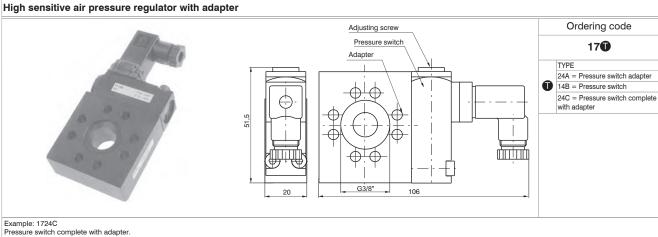
 Pressure adjusting lockable handle by simply pressing it downwards in the desired position. Transparent technopolymer bowl with shock resistant technopolymer protection connected to the body with bayonet cap and safety button.

 Manual and semi-automatic water drain valve; in the semi-automatic version the drainage hap-
- Manual and semi-automatic water drain valve; in the semi-automatic version the pens when there is no pressure or by pushing the valve up-wards. Automatic water drainage bowl available on request. Possibility to see the water level on 360° also with bowl protection assembled. 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.

	Connections	G 1/4" - G 3/8"
r	Max working pressure (bar)	13 bar - 1,3 MPa
	Temperature °C	50°C
	Pressure gauge connections	G 1/8"
	Weight	gr. 960
)	Pressure range (bar)	0 - 2 / 0 - 4 / 0 - 8 / 0 - 12
	Filter pore size	5μ - 20μ - 50μ
	Bowl capacity	30 cm ³
	Indicative oil drip rate	1 drop every 300/600 NI
	Oil type	FD22 - HG32
	Bowl capacity	52 cm ³
	Min. operational flow at 6,3 bar	20 NI/min
	Assembly position	Vertical
	Wall fixing screw	M5
	Max. fittings torque	25 Nm





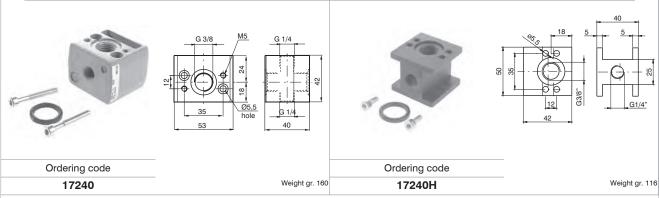
1 = Neutral 2 = N.C. contact 3 = N.O. contact Connection \bigcirc 3 DIN 43650 Type C connector

Operational characteristic

- The pressure switch complete of adapter has to be assembled between two elements of the Max working pressure (bar)
- 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 (bar) from 2 to 10 bar) by
 Microswitch capacity The electrical connection is made by mean of a 15 connector DIN 43650 type C.

 The microswitch contact could be Normally Closed or open (change over switch).
- Technical characteristic 13 bar - 1,3 MPa 50°C gr. 200 1A Microswitch Maximum voltage 250 VAC Grade of protection (with connector assembled) IP 65 2 - 10 bar Pressure range (bar) Assembly position Any

Air Intake Air Intake - "H" profile



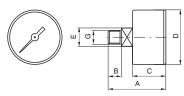


Pressure gauge









DIMENSIONS							
CODE	Α	В	С	D	Е	G	Weight gr.
17070A	44	10	26	41	14	1/8"	60
17070B	45	10	27	49	14	1/8"	80

Manometer diameter D. 23 mm

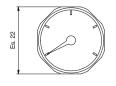
Ordering code

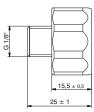
17070M.

SCALE A = Scale 0-4 bar

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







Fixing bracket

Ordering code

17250

Weight gr. 65



