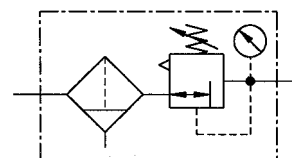




## Filter regulators

Size 2

# 678.020

**G 3/8**
**0.5 to 10 bar**
**0.5 to 16 bar**


### Characteristics

<b>Type</b>	<b>678.020</b>
<b>Port</b>	<b>G 3/8</b>
Pressure gauge port	G 1/4
Type of construction	Diaphragm pressure regulator with self-relieving design Centrifugal filter Sintered filter element  Special versions on request
Input pressure $p_1$	Max. 16 bar with plastic bowl Max. 25 bar with metal bowl
Input pressure $p_1$ with fully-automatic drain	Max. 16 bar Min. 1.5 bar
Control range $p_2$	0.5 to 10 bar / 0.5 to 16 bar (standard) 0.5 to 3 bar / 0.5 to 6 bar on request
Mounting position	Vertical, drain plug at bottom
Mounting type	Bracket
Medium temperature	-10 to 60 °C (other temperature ranges on request)
Ambient temperature	-10 to 60 °C (other temperature ranges on request)
Filter rating	40 µm
Bowl capacity	Max. 50 cm <sup>3</sup> condensate
Condensate drain	Manual, semi-automatic, Fully automatic on request
Weight [g]	1250 / 1390 with pressure gauge

### Materials

Part	Material
Head piece (body)	Z 410
Spring bonnet	Z 410-brass
Diaphragm	→ NBR-brass
Pressure spring	Galvanised steel
Valve cone	→ NBR-brass
Counter-pressure spring	Stainless steel
O-ring 58 x 3	→ NBR
Filter element 40 µm	Bronze
Condensate bowl	Polycarbonate
Baffle	PA

### Ordering information

Type
Port
Options  
678.0XX X

Port	
<b>020</b>	G 3/8
<b>021</b>	G 3/8 - $p_2$ : 0.5 to 16 bar
Options	
<b>K-HA</b>	Plastic bowl
<b>M</b>	Metal bowl
<b>S</b>	Bowl guard

### Order example: 678.020 K-HA

Please use the suffix »A« to order fully-automatic drain

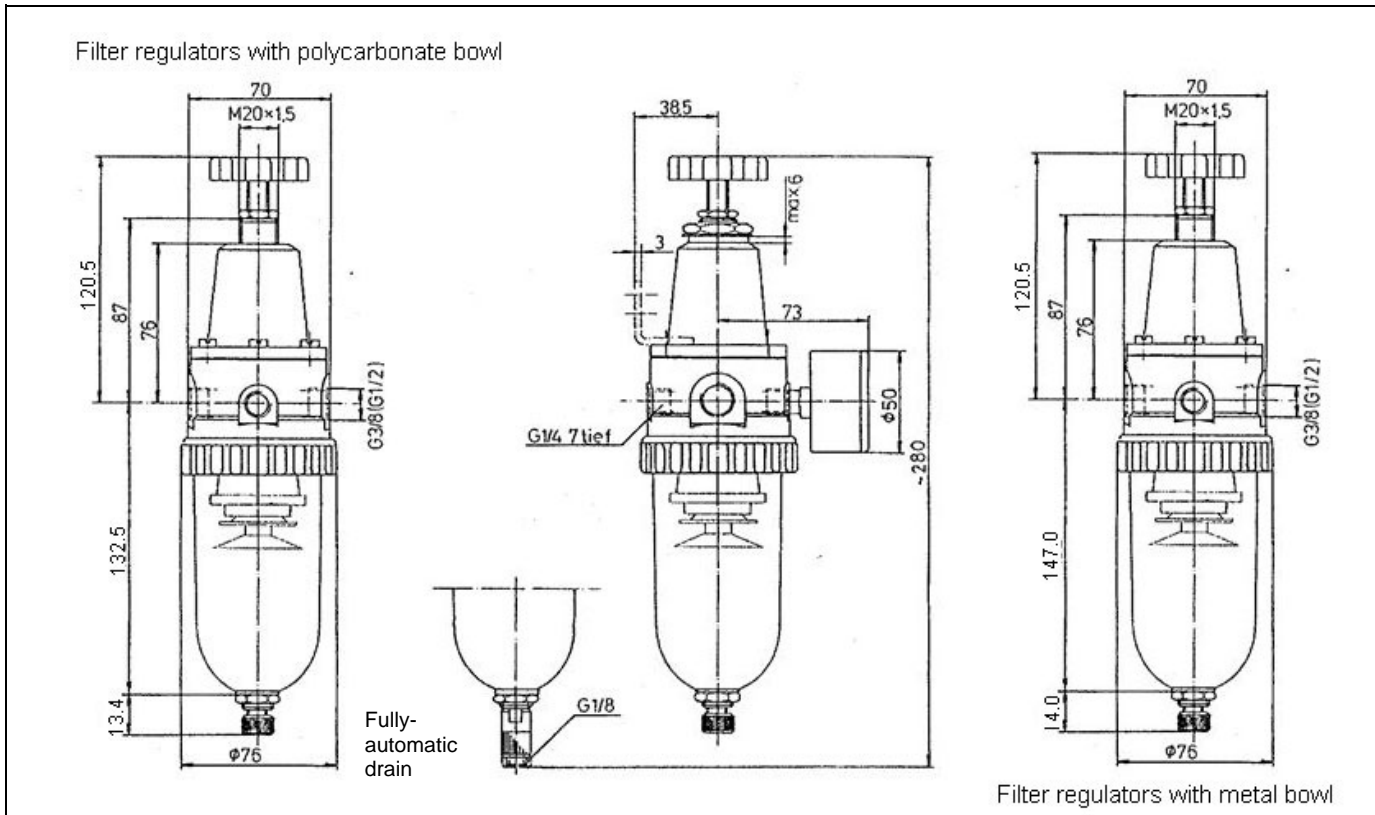
### Description

- Standard design
- Pressure setting can be locked by means of lock nut on adjusting screw
- Flow direction indicated by arrows
- Entry in direction of arrow
- Independent of inlet pressure
- Pressure gauge  $\varnothing$  63 mm included
- Pressure gauge can be mounted at both ends
- Filter rating acc. to ISO 4003, glass bead test
- Bowl guard can be retrofitted

### Accessories

Designation	Order No.
Nut M 20 x 1.5 and washer	74/1
Mounting bracket with nut and washer	75/2
Fully-automatic drain (external)	65/0-N
Fully-automatic drain (internal)	655.6.900
Bowl guard	SK 02
Filter element 40 µm	652.6.940
Plastic bowl	650/1-HA
Metal bowl	650/11

## Dimensions [mm]



## Flow rates

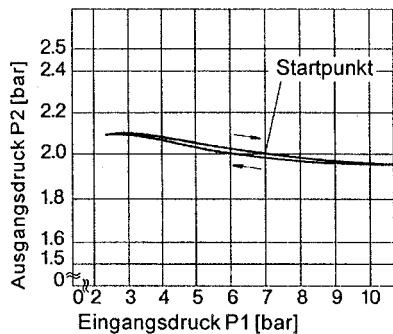
Flow rates at  $p_1 = 8 \text{ bar}$

Output pressure $p_2$	QN	$\text{m}^3/\text{h}$	$\text{l}/\text{min}$
6	90	1500	

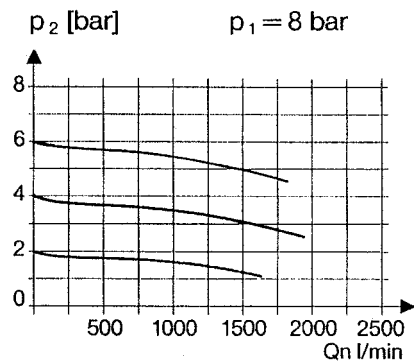
## Hysteresis

Hysteresis of  $p_2$  as a function of rising (falling)  $p_1$  at a constant draw-off rate QN 20 l/min  
 Basic setting (starting point):  $p_1: 7.0 \text{ bar}$   
 $p_2: 2.0 \text{ bar}$

Qn = 20 l/min



## Flow characteristic



## Main spare parts

Part	Part No.
Set of wearing parts - Diaphragm - Valve cone - O-ring 58 x 3	22.602.4
Pr. gauge $\varnothing 50 \text{ mm}$ , G1/4	
0 to 4 bar	215-KD
0 to 6 bar	216-KD
0 to 10 bar	217-KD
0 to 16 bar	218-KD