



Pressure regulating valve

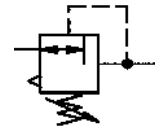
Size 3

637.40 A to 637.45 D
637.533 A to 637.543 D

G 3/4 (red.)

G 1

0.5 to 3 bar
0.5 to 6 bar
0.5 to 10 bar
0.5 to 16 bar



Characteristics

Order No.	637.45 A	637.45 B	637.45 C	637.45 D
	637.533 A	637.533 B	637.533 C	637.533 D
Port	G 1			
Order No.	637.40 A	637.40 B	637.40 C	637.40 D
	637.543 A	637.543 B	637.543 C	637.543 D
Port	G 3/4 (reduced)			
Pressure gauge port	G 1/4			
Type of construction	Diaphragm pressure regulator with self-relieving design Special versions on request			
Max. input pressure p ₁	25 bar			
Control range p ₂	0.5 to 3 bar / 0.5 to 6 bar / 0.5 to 10 bar / 0.5 to 16 bar			
Mounting position	Any / note direction of arrow			
Mounting type	Panel mounting, hole Ø20.5 Bracket			
Medium temperature	Max. 80°C			
Ambient temperature	Max. 80°C			
Weight [g]	1200 / 1300 with pressure gauge			

Description

- Standard design
- Double nipples (1") required for block mounting with other devices
- Pressure setting by means of adjusting screw with plastic knob, setting can be locked with lock nut
- Flow direction indicated by arrows
- **Entry in direction of arrow**
- Virtually independent of inlet pressure
- Pressure gauge Ø63 included, can be mounted at both ends
- Panel mounting with nut and washer on cover
- Wall mounting with mounting bracket on cover

Materials

Part	Material
Head piece (body)	Zinc - Z 410
Spring bonnet/adjusting screw	Zinc - Z 410/brass
Diaphragm →	NBR-brass
Pressure spring	Galvanised steel
Valve cone →	NBR-brass
Counter-pressure spring	Stainless steel
O-rings	NBR

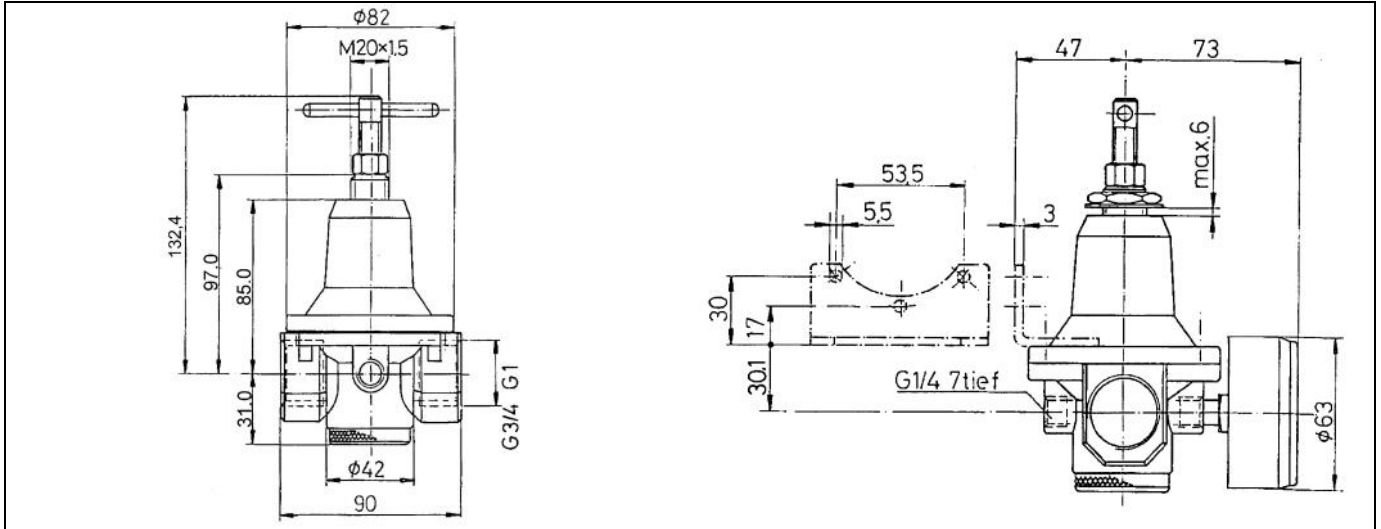
Accessories

Designation	Order No.
Nut M 20 x 1.5 and washer	74/1
Mounting bracket, incl. 2 screws	H 822
Mounting kit	75/2
Double nipple G 1"	252.07/2-N
Double nipple R 1" (conical) for block mounting with other devices	252.305-N
Reducing nipple G 1" male to G 3/4" female	251.05-N

Main spare parts

Part	Part No.
→ Set of wearing parts - Diaphragm, cmpl. - Valve cone, cmpl. - O-ring	22.645.4 K
Pr. gauge Ø63, G 1/4	
0 to 4 bar	215-KD
0 to 6 bar	216-KD
0 to 10 bar	217-KD
0 to 16 bar	218-KD

Dimensions



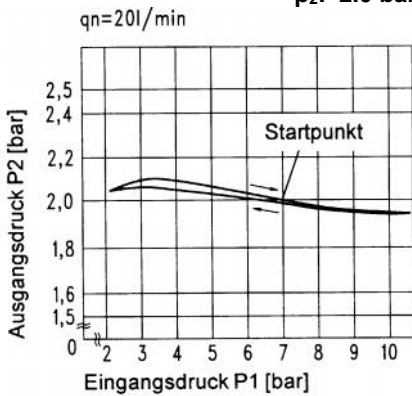
Flow rates

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

Art. No.		637.40 A 637.45 A 637.533 A 637.543 A	637.40 B 637.45 B 637.533 B 637.543 B	637.40 C 637.45 C 637.533 C 637.543 C	637.40 D 637.45 D 637.533 D 637.543 D
Output pressure $p_2 = 6 \text{ [bar]}$	QN m^3/h	300	300	300	300
Nominal flow ($\Delta p = 1 \text{ bar}$)	QN l/min	5000	5000	5000	5000

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): $p_1: 7.0 \text{ bar}$
 $p_2: 2.0 \text{ bar}$



Flow characteristic

Control range 0.5 to 10 bar

