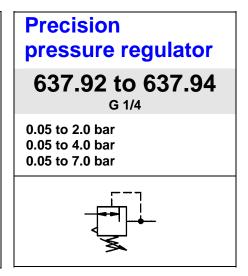


# Compressed air conditioning





## Characteristics

Order No.	637.92	637.93	637.94	
Port	G 1/4			
Pressure gauge port	G 1/8			
Medium	Compressed air, filtered 0.01 µm,			
		oil-free		
Type of construction	Diaphragm pressure regulator with			
	self-relieving design			
Max. input pressure p₁	16 bar			
Control range p <sub>2</sub>	0.05-2.0 bar	0.05-4.0 bar	0.05-7.0 bar	
Own air consumption at	< 2.2 l/min	< 3.0 l/min	< 4.1 l/min	
input pressure	$p_1 = 5 bar$	$p_1 = 7 \text{ bar}$	$p_1 = 10 \text{ bar}$	
Mounting position	Any / note direction of arrow			
Mounting type	Panel mounting, hole Ø12.5			
Medium temperature	-10 to 60 °C			
Ambient temperature	-10 to 60 °C			
Weight [g]	600			

## **Materials**

Part	Material
Head piece (body)	Zinc - Z 410
Adjusting screw	Stainless steel
Double diaphragm	NBR-AI
Pilot diaphragm	NBR-AI-St
Fixed orifice	Stainless steel
Pressure spring	Galvanised steel
Valve cone, cmpl.	NBR-stainless steel-brass
Counter-pressure spring	Stainless steel
Bottom screw	Brass-NBR
Rubber spring	NBR
-	

## Accessories

Designation	Order
Mounting bracket	638.00

# **Description**

- Double nipples (G1/4) required for block mounting with other devices
- Pressure setting can be locked with lock nut
- Flow direction indicated by arrows
- Entry in direction of arrow
- Pressure gauge **not** included, can be mounted at both ends
- Panel mounting with nut on cover
- Wall mounting with mounting bracket on body

## **Applications**

Precision regulator for use in open and closed-loop control systems in process engineering, the chemical industry, mineral oil production and refining, metallurgy, the paper industry, etc.

# Operation

 The regulator is only allowed to be operated with micro-filtered air (filter rating 0.01 μm) (Section 1)

# Main spare parts

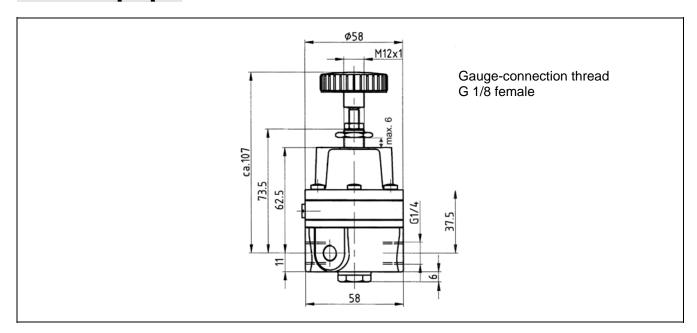
No spare parts can be supplied.

Regulators 637.92 to 637.94 are only allowed to be opened and repaired in the factory.



# Compressed air conditioning

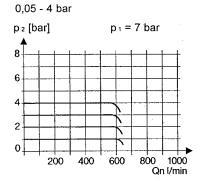
# **Dimensions [mm]**



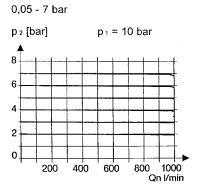
## Flow characteristic

# 0,05 - 2 bar p<sub>2</sub> [bar] p<sub>1</sub> = 5 bar 8 6 4 2 0 100 200 300 400 500 Qn l/min

## Flow characteristic



## Flow characteristic



## **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 bar  $p_2$ : 2.0 bar

