

Dome pressure regulator D 1

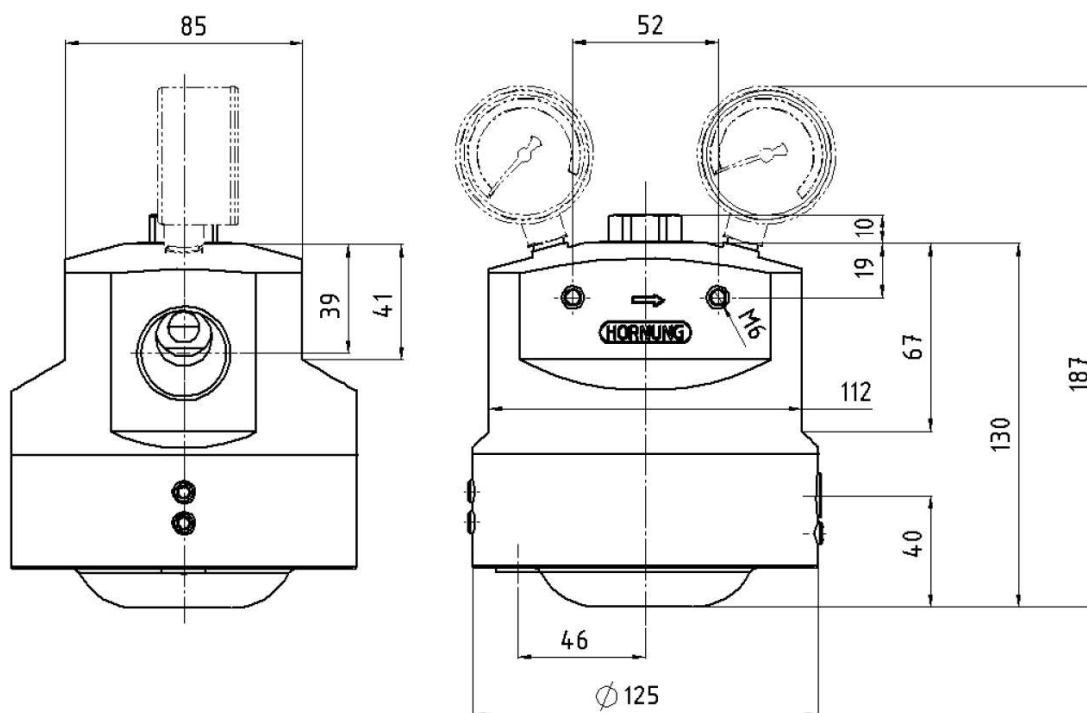


Gauges optional

TECHNICAL DETAILS		APPLICATION AREA	DESCRIPTION
Material:	Brass or stainless steel 1.4404	The dome pressure regulator get used as a line pressure regulator.	Dome pressure regulators are characterised by an exact control accuracy and a high flow.
Valve seat:	Ø 12,7 (balanced)	Without changing parts it is perfect for a large outlet pressure range.	The dome pressure regulator has a diaphragm sensing element which, on one side, is subjected to a load force created by a gas pressure. On the other side, the sensing element is subject to the force of system fluid.
Cv value:	2,6 (Ø 12,7)	Depending of the used material the pressure regulator is applicable for different gases and liquids.	A large independence from pressure fluctuations at the inlet is reached with a balanced poppet.
Seat:	EPDM or viton	We urgently recommend to instal a fine filter with min. 40 µ at the inlet.	If the dome pressure regulator is used for the pressure control of gases, the dome could be loaded with help of needle valves.
Diaphragm:	EPDM or viton	Also the following equipment and building parts must be protected against improper high pressure by suitable safty valves.	For the pressure regulation of liquids and aggressive gases, the dome can be filled with compressed air or nitrogen externally, by means of a pilot pressure regulator.
Max. inlet pressure:	100 bar		
Outlet pressure ranges:	0,2 - 5 bar 0,5 - 100 bar		
Operating temp.:	-20°C to +60°C		
Size:	Ø 125 x 140 mm		
Weight:	8865 g		
Connections:	In-/ outlet G 1 gauge G 1/4 dome-screw G 1/8		

QUALITY STANDARD

The company Hornung is certified to **DIN EN ISO 9001** and **ISO 14001:2009**. All single parts are manufactured, assembled and tested by in-house production. The finished parts are therefore under all criteria of German quality control with 100% final inspection.



REGULATING WITH PILOT PRESSURE REGULATORS

If the outlet pressure has to be more frequently adjusted, precisely preset or remote controlled, then the use of a pilot regulator is recommended.

A pilot regulator is installed instead of the plug at the dome of the pressure regulator.

Control valves can be spring loaded pressure regulators, so called pilot regulators or proportional valves.

DYNAMIC PRESSURE REGULATION

A dynamic pressure control is reached by means of an integrated needle valve in the dome of the pressure regulator.

By slightly releasing of the control medium into the atmosphere, the control medium will be constantly refilled.

Thereby in the dome area of the pressure regulator, gets a high pressure stability if the temprature and flow varies.

ORDER DETAILS

Material / pressure:

- 1 = Brass / 100 bar
- 2 = Stainless steel / 100 bar
- 3 = Brass / 5 bar
- 4 = Stainless steel / 5 bar

Seat:

- 1 = $\varnothing 12,7$ (balanced)

Diaphragm:

- 1 = EPDM
- 2 = viton

Gauges:

- 0 = none
- 1 = with inlet and outlet gauge

Option at inlet / outlet

- 0 = G1" - internal thread
- 1 = flange DN25-PN40-Form C

Regulator type
36

D 1

36-
Type

1
Material/
pressure

1
Seat

0
Diaphragm

1
Gauge

0
Option

Gas type
Gas type

Accessories:

- Flanges, gauges, tube ttings und accessories
- Fine filter F1, safety valves available on request
- Wall mounting bracket