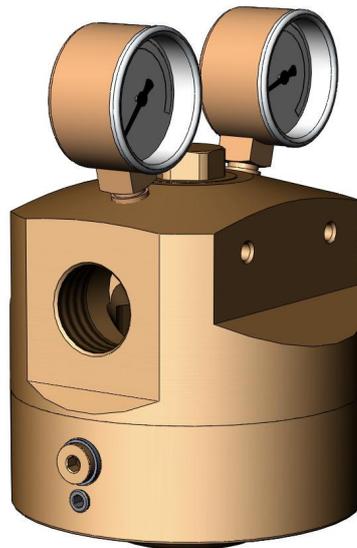


# Dome – Pressure regulator D1



Gauges optional

## Description:

Dome - pressure-regulators are characterised by accurate regulation and a large throughput. The Dome - pressure regulator works according to the principle of the pressure balance between Dome - pressure and outlet pressure. A large independence from fluctuations is reached with a balanced poppet.

If the Dome - pressure regulator is used for the pressure control of gases, the Dome - pressure can be controlled with the needle valves on the inlet pressure side.

For the pressure regulation of liquids the Dome is filled externally with compressed air or Nitrogen by means of a pilot pressure regulator.

## Application area:

The Dome – pressure regulator is used as a line-pressure regulator. Without exchanging parts it is suitable for a large outlet pressure range. Independent of the used material the pressure-regulator is applicable for different gases and liquids.

We urgently recommend the connection of a fine filter, with at least 40µ, before the pressure-regulator, as well as to protect following components with suitable relief valves against unduly high pressures.

## Technical details:

Material:	Brass or St. steel	
Valve seat:	Ø 6,35	Ø 12,7 (Balanced)
Kv-value:	2,6 (Ø 12,7)	
Kv-value:	0,3 (Ø 6,35)	
Seat:	EPDM or Viton	
Diaphragm:	EPDM or Viton	
Max. Inlet pressure:	100 bar	
Regulating area:	0,5 – 100 bar	
Operating temp.:	-20 °C to +60 °C	
Size:	Ø125 x 140	
Weight:	8865g	
Connections:	In / Outlet	G 1
	Gauge	G1/4
	Dome-Screw	G1/8

## Hornung Quality standard

The company Hornung is certified to **DIN EN ISO 9001**

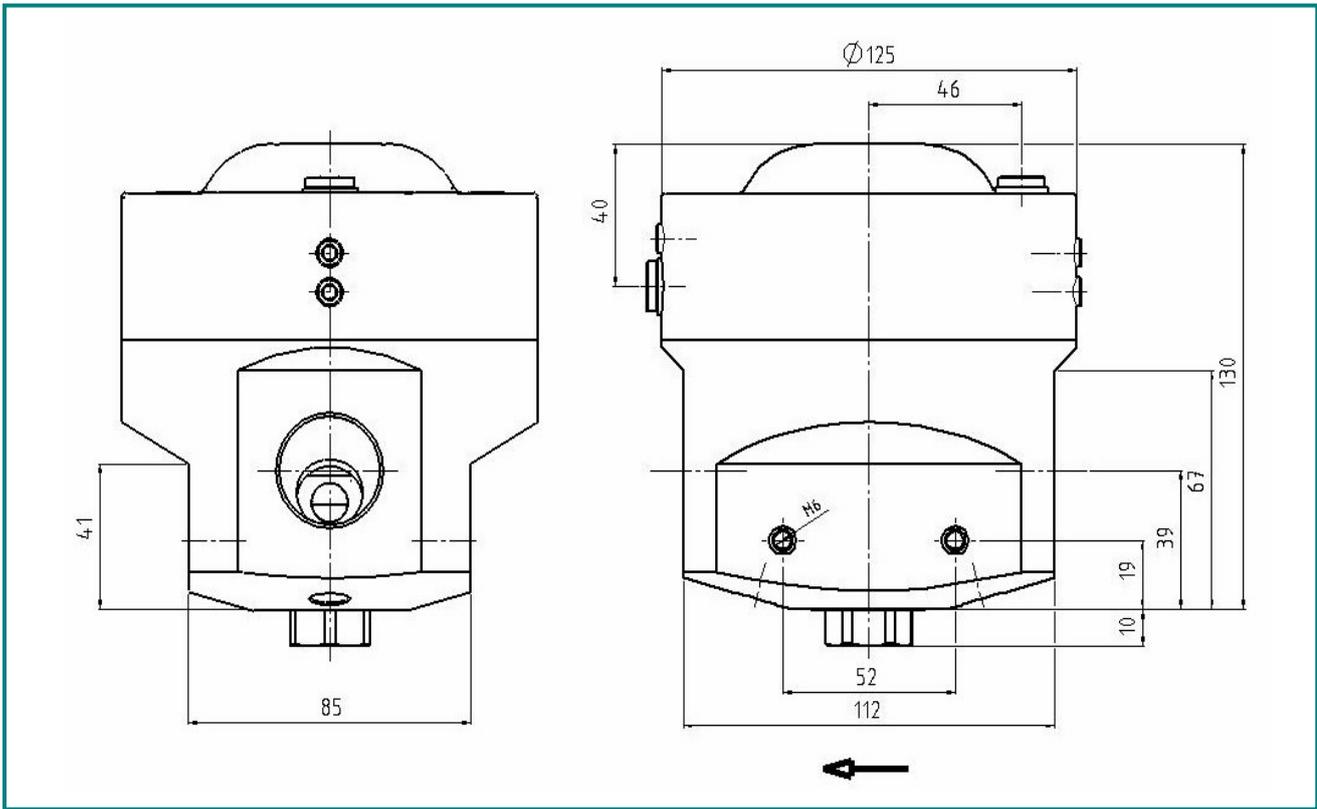
All single parts are manufactured, assembled and tested in house.

The finished parts are therefore under the criteria of our exact quality control with 100% final control.

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**Operating variations:**

**Regulating with Pilot pressure regulators:**

If the initial pressure is to be more frequently adjusted, precisely preset or changed from the distance, then the use of control valves is recommended.

A control valve is attached in place of the plug at the dome of the pressure-regulator. As control valves, spring-tensioned pressure reducing valves, called pilot pressure regulators(see in particular our type " HD250 ") or proportional valves come into use.

**Dynamic pressure regulation:**

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

By slight releasing the control medium into the atmosphere the control medium is constantly re-fed. Thereby in the dome area of the pressure-regulator when there are variations in temperature and flow, high pressure stability is reached.

Stand: 03/2006

**Accessories:**

- Gauges, Tube fittings und accessories
- Wall mounting bracket
- Pilot pressure regulator HD250
- Flanges, Fine filter F1 (see Data sheet)
- Safety valves available on request

**Order details:**

**Material:**

- 1 = Brass
- 2 = Stainless steel

**Seat:**

- 0 = Ø 6,35
- 1 = Ø 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

**Order example:**

Regulator type	
36	D1

36	-	1	1	0	0	0	Medium
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Type Mat. Seat Diaph. Gauge Option Medium