

All stainless steel safety pressure gauges according to EN 837-1/S3 with or without glycerine filling

Nominal sizes ND 100

Connection position bottom



Description

The all stainless steel pressure gauges are ideal for the hard conditions and the resulting high demands on pressure measurement in production facilities in chemical industry and other comparable branches. Resistance to aggressive media and environments is achieved by using high-grade materials such as stainless steel both for the measuring system and the case.

The glycerine filling provides wear-protection for the measuring system through damping, should pulsating pressures and mechanical vibrations occur. The measuring system is of accuracy class 1.0, has overrange protection amounting to 1.3 times the max. rating and can be loaded up to the full scale value.

The safety execution of the pressure gauges comprises a burstproof solid front between dial and Bourdon tube, a laminated safety glass as well as a blow-out back (according to EN 837-1/S3).

Pressure gauges with glycerine filling are equipped with a compensation diaphragm. This diaphragm avoids a pressure rise in the case that is due to temperature bound volume expansion of the liquid filling, thus avoiding indicated errors.

Features

- o Measuring system of high corrosion resistant materials, Stainless steel or Monel 400
- o Resistant to chemicals
- o Accuracy class 1.0
- o Fulfills highest safety requirements to EN 837-1/S3
- o Solid front between measuring system and dial
- o Vibration-free display and long service life through glycerine filling

Ranges


0 ... 0.6 bar to 0 ... 4000 bar

Applications

Processing technology, Compressors
Machine and apparatus construction.

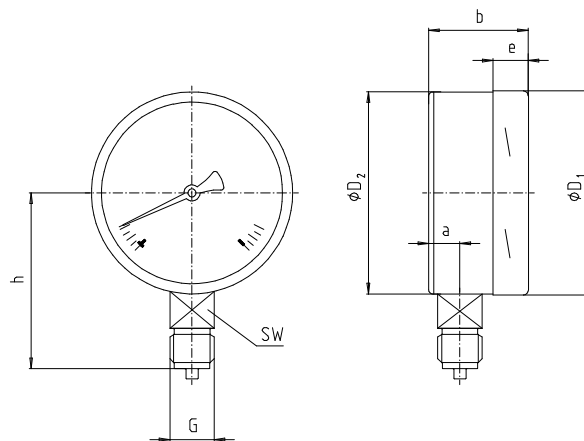
Models: P1701, P2112, P2113, P2202

Technical data

| Model | P2112 | P2113 | P2202 | P1701 | Options |
|---------------------------------------|--|-------|--|-------------------------------------|---------------------------------|
| Nominal size | 100 | | | | |
| Symbol |  | | | | |
| Accuracy class to EN 837-1 | 1.0 | | 1.6 | | |
| Ranges | 0 ... 0.6 bar to 0 ... 1600 bar negative or positive / negative and positive gauge pressure | | 0 ... 1.6 bar to 0 ... 400 bar | 0 ... 2500 bar to 0 ... 4000 bar | |
| Application | Constant load: up to full scale value Alternating load: up to 0.9 x full scale value short-time: overload capacity 1.3 | | 3/4 fsv ¹⁾ 2/3 fsv full scale value | | (P2112 + P2113 - 1.5 to 2 x) |
| Case | Stainless steel, 1.4301 with blow-out back, solid front | | | | |
| Bezel | Stainless steel, 1.4301 bayonet ring | | | | Front flange |
| Window | Laminated safety glass | | | | |
| Dial | Aluminium, white, scale and imprint black | | | | Dual scale |
| Pointer | Aluminium, black | | | | |
| Movement | Stainless steel | | | | |
| Measuring element | Stainless steel, 316 L Bourdon tube up to 60 bar, helical tube above 100 bar | | Monel 400 | Stainless steel | |
| Pressure connection - position | Stainless steel, 316 L radial bottom | | Monel 400 | Stainless steel | |
| - thread | G 1/2 B (1/2 NPT) | | M16x1.5 female with cone 60° | | Other threads on request |
| Temperatures - Medium - Ambient | Tmin. -20°C, Tmax. 100°C Tmin. -20°C, Tmax. 60°C | | | | 200°C (without filling) |
| Temperature drift | 0.3% /10K if deviation from normal temperature 20°C | | | | |
| Liquid filling | none | | glycerine | | |
| Protection to | IP 65 EN 60 529 /IEC 529 | | | | |
| Orifice | | | | | ø 0.4 ; ø 0.8 |
| Weight approx.. | 0.600 kg | | 1,000 kg | | |

1) fsv = full scale value

Dimensions



| Model | Dimensions [mm] | | | | | | | |
|-----------------|-----------------|------|-----|-----|------|------|------|----|
| | a | b | D1 | D2 | e | G | h ±1 | SW |
| P2112, P2113 | 24 | 57,5 | 101 | 100 | 17,5 | G½ B | 87 | 22 |
| P2202, P1701 | 24 | 57,5 | 101 | 100 | 17,5 | G½ B | 87 | 22 |

Modifications reserved