



## Standard capsule type pressure gauges for differential pressure type D4

### benefits

- Measurement of extremely small differential pressures
- robust design
- static pressures up to 400 mbar
- direct indication of the differential pressure
- many customised versions available

## Application

For differential pressure measurement of non-corrosive, gaseous, dry media. Especially suitable for filter loss measurement in air conditioning and ventilation applications.

! For measuring gas or vapour, observe the table "Selection Criteria as per EN 837-2" (see appendix)!

## Technical Specifications

### Type

D4

### Nominal size

160

### Function

The "plus" pressure (= high pressure) is applied to the inside of the diaphragm. The "minus" pressure (= low pressure) is applied to the inside of the pressure-tight housing. The pressure difference causes the diaphragm to change its shape, thus generating the movement required to measure the pressure. This displacement is picked up by the movement. The differential pressure is directly indicated by a pointer.

### accuracy class

EN 837-3/6  
1.6

### ranges (EN 837-3/5)

see ordering table

### application area

static load: Full scale value

dynamic load: 0.9 x full scale value

### Overpressure safety

Full scale value

### maximum static pressure

400 mbar

### Operating temperature range

Medium: max. 60 °C

Ambient: -20/+60 °C

### Temperature performance

Indication error when the temperature of the measuring system deviates from the normal temperature of 20 °C:  
at rising temperature approx.  $\pm 0.6 \text{ \%}/10 \text{ K}$   
falling temperature approx.  $\pm 0.6 \text{ \%}/10 \text{ K}$   
of full scale value

**Degree of protection**

IP 66 (EN 60529)

**Connection**

stainless steel 316 Ti/316 L  
bottom, parallel, one behind the other  
2 x G $\frac{1}{2}$ B, SW22 (EN 837-3/7.3)

**Measuring element (wetted part)**

Capsule element, CuBe alloy

**Movement (wetted part)**

Brass

**Zero correction**

from the front

**Options**

- back flange
- 3-hole fixing, panel mounting bezel
- hose connections
- special scales
- other process connections

**Seal (wetted part)**

NBR (Perbunan)

**Dial (wetted part)**

Aluminium, white  
Scaling: black

**Pointer (wetted part)**

Aluminium, black

**Housing (wetted part)**

Stainless steel 304

**bayonet bezel**

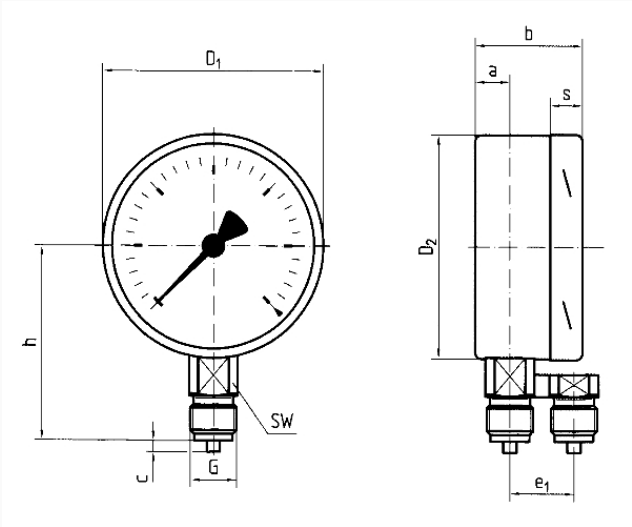
Stainless steel 304

**Window (wetted part)**

Plastic (PMMA)

Technical Drawings

NG 100/160 – bottom connection



Dimensions (mm)

| NG  | a  | b  | c | D1  | D2  | e1 | G   | h   | s  | SW |
|-----|----|----|---|-----|-----|----|-----|-----|----|----|
| 100 | 16 | 49 | 3 | 101 | 99  | 32 | G½B | 86  | 20 | 22 |
| 160 | 16 | 49 | 3 | 161 | 159 | 32 | G½B | 118 | 20 | 22 |

## Versions

|          |      |  | housing<br>ø | Housing                     | accura-<br>cy class | Connec-<br>tion | Ausrich-<br>tung | Range         | Type             |   | Part no. |
|----------|------|--|--------------|-----------------------------|---------------------|-----------------|------------------|---------------|------------------|---|----------|
| KP160Dif | D401 |  | 160 mm       | Stain-<br>less<br>steel 304 | 1.6                 | 2 x G½B         |                  | 0/25<br>mbar  | KP160Dif<br>D401 | ● | 35616401 |
| KP160Dif | D401 |  | 160 mm       | Stain-<br>less<br>steel 304 | 1.6                 | 2 x G½B         |                  | 0/40<br>mbar  | KP160Dif<br>D401 | ● | 35617401 |
| KP160Dif | D401 |  | 160 mm       | Stain-<br>less<br>steel 304 | 1.6                 | 2 x G½B         |                  | 0/60<br>mbar  | KP160Dif<br>D401 | ● | 35618401 |
| KP160Dif | D401 |  | 160 mm       | Stain-<br>less<br>steel 304 | 1.6                 | 2 x G½B         |                  | 0/100<br>mbar | KP160Dif<br>D401 | ● | 35619401 |
| KP160Dif | D401 |  | 160 mm       | Stain-<br>less<br>steel 304 | 1.6                 | 2 x G½B         |                  | 0/160<br>mbar | KP160Dif<br>D401 | ● | 35620401 |
| KP160Dif | D401 |  | 160 mm       | Stain-<br>less<br>steel 304 | 1.6                 | 2 x G½B         |                  | 0/250<br>mbar | KP160Dif<br>D401 | ● | 35621401 |
| KP160Dif | D401 |  | 160 mm       | Stain-<br>less<br>steel 304 | 1.6                 | 2 x G½B         |                  | 0/400<br>mbar | KP160Dif<br>D401 | ● | 35622401 |

● in-stock items

● Non-stock items