

### Applications and features

- Class 1, up to 1000 bar, metrology-wise
- For direct pressure indication at the measuring point and simultaneous switching of circuits for system control
- The switching point can be adjusted in the centre of the viewing glass across the entire measuring range (280°C). If the pressure reaches the set limit, the contacts switch.
- High switching reliability (30W/50VA) also in the event of vibrations
- Only suitable if an imprecise switching point is sufficient (2-5% of set switching point)
- Works without energy supply and, therefore, also in the event of power failure
- Up to 4 switch contacts with NS 100 or NS 160, up to 2 switch contacts with NS 63
- 3 switching functions selectable: clockwise, closing with increasing pressure (closing contact), opening (opening contact), switching (alternation).
- Suitable for gaseous, low-viscosity and non-crystallising measuring media that do not corrode brass
- Available options are triangular front ring with bracket attachment, 3-hole front flange or attachment rim at the back

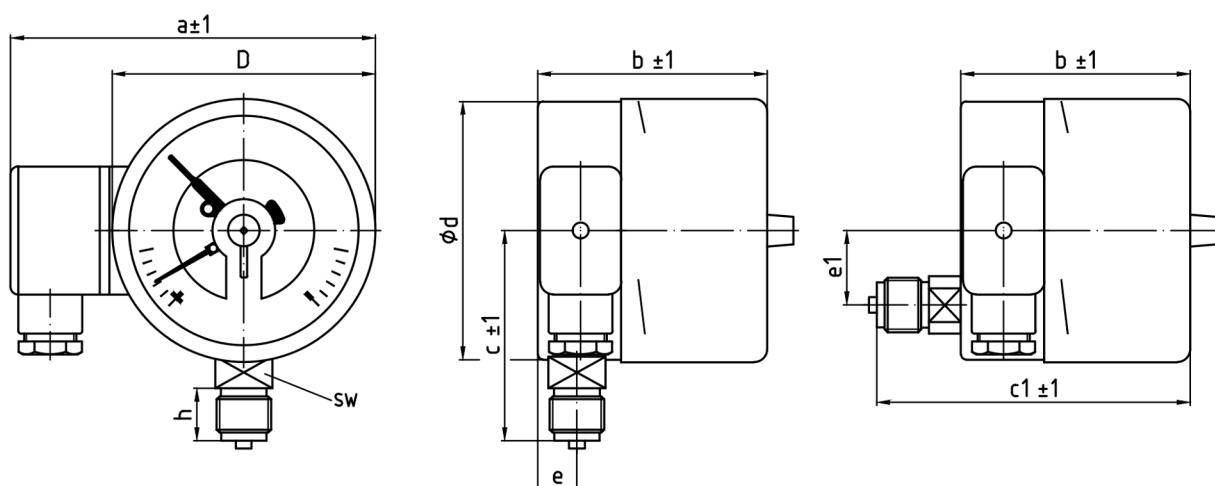


| Nominal size | Accuracy | Connection | Low radial | Centre back mount | Up radial | Lower back mount | Housing            |
|--------------|----------|------------|------------|-------------------|-----------|------------------|--------------------|
| NS 100       | Cl 1.0   | G 1/2B     | •          |                   |           | •                | CrNi steel, 1.4301 |
| NS 160       | Cl 1.0   | G 1/2B     | •          |                   |           | •                | CrNi steel, 1.4301 |

| Technical features                             |                                                                          |
|------------------------------------------------|--------------------------------------------------------------------------|
| Type standard                                  | in conformity with EN 837-1                                              |
| Sensing element                                | Bourdon tube element (circular up to 40bar, helical starting from 60bar) |
| Scale ranges (negative overpressure)           | -1 bar ... 0 bar                                                         |
| Scale ranges (positive overpressure)           | 0 bar ... 1000 bar                                                       |
| Scale ranges (neg./pos. overpressure)          | -1 bar ... +15 bar                                                       |
| Scale on dial                                  | linear, 270 angle degrees                                                |
| End stop on dial                               | without end stop pin                                                     |
| Fluctating pressure limit                      | 0.9-fold span                                                            |
| Steady pressure limit                          | 1.0-fold span                                                            |
| Short time pressure limit                      | 1.3-fold span                                                            |
| Temperature effect on accuracy (+/- of T ref.) | max. +/-0.4% of span per +/-10 K of reference temp.                      |
| Measuring medium temperature                   | max. +60°C                                                               |
| Ambient temperature                            | -40°C to +60°C                                                           |
| Storage temperature                            | -40°C to +60°C                                                           |

| Technical features                |                                            |
|-----------------------------------|--------------------------------------------|
| Gaseous measuring media           | applicable                                 |
| Fluid measuring media             | applicable                                 |
| Viscous measuring media           | not applicable                             |
| Crystallising measuring media     | not applicable                             |
| Aggressive measuring media        | not applicable                             |
| Housing type                      | Housing with bayonet catch                 |
| Ingress protection of the housing | IP54 acc. EN 60529 / IEC 528               |
| Type of mounting                  | stand-alone process connection             |
| Sensing element material          | brass                                      |
| Connection material               | brass                                      |
| Window                            | scratch resistant instrument glass         |
| Material of instrument dial       | Aluminium pure white coated, black imprint |
| motion work                       | brass                                      |
| Pointer                           | Aluminium, anodized                        |
| Red mark pointer                  | see options                                |
| Damping fluid                     | see options                                |

| Technical features           |                                        | Technical features |                                                                    |
|------------------------------|----------------------------------------|--------------------|--------------------------------------------------------------------|
| Sealing materials            | Housing: NBR (Perbunan), silicone free | Important notes    | max. 100°C measuring medium temperature, with fluid damped devices |
| Protection and safety design | see options                            |                    |                                                                    |
| ATEX suitability             | inadmissible                           |                    |                                                                    |



!!! EN !!! Maße in mm Gewicht in kg

| NG     | D   | d   | a   | b  | c   | c1 | e  | e1   | h  | SW |
|--------|-----|-----|-----|----|-----|----|----|------|----|----|
| NG 100 | 101 | 99  | 140 | 50 | 82  | 82 | 15 | 28,5 | 20 | 22 |
| NG 160 | 161 | 159 | 200 | 50 | 118 | 82 | 16 | 28,5 | 20 | 22 |

| Options                                            |            | Options                                                        |            |
|----------------------------------------------------|------------|----------------------------------------------------------------|------------|
| Red marking on instrument dial                     | from 1 pcs | Oxygen design, incl. certificate                               | from 1 pcs |
| Special scale for standard reading/measuring range | from 1 pcs | Silicone free design, incl. Factory Confirmation               | from 1 pcs |
| Special reading/measuring range                    | from 1 pcs | Acid gas design, incl. certificate                             | from 1 pcs |
| Text inscription in black block letters            | from 1 pcs | Material test report 2.2 (EN 10204)                            | from 1 pcs |
| Monochrome logo and text inscription               | from 1 pcs | Material inspection certificate 3.1 (EN 10204)                 | from 1 pcs |
| Polychrome graphic, logo and text inscription      | from 1 pcs | Factory calibration with inspection certificate 3.1 (EN 10204) | from 1 pcs |
| Throttle screw 0.3mm                               | from 1 pcs | Internationally recognised calibration (ÖKD)                   | from 1 pcs |
| Throttle screw 0.6mm                               | from 1 pcs | Preparation for official verification                          | from 1 pcs |
| Special threads, e.g. NPT, M12x1.5                 | from 1 pcs | Verification: stamping mark                                    | from 1 pcs |
| Laminated safety glass acc. to S1 (EN 837-1)       | from 1 pcs | Verification: stamping mark and verification certificate       | from 1 pcs |
| Pressure relief opening acc. to S2 (EN 837-1)      | from 1 pcs | Silicone filling                                               | from 1 pcs |
| Impact protection cap                              | from 1 pcs | Almond oil, FDA approved                                       | from 1 pcs |
| Oil and grease free design incl. certificate       | from 1 pcs |                                                                |            |

Abbildungen unverbindlich, Konstruktions-, Maß- und Werkstoffänderungen vorbehalten  
illustrations are non-binding, all designs, configurations, measurements and materials are subject to change without prior notice