

Diaphragm type pressure gauge

Model P5500 and P6500

According to EN 837-3

Nominal size 100 mm or 160 mm

Accuracy: Class 1,6 (EN)

Features

- Stainless steel construction
- Suitable for corrosive environments
- Protection IP65
- Usable to full scale
- Overload protection up to 5 times F.S.
- Dry or liquid filled

Ranges

-25 ... 0 mbar up to 0 ... 25 bar

-10 ... 0 in. H₂O up to 0 ... 300 psi

Applications

Chemical and petrochemical industry

Machine and apparatus construction

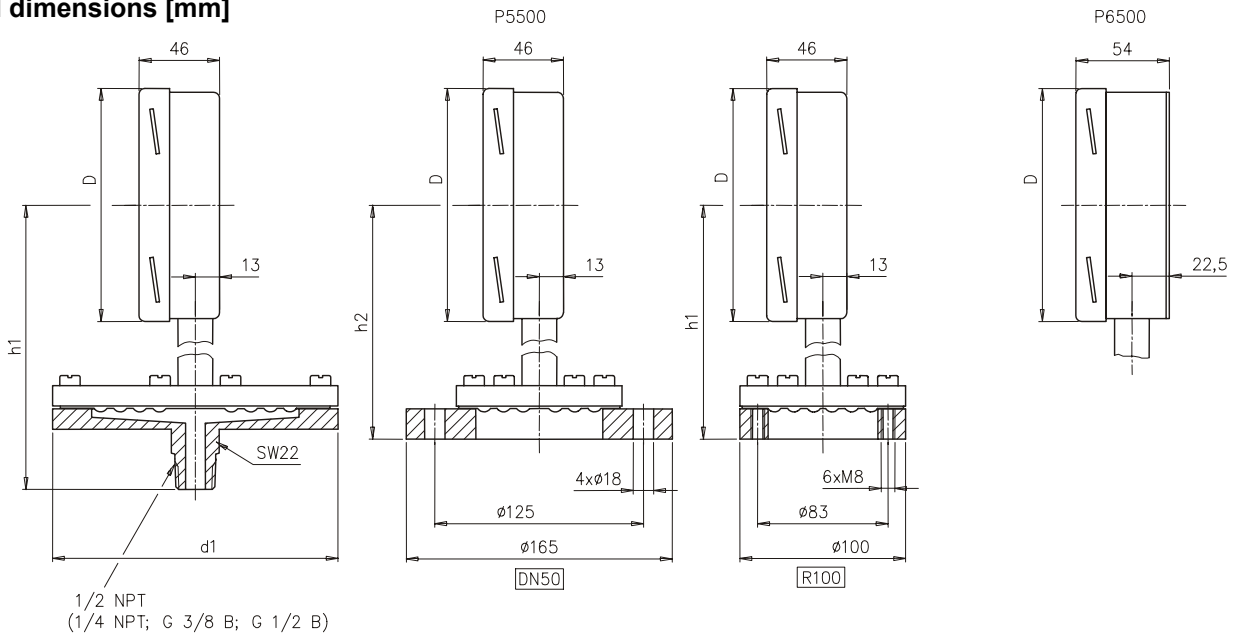
Food and beverage industry

Pulp and paper industry



| Technical specification | P5500 | | P6500 | | | | | | | | | | | | | |
|--|--|-----|---|-----|---|-----|---------|-------|--|-------|--------|--------|--------|--------|------|-------|
| | 100 | 160 | 100 | 160 | | | | | | | | | | | | |
| Dial size [mm] | 100 | 160 | 100 | 160 | | | | | | | | | | | | |
| Construction | Open front cylindrical case, optional with blow out disc at the back | | Solid front safety pattern cylindrical case with blow out at the back | | | | | | | | | | | | | |
| Measuring principle | Horizontal diaphragm | | | | | | | | | | | | | | | |
| Range [mbar] | 25 | 40 | 60 | 100 | 160 | 250 | 400 | -25/0 | -40/0 | -60/0 | -100/0 | -160/0 | -250/0 | -400/0 | | |
| [bar] | 0,6 | 1,0 | 1,6 | 2,5 | 4 | 6 | 10 | 16 | 25 | -1/0 | -1/0,6 | -1/1,5 | -1/3 | -1/5 | -1/9 | -1/15 |
| Overpressure limit | Continues service up to maximum rating, alternating service up to 90 % or rating | | | | Optional 5 times F.S., but max. 40 bar | | | | Gauge, vacuum and compound | | | | | | | |
| Pressure type | | | | | | | | | | | | | | | | |
| Process connection | G 1/4 B male, G 3/8 B male, G 1/2 B male | | | | 1/4 NPT male, 1/2 NPT male according ANSI/ASME B1.20.1 | | | | Direct flange DN25/PN40, DN50/PN40, open ring dia. 100x83x6xM8 with opening dia. 63 mm | | | | | | | |
| | Extended flange DN25/PN16-40, DN40/PN16-40, DN50/PN16-40 | | | | Extended flange 1", 1 1/2", 2", 150 ... 600 lbs RF according ANSI/ASME | | | | Others on request | | | | | | | |
| Connection location | Lower | | | | | | | | | | | | | | | |
| Material | | | | | | | | | | | | | | | | |
| Measuring flange | Stainless steel 316 (1.4401), on request Halar coated or PTFE lined or Polypropylene | | | | > 2,5 bar steel covered with stainless steel 316 (1.4401), on request PTFE-lining | | | | ≤ 2,5 bar stainless steel 316Ti (1.4571), on request PTFE-lining | | | | | | | |
| Diaphragm | | | | | | | | | | | | | | | | |
| Case/bayonet ring | Stainless steel 304 (1.4301), optional 316 (1.4401) | | | | | | | | | | | | | | | |
| Window | Instrument glass, optional laminated safety glass or acrylic glass | | | | Laminated safety glass, optional acrylic glass | | | | | | | | | | | |
| Dial | Aluminum, black markings on white background | | | | | | | | | | | | | | | |
| Pointer | Aluminum, black, optional micrometer adjustment, red set hand or maximum pointer | | | | | | | | | | | | | | | |
| Movement | Stainless steel 304 (1.4301) | | | | | | | | | | | | | | | |
| Accuracy | Class 1,6 (1,6 % F.S.) | | | | | | | | | | | | | | | |
| Permissible | | | | | | | | | | | | | | | | |
| Ambient temperature | -25 ... 50 °C | | | | | | | | | | | | | | | |
| Medium temperature | Max. 100 °C | | | | | | | | | | | | | | | |
| Storage temperature | -40 ... 60 °C | | | | | | | | | | | | | | | |
| Effect | Max. 0,5 % / 10 K | | | | | | | | | | | | | | | |
| Protection according EN 60 529/IEC 529 | IP65 | | | | | | | | | | | | | | | |
| Filling liquids | Glycerin, silicone, others on request, only possible for ranges ≥ 40 mbar | | | | | | | | | | | | | | | |
| Mounting | Standard stem or flange | | | | | | | | | | | | | | | |
| Weight ≤ 400 mbar / > 400 mbar [kg] | 2,3/1,8 | | 3,8/3,4 | | 2,3/1,8 | | 3,8/3,4 | | | | | | | | | |
| Accessories, options | Valves, gauges with contacts (see G1.K55/E), compensation diaphragm for filled cases | | | | | | | | | | | | | | | |

General dimensions [mm]



| NG | ∅D | ∅d1 | h1 | h2 |
|--------|-----|-------------------|-------------------|-----|
| 100 mm | 102 | 100 ¹⁾ | 160 ²⁾ | 132 |
| 160 mm | 162 | 100 ¹⁾ | 160 ²⁾ | 147 |

¹⁾ Pressure range > 400 mbar ²⁾ Pressure range ≤ 400 mbar

Order information

Rev. C

| Size | Type | System material | Execution | Process connection | Connection orientation | Range | Engineering units | Filling/blow out | Options |
|-----------------|-------|--|--|---|------------------------|---|------------------------------|--|---|
| (100) 100 mm | P5500 | (S) Diaphragm 316Ti (1.4571), flange | (=) IP65 | (04) ½ NPT male | (L) Lower | -25/ 0 -40/ 0 -60/ 0 -100/ 0 -160/ 0 -250/ 0 -400/ 0 | MBAR | (=) Standard no filling | (NH) Tagging wired (CS) Dual scale |
| (160) 160 mm | P6500 | 316 (1.4401) (SP) > 400 mbar diaphragm PTFE-lined, flange polypro- pylene (SH) Diaphragm 316Ti (1.4571), flange 316 (1.4401) Halar coated (ST) Diaphragm 316Ti (1.4571), flange 316 (1.4401) PTFE-lined | (L) Liquid filled IP65 ¹⁾ | (02) ¼ NPT male (13) G ¼ B male (14) G 3/8 B male (15) G ½ B male (DN50) Flange DN50 (R100) Open flange with ring dia. 100x83x6xM8 | | 0/ 25 0/ 40 0/ 60 0/ 100 0/ 160 0/ 250 0/ 400 -1/ 0 -1/ 1,5 -1/ 3 -1/ 5 -1/ 9 -1/ 15 -1/ 24 0/ 0,6 0/ 1 0/ 1,6 0/ 2,5 0/ 4 0/ 6 0/ 10 0/ 16 0/ 25 | BAR | (GV) Silicone (GR) Glycerin (RB) Blow out disc (only dry execu- tion) (RBL) Blow out disc with compen- sation dia- phragm (only for liquid filled execution) () Contact type and function (see G1.K55/E) | (6B) Oxygen cleaned (MP) Micrometer pointer (EP) Maximum pointer, adjustable (PD) Acrylic glass (SG) Safety glass (HP) Overpressure load 5 times (max. 40 bar) (DA) Dial marking (SH) Red set hand stationary |
| | | | ¹⁾ liquid filled only for ranges ≥ 40 mbar | others on request | | | psi and others on request | | |

How to order

| Size | Type | System material | Execution | Process connection | Connection orientation | Range | Engineering unit | Filling/blow out | Option |
|------|-------|-----------------|-----------|--------------------|------------------------|-------|------------------|------------------|--------|
| 100 | P5500 | S | = | 04 | L | -25/0 | MBAR | = | NH |

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