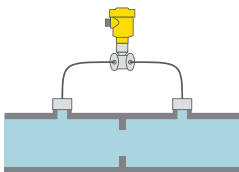
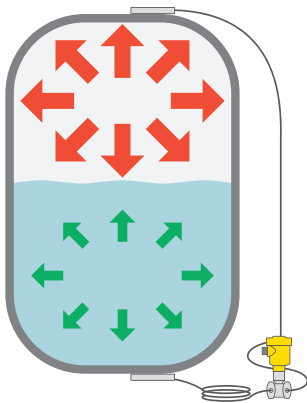


Differential pressure



Differential pressure measurement

In differential pressure measurement, different pressures act on an oil-filled, differential pressure measuring cell from two sides. The instrument converts the differential pressure into an electronic signal.

Pressure, level, density and flow of liquids, suspensions, gases and vapours can be measured using the principle of differential pressure.

The advantages

- ✓ Wide application spectrum thanks to large selection of measuring ranges and process fittings
- ✓ Differential pressure transmitters can detect differential pressures of just a few mbar
- ✓ With a chemical seal installed, media with extreme temperatures can also be safely and reliably measured

PRO

VEGADIF 85



PRO

Chemical seal CSB/CSS



PRO

Electronic differential pressure



| | | | |
|---------------------|---|--|---|
| Application | Liquids and gases | Liquids and gases | Liquids and gases, even at high pressures and temperatures |
| Deviation | < ±0.065 % | – | 0.2 %; 0.1 %; 0.05 % |
| Measuring cell | Metallic measuring cell | – | Depending on the sensor of VEGABAR series 80 |
| Process fitting | ¼-18 NPT, M10, optional with chemical seal assembly, metallic of 316L, Alloy | Flanges from DN 40, 2" cells from DN 50, 2" of 316L, Alloy, Tantalum | Thread from G¼, ¼ NPT, flanges from DN 25, 1", hygienic fittings; 316L, Duplex steel, PVDF, Alloy, PEEK |
| Process temperature | -40 ... +105 °C | -40 ... +400 °C | -40 ... +400 °C |
| Measuring range | +0.01 ... +40 bar (+1 ... +4000 kPa) | -16 ... +16 bar (-1600 ... +1600 kPa) | ±0.025 ... ±1000 bar (±2.5 ... ±100000 kPa) |
| Overload resistance | up to 400 bar | up to 400 bar | up to 200-fold measuring range |
| Signal output | 4 ... 20 mA, 4 ... 20 mA/HART, Profibus PA, Foundation Fieldbus | – | 4 ... 20 mA/HART, Profibus PA, Foundation Fieldbus |
| Display/adjustment | PLICSCOM, PACTware/DTM, VEGADIS 81, VEGADIS 82, VEGA Tools app | – | PLICSCOM, PACTware/DTM, VEGADIS 81, VEGADIS 82, VEGA Tools app |
| Approvals | ATEX, UKEX, IECEx, CSA, EAC (GOST), INMETRO, Overfill protection, Ship, SIL2/3 | In combination with VEGADIF 85 | ATEX, UKEX, IECEx, FM, CSA, NEPSI, EAC (GOST), INMETRO, CCOE, SEPRO, Overfill protection, Ship, SIL2/3 |
| Benefit | ✓ Measurement of extremely low differential pressures through high-precision measurement data acquisition | ✓ High chemical resistance through choice of appropriate diaphragm materials | ✓ Exact differential pressure measurement without capillary lines |