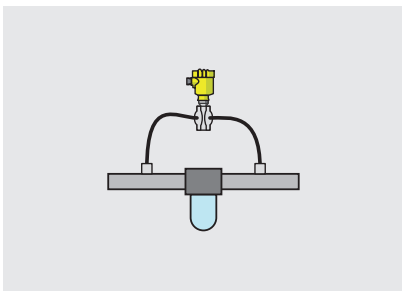
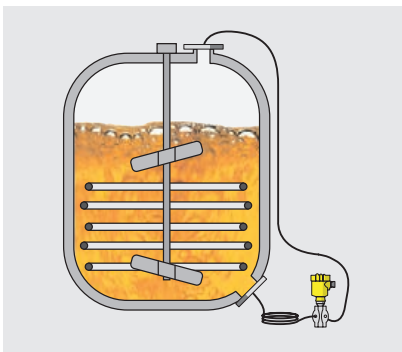




Differential pressure



Area of application




The differential pressure gauge VEGADIF was specially developed for level measurement of liquids and gases in pressurized vessels. It is also suitable for pressure monitoring across filters and pumps as well as for flow measurement of gases, vapours and liquids in conjunction with a differential pressure generator (e.g. orifice plate). When used in conjunction with a CSB or CSS chemical seal assembly, VEGADIF can also be deployed for density and interface measurement.

Measuring principle

Different pressures act on the two sides of an oil-filled differential pressure measuring cell. This converts the pressure differential into an electronic signal. A piezo measuring cell is used as the pressure measuring cell.

Advantages

The differential pressure transmitter VEGADIF is characterized by its especially wide application spectrum. Even differential pressures of only a few mbar can be accurately measured. Media at extreme temperatures can be measured by adding a chemical seal assembly.

	VEGADIF 85	Chemical seal CSB	Chemical seal CSS
			
Application	Liquids and gases	Liquids and gases	Liquids and gases
Deviation	0.15 %; 0.075 %	–	–
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	Flanges from DN 50, 2" cells from DN 50, 2" of 316L, Alloy, Tantalum
Process temperature	-40 ... +120 °C	-40 ... +400 °C	-40 ... +400 °C
Measuring range	from -10 ... +10 mbar (-1 ... +1 kPa) up to -40 ... +40 bar (-4000 ... +4000 kPa)	from -100 ... +100 mbar (-10 ... +10 kPa) up to -40 ... +40 bar (-4000 ... +4000 kPa)	from -100 ... +100 mbar (-10 ... +10 kPa) up to -40 ... +40 bar (-4000 ... +4000 kPa)
Overload resistance	up to 420 bar	up to 420 bar	up to 420 bar
Signal output	4 ... 20 mA, 4 ... 20 mA/HART, Profibus PA, Foundation Fieldbus	–	–
Display/Adjustment	PLICSCOM, PACTware, VEGADIS 81, VEGADIS 82	–	–
Approvals	ATEX, IEC, FM, CSA, EAC (GOST), Overfill protection	In combination with VEGADIF 85	In combination with VEGADIF 85
Benefit	<ul style="list-style-type: none"> • Measurement of extremely low differential pressures through high-precision measurement data acquisition • High operational reliability through integrated overload diaphragm • Universally applicable thanks to wide selection of measuring ranges and process fittings 	<ul style="list-style-type: none"> • High chemical resistance through choice of appropriate diaphragm materials • Versatile solutions through free configurability • Reliable measurement, even in extreme temperatures 	

Electronic differential pressure see page 41