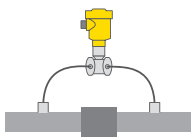
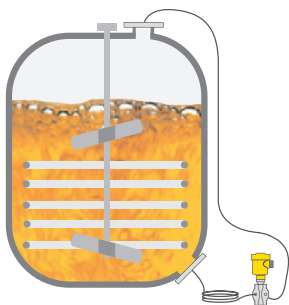




## Differential pressure



### Area of application




The differential pressure transmitter 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 flow element. 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/CSS	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	Flanges from DN 25, 1", hygienic fittings, thread from G½ of 316L, Duplex, PVDF, Alloy
Process temperature	-40 ... +120 °C	-40 ... +400 °C	-40 ... +400 °C
Measuring range	-16 ... +16 bar (-1600 ... +1600 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-times 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, VEGADIS 81, VEGADIS 82, VEGA Tools app	–	PLICSCOM, PACTware, VEGADIS 82, VEGA Tools app
Approvals	ATEX, IEC, CSA, EAC (GOST), Overfill protection, Ship, SIL2/3	In combination with VEGADIF 85	ATEX, IEC, FM, CSA, EAC (GOST), Overfill protection, Ship, SIL2/3
Benefit	<ul style="list-style-type: none"> <li>• Measurement of extremely low differential pressures through high-precision measurement data acquisition</li> <li>• High operational reliability through integrated overload diaphragm</li> <li>• Universally applicable thanks to wide selection of measuring ranges and process fittings</li> </ul>	<ul style="list-style-type: none"> <li>• High chemical resistance through choice of appropriate diaphragm materials</li> <li>• Versatile solutions through free configurability</li> <li>• Reliable measurement, even in extreme temperatures</li> </ul>	<ul style="list-style-type: none"> <li>• Exact differential pressure measurement without capillary lines</li> <li>• Cost savings through simultaneous output of absolute and differential pressure</li> <li>• Universal use through simple combination of sensors from VEGABAR series 80</li> </ul>