Front flush miniature pressure sensor with G1/4 process connection
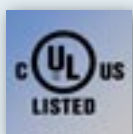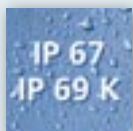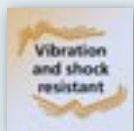
Pressure sensors

Compact design (SW 19)

High measuring accuracy < ± 0.5 %

Precise repeatability < ± 0.05 %

Robust low-cost solution with welded stainless steel housing

Small and flush-mount

The new miniature pressure sensors of the PL54 series have a flush-mount diaphragm seal with G1/4 thread directly welded to the sensor.
This measuring cell guarantees high accuracy in a very compact housing with only 19 mm across flats. In addition, the sensors feature a particularly cost-optimised price-performance ratio.
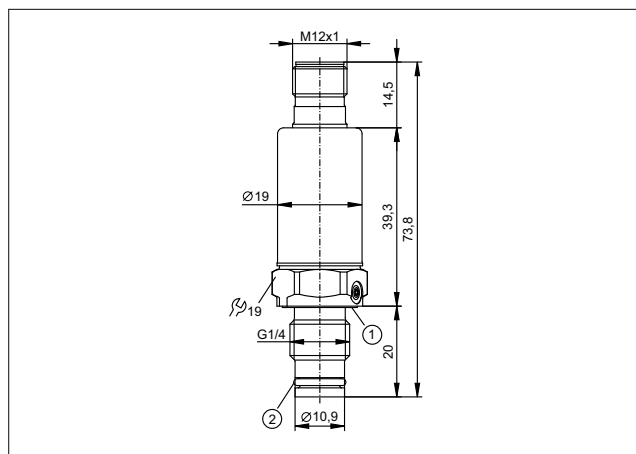
Applications

The PL54 sensors are especially used for pressure measurement in applications where flush mounting is required. This is usually the case with adhesives, glues, sealants, foams and other viscous media that would cure in dead spaces. The flush connection prevents clogging of the process connection even with contaminated media.
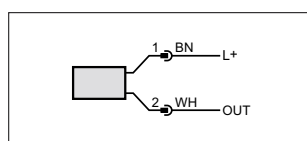
Accessories

Type	Description	Order no.
Installation		
	Seal FKM	**E30145**
	Seal EPDM	**E30442**
	Welding adapters G1/4	**E30503**
	Welding aid	**E30508**
Connection technology		
	M12 socket, 2 m black, PUR cable	**EVC001**
	M12 socket, 5 m black, PUR cable	**EVC002**
	M12 socket, 2 m black, PUR cable	**EVC004**
	M12 socket, 5 m black, PUR cable	**EVC005**

Measuring range relative pressure [bar]	P$_{overload}$ max. (static) [bar]	P$_{bursting}$ min. [bar]	Order no.
Output function 4...20 mA			
0...400	1000	1,700	**PL5400**
0...250	625	1,200	**PL5401**
0...160	400	1,100	**PL5412**
0...100	250	1000	**PL5402**
0...60	150	900	**PL5423**

Common technical data		
Operating voltage	[V DC]	8.5...36
Reverse polarity protection		•
Step response time	[ms]	1
Accuracy / deviations (in % of the span)		
Linearity error		< ± 0.5
Linearity		< ± 0.1 (BFSL) / < ± 0.2 (LS)
Hysteresis		< ± 0.2
Repeatability		< ± 0.05
Long-term stability		< ± 0.1
Temperature coefficients (TEMPCO) in the temperature range -40...90°C (in % of the span per 10 K)		
TEMPCO of zero		< ± 0.1 (-25...90 °C) / < ± 0.2 (-40...-25 °C)
TEMPCO of the span		< ± 0.1 (-25...90 °C) / < ± 0.2 (-40...-25 °C)
Medium temperature	[°C]	-40...90
Protection		IP 67 / IP 69K
Materials (wetted parts)		NBR, high-grade stainless steel (630 / 1.4542)

Dimensions

1) Seal

Wiring

ifm – close to you!