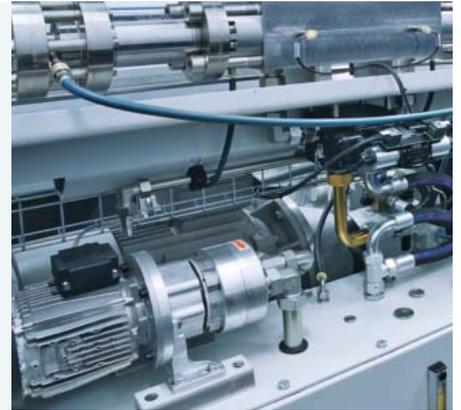




Process sensors

PV pressure sensor – one sensor, two solutions



Pressure sensors



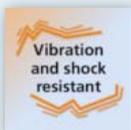
Two solutions: continuous transmission of process values via IO-Link and 2 switching outputs

Vast setting options and advanced diagnostics via IO-Link

Compact design (AF19) with process connection G 1/4

Switch point accuracy $< \pm 0.5\%$, repeatability $< \pm 0.05\%$

Robust low-cost solution with welded stainless steel housing



Miniaturisation for industrial applications

The new PV pressure sensor features a thin-film measuring cell directly welded with the process connection. This technology guarantees high accuracy in a very compact housing with only 19 mm across flats at a cost-optimised price/performance ratio.

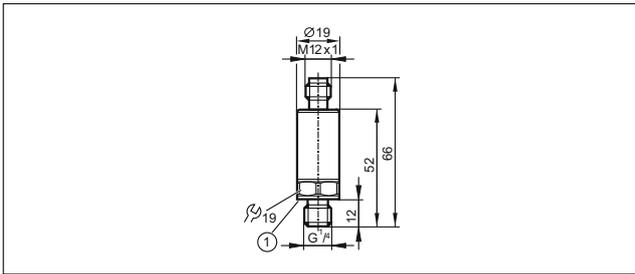
Applications

With the seal-less design of the process connection the sensors can be used not only in hydraulic applications but also in inert gases. In industrial applications the laser labelling on the housing is also advantageous. Even in adverse environmental conditions, the sensor remains permanently identifiable. Another advantage is the integrated IO-Link interface. Thanks to IO-Link the new pressure sensor continuously transmits process values and other important data, e.g. a pressure peak counter.

Moreover, the digital measurement results are more accurate because there are no conversion losses by D/A converters or external influences (e.g. cable lengths).

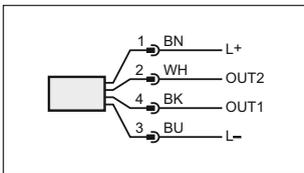


Dimensions



1) seal

Wiring



OUT1: switching output or IO-Link
 OUT2: switching output
 Colours to DIN EN 60947-5-2

Accessories

Type	Description	Order no.
	Adapter; G 1/4 - G 1/2, high-grade stainless steel (316Ti/1.4571)	E30135
	IO-Link interface for parameter setting and analysis of units with DTM specification, current consumption via USB port: max. 500 mA	E30396
	Memory plug, parameter memory for IO-Link sensors	E30398
	LR DEVICE (supplied on USB flash drive) Software for online and offline parameter setting of IO-Link sensors and actuators	QA0011

Measuring range Relative pressure [bar]	Poverload max. (static) [bar]	Pburst min. [bar]	Order no.
Output function 2 x DC PNP/NPN, IO-Link			
0...400	1000	1700	PV7000
0...250	625	1200	PV7001
0...100	250	1000	PV7002
0...60	150	900	PV7023
-1...25	65	600	PV7003
-1...10	25	300	PV7004

Common technical data

Operating voltage	[V DC]	18...30
Reverse polarity protection		•
Current rating	[mA]	100
Switching frequency	[Hz]	≤ 170
Response time	[ms]	< 3
Switching output		< 3
Accuracy / deviation (in % of the span)		
Linearity error		< ± 0.5
Switch point accuracy		< ± 0.5
Linearity		< ± 0.1 (BFSL) / < ± 0.2 (LS)
Hysteresis		< ± 0.2
Repeatability		< ± 0.05
Long-term stability		< ± 0.1
Temperature coefficient (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 in contact with the medium		FKM, high-grade stainless steel (316L/1.4542)
Restrictor element integrated		•
Communication interface		IO-Link 1.1 COM2 slave; 38.4 kbaud

Connection technology

Type	Description	Order no.
	Socket, M12, 2 m black, PUR cable	EVC001
	Socket, M12, 5 m black, PUR cable	EVC002
	Socket, M12, 2 m black, PUR cable	EVC004
	Socket, M12, 5 m black, PUR cable	EVC005