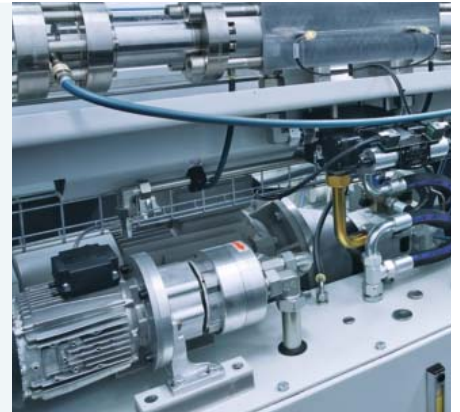




Process sensors

# PV pressure sensor – one sensor, two solutions



Pressure sensors



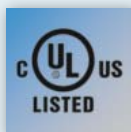
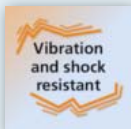
**Two solutions: continuous transmission of process values via IO-Link and 2 switching outputs**

**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

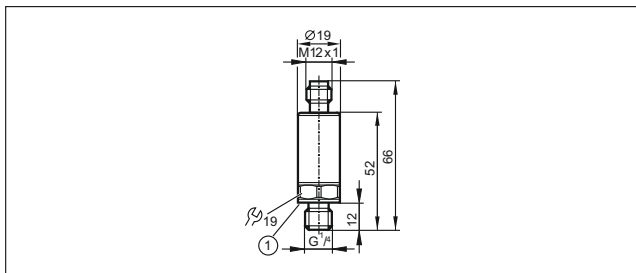
The new PV pressure sensor features a thin-film measuring cell directly welded with the process connection. This technology guarantees high accuracy in a very compact housing with only 19 mm across flats at a cost-optimised price/performance ratio.

## 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).

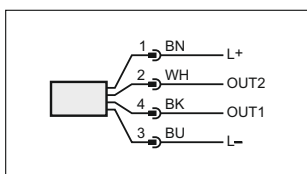


## Dimensions







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)	<b>E30135</b>
	IO-Link interface for parameter setting and analysis of units with DTM specification, current consumption via USB port: max. 500 mA	<b>E30396</b>
	Memory plug, parameter memory for IO-Link sensors	<b>E30398</b>
	LR DEVICE (supplied on USB flash drive) Software for online and offline parameter setting of IO-Link sensors and actuators	<b>QA0011</b>

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

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
<b>Accuracy / deviation (in % of the span)</b>		
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
<b>Temperature coefficient (TEMPCO) in the temperature range -40...90 °C (in % of the span per 10 K)</b>		
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	<b>EVC001</b>
	Socket, M12, 5 m black, PUR cable	<b>EVC002</b>
	Socket, M12, 2 m black, PUR cable	<b>EVC004</b>
	Socket, M12, 5 m black, PUR cable	<b>EVC005</b>