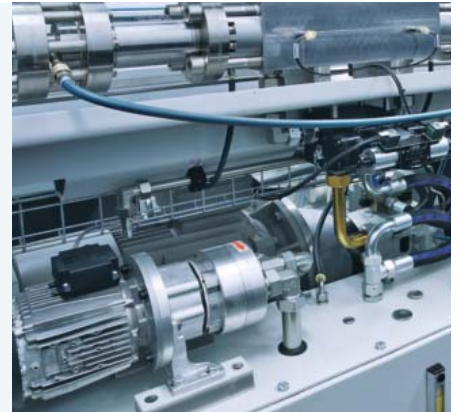




Process sensors

Precise pressure sensor with additional temperature monitoring



Pressure sensors

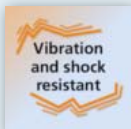


Continuous process value transmission via IO-Link, 2 switching outputs

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

Robust low-cost solution with welded stainless steel housing

- Integrated temperature measurement removes need for multiple instruments (PV80xx)
- Full parameter setting and advanced diagnostics via IO-Link



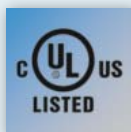
Vibration and shock resistant



IP 67
IP 69 K



IO-Link



UL
LISTED

Miniaturisation for industrial applications

The 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 ensures clear part identification. Even in adverse environmental conditions, the sensor remains permanently identifiable. IO-Link allows the pressure sensor to continuously transmit process values (system pressure and temperature) as well as other important data, such as peak counter. Moreover, the digital measurement results are more accurate because there are no conversion losses by D/A converters or external influences.



Measuring range relative pressure [bar]	P _{overload} max. (static) [bar]	P _{burst} min. [bar]	Order no.
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Pressure sensor, output function 2 x DC PNP/NPN, IO-Link

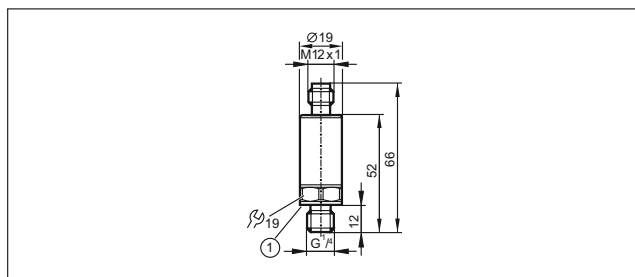
0...600	1500	2500	PV7060
0...400	1000	1700	PV7000
0...250	625	1200	PV7001
0...100	250	1000	PV7002
0...60	150	900	PV7023
-1...25	65	600	PV7003
-1...10	25	300	PV7004

Measuring range relative pressure [bar]	P _{overload} max. (static) [bar]	P _{burst} min. [bar]	Order no.
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Pressure sensor with integrated temperature measurement, output function 2 x DC PNP/NPN, IO-Link

0...600	1500	2500	PV8060
0...400	1000	1700	PV8000
0...250	625	1200	PV8001
0...100	250	1000	PV8002
0...60	150	900	PV8023
-1...25	65	600	PV8003
-1...10	25	300	PV8004

Dimensions



1) seal

Accessories

Design	Description	Order no.
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Installation

	Adapter; G 1/4 - G 1/2, high-grade stainless steel (320S17/1.4571)	E30135
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IO-Link

	USB IO-Link master for parameter setting and analysis of units Supported communication protocols: IO-Link (4.8, 38.4 and 230 Kbits/s)	E30390
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	Memory plug, parameter memory for IO-Link sensors	E30398
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	LR DEVICE (supplied on USB flash drive) Software for online and offline parameter setting of IO-Link sensors and actuators	QA0011
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Connection technology

	Socket, M12, 2 m, black, PUR cable	EVC001
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	Socket, M12, 5 m, black, PUR	EVC002
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	Socket, M12, 2 m, black, PUR cable	EVC004
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	Socket, M12, 5 m, black, PUR	EVC005
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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)

Temperature monitoring		
Measuring range	[°C]	-40...90
Accuracy	[K]	± 2.5 + (0.045 x (ambient temperature - medium temperature))

Medium temperature	[°C]	-40...90
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Protection rating		IP 67 / IP 69K
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Materials in contact with the medium		FKM, high-grade stainless steel (17-4 PH/1.4542)
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Restrictor element integrated		•
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Communication interface		IO-Link 1.1 COM2 slave; (38.4 kbaud)
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We reserve the right to make technical alterations without prior notice. · 04.2020