With E1 approval: Pressure transmitters for mobile machines

Pressure sensors

Compact design with 19 mm across flats and G 1/4-inch process connection

Fast response time of only 2 milliseconds

Measuring accuracy < ±0.8%, repeatability < ±0.05%

Easy connection via M12 or DEUTSCH connector

Welded stainless steel housing for reliable use in harsh working environments

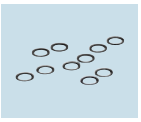
E1 type approval for mobile applications

The PT/PU-type sensors are suited for mobile applications and especially for hydraulic and pneumatic applications with high operating pressure. They offer high vibration and shock resistance, a high degree of protection and very good EMC resistance. They also have the E1 type approval.

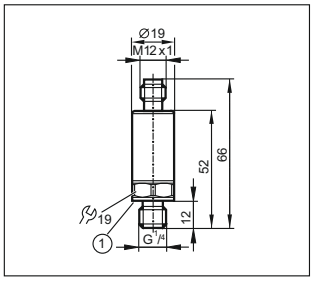
High measuring accuracy in compact housing

The thin-film measuring cell of the sensor is directly welded to the process connection and features a high measuring accuracy and short response time. The measurement technology used also enables the extremely compact housing dimensions with a width across flats of only 19 millimetres. This facilitates installation even where space is at a premium.

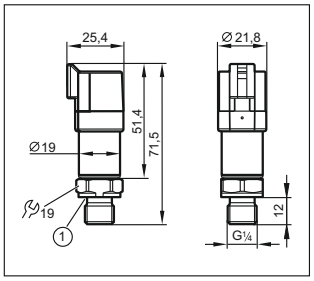
Accessories

Type	Description	Order no.
Installation		
	Adapter G 1/4 – G 1/2, high-grade stainless steel (1.4571/316Ti)	**E30135**
	Seal FKM	**E30145**
	Seal EPDM	**E30442**
Connection technology		
	Socket, M12, 2 m, PUR cable, halogen-free, black	**EVM001**
	Socket, M12, 5 m, PUR cable, halogen-free, black	**EVM002**
	Socket, M12, 10 m, PUR cable, halogen-free, black	**EVM003**
	Socket, M12, 2 m, PUR cable, halogen-free, black	**EVM004**
	Socket, M12, 5 m, PUR cable, halogen-free, black	**EVM005**
	Socket, M12, 10 m, PUR cable, halogen-free, black	**EVM006**

Dimensions

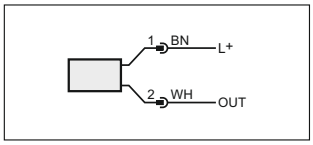


PT5 / PU5

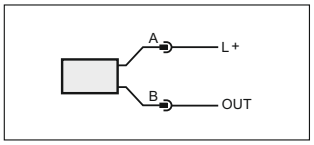


PT7
1) Seal: FKM / DIN 3869

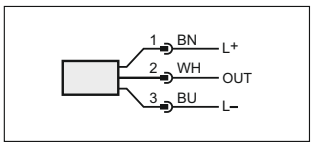
Wiring diagram



PT5



PT7



PU5

Measuring range relative pressure [bar]	$P_{overload}$ max. (static) [bar]	$P_{bursting}$ min. [bar]	Order no.
Output function 4...20 mA, M12 connector			
0...600	1500	2500	**PT560E**
0...400	1000	1700	**PT500E**
0...250	625	1200	**PT501E**
0...100	250	1000	**PT502E**
0...25	65	600	**PT503E**
0...10	25	300	**PT504E**
Output function 4...20 mA, DEUTSCH connector			
0...600	1500	2500	**PT760E**
0...400	1000	1700	**PT700E**
0...250	625	1200	**PT701E**
0...100	250	1000	**PT702E**
0...25	65	600	**PT703E**
0...10	25	300	**PT704E**
Output function 0.5...4.5 V, M12 connector			
0...600	1500	2500	**PU560E**
0...400	1000	1700	**PU500E**
0...250	625	1200	**PU501E**
0...100	250	1000	**PU502E**
0...60	150	900	**PU523E**
0...25	65	600	**PU503E**
0...10	25	300	**PU504E**

Common technical data		
Operating voltage	[V DC]	8...32
Reverse polarity protection		•
Accuracy / deviation (in % of the span)		
Linearity error		< ± 0.8
Linearity		< ± 0.25 (BFSL)/< ± 0.5 (LS)
Hysteresis		< ± 0.2
Repeatability		< ± 0.05
Long-term stability		< ± 0.1
Temperature coefficient (TEMPCO) in the temperature range -40...125°C (in % of the span per 10 K)		
TEMPCO of zero + span		< ± 0.1 (0...80 °C) < ± 0.2 (-40...0 °C and 80...125 °C)
Medium temperature	[°C]	-40...125
Protection		IP 67 / IP 69K
Materials (wetted parts)		high-grade stainless steel (1.4542) (17-4 PH / 630)
Restrictor		•
EMC		compliant with UN ECE R10 Rev. 5 ISO 11452-2: 100 V/m EN61326-1