



Process sensors

Pressure sensors for water-based media



Pressure sensors



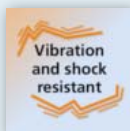
Wetted parts: ceramics, EPDM and high-grade stainless steel

DNV-GL approval for maritime applications

Robust ceramic measuring cell

Rotatable process connection

Programmable red/green display



Applications

Based on the tried-and-tested pressure sensors, ifm presents a version for special applications. The new PE2 family of pressure sensors are ideally suited for water-based media due to the materials used for their wetted parts (ceramics, EPDM, stainless steel).

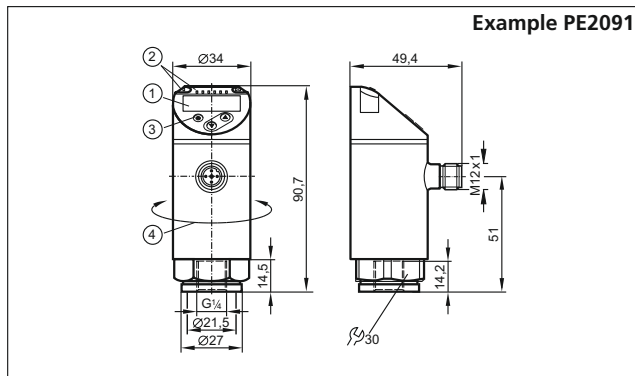
Further applications are ammonia circuits in refrigerating technology and monitoring of cleaning agents and other secondary processes in the food industry. The PE2 family is not suitable for oils and oil-based media due to its EPDM cell sealing.

Robust measuring cell

The ceramic measuring cell ensures excellent overload protection even in case of cavitation, and a high resistance to media.

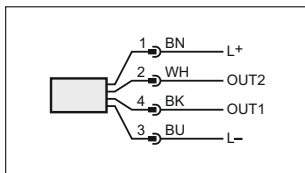


Dimensions



- 1) 4-digit alphanumeric display / alternating indication (red and green)
- 2) LEDs (display unit / switching status)
- 3) programming button
- 4) upper part of the housing can be rotated by 345°

Wiring diagram



OUT1: switching output or IO-Link
 OUT2: switching output
 Colours to DIN EN 60947-5-6

Accessories

Design	Description	Order no.
	EPDM seal for external thread	E30442
	Angle bracket	E30421
	Protective cover	E30420
	Ventilation cover	E30432
	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
	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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Measuring range Relative pressure [bar]	Poverload max. [bar]	Pburst min. [bar]	Order no.	Order no.
Output function 2 x NO/NC or 1x NO/NC + analogue, IO-Link			G 1/4	G 1/4 male
0...250	500	1200	PE2091	PE2591
0...100	300	650	PE2092	PE2592
0...25	150	350	PE2093	PE2593
0...10	75	150	PE2094	PE2594
0...2.5	20	50	PE2096	PE2596
-1...1	20	50	PE2099	PE2599

Common technical data

Operating voltage	[V DC]	18...30
Current rating	[mA]	250
Accuracy / deviation (in % of the span) turn down 1:1		
Switch point accuracy		< ± 0.4
Linearity error		< ± 0.25 (BFSL) < ± 0.5 (LS)
Repeatability		< ± 0.1
Long-term stability		< ± 0.05
Temperature coefficient (TEMPCO) in the temperature range -25...80 °C (in % of the span per 10 K)		
Greatest TEMPCO of zero		< ± 0.2
Greatest TEMPCO of the span		< ± 0.2
Switching frequency	[Hz]	≤ 500
Medium temperature	[°C]	-25...80
Shock resistance	[g]	50
Vibration resistance	[g]	20
Materials in contact with the medium		high-grade stainless steel (1.4404 / 316L) Al2O3 (ceramics), EPDM
Communication interface		IO-Link 1.1 COM2 slave; 38.4 kbaud

Connection technology

Design	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