

Even more sturdy and precise, and also faster

Robust high-resolution pressure sensor

- Pressure peak and overload resistant ceramic measuring cell with diagnostic function
- Fast compensation of dynamic temperature changes
- Permanent 150°C medium temperature
- Factory certificate for free download
- Very high resolution thanks to 32 bits and IO-Link



ifm - close to you!

Eactory setting Measuring range	Order no.		
measuring range [bar]	ge relative pressure [bar]	G1 / Aseptoflex Vario	G1 / sealing cone
0160	0160	-	PI1612
0100	-1100	-	PI1602
040	-140	PI1743	PI1843
025	-125	PI1703	PI1803
016	-116	PI1714	PI1814
010	-110	PI1704	PI1804
06	-16	PI1715	PI1815
04	-14	PI1705	PI1805
02.5	-0.1242.5	PI1706	PI1806
01.6	-0.11.6	PI1717	PI1817
01	-0.051	PI1707	PI1807
-11	-11	PI1709	PI1809
00.4	-0.050.4	PI1718	PI1818
00.25	-0.01240.25	PI1708	PI1808
00.1	-0.0050.1	PI1789	PI1889

A successful product improved even further

The ifm pressure sensors of the PI series have proven their worth in the food and beverage industry for many years. The key to success lies in the extremely robust ceramic measuring cell, which can easily withstand even extreme pressure peaks and overloads. Ceramic is also resistant to abrasive media. Unlike conventional sensors with a metallic diaphragm, no oil is required as a pressure transfer medium. This eliminates the risk of medium contamination when the sensor is damaged. As a result, the ceramic measuring cell offers maximum safety, especially in applications in the food and beverage industry. A new feature is an advanced diagnostic function that continuously monitors the status of the measuring cell. It provides maximum confidence in the measurement while also meeting the documentation requirements of critical processes.

Technical data			
Step response time analogue output	[ms]	30 (2L) / 7 (3L)	
Accuracy (in % of the span) deviation of the characteristics (to DIN EN 61298-2)		< ± 0.2	
Medium temperature	[°C]	-25150	
Materials (wetted parts)		Ceramic 99.9 %, PTFE, stainless steel (316L/1.4435)	
Communication interface		IO-Link 1.1 COM2 (38.4 kbaud)	
Protection rating		IP69K	

Sophisticated compensation for temperature changes

With pressure sensors, highly dynamic temperature fluctuations often lead to a scenario where the measured values only slowly approximate the actual pressure value. The new dynamic temperature compensation on the PI balances these effects in tanks and pipes by using an intelligent algorithm, making the measurement signal even more reliable.

IO-Link

IO-Link enables not only the loss-free digital transmission of measured values, but also the sensor configuration and provision of diagnostic data, e.g. excess temperature or measuring cell monitoring. Alternatively, the sensor can also be configured on site using the conventional method with three operating keys and a setting menu.

High resolution

The resolution of the IO-Link signal has been increased to 20,000 steps, especially for hydrostatic measurement in tanks.

BEST FRIENDS



TCC temperature sensor Including self-monitoring for maximum process reliability



LMT level sensor Point level detection even with difficult media



LDL conductivity sensor Precise distinction of liquid media based on their conductivity



For further technical details, please visit: ifm.com/fs/PI1602