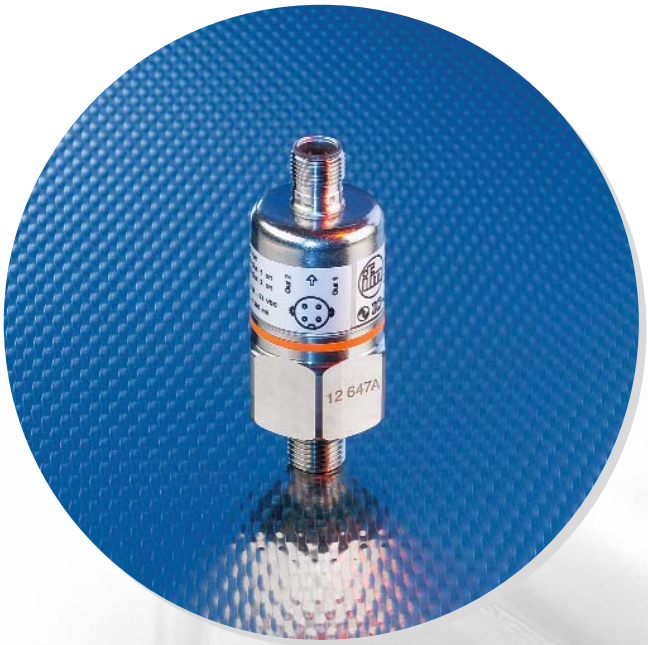
product news

ifm electronic

Fluid sensors and diagnostic systems

Optimised pressure transmitter with improved accuracy.



Compact and robust remake of the tried-and-tested PP series.

- Pressure sensor for mobile applications, shock resistant up to 1000 g.
- Two switching outputs.
- Extremely robust and reliable.
- Excellent EMC resistance.
- Communication via I/O link Interface.

IP 68
IP 69 K

Vibration and shock resistant

Stainless steel

EMC

A new generation of the PP series

The new design and improved technology of these tried-and-tested pressure sensors is distinguished by a higher overall accuracy of 0.5 %, a more compact housing and an enhanced switch point accuracy of 0.5 %. The tried-and-tested pressure sensing principle using a ceramic-capacitive measuring cell ensures reliable and long-term stable measured values in mobile and stationary hydraulic applications.

The improved housing design allows the units to be installed more easily in narrow applications that are difficult to access.

This update is completed by an attractive price complemented by the added value of maximum plant uptime.

Pressure monitoring in hydraulic systems.

fluid sensors and diagnostic systems

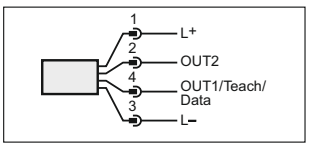
position sensors and object recognition

bus, identification and control systems

Process connection G 1/4 A / M5 female
2 switching outputs PNP or NPN
Diagnostic function

Measuring range Relative pressure [bar]	Overload pressure max. [bar]	Bursting pressure min. [bar]	Switch point SP [bar]	Switch-off point rP [bar]	Step increment [bar]	Order no.
M12 connectors · 2 x ⎓ / ⏚ or 1 x ⎓ / ⏚ and 1 x diagnosis, PNP						
0...400	600	1000	4...400	2...398	2	**PP7550**
0...250	400	850	2...250	1...249	1	**PP7551**
0...100	300	650	1...100	0.5...99.5	0.5	**PP7552**
0...25	150	350	0.2...25	0.1...24.9	0.1	**PP7553**
-1...10	75	150	-0.90...10	-0.95...9.95	0.05	**PP7554**
0...2.5	20	50	0.02...2.5	0.01...2.49	0.01	**PP7556**
M12 connectors · 2 x ⎓ / ⏚ or 1 x ⎓ / ⏚ and 1 x diagnosis, NPN						
0...400	600	1000	4...400	2...398	2	**PP0520**
0...250	400	850	2...250	1...249	1	**PP0521**
0...100	300	650	1...100	0.5...99.5	0.5	**PP0522**
0...25	150	350	0.2...25	0.1...24.9	0.1	**PP0523**
-1...10	75	150	-0.90...10	-0.95...9.95	0.05	**PP0524**

Wiring diagram



Accessories

Type	Description	Order no.
	Programming and display unit: for EPS sensors	**PP2001**
	IO-link interface	**E30396**
	Flange adapter G1/4 for pressure sensors type PP7	**E30063**

Connectors and splitter boxes

Type	Description	Order no.
	M12 socket, 2 m black, PUR cable	**EVC004**
	M12 socket, 5 m black, PUR cable	**EVC005**

Common technical data		
Operating voltage	[V DC]	9.6...36
Current rating	[mA]	2 x 250
Current consumption	[mA]	< 45
Switch point accuracy	[%]	< ± 0.5
Repeatability	[%]	< ± 0.1
Hysteresis	[%]	< ± 0.1
Linearity	[%]	< ± 0.5
Shock resistance		1000 g
Vibration resistance		20 g (10...2000 Hz)
Materials (wetted parts)		stainless steel (303S21); FPM, ceramics
Medium temperature	[°C]	-25...90
Protection		IP 68 / IP 69K

Improvements

The redesign of the PP sensors provides higher accuracy and an improved housing. Programming can now be effected via IO link by means of FDT or the programming and display unit PP2001.

The output of the PP7 series is positive switching, the respective counterpart with negative-switching output is the PP05 series.

The user can choose between two switching outputs or one switching output and one diagnostic output.

In addition to the existing CE and cULus approvals the sensors also comply with the EN50155 standard and therefore they are also railway compliant. Furthermore the sensors have been developed to the requirements of the e1 type approval of the German Federal Office for Motor Traffic and therefore they are e1 compliant.
(e1 type approval on request)