

Penny & Giles Proportional Pressure Sensor PPS110

- **Stainless-steel diaphragm**
- **Measurement ranges up to 1000bar**
- **Multiple pressure-connection options**
- **Multiple electrical-output options**
- **Accuracy 0.5%**
- **Environmentally robust**

A thin-film, semiconductor measuring element bonded to a stainless-steel diaphragm ensures excellent sensor performance in terms of long-term stability, measured-media compatibility and pressure peaks; so making the PPS110 suitable for use in a wide range of industrial applications. Overall robustness, even in the most challenging of hydraulic applications, is assured through the unit's welded stainless-steel housing.



STANDARD CONFIGURATIONS

MEASUREMENT RANGE (bar)	1	1.6	2	2.5	4	6	10	16
	20	25	40	60	100	160	200	250
	400	600	1000					
PRESSURE MODE	Gauge							
PRESSURE CONNECTION	G 1/4 A Shape E		G 1/4 B		1/4 NPT		G 1/2 B	
ELECTRICAL OUTPUT	4-20mA two wire		4-20mA three wire		0-10V		0-5V	
	1-5V		0.5-4.5v ratiometric					
ELECTRICAL CONNECTION	MVC/A		MVC/C		M12x1 - S763		Flying Lead	

SPECIFICATIONS

ACCURACY

AT 20°C	0.5% of measurement range. Option for 0.25%. Includes non-linearity, hysteresis, zero offset and final offset in accordance with IEC 61298-2
BEST-FIT STRAIGHT LINE	0.125%
NON-LINEARITY	0.15% of measurement range
REPEATABILITY	0.1% of measurement range
STABILITY PER YEAR	0.1% of measurement range

ELECTRICAL

RESPONSE TIME	1ms over 10-90%
OVER VOLTAGE	350Vdc. Option for 710Vdc

MECHANICAL

SENSING DIAPHRAGM	Stainless steel
HOUSING	Stainless steel
SHOCK RESISTANCE	1000g according to IEC 68-2-32
VIBRATION RESISTANCE	20g according to IEC 68-2-2 and IEC 68-2-36
MASS	80-120mg dependent on configuration
CE-MARKING	To 2004/108/EC
IP RATING	Per electrical connector rating
OPTIONS	Load dump module, restrictor

TEMPERATURE

MEASURED MEDIA	-40°C to 125°C
OPERATING	-40°C to 105°C. Option for -55°C.
STORAGE	-40°C to 125°C
COMPENSATED RANGE	-20°C to 85°C
TEMPERATURE COEFFICIENTS WITHIN THE COMPENSATED RANGE	
MEAN OFFSET	0.015%/°C of measurement range
MEAN RANGE	0.015%/°C of measurement range
TOTAL ERROR	-40°C 2% of measurement range, 105°C 2% of the measurement range

For detailed specifications of pressure ratings, pressure connections, electrical outputs and electrical connections, refer to the Pressure Sensors General Specification document.