

Penny & Giles
Proportional Pressure Sensor
 PPS140

- **Stainless-steel. flush 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 flush, stainless-steel diaphragm ensures excellent sensor performance in terms of long-term stability, measured-media compatibility and pressure peaks; so making the PPS140 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										
GAUGE (BAR)	0.6	1	1.6	2	2.5	4	6	10	20	
ABSOLUTE (BAR)	1	2	2.5	6	10	20	40	60	100	
	160	200								
PRESSURE MODES	Gauge / Absolute									
PRESSURE CONNECTION	G 1/2 A Shape A			G 1 A Shape E						
ELECTRICAL OUTPUT	4-20mA two wire		4-20mA three wire		0-10V		1-5V			
	0.5-4.5V ratiometric									
ELECTRICAL CONNECTION	MVC/A		MVC/C		Male 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	Silicon
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

TEMPERATURE

MEASURED MEDIA	-30°C to 100°C
OPERATING	-30°C to 100°C
STORAGE	-40°C to 100°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	-30°C 2% of measurement range, 100°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.