

Pressure Sensor - EPT2105



- Long life and proven performance
- Light weight plastic design
- Low cost pressure measuring

The **EPT2105** is based on the proven design of the EPT2100 and optimised for applications with low cost requirements.

The silicon measuring cells used within this design coupled with the high level output circuitry, assures excellent accuracy and long term stability within a light weight design.

The monolithic sensing element is compatible with many medias, including oil and compressed air and is suitable for applications with measuring ranges of 10 and 12 bar.



Specification

Performance

Accuracy @ RT	% of the range < $\pm 0,5$ % at room temp. < $\pm 2,5$ % at $-40..105^{\circ}\text{C}$	(incl. nonlinearity, hysteresis, repeatability and temperature effects. (New parts: max. drift 0,1 % FS/year)
Span	4.0 V	
Output at FS	4.5 V	
Zero output	0.5 V	
Response time	10 msec (Measured from initial value to output at 90%)	
Stability/year	% of the range < ± 0.1 %	
Pressure range	10 bar, 12 bar	
Overrange pressure	20 bar	
Burst pressure	30 bar	
Pressure cycles	> 10 million	
Environment		
Temperature range	-40° to 125°C	
Shock	1000 G, 11 msec., 1/2 Sine	
Vibration	16 G peak, 20 to 2000 Hz	
Sealing	IP 66	

Electronics

Excitation	5 VDC for 0.5 – 4.5 V ratiometric output
Current consumption	7.5 mA min. 10 mA max.
Load resistor	2.5 k Ω
Load capacitor	25 nF
Output resistance	10 Ω
Output source current	2.0 mA
Output sink current	2.0 mA
Output ratiometricity	0. to 1.1 %
Isolation resistance to case	100 M Ω
Short circuit protection	Yes
Reverse voltage protection	Yes

Mechanics

Housing	Housing PA 6.6 30% GF
Wetted parts	O-Ring is NBR 70 shore, Aluminum, silicon, silicone-glue
Pressure port	M18x1.5
Electrical connection	Packard connector
Weight	> 50 g
Mounting force max.	8 Nm

Ordering Information

Product code: 10 bar version - EPT2105-M18-01000-B-5-C
12 bar version - EPT2105-M18-01200-B-5-C

Dimensions and wiring

