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Piezoelectric Pressure Transducer Model CL30

Description:

Mod. CL 30 Piezoelectric Pressure Transducer incorporates a piezo column which converts the mechanical pressure signal into an electrical output signal. The characteristics of the piezo material allows for the measurement of very fast pressure changes. Its high sensitivity offers high resolution as well as high accuracy. The sensor element and the diaphragm can be cooled with distilled water which makes the transducer capable of wide temperature range applications. A typical application would be the measurement of ignition pressures in combustion engines where the transducer can be mounted in spark-plug hole.



Technical Specifications:

Range in Bar:	100 bar
Permitted Overload:	≤ 50 %
Sensitivity:	20 pC/bar
Capacitance:	8 pF
Linearity	± 0,5 %; 1 %
Hysteresis:	± 0,2 %
Temperature Stability:	± 0,1 %/10 K
Resistance:	10 ⁸ MΩ
Accuracy Class:	0,5; 1 or 2
Natural Frequency:	≥ 50 kHz
Vibration Strength:	≤ 10 g/ms @ frequencies ≤ 2 kHz
Impact Strength:	≤ 10 g/ms
Operating Temperature Range:	- 20 °C to 50 °C
Pressure Medium Temperature:	- 20 °C to 300 °C (with water cooling)
Cooling Medium Throughput:	0,3 l/min
Cooling Medium:	Distilled Water
Permitted Rel. Humidity:	80 %
Protection Standard:	IP54
Configurations:	A and K
Mounting Thread:	Configuration A: M14x1,25 Configuration K: M18x1,5
Dimensions:	Configuration A: Wrench size 19 x 40 mm Configuration K: Wrench size 22 x 49 mm