

KISTLER

measure. analyze. innovate.












Pressure Sensors

A Product Selection
Guide for General
Purpose Piezoelectric
Measurement
Equipment



Products for General Pressure Measurement

Overview: Piezoelectric Pressure Sensors

Sensor	Type Dimensions	Technical Data						Special Characteristics
		Pressure Range [bar]		Operating Temperature Range [°C]		Sensitivity [pC/bar]	Natural Frequency [kHz]	
		min.	max.	min.	max.			
	601A ø5,5 mm L = 15,0 mm	0	250	-196	200	16	150	- Miniature size
	601H ø5,5 mm L = 15,0 mm	0	1 000	-196	200	16	150	- Miniature size - High pressure
	6001 ø5,5 mm L = 14,8 mm	0	250	-196	350	15	150	- Miniature size - High operating temperature up to 350 °C
	6005 ø5,5 mm L = 15,6 mm	0	1 000	-196	200	10	140	- Miniature size - Reinforced membrane giving an extended sensor life span
	6031 ø5,5 mm L = 15,0 mm	0	250	-196	200	14	160	- Miniature size - Acceleration compensated
	603B ø5,5 mm L = 11,8 mm	0	200	-196	200	5	400	- Miniature size - High natural frequency of 400 kHz - Acceleration compensated
	701A ø9,5 mm L = 26,8 mm	0	250	-150	200	80	70	- High sensitivity
	7001 ø9,5 mm L = 26,8 mm	0	250	-196	350	80	70	- High sensitivity - High operating temperature up to 350 °C
	7005 ø9,5 mm L = 26,8 mm	0	600	-196	200	50	70	- High sensitivity - Reinforced membrane giving an extended sensor life span
	7031 ø9,5 mm L = 26,8 mm	0	250	-150	200	55	80	- High sensitivity - Acceleration compensated
	7261A ø35,0 mm L = 55,8 mm	-1	10	-40	240	2 200	13	- Low pressure - Very high sensitivity of 2 200 pC/bar

Accessories for Piezoelectric Pressure Sensors

Adapters

When space isn't a premium, the sensor can be fitted into a mounting adapter. Internally these provide the required level of mounting accuracy, whilst externally they can be fitted into a much less precisely toleranced mounting bore.



Mounting Nuts and Connecting Nipples

When the mounting location space is restricted, the sensor can be located in an appropriately dimensioned mounting bore, and then held in place with a mounting nut, or connecting nipple on to which the cable is then attached.



Cables

Piezoelectric sensors generate a tiny charge, in the order of pico Coulombs. For this reason only high impedance cables can be used to connect the sensor to a charge amplifier.



Electronics

Kistler provides a wide range of signal conditioning charge amplifiers. These convert the high impedance charge signal produced by a piezoelectric sensor into a ± 10 V analogue signal, which is compatible with standard DAQ and readout instrumentation.



Calibration

Kistler provides calibration and test services for all our sensors and electronics. Additionally, a variety of calibration equipment is available for customers wishing to conduct their own sensor calibrations.

