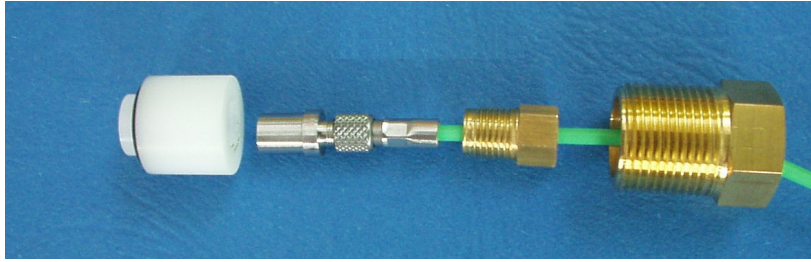


Pressure Transducers M

Piezoelectric Transducers for High Frequency Measurements

The piezoelectric PVDF Pressure Gauge series M is the state of the art device for measuring high frequency pressure changes with rise times of only a few nanoseconds in gases and liquids. The transducer is based on piezoelectric pvdf. It is recommended for measuring blast waves, shock waves in shock tube experiments or other dynamic pressures. The gauge is nearly free from vibrations. All sensor elements are protected by an elastic resin for thermal protection.

PVDF Sensor Type	Rise time	Sens. diam.	Outer diam.	Sensiti- vity	Cabel	Article No.	Application
 <p>M60-3</p>	60 ns	3 mm	5.5 mm	4 pC/bar	KIAG M4x0.35 sep. 2 m cable necessary	100-200-1	<ul style="list-style-type: none"> experiments in gas ideal for wall mount in shock tubes (for end wall, M100-1) with KIAG connector excluding separate cable, article 800-200-1 dimension identical to Kistler 603B. wall mount kit, article-no. 100-290-1 charge amplifier Müller MCPA 10 or Kistler necessary.
 <p>M60-3L</p>	60 ns	3 mm	5.5 mm	4 pC/bar	incl. 2 m Cable, water tight	100-200-3	<ul style="list-style-type: none"> Same sensor as M60-3, but for liquids and ultrasound as well, blast waves in liquids with direct water tight cable head identical to M60-3 in case of short pulses direct connection to a recorder with 1 MOhm input recommended in case of longer pressure waves or longer cable extensions charge amplifier MCPA 10 is necessary
 <p>M100-1</p>	100 ns	1 mm	5.5 mm	1 pC/bar	KIAG M4x0.35 sep. 2 m cable necessary	100-200-7	<ul style="list-style-type: none"> experiments in gas ideal for explosion chambers for frontal orientation to shock wave thermal protection lasts for 80 to 100 ms charge amplifier MCPA 10 is recommended wall mount, article 100-290-3 excluding cable , article 800-200-1
 <p>M60-1L-M3</p>	40 ns	1 mm	M3	0.4 pC/bar	incl. 2 m cable	100-201-2	<ul style="list-style-type: none"> experiments in gas or liquids with direct water tight cable with a M3 thread for easy and direct mounting in a wall rubber O-ring provides a tight connecting application similar to M60-3L



Pressure Transducer M60-3 with cable and wall mount adapter

Technical Data

Range:	- 20 to 400 bar (-2 to 40 MPa)
Rise time:	40-100 ns
Bandwidth:	Up to 15 MHz
Sensitivity:	M60-3: about 0.5 pC/MPa M60-1L-M3: about 0.04 pC/MPa
Calibration:	Steady state shock tube calibration up to 1 MPa.
Sensitive diameter:	M60-3: 3.0 mm M60-1/M100-1: 1.0 mm
Polarity:	Negative
Capacity:	About 30 pF
Impedance:	> 10¹⁰ Ohm
Sensitive element	Piezoelectric PVDF
Temperature range:	-20 up to +65°C, shortly higher
Housing:	Stainless steel, sensitive element covered with an elastic epoxy resin
Size:	M60-3/M100-1: 6.3 mm x 12 mm M60-3L: 6.3 x 28 mm M60-1L-M3: M3 x 27 mm M60-3: 1.4 g
Connector:	M60-3/M100-1: KIAG M4 x 0.35 pos., cable article no. 800-200-1 M60-3L, M60-1L-M3 types: with a water tight 2 m cable with BNC pos.

Article-No.: 100-200-1	Pressure Transducer M60-3
Article-No.: 100-200-3	Pressure Transducer M60-3L with 2 m water tight cable
Article-No.: 100-200-7	Pressure Transducer M100-1
Article-No.: 100-201-2	Pressure Transducer M60-1L-M3 with M3 thread, 2 m cable, BNC
Article-No.: 100-200-4	Surcharge for a stainless steel closed housing for M60 types
Article-No.: 100-290-1	Wall Mounting Set Delrin, wall thick. 18 mm for M60-3, M60-3L and M100
Article-No.: 100-290-2	Wall Mounting Set Brass, wall thick. 18 mm for M60-3, M60-3L and M100
Article-No.: 100-290-3	Wall Mounting Set Delrin, wall thick. 12 mm for M60-3, M60-3L and M100
Article-No.: 100-290-4	Wall Mounting Set Brass, wall thick. 12 mm for M60-3, M60-3L and M100
Article-No.: 100-290-5	Adapter for M60-3 Wall Mounting Set for M60-1L-M3
Article-No.: 800-200-1	KIAG M 4 connection cable, 2 m for M60-3 and M100-1

The transducer can be delivered in nearly any shape. If you wish a special design, cable length or connector please send us a drawing and request a quotation.