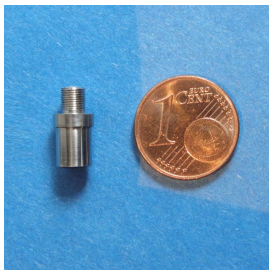
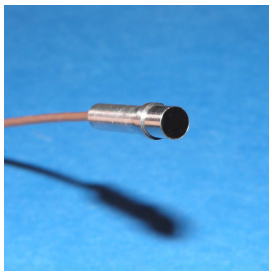
Pressure Transducers M60

Piezoelectric Transducers for High Frequency Measurements

The piezoelectric PVDF Pressure Gauge series M60 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 or shock waves in shock tube experiments. The gauge is nearly free from vibrations. Beside M60-1L all sensor elements are protected by a thin elastic resin.

PVDF Sensor Type	Rise time	Sens. diam.	Outer diam.	Sensitivity	Cabel	Article No.	Application
 M60-3	60 ns	3 mm	5.5 mm	3 pC/bar	KIAG M4x0.35 Incl. sep. 2 m cable	100-200-1	• experiments in gas • ideal for shock tubes • with KIAG connector • including 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.
 M60-3L	60 ns	3 mm	5.5 mm	3 pC/bar	incl. 2 m cable	100-200-2	• experiments in gas or liquids • ideal for blast waves • 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 • wall mount, article 100-290-1
 M60-1L	40 ns	1 mm	2.5 mm	0.4 pC/bar	incl. 2 m cable	100-201-1	• experiments in gas or liquids • air blast waves and ultrasound • with direct water tight cable • 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 • wall mount, article 100-290-3
 M60-1L-M3	40 ns	1 mm	3 mm with M3 thread	0.4 pC/bar	incl. 2 m cable	100-201-2	• experiments in gas or liquids • ideal for blast waves • 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

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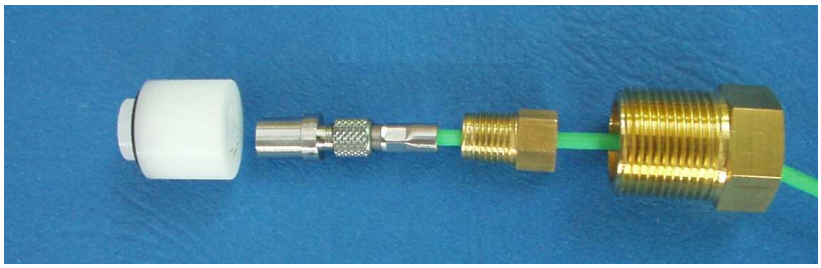

Pressure Transducer M60-3 with cable and wall mount adapter

Technical Data

Range:	**- 20 to 400 bar (-2 to 40 MPa)**
Rise time:	**40-60 ns**
Bandwidth:	**Up to 15 MHz**
Sensitivity:	**M60-3: about 3.0 pC/bar** **M60-1: about 0.4 pC/bar**
Calibration:	**Steady state shock tube calibration up to 10 bars.**
Sensitive diameter:	**M60-3: 3.0 mm** **M60-1: 1.0 mm**
Polarity:	**Negative**
Capacity:	**About 30 pF**
Impedance:	**> 10^{10} Ohm**
Sensitive element	**Piezoelectric PVDF**
Temperature range:	**-20 up to +60℃, shortly higher**
Housing:	**Stainless steel, sensitive element covered with an elastic resin**
Size:	**M60-3: 6.3 mm x 12 mm** **M60-3L: 6.3 x 28 mm** **M60-1L: 2.5 mm x 26 mm** **M60-1L-M3: M3 x 27 mm** **M60-3: 1.4 g**
Connector:	**M60-3: KIAG M4 x 0.35 pos., cable article no. 800-200-1 included** **M60-3L, M60-1L types: with a water tight 2 m cable with BNC pos.**

Article-No.: 100-200-1	**Pressure Transducer M60-3 incl. separate 2 m cable**
Article-No.: 100-200-3	**Pressure Transducer M60-3L with 2 m water tight cable**
Article-No.: 100-201-1	**Pressure Transducer M60-1L with 2 m cable and BNC pos.**
Article-No.: 100-201-2	**Pressure Transducer M60-1L-M3 with M3 thread, 2 m cable, BNC**
Article-No.: 100-299-1	**Surcharge for a stainless steel closed housing for M60-3 types**
Article-No.: 100-290-1	**Wall Mounting Set for M60-3 and M60-3L**
Article-No.: 100-290-3	**Adapter for M60-3 Wall Mounting Set for M60-1L w/o thread**
Article-No.: 800-200-1	**KIAG M 4 connection cable, 2 m for M60-3**

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.