

Pressure sensors



General:

for use with
GMH31xx, GDUSB: Type GMSD ... -K31,
GMH 51xx: Type: GMSD ... - K51

Application:

air and non aggressive gases
not suitable for water / liquids

Relative pressure sensors: for measuring of over / under pressure and pressure difference

	GMSD 2,5 MR ..	GMSD 25 MR ..	GMSD 350 MR ..	GMSD 2 BR ..	GMSD 10 BR ..
Measuring range	-1.999 ... +2.500 mbar	-19.99 ... +25.00 mbar	-199.9 ... +350.0 mbar	-1000 ... +2000 mbar	-1.00 ... 10.00 bar
Overload	max. 200 mbar	max. 300 mbar	max. 1 bar	max. 4 bar	max. 10.34 bar
Resolution	0.001 mbar (0.1 Pa)	0.01 mbar (1 Pa)	0.1 mbar	1 mbar	10 mbar
Accuracy (typ.)					
hysteresis / linearity	± 0.2 % FS	± 0.2 % FS	± 0.2 % FS	± 0.2 % FS	± 0.2 % FS
temperature influence (from 0-50 °C)	± 1.0 % FS	± 0.5 % FS	± 0.4 % FS	± 0.4 % FS	± 0.4 % FS

Absolute pressure sensors:

	GMSD 1,3 BA ..	GMSD 2 BA ..	GMSD 7 BA ..
Measuring range	0 ... 1300 mbar abs.	0 ... 2000 mbar abs.	0.00 ... 7.00 bar abs.
Overload	max. 4 bar abs.	max. 4 bar abs.	max. 10.34 bar abs.
Resolution	1 mbar	1 mbar	10 mbar
Accuracy (typ.)			
hysteresis / linearity	± 0.2 % FS	± 0.2 % FS	± 0.2 % FS
temperature influence (from 0-50 °C)	± 0.4 % FS	± 0.4 % FS	± 0.4 % FS

Specification:

Sensor:	piezoresistive pressure sensor
Pressure connection:	2 connection pins for tubes 6 x 1 mm (6 mm inside-Ø and 4 mm outside-Ø)
Electronics:	PC board with amplifier and data memory for sensor data (measuring range / calibration etc.) integrated in sensor housing
Working temperature:	0 ... +50 °C
Relative humidity:	0 ... +95 % RH (non condensing)
Storage temperature:	-25 ... +70 °C
Housing:	ABS plastic with suspension eye, dimensions do not incl. conn. pin: 68 x 32,5 x 15 mm, dimensions with connection pin: 68 x 32,5 x 27,5 mm.
Weight:	approx. 75 g (...-K51: approx. 82 g)
Device connection:	
GMSD ... - K31:	1 m PVC connection cable, screened with integral 6-pin Mini-DIN-plug, lockable
GMSD ... - ex:	
GMSD ... - K51:	1 m PVC connection cable, screened with 7-pin bayonet plug

Options:

Ex-protection



Higher probe accuracy

by multi point calibration
 Additional individual linearisation points are stored in sensor memory. (not possible for GMSD 2,5 MR and GMSD 25 MR!)

Certificate of calibration WPD5

Tube, Tube clips, adapter, couplings, etc.

for GMH31xx, GMSD, MSD, GDHs and pressure measuring transducers.



GDZ-01

PVC-tube 6/4 (6 mm outside-Ø, 4 mm inside-Ø) (5 bar @ 23 °C)

GDZ-02

PE (polyethylene) 6/4 (6 mm outside-Ø, 4 mm inside-Ø) (10 bar @ 23 °C))

GDZ-03

PUR (polyurethane) 6/4 (6 mm outside-Ø, 4 mm inside-Ø) (9 bar @ 23 °C)

GDZ-04

PA (polyamide) 6/4 (6 mm outside-Ø, 4 mm inside-Ø) (25 bar @ 23 °C)

GDZ-05

Screw-type glanding for 6/4 tube with outside thread G1/8"

GDZ-06

Increases glanding for 6/4 tube with inside thread G1/8"

GDZ-08

Double adapter for 6/4 tube to 6/4 tube

GDZ-09

Coupling adapter (NW5) made of brass with inside thread G1/4" (suitable for GDZ-12)

GDZ-10

Coupling adapter (NW5) made of brass for tube with 6 mm inside-Ø (suitable for GDZ-12)

GDZ-11

Coupling adapter (NW5) made of brass with outside thread G1/4" (suitable for GDZ-12)

GDZ-12

Coupler socket (NW5) made of brass (single-hand use) with inside thread G1/4"

GDZ-17

Screw-in connection for 6/4 tube with outside thread G1/4"

GDZ-18

Tube clamp for 6/4 tube

GDZ-19

Tube clamp for 8/6 tube (8 mm outside-Ø and 6 mm inside-Ø)

GDZ-21

T-piece for 6/4 tubes

GDZ-25

Luer-Lock male to 6/4 tube

GDZ-26

Luer-Lock female to 6/4 tube

GDZ-29

Filter-Membrane incl. Luer-Locks (GDZ-25 and GDZ-26)

GDZ-31

Silicone tube 8/5 (8 mm outer / 5 mm inner) (2 bar at 23 °C) temperature-resistant up to 200 °C, very flexible (figure similar to GDZ-04)

GOG-N

needle, Ø 0.9 mm - suitable to Luer-Lock male (5 pieces) (without picture)

for additional accessories refer to page 55