

Product Information

Sensors and Instrumentation

Pressure transducer incl. pressure sensor GMUD MP-S / -F



- For absolute, over-/underpressure and pressure difference
- Piezoresistive pressure sensor with integrated temperature compensation
- For controlling, measuring and monitoring

Characteristic

The GMUD MP is suited for controlling, measuring and monitoring tasks e.g. in climate and ventilation technology or environmental and medical technology.

The pressure transducer with integrated pressure sensor can be used for non-aggressive, non-oxidizing and non-reducing gases. The GMUD must not be used for applications in water.

Depending on design type the GMUD MP measures:

- absolute pressure (abs.)
- relative pressure (rel. neg. connector open), e.g. 0..+10.00 mbar
- difference pressure (rel.), e.g. -10.00..+10.00 mbar

Specifications

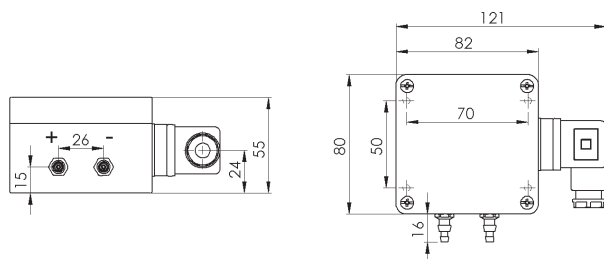
Sensor element : Piezoresistive pressure sensor with integrated temperature compensation

Relative fine pressure range:	Measuring range	Overload	Burst pressure
MP-F-MR0	0.000..1.000 mbar rel.	150 mbar	200 mbar
MP-F-MR1	0.00..10.00 mbar rel.	150 mbar	200 mbar
MP-F-MR2	0.00..20.00 mbar rel.	150 mbar	200 mbar
Optimized customer-specific range available via option - MBF (e.g. -15 ... +15 mbar)			
Relative pressure range:	Measuring range	Overload	Burst pressure
MP-S-MR0	0.0..100.0 mbar rel.	1000 mbar	1500 mbar
MP-S-MR1	0.0..500.0 mbar rel.	1000 mbar	1500 mbar
MP-S-MR2	0..1000 mbar rel.	2000 mbar	3000 mbar
MP-S-MR3	0..2000 mbar rel.	4000 mbar	6000 mbar
MP-S-MR4	0..5000 mbar rel.	7000 mbar	7000 mbar
Absolute pressure range:	Measuring range	Overload	Burst pressure
MP-S-MA0	0..1100 mbar abs.	2000 mbar	3000 mbar
MP-S-MA1	0..2000 mbar abs.	4000 mbar	6000 mbar
Optimized customer-specific range available via option - MBS (e.g. -350 ... +350 mbar)			

Accuracy typ.	: GMUD MP-S: ±0.15 % FS (lin.), ±0.6 % FS (hysteresis and temperature 0..70 °C) GMUD MP-F: ±0.35 % FS (lin.), ±0.6 % FS (hysteresis and temperature 0..70 °C)
Output signal	: 4..20 mA / 0..10 V (adjustable via menu)
Auxiliary supply	: only in output mode 0..10 V (18..30 V DC / 24 V AC)
Permissible burden	: (4..20 mA): $R_a[\Omega] = (U_v[V] - 12[V]) / 0.02 A$
Permissible load	: (0..10 V): $\geq 3000 \Omega$
Working temperature	: -20..+70 °C
Storage temperature	: -40..+70 °C
Display / handling	: 4-digit 7-segment-display and 3-button-operation
Pressure connection	: Universal pressure connector for 6 x 1 mm or 8 x 1 mm plastic hose (4 or 6 mm hose inner diameter)
Mounting position	: Arbitrary (low sensitivity to mounting position at small measuring ranges)
Housing	: ABS (IP65): With fixing holes for wall mounting (after removing the cover)
Electric connection	: Angle plug according to EN 175301-803/A (IP65) max. wire cross section: 1.5 mm ² , wire diameter: 4.5..7 mm

Product Information

Dimensions



Product key

1. 2.
GMUD-MP - -

1. Pressure type and measuring range	
F-MR0	0..1 mbar rel.
F-MR1	0..10 mbar rel.
F-MR2	0..20 mbar rel.
F-MBF	Any fine pressure range (< 25 mbar)
S-MR0	0..100 mbar rel.
S-MR1	0..500 mbar rel.
S-MR2	0..1000 mbar rel.
S-MR3	0..2000 mbar rel.
S-MR4	0..5000 mbar rel.
S-MA0	0..1100 mbar abs.
S-MA1	0..2000 mbar abs.
S-MBS	Any pressure range (> 35 mbar)
2. Options	
00	without option
LACK	board varnished on both sides
OUT	switching output
WE	factory setting, not for MBF and MBS

Order example:

± 700 mbar rel. with switching output:

GMUD MP-S / MBS: -700..+700 mbar, OUT

0..100 mbar rel. with varnishing and switching output:

GMUD MP-S - MR0 / LACK, OUT