

PRESSURE MEASURING TRANSDUCER FOR ABSOLUTE PRESSURE OR OVER / UNDER PRESSURE AND PRESSURE DIFFERENCE



FREELY SCALABLE



absolute pressure connection

HIGHLIGHTS:

- Change between 4 ... 20 mA / 0 ... 10 V
- With display
- Switching output
- Configuration protected by code lock

GMUD-MP - S

Pressure measuring transducer for pressure difference or absolute pressure (pressure range >25 mbar)

GMUD-MP - F

Pressure measuring transducer for pressure difference (fine pressure range ≤25 mbar)

General:

Microprocessor controlled, digital pressure transducer with display and operation via 3 buttons. With freely scalable analog output that can be switched between 4 ... 20 mA and 0 ... 10 V. Code lock for input, after code input parameters can be changed (code permanently stored).

Application:

For air and non-aggressive gases

Area of application:

controlling, measuring and monitoring, climate and ventilation, environmental and medical technology

Measuring ranges:

Difference fine pressure range:

GMUD MP-F-MR0: Art. no. 602483	Measuring range: 0.000 ... 1.000 mbar Overload: 250 mbar, Burst pressure: 500 mbar
GMUD MP-F-MR1: Art. no. 602485	Measuring range: 0.00 ... 10.00 mbar Overload: 150 mbar, Burst pressure: 200 mbar
GMUD MP-F-MR2: Art. no. 602487	Measuring range: 0.00 ... 20.00 mbar Overload: 150 mbar, Burst pressure: 200 mbar
GMUD-MP-F-MR3: Art. no. 605958	Measuring range: -1.999 ... +2.500 mbar Overload: 250 mbar, Burst pressure: 500 mbar
GMUD-MP-F-MR4: Art. no. 604355	Measuring range: -19.99 ... +20.00 mbar Overload: 150 mbar, Burst pressure: 200 mbar

Difference pressure range:

GMUD MP-S-MR0: Art. no. 602482	Measuring range: 0.0 ... 100.0 mbar Overload: 1000 mbar, Burst pressure: 1500 mbar
GMUD MP-S-MR1: Art. no. 602491	Measuring range: 0.0 ... 500.0 mbar Overload: 1000 mbar, Burst pressure: 1500 mbar
GMUD MP-S-MR2: Art. no. 602493	Measuring range: 0 ... 1000 mbar Overload: 2000 mbar, Burst pressure: 3000 mbar
GMUD MP-S-MR3: Art. no. 602495	Measuring range: 0 ... 2000 mbar Overload: 4000 mbar, Burst pressure: 6000 mbar
GMUD MP-S-MR4: Art. no. 602497	Measuring range: 0 ... 5000 mbar Overload: 7000 mbar, Burst pressure: 7000 mbar
GMUD-MP-S-MR5 Art. no. 607278	Measuring range: -100.0 ... +100.0 mbar Overload: 1000 mbar, Burst pressure: 1500 mbar
GMUD-MP-S-MR6 Art. no. 607925	Measuring range: -500 ... +500 mbar Overload: 1000 mbar, Burst pressure: 1500 mbar
GMUD-MP-S-MR7 Art. no. 607252	Measuring range: -1000 ... +1000 mbar Overload: 2000 mbar, Burst pressure: 3000 mbar

Absolute pressure range:

GMUD MP-S-MA0: Art. no. 602499	Measuring range: 0 ... 1100 mbar abs. Overload: 2000 mbar, Burst pressure: 3000 mbar
GMUD MP-S-MA1: Art. no. 602501	Measuring range: 0 ... 2000 mbar abs. Overload: 4000 mbar, Burst pressure: 6000 mbar

Types of pressure:

Absolute pressure is the pressure related to vacuum (zero pressure). When no pressure is applied (pressure port open), the ambient pressure is displayed. Examples: meteorological measurements (eg 1013 hPa abs), vacuum processes
Differential pressure is the pressure difference between 2 press. Mostly both pressures are connected to a respective side of the measuring membrane, the sensor must have two pressure connections. Examples: ventilation technology / filters, dynamic pressure measurements
Relative pressure is the pressure difference between a pressure / vacuum and the ambient pressure. For relative pressure measurement with a differential pressure sensor (2 pressure ports) one of the terminals is left open. Examples: pneumatic, tire pressure, hydraulic

Specifications:

Sensor element:	piezoresistive pressure sensor with integrated temperature
Typ. accuracy:	depends on type (see manual) ±0.15 % (linearity) ±0.6 % FS (hysteresis and temperature 0 ... 70 °C)
Output signal:	4 ... 20 mA / 0 ... 10 V (selectable in menu)
Auxiliary energy:	only needed if 0 ... 10 V output signal is selected (18 ... 30 V DC)
Permissible burden:	(4 ... 20 mA): $R_L[\Omega] \leq (U_V [V] - 12 [V]) / 0.02 A$
Permissible load:	(0 ... 10 V): ≥3000 Ω
Betriebstemperatur:	-20 ... +70 °C
Storage temperature:	-40 ... +70 °C
Display / Operation:	4-digit 7-segment display and 3 buttons
Display range:	-1999 ... 9999 digit
Pressure connection:	universal pressure connecting pieces for 6 x 1 mm or 8 x 1 mm plastic tubes (4 or 6 mm inner pipe diameter)
Mounting position:	any position (small influence of mounting position for low ranges)
Housing:	ABS (IP65): with fixing holes for wall mounting (accessible after cover has been removed)
Dimensions:	Housing 80 x 82 x 55 mm (without elbow-plug and pressure connecting pieces)
Electric connection:	Elbow-type plug acc. to EN 175301-803/A (IP65) max. wire cross section: 1.5 mm ² , wire / cable Ø: 4.5 ... 7 mm
Scope of supply:	Device, calibration protocol, manual

Option:

- LACK**
card coated on both sides for outdoor application
- OUT**
Switching output (max 28 V, 40 mA), switches if meas. Value falls below or exceeds limit value connection via 2nd elbow-type plug
- WE**
Default settings according to customer's specifications, includes: output signal, measuring range, default state in case of error (without upcharge if together with MBF / MBS)
- MBF**
Option any fine pressure range ≤25 mbar, please state desired measuring range
- MBS**
Option any pressure range >25 mbar ... 5000 mbar, please state desired measuring range

Accessories and spare parts:

Tube and accessories: see page 86.

HANDHELD INSTRUMENT
DISPLAY / CONTROLLER
LOGGER- / BUS SYSTEMS
TRANSMITTER
TEMPERATURE PROBE
ALARM / PROTECTION, LEVEL