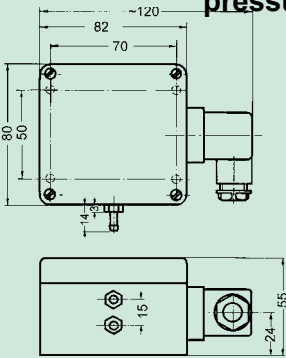


Pressure measuring transducer for absolute pressure, over/under pressure and pressure difference



picture shows relative pres. GMUD

GMUD standard pressure range

GMUD fine pressure range (0 to 1 ... 25 mbar)

Application: for air, non-corrosive, non oxidising and non-reducing gases and liquids. Not suitable for water! Suitable for controlling, measuring and monitoring on the climatic/ventilation, environmental and medical technology sector. For use in water an air cushion or hydrophobic filter is required - please contact us.

Types of pressure: ABSOLUTE PRESSURE (vacuum used as reference) for measuring over pressure over absolute zero (sensor displaying barometric air pressure when coming into contact with atmospheric pressure). RELATIVE PRESSURE (reference atmosphere or ambient pressure) for over/under pressure measurements and pressure difference measurements. (Sensor displaying zero when coming into contact with atmospheric or ambient pressure).

Specification:

Sensor element: piezoresistive pressure sensor with integrated temperature compensation 0 to 70°C

Measuring ranges: (standard)

Absolute pressure: 0 to 1100 mbar (e.g. barometric air pressure)
0 to 2 bar
0 to 7 bar
Relative pressure: 0 to 70 mbar
0 to 2 bar
0 to 10 bar

OPTION: any intermediate values upon request

Overload and bursting pressure:

Meas. range:	70 mbar	1100 mbar	2 bar	7, 10 bar
Overload:	1.3 bar	2 bar	4 bar	10.34 bar

Typ. accuracies:

±0.2% FS (hysteresis and linearity), ±0.4% FS (temperature effect 0 - 50°C)
at meas. range ≤ 25mbar: ±0.6% FS (temperature effect 0 to 50°C)
OPTION: double accuracy for meas. range >25mbar - against upcharge

Output signal: 4 - 20 mA (0-10V against upcharge)

Auxiliary energy: Vs = 12 ... 30 V DC (at 0-10V: Vs = 18 ... 30 V DC)

Permissible impedance (at 4-20mA): $RA [\Omega] = (Vs [V] - 12V) / 0.02A$

Permissible load (at 0-10V): $RL [\Omega] > 3000\Omega$

Operating temperature: 0 ... +70 °C

Storage temperature: -45 ... +70 °C

Pressure connection: 1 (at abs.) bzw. 2 (at rel.) metal connection pieces (nickel plated) for plastic tube 6 x 4 mm (4 mm inner diameter)

Mounting position: any position (small ranges up to 10 mbar depending on position)

Housing: ABS (IP65)

Fixing: by means of fixing holes for wall mounting (accessible after cover has been removed)

Mounting distance: 70 x 50 mm (H x W)

Fixing screws: max. shaft Ø 4 mm

Electric connection: elbow-type plug conforming to DIN 43650 (IP65)
max. wire cross section 1.5 mm², wire/cable Ø from 4.5 mm to max. 7 mm

Prices options:

AV010: option output signal 0-10V	upcharge:
MB...: option any measuring range	upcharge:
(please state desired measuring range - no upcharge at fine pressure ranges)	
LACK: option "encapsulated PC board"	upcharge:
(for outdoor application)	
DSG: option double sensor accuracy	upcharge:
(not possible for high-precision range!)	
VO: option on-site display	upcharge:
(for output signal 4-20mA, auxiliary energy Uv = 17 ... 30 V DC)	

For suitable tubes, accessories p.r.t. page 21

pressure measuring transducer 4...20mA or 0...10V



GMDP standard pressure range

GMDP fine pressure range (0 to 1 ... 25 mbar)

Application: for air, non-corrosive, non oxidising and non-reducing gases and liquids. Not suitable for water! Suitable for controlling, measuring and monitoring on the climatic/ventilation, environmental and medical technology sector.

Types of pressure: ABSOLUTE PRESSURE (vacuum used as reference) for measuring over pressure over absolute zero (sensor displaying barometric air pressure when coming into contact with atmospheric pressure). RELATIVE PRESSURE (reference atmosphere or ambient pressure) for over/under pressure measurements and pressure difference measurements. (Sensor displaying zero when coming into contact with atmospheric or ambient pressure).

Specification:

Sensor element: piezoresistive pressure sensor with integrated temperature compensation 0 to 70°C

Measuring ranges: (standard)

Absolute pressure: 0 to 1100 mbar
0 to 2 bar
0 to 7 bar
Relative pressure: 0 to 70 mbar
0 to 2 bar
0 to 10 bar

OPTION: any intermediate values (under pressure also possible) against upcharge available upon request: e.g. ±1bar, 0 bis 350mbar, 0 to 10mbar, etc.

Overload and bursting pressure:

Meas. range:	70 mbar	1100 mbar	2 bar	7, 10 bar
Overload:	1.3 bar	2 bar	4 bar	10.34 bar

Sensor accuracy (typ. values):

±0.2% FS (hyst. and linearity), ±0.4% FS (temperature effect from 0 to 50°C)
at meas. range ≤ 25mbar: ±0.6% FS (temperature effect 0 to 50°C)
OPTION: double accuracy for meas. range >25mbar - against upcharge

Output signal: 4 - 20 mA (0-10V against upcharge)

Auxiliary energy: Vs = 12 ... 30 V DC (at 0-10V: Vs = 18 ... 30 V DC)

Permissible impedance (at 4-20mA): $RA [\Omega] = (Vs [V] - 12V) / 0.02A$

Permissible load (at 0-10V): $RL [\Omega] > 3000\Omega$

Operating temperature: 0 ... +70 °C

Storage temperature: -45 ... +70 °C

Relative humidity: 0 ... 80 % r.h. (non-condensing)

Pressure connection: 2 plastic connection pieces for plastic tube 6 x 4 mm (4 mm inner diameter)

Mounting position: any position (small ranges up to 10 mbar depending on position)

Design-type: electronic PC board cpl. with sensor, 56 x 70 x 33 mm (BxHxT)

Mounting: 4 holes, 3.5 mm Ø each

Mounting distance: 43,5 x 58 mm (W x H)

Electric connection: screw-type/plug-in terminal

Order code:

GMDP 0...1100 mbar abs. / DSG:

GMDP, 4-20mA = 0...1100 mbar abs., double sensor accuracy

GMDP -1.. 10 bar rel. / AV010, LACK:

GMDP, 0-10V = -1 to 10 bar rel., encapsulated PC board

Prices, options:

AV010: option output signal 0-10V	upcharge:
MB...: option any measuring range	upcharge:
(please state desired measuring range - no upcharge at fine pressure ranges)	
LACK: option "encapsulated PC board"	upcharge:
DSG: option double sensor accuracy	upcharge:
(not possible for high-precision range!)	

For suitable tubes, accessories p.r.t. page 21