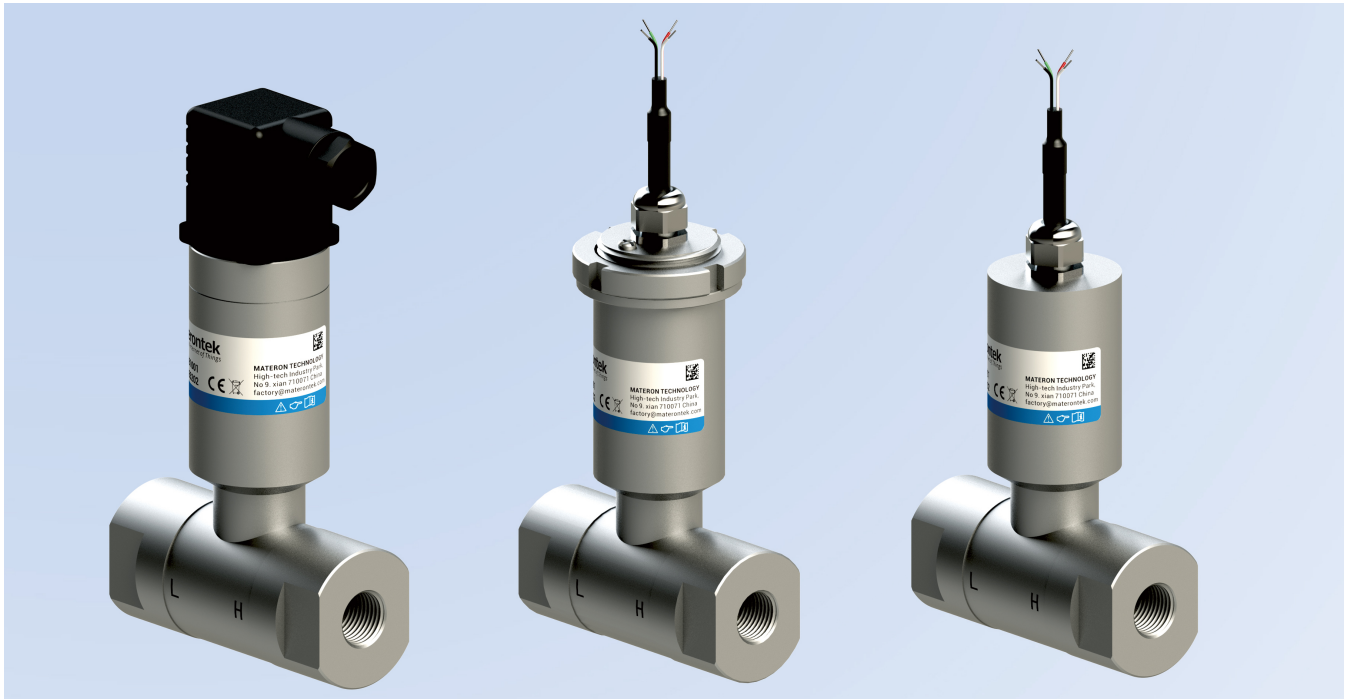


Model DPM500-D series

OEM Differential Pressure Transmitter
 Excellent overload pressure / 10mbar@20bar overload
 Range 10mbar...40bar / 4...20mA with HART

Materontek
 Sensing and Internet of Things



Features

- ❑ Measuring ranges from 10mbar to 40bar
- ❑ Differential pressure
- ❑ Accuracy: $\pm 0.1\%$ FSO(Typ.)
- ❑ Calibrated and temperature compensated
- ❑ Stainless steel pressure sensor
- ❑ Excellent overload pressure
- ❑ Output 4...20mA+HART/RS485

Application

- ❑ Hydraulic and pneumatic
- ❑ Machine building
- ❑ Level measurement
- ❑ IoT pressure measurement

Technical data

Pressure range

| | | | | | | | |
|------------------------------------|---------|---------|----------|---------|---------|---------|--|
| Nominal pressure [P_N] | 10 mbar | 60 mbar | 400 mbar | 1 bar | 4 bar | 40 bar | |
| Overpressure [Positive & negative] | 10 bar | 20 bar | 30 bar | 70 bar | 100 bar | 100 bar | |
| Static pressure | 70 bar | 70 bar | 100 bar | 100 bar | 100 bar | 100 bar | |

Performance

| | | |
|-------------------------------|--|--|
| Accuracy* | $\pm 0.3\%$ FS ($P_N = 10\text{mbar}$) $\pm 0.2\%$ FS ($P_N = 60\text{mbar}$) $\pm 0.1\%$ FS ($P_N > 60\text{mbar}$) | *Linearity (best straight line) + Hysteresis + Repeatability |
| Operating Temperature | -20 to 85°C | |
| Compensated Temperature Range | -20 to 80°C | |
| Vibration | 5 g RMS(20 to 2000Hz) | |
| Shock | 100 g(10 ms) | |
| Static pressure effect | <0.05 %FS/100bar | |
| Long Term Stability | <0.05 %FS/year | |

Electrical @25°C

| | |
|-----------------------------|---|
| Output signal / Supply | 2-wire 4...20mA+HART / $V_S = 10.5...45\text{VDC}$ 4-wire RS485 MODBUS / $V_S = 3...5\text{VDC}$ |
| Insulation Resistance | 100 M Ω @100VDC |
| EMC Test | IEC61000-6-2/IEC61000-6-3 |
| Reverse polarity protection | No damage - no function |

Model DPM500-D series

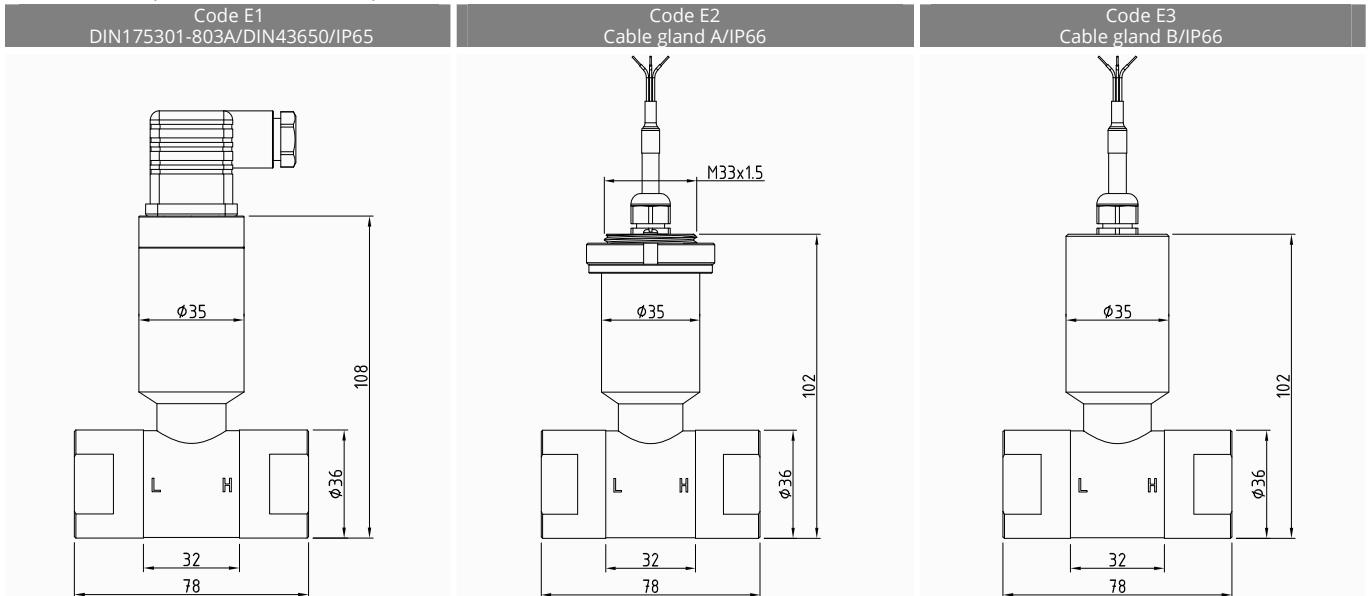
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Physical Specifications

| | |
|-------------|----------------------|
| Housing | 304 stainless steel |
| Diaphragm | 316L stainless steel |
| Oil Filling | Silicone oil |
| Protection | IP65 |
| Weight | ~400g |

Dimensions (All dimensions in mm)



Electrical connections

| | | |
|-------------------------|----------|---------|
| DIN175301-803-A/ | 4...20mA | RS485 |
| Cable gland | 2-wire | 4-wire |
| +Vcc | 1/Red | 1/Red |
| OUT | 2/Black | |
| GND | NA | 2/Black |
| RS485 A | | 3/Green |
| RS485 B | | 4/White |

Ordering code

Part Number: DPM500-D-01-D-42-G4-SS-E1

| Model | Range | Type | Output | Pressure Port | Diaphragm material | Electrical Connection |
|-----------------|--------------------------|-----------------------|-------------------------|--------------------------|--------------------------------|------------------------------|
| DPM500-D | 01 10mbar | D Differential | 42 4...20mA+HART | G4 G1/4"male | SS SUS316L | E1 DIN175301-803A |
| | 02 60mbar | | RS RS485 | N4 1/4"NPT female | HC Hastelloy C-276 | E2 Cable gland A/IP66 |
| | 03 400mbar | | | 99 customer | TA Tantalum | E3 Cable gland B/IP66 |
| | 04 1bar | | | | GD SUS316L gold plating | |
| | 05 40bar | | | | | |
| | 06 60bar | | | | | |
| | 07 -10...10mbar | | | | | |
| | 08 -60...60mbar | | | | | |
| | 09 -400...400mbar | | | | | |
| | 10 -1...1bar | | | | | |
| | 99 customer | | | | | |