



Description:

PAKKENS MPS-10 Pressure Transmitter has been developed for accurate measurements in various industrial applications. The wide measurement range, commonly used signal output, high resistance to overpressure, and low nonlinearity value make it a reliable and robust product for the pressure measurement of fluids that do not attack Ceramic and AISI 316L.

Industrial Applications:

Process control, industrial robots, machine building, hydraulics and pneumatics, pumps and compressors, building services, HVAC systems, water and waste water treatment systems

General Specifications:

| | |
|--|---|
| Measurement Range: From 0...0.5 bar to 0...600bar | Voltage Supply: 9-35 V |
| Measuring Method: Relative | Operating Temperature: -25...125 °C |
| Sensor Type: Piezoresistive (Monolithic/Flush Diaphragm - Sealed Sensor) | Storage Temperature: -40...135 °C |
| Sensor Material: Ceramic | Response Time: < 0.5 ms |
| Casing: Monoblock AISI 316L | Shock Resistance: 50g |
| Non-Linearity: ≤±0.5 % of F.S (Optional: ≤±0.1 %) | Vibration Resistance: 20g |
| Long-term Stability: ≤±0.3 % of F.S/year | Free-fall Resistance: h=1 m to concrete surface |
| Service Life: 10 million cycles | ROHS Compliance: Yes |
| Output Signal: 2-wire/4...20 mA | Ingress Protection Rate: IP65 |
| Output Type: Current Loop | Reverse Polarity Protection: Built-in |

Overpressure Resistance and Vacuum Capability:

| | Pressure (bar) | | | | | | | | | | | | | | | | | |
|--------------|----------------|------|------------------|------------------|----------------|----|----------------|----|----|----|-----------------|-----------------|-----|-----|-----|-----|-----|-----|
| Nominal | 0,5 | 1 | 1,6 ¹ | 2,5 ¹ | 4 ¹ | 5 | 6 ¹ | 10 | 16 | 20 | 25 ¹ | 40 ¹ | 50 | 100 | 200 | 250 | 400 | 600 |
| Overpressure | 1 | 2 | 4 | 10 | 10 | 10 | 10 | 20 | 40 | 40 | 40 | 100 | 100 | 150 | 350 | 350 | 500 | 750 |
| Vacuum | -0,1 | -0,5 | -0,8 | -0,9 | -0,9 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 |

1- Sensor Type is Monolithic for these pressure values.

Accuracy and Temperature Drift:

| Pressure (bar) | 0,5 | 1 | 1,6 | 2,5 | 4 | 5 | 6 | 10 | 16 | 20 | 25 | 40 | 50 | 100 | 200 | 250 | 400 | 600 |
|----------------|--------------|-----|-----|-----|-----|---|---|----|----|----|-----|----|----|-----|-----|-----|-----|-----|
| Accuracy | 25 °C | 1.5 | | | | | | | | | 1.0 | | | | | | 1.5 | |
| | 0...85 °C | | | | 1.5 | | | | | | 1.4 | | | 1.6 | 1.8 | 2.4 | | 2.8 |
| | -10...105 °C | | | | 1.8 | | | | | | 1.7 | | | 1.8 | 2.2 | 2.6 | | 3.2 |
| | -25...125 °C | | | | 2.2 | | | | | | 2.0 | | | 2.2 | 2.5 | 3.1 | | 3.5 |

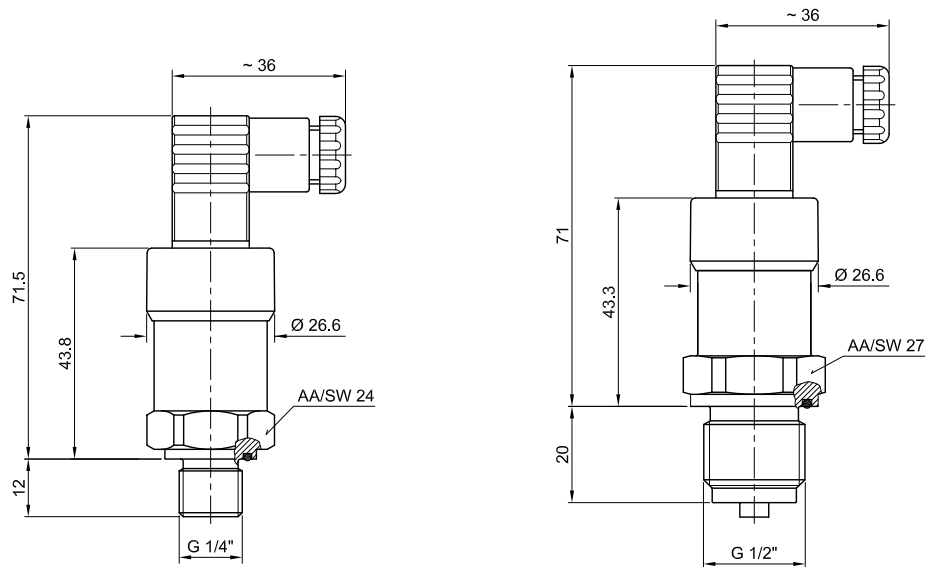
Accuracy includes non-linearity, hysteresis, and non-repeatability at reference conditions. (IEC 61298-1)

Dimensions in mm:

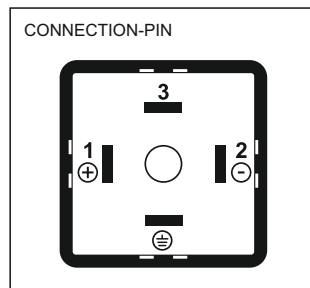
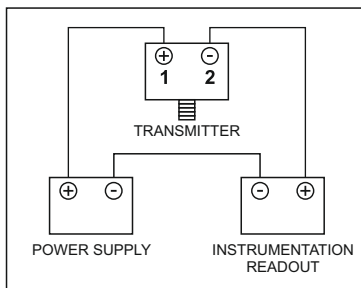
Thread connections can be either G1/4" or G1/2" upon request. (EN-837)

Standard sealings are made up of Viton <60 bar and NBR >60 bar

The minimum permissible medium and ambient temperature for those is -30 °C



Electrical Connection Scheme:



Standard:
DIN 175301-803 A

Reverse Polarity Protection:
UB(1) vs. 0V(2)
UB: Positive power supply terminal, 0V: Negative power supply terminal

Total Current Consumption:
<30 mA

Electrical Connector Material:
PBT GF 30

Approvals:

Turkish Standards Institution

ISO 9001 Quality Management System

TÜRKAK Calibration Laboratory Accreditation Certificate

2014/68/EU Pressure Equipment Directive - Certificate of Conformity

2011/65/EU Restriction of Hazardous Substances Directive - Declaration of Conformity

Gost Certificate

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