Pressure Transmitter MPS-10

Data Sheet Number: SRT.02.05/00

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 waster treatment systems

General Specifications:

Measurement Range:
From 0...0.5 bar to 0...600bar

Measuring Method:
Relative

Sensor Type:
Piezoresistive (Monolithic/Flush Diaphragm - Sealed Sensor)

Sensor Material:
Ceramic

Casing:
Monoblock AISI 316L

Non-Linearity:
≤±0.5 % of F.S (Optional: ≤±0.1 %)

Long-term Stability:
≤±0.3 % of F.S/year

Service Life:
10 million cycles

Output Signal:
2-wire/4...20 mA

Output Type:
Current Loop

Voltage Supply:
9-35 V

Operating Temperature:
-25...125 °C

Storage Temperature:
-40...135 °C

Response Time:
< 0.5 ms

Shock Resistance:
50g

Vibration Resistance:
20g

Free-fall Resistance:
h=1 m to concrete surface

ROHS Compliance:
Yes

Ingress Protection Rate:
IP65

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
Overpressure	1	2	4	10	10	10	10	20	40	40	40	100	100	150	300	375	500
Vacuum	-0,1	-0,5	-0,8	-0,9	-0,9	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1

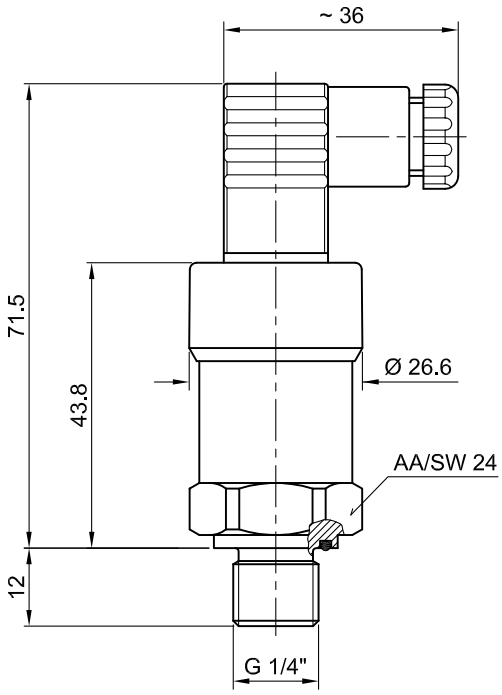
1- Sensor Type is Monolithic for these pressure values.

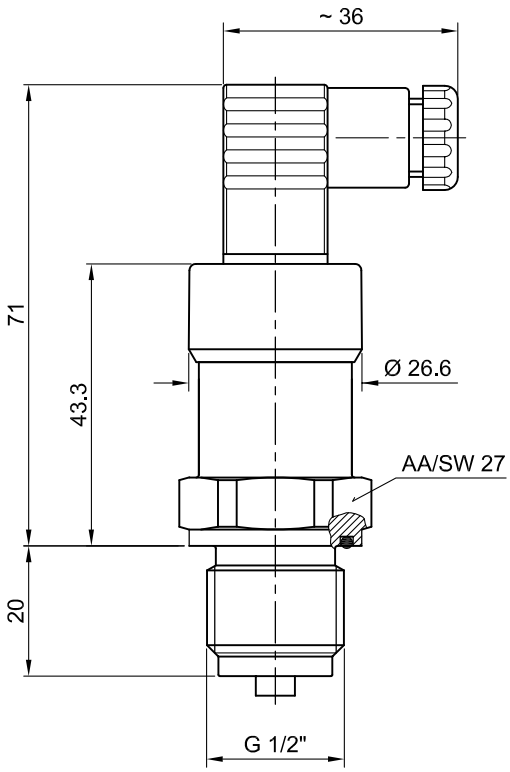
Accuracy and Temperature Drift:

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

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

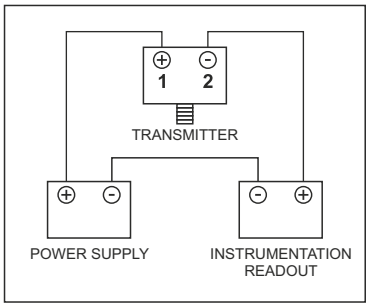
Dimensions in mm:

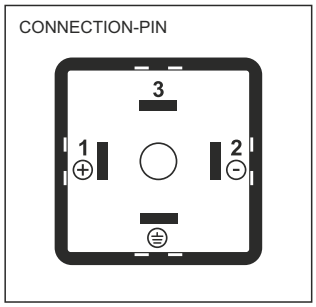




Thread connections can be either G1/4" or G1/2" upon request. (EN-837)
Standard sealings are made up of Viton (0...60 bar) and NBR (>60 bar)
The minimum permissible medium and ambient temperature for those is -30 °C

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
- TURKAK Calibration Laboratory Accreditation Certificate
- EU Declaration of Conformity
- Restriction of Hazardous Substances Directive
- Metrology Measurement Technology