PRESSURE TRANSMITTER MTX-F

The pressure transmitter is designed for gauge pressure measurement and consists of a ceramic pressure cell and a robust, media-resistant stainless steel housing.

Advantages
– Compact design and low installation depth
– High measurement accuracy
– Very good media resistance
– Vacuum resistant

Application examples
– Water and environmental technology
– Hydraulics and pneumatics
– Plant and equipment engineering
– HVAC / Air conditioning
– Oils and gases



General data	
Sensor technology	Piezoresistive, Wheatstone bridge
Sensor type	Monolitic, gauge pressure

Electrical data	
Pressure range	-1 to 150 bar
Supply voltage	5 V ±0.5 VDC
Output signal	Ratiometric 10 – 90 %
Accuracy	≤ 2 % FS
Non-Repeatability	±0.25 % FS
Long-term stability	±0.25 % FS (1000 h at 80° C) ±0.15 % FS (100k Pressure Cycles)
Long-term stability of the span	± 0.1 % FS (1000 h at 80°C) ±0.1 % FS (100k Pressure Cycles)
Temperature coefficient of Span	±0.02 % FS/K
Temperature coefficient of Offset	±0.08 % FS/K

Mechanical data	
Dimensions	See drawing
Diameter	SW 19
Weight	approx. 50 g

Environmental data	
Operating temperature	-5 to +80 °C
Storage temperature	-20 to +80 °C

Material	
Sensor body	Stainless steel
Pressure cell	Ceramic AL_2O_3 96 % Others on request

Electrical connection	
	Cable Connector

Nominal Pressure						
		10 bar	20 bar	50 bar	100 bar	150 bar
Gauge pressure		•	•	•	•	•
Overpressure*	bar	≤ 13	≤ 26	≤ 65	≤ 130	≤ 195
Burst pressure	bar	≥ 20	≥ 40	≥ 100	≥ 200	≥ 300
Vaccum capability		•	•	•	•	•
Accuracy** typ. / max	% FS	0.5 / 0.9	0.5 / 0.9	0.5 / 0.9	0.4 / 0.8	0.4 / 0.8

* The specified overpressure ensures correct functioning of the cell in the event of overload. Duration of overpressure < 1 s
** Basis of calculation:

$$\text{Accuracy} = \sqrt{\text{Nonlinearity}^2 + \text{Hysteresis}^2 + \text{Nonrepeatability}^2}$$

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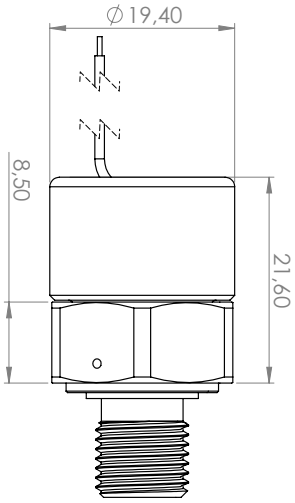
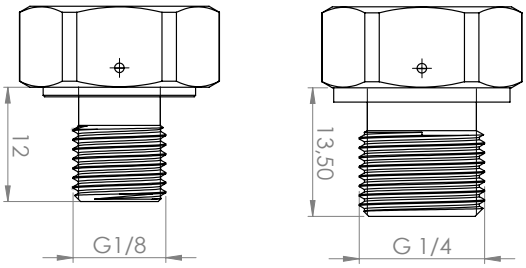
Drawing

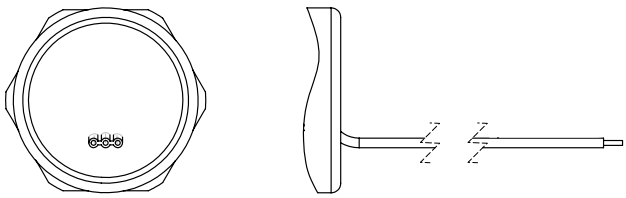


All dimensions in mm

Process connection



Electrical connection



Metallux cannot picture the customer's operating and application conditions and the customer's existing environmental influences.
We therefore recommend that you carry out your own investigations into the planned use of the products under the actual operating conditions.

We continuously improve our products and also update our data sheets regularly. In this respect, there may be changes in the specification.
These changes will apply to orders received by us from the time of the update, unless otherwise agreed.

Our products comply with Directive 2011/65/EU (RoHS) including Directive 2015/863/EU and Regulation (EC) No. 1907/2006 (REACH).