

Model Number

PMI360D-F130-R2-V15

Position sensor for PAX001

Features

- Measuring range 0 ... 360°
- RS 232 transmission

Technical data

General specifications

Measurement range	0 ... 360 °
Rotational speed	≤ 100 min ⁻¹

Nominal ratings

Operating voltage U_B	18 ... 30 V DC
Reverse polarity protected	reverse polarity protected
Repeat accuracy	0.5°
Resolution	0.2 °
Temperature drift	1.5° (-25 °C ... 70 °C)
No-load supply current I_0	≤ 45 mA

Functional safety related parameters

MTTF _d	450 a
Mission Time (T_M)	20 a
Diagnostic Coverage (DC)	0 %

Indicators/operating means

LED yellow	RS 232
LED PWR/ERR	status display LED, green/red (Power on / missing actuator / keylock)

Interface

Interface type	RS 232, for communication with interface box PAX...
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Ambient conditions

Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
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Mechanical specifications

Connection type	M12 x 1 connector, 5-pin
Housing material	PBT
Protection degree	IP67
Mass	180 g

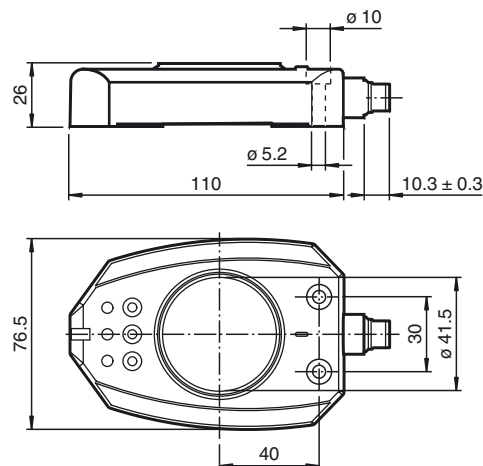
Compliance with standards and directives

Standard conformity	
Standards	EN 60947-5-2:2007 IEC 60947-5-2:2007

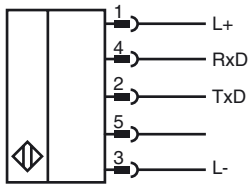
Approvals and certificates

UL approval	cULus Listed, General Purpose, Class 2 Power Source
CCC approval	Products with a maximum operating voltage of ≤36 V do not bear a CCC marking because they do not require approval.

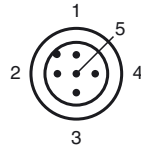
Dimensions



Electrical Connection



Pinout



Accessories

BT-F130-A

Actuator for F130 series

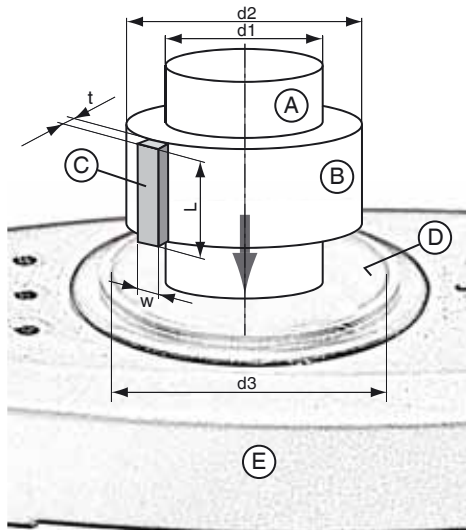
V15-G-2M-PUR-V15-G

Connecting cable, M12 to M12, PUR cable 5-pin

Using a different actuating element

You can use a different actuator instead of the BT-F130-A actuator provided, which must be positioned centrally in the sensor opening. When using a different actuating element, the element must fulfill all requirements relating to the material, dimensions and distance to the sensitive surface on the sensors (see table). Failing to fulfill all of these requirements may reduce the accuracy/resolution of the sensor or even cause the sensor to stop functioning.

Dimensions when using a different actuating element



- A Drive shaft
- B Insulation ring made from non-conductive material
- C Separate actuator (L ≥ 23 mm)
- D Sensitive surface on the sensors (black, cylindrical inner surface)
- E Sensor



Actuator (C) can be placed on the insulating ring made from non-conductive material (B) or inserted in this ring.

Dimension	
t	2 mm

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w	7.5 mm
L	≥ 23mm
d1	Depending on the drive shaft material S235JR+AR (previously St37-2): max. 19 mm Stainless steel 1.4435 / AISI 316L (V4A): max. 21 mm Stainless steel 1.4305 / AISI 303 (V2A): max. 23 mm
d2	Select so that the distance between the edges of the actuator and the sensitive surface on the sensor is 1 ... 2 mm.
d3	41.5 mm
Actuator material	Mild steel such as S235JR+AR (previously St37-2)