Model Number

PMI360D-F130-R2-V15

Position sensor for PAX001

Features

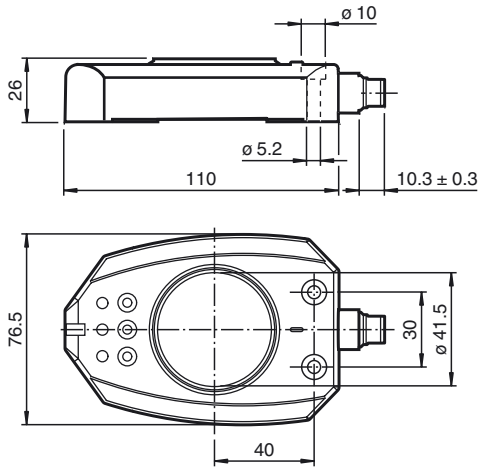
- **Measuring range 0 ... 360°**
- **RS 232 transmission**

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 protection	reverse polarity protected
Repeat accuracy R	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)
Interface	
Interface type	RS 232, for communication with interface box PAX...
Ambient conditions	
Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
Mechanical specifications	
Connection type	5-pin, M12 x 1 connector
Housing material	PBT
Degree of protection	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	CCC approval / marking not required for products rated ≤36 V

Dimensions



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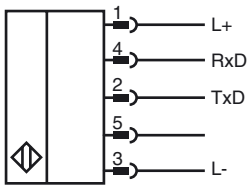
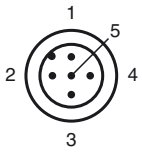
Electrical Connection



Pinout



Accessories

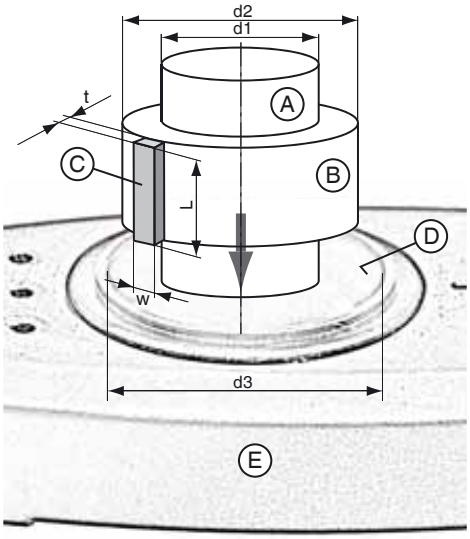
BT-F130-A
Actuator for F130 series

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
w	7.5 mm

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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)

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