

Model Number

PMI360DV-F130-IU-V15

Features

- Analog output, load-dependent voltage or current
- Parameterisable measuring range

Technical data

General specifications

Measurement range	max. 360° min. 90°
Adjustment range	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	± 0.25 °
Resolution	0.2 °
Temperature drift	0.02 ° / °C (-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 PWR/ERR	LED green / red
LED U/I	Activator within measuring range

Analog output

Output type	current output or voltage output (load dependent) 4 ... 20 mA ($R_L < 400 \Omega$) 0 ... 10 V ($R_L > 3.3 \text{ k}\Omega$)
Linearity error	± 0.6 °, (with original actuator)

Ambient conditions

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

Connection type	5-pin, M12 x 1 connector
Degree of protection	IP67
Material	
Housing	PBT
Target	mild steel, e. g. 1.0037, SR235JR (formerly St37-2)
Mass	180 g

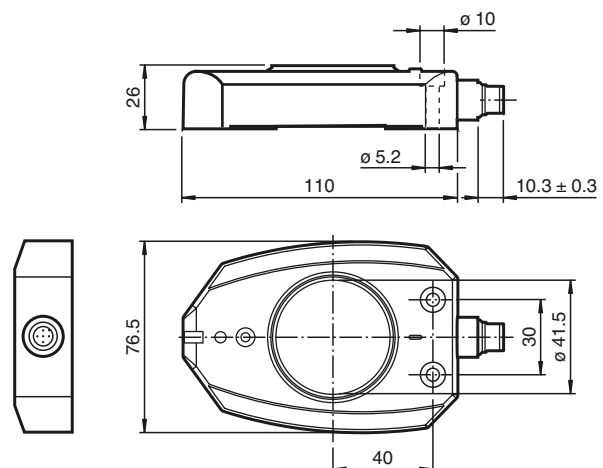
Compliance with standards and directives

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

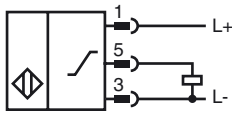
Approvals and certificates

UL approval	cULus Listed, General Purpose, Class 2 Power Source
CCC approval	CCC approval / marking not required for products rated ≤36 V

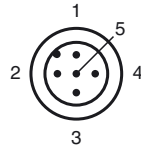
Dimensions



Electrical Connection



Pinout



Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
2	WH	(white)
3	BU	(blue)
4	BK	(black)
5	GY	(gray)

Accessories

BT-F130-A

Actuator for F130 series

V15-G-2M-PVC

Female cordset, M12, 5-pin, PVC cable

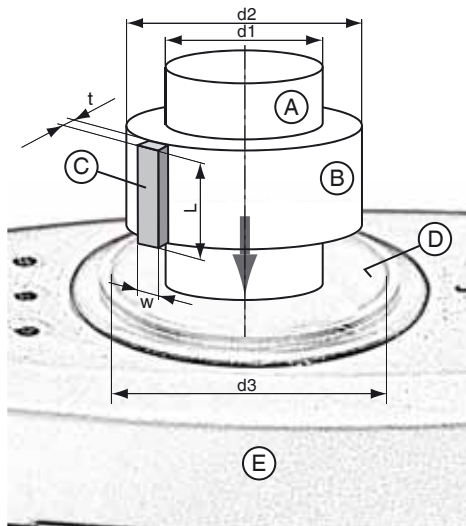
V15-W-2M-PVC

Female cordset, M12, 5-pin, PVC cable

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



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- A Drive shaft
- B Insulation ring made from non-conductive material
- C Separate actuator (L \geq 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
L	\geq 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)