

Ind. angular measuring system

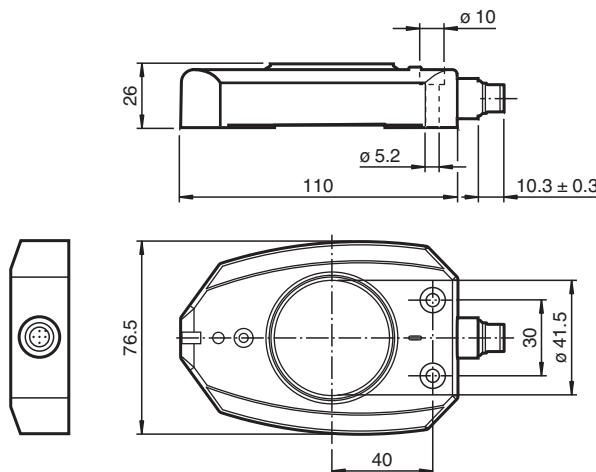
PMI360DV-F130-IU-V15



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



Dimensions



Technical Data

General specifications

Measurement range		max. 360° min. 45°
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Adjustment range		360°
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Rotational speed		max. 100 min ⁻¹
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Nominal ratings

Operating voltage	U_B	18 ... 30 V DC
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Reverse polarity protection		reverse polarity protected
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Repeat accuracy	R	± 0.25 °
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Resolution		0.2 °
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Temperature drift		0.02 ° / °C (-25 °C ... 70 °C)
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No-load supply current	I_0	≤ 45 mA
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Functional safety related parameters

MTTF _d		450 a
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Mission Time (T _M)		20 a
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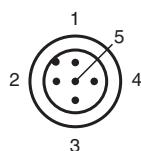
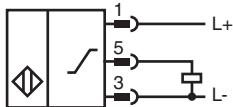
Diagnostic Coverage (DC)		0 %
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Indicators/operating means

Technical Data

LED PWR/ERR	LED green / red
LED U/I	Activator within measuring range
Analog output	
Output type	current output or voltage output (load dependend) 4 ... 20 mA ($R_L < 400 \Omega$) 0 ... 10 V ($R_L > 3.3 \text{ k}\Omega$)
Linearity error	$\pm 0.6^\circ$, (with original actuator)
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 $\leq 36 \text{ V}$
Ambient conditions	
Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
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

Connection



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

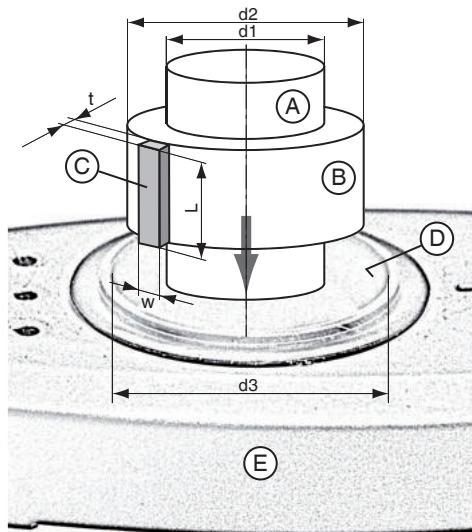
	BT-F130-A	Actuator for F130 series
	V15-G-2M-PVC	Female cordset single-ended M12 straight A-coded, 5-pin, PVC cable grey
	V15-W-2M-PVC	Female cordset single-ended M12 angled A-coded, 5-pin, PVC cable grey

Additional Information

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 ($L \geq 23$ 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	≥ 23 mm
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)