



### Model Number

PMI360DV-F130-IU2E2-V15

### Features

- Analog output, load-dependent voltage or current
- 2 configurable switching frames
- Parameterisable measuring range

## Technical data

### General specifications

Measurement range	max. 360° min. 45°
Adjustment range	2 switch frames programmable , min. 5°, max. 360°
Rotational speed	≤ 100 min <sup>-1</sup>

### Nominal ratings

Operating voltage U <sub>B</sub>	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 <sub>0</sub>	≤ 45 mA
Time delay before availability t <sub>v</sub>	1 s

### Functional safety related parameters

MTTF <sub>d</sub>	450 a
Mission Time (T <sub>M</sub> )	20 a
Diagnostic Coverage (DC)	0 %

### Indicators/operating means

LED yellow 1	switching state, Switching output 1
LED yellow 2	switching state, Switching output 2
LED PWR/ERR	Status display LED, green/red (Power on / missing actuator / keylock)
LED U/I	Activator within measuring range

### Switching output

Output type	2 switch outputs PNP, NO , reverse polarity protected , short-circuit protected , programmable
Operating current I <sub>L</sub>	≤ 100 mA
Switching hysteresis	1 °
Voltage drop	≤ 3 V
Short-circuit protection	pulsing

### Analog output

Output type	current output or voltage output (load dependend) 4 ... 20 mA (R <sub>L</sub> < 400 Ω) 0 ... 10 V (R <sub>L</sub> > 3.3 kΩ)
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

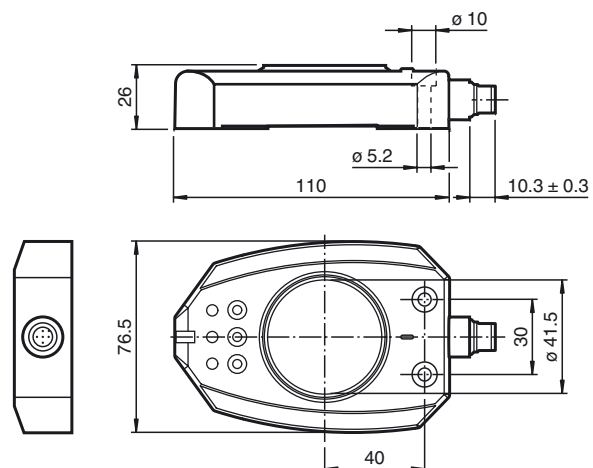
### Compliance with standards and directives

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

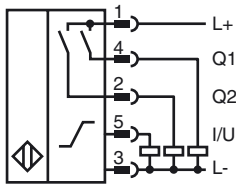
### Approvals and certificates

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

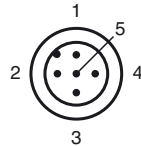
## Dimensions



**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

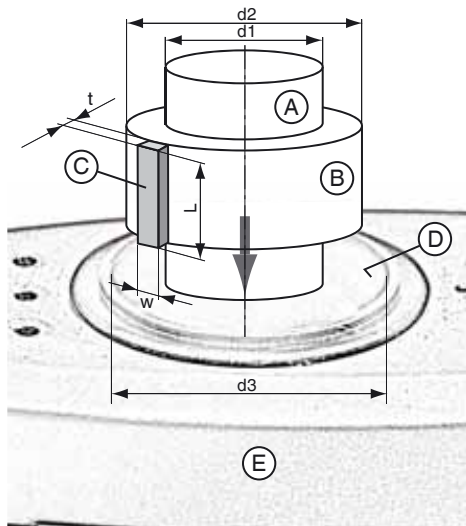
**V15-W-2M-PVC**

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**



Release date: 2015-04-07 11:15 Date of issue: 2015-04-07 215316\_eng.xml

- 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)