



Model Number

PMI14V-F112-U-V3

Features

- Analog output 0 ... 10 V
- Measuring range 0 ... 14 mm
- Scaleable measurement range, programmable via key

Technical data

General specifications

| | |
|----------------------------|-----------------------|
| Switching element function | Analog voltage output |
| Object distance | max. 2.5 mm |
| Measurement range | 0 ... 14 mm |

Nominal ratings

| | |
|------------------------------|----------------------------|
| Operating voltage U_B | 18 ... 30 V DC |
| Reverse polarity protected | reverse polarity protected |
| Linearity error | ± 0.3 mm |
| Repeat accuracy | ± 0.05 mm |
| Resolution | 33 μ m |
| Temperature drift | ± 0.4 mm |
| No-load supply current I_0 | ≤ 20 mA |
| Operating voltage display | LED |

Functional safety related parameters

| | |
|--------------------------|-------|
| MTTF _d | 650 a |
| Mission Time (T_M) | 20 a |
| Diagnostic Coverage (DC) | 0 % |

Analog output

| | |
|--------------------------|------------------------------|
| Output type | 1 voltage output: 0 ... 10 V |
| Load resistor | $\geq 1000 \Omega$ |
| Short-circuit protection | pulsing |

Ambient conditions

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

Mechanical specifications

| | |
|-------------------|--|
| Connection type | M8 x 1 connector, 3-pin |
| Protection degree | IP67 |
| Material | |
| Housing | PA 6 |
| Note | The data relating to accuracy only apply to a distance to the object to be detected of 1 ... 2.5 mm. |

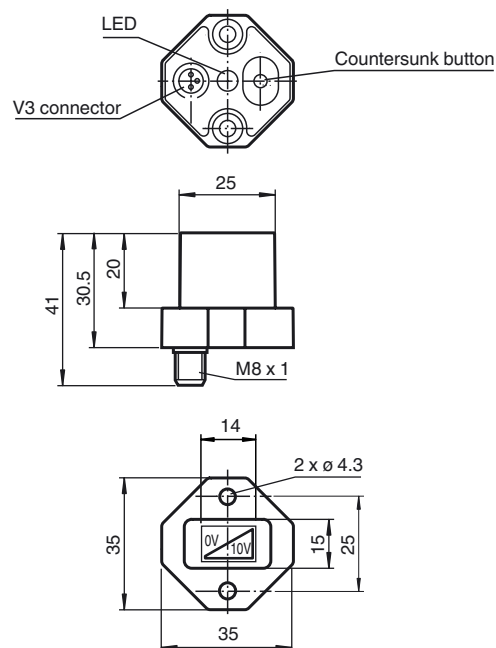
Compliance with standards and directives

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

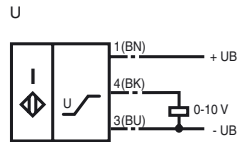
Approvals and certificates

| | |
|--------------|--|
| 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



Core colours in accordance with EN 60947-5-2.

Pinout



Wire colors in accordance with EN 60947-5-2

| | | |
|---|----|---------|
| 1 | BN | (brown) |
| 3 | BU | (blue) |
| 4 | BK | (black) |

Accessories

BT-F90-W

Damping element for F90 sensors; lateral screw holes

V3-GM-2M-PUR

Cable socket, M8, 3-pin, PUR cable

V3-WM-2M-PUR

Cable socket, M8, 3-pin, PUR cable

Additional Information

dimensions for the target object:

