

1) Operating voltage, 2) Output function, 3) rotatable 180°, 4) Optical axis emitter, 5) Optical axis receiver, 6) Display and keypad



**Basic features**

<b>Application</b>	Distance measurement
<b>Approval/Conformity</b>	CE cULus EAC WEEE
<b>Basic standard</b>	IEC 60947-5-2
<b>Principle of operation</b>	Photoelectric distance sensor
<b>Series</b>	24K
<b>Style</b>	Square Connection can be rotated

**Display/Operation**

<b>Adjuster</b>	Key (2x)
<b>Display</b>	LED green: Power Object in range - LED yellow
<b>Power indicator</b>	yes
<b>Setting</b>	Working range Factory setting (Reset)

**Electrical connection**

<b>Connection</b>	Connector, M12x1-Male, 5-pin
<b>Polarity reversal protected</b>	yes
<b>Short-circuit protection</b>	yes

**Electrical data**

<b>No-load current I<sub>o max.</sub> at U<sub>e</sub></b>	180 mA
<b>Operating voltage U<sub>b</sub></b>	18...30 VDC
<b>Protection class</b>	II
<b>Rated operating voltage U<sub>e DC</sub></b>	24 V
<b>Ready delay t<sub>v max.</sub></b>	300 ms
<b>Ripple max. (% of U<sub>e</sub>)</b>	15 %
<b>Turn-off delay t<sub>off max.</sub></b>	5 ms
<b>Turn-on delay t<sub>on max.</sub></b>	5 ms

**Environmental conditions**

<b>Ambient temperature</b>	-20...50 °C
<b>IP rating</b>	IP67

**Functional safety**

MTTF (40 °C) 37 a

**Interface**

Interface IO-Link 1.0

**Material**

Housing material Plastic  
 Material sensing surface Glass

**Mechanical data**

Dimension 50 x 21 x 50 mm  
 Mounting part Screw M4

**Optical features**

Ambient light max. 5000 Lux  
 Beam characteristic Divergent  
 Laser class per IEC 60825-1 2  
 Light spot size 1 x 1 mm at 450 mm  
 Light type Laser red light  
 Principle of optical operation Triangulation  
 Pulse duration t max. 22 ms  
 Pulse power Pp max. 1.2 mW  
 Wave length 655 nm

**Range/Distance**

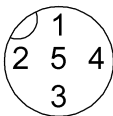
Accuracy ±1 %  
 Range 50...650 mm  
 Repeat accuracy ± 0.5 %  
 Resolution ≤ 100 µm

**Remarks**

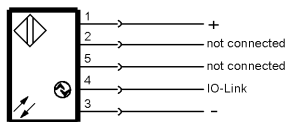
For additional information, refer to user's guide.  
 For more information about MTTF and B10d see MTTF / B10d Certificate

Indication of the MTTF- / B10d value does not represent a binding composition and/or life expectancy assurance; these are simply experiential values with no warranty implications. These declared values also do not extend the expiration period for defect claims or affect it in any way.

**Connector Drawings**



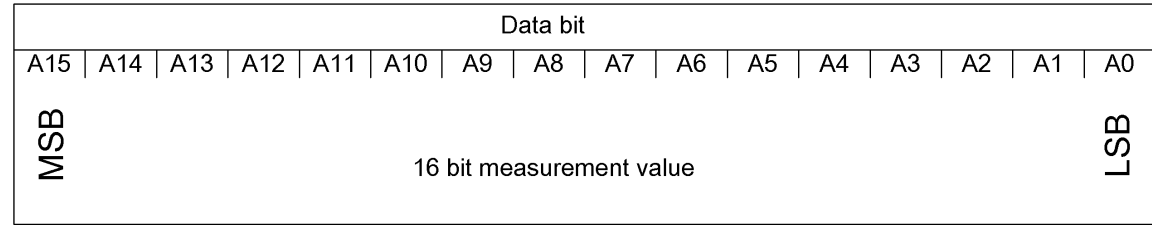
**Wiring Diagrams**



## Help Views

### IO-Link process data

Output data device

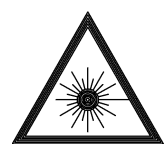


16 bit measurement value: distance  
 1 bit output resolution: 0.1 mm  
 Signal too weak: 65535  
 Laser error: 65533

## Opto Symbols



## Warning Symbols



**LASER BEAM - DO NOT STARE INTO THE LIGHT BEAM!**

LASER CLASS 2 per IEC60825-1: 2003-10