

1) Output function/Error, 2) Output mode, recvr., L/D, 3) Error, 4) Output curve rising/falling, 5) Pneumatics connection PK-3



**Basic features**

<b>Additional features</b>	Contamination compensation to up to 10% loss in intensity.
<b>Approval/Conformity</b>	CE WEEE
<b>Basic standard</b>	IEC 60947-5-2
<b>Principle of operation</b>	Fork sensor
<b>Series</b>	C
<b>Style</b>	Fork Straight connection

**Display/Operation**

<b>Adjuster</b>	Key (2x)
<b>Display</b>	Output function- LED yellow Error - 2 x LED yellow, flashing
<b>Setting</b>	Switching/error output Output curve rising/falling Sensitivity Light-on/dark-on

**Electrical connection**

<b>Connection</b>	Connector, M12x1-Male, 4-pin
<b>Polarity reversal protected</b>	yes
<b>Short-circuit protection</b>	yes

**Electrical data**

<b>Load capacitance max. at Ue</b>	2.2 µF
<b>Load resistance RL max. (Analog I)</b>	600 Ohm
<b>No-load current Io max. at Ue</b>	30 mA
<b>Operating voltage Ub</b>	18...30 VDC
<b>Rated operating current Ie</b>	100 mA
<b>Rated operating voltage Ue DC</b>	24 V
<b>Ready delay tv max.</b>	100 ms
<b>Ripple max. (% of Ue)</b>	10 %
<b>Switching frequency</b>	500 Hz
<b>Turn-off delay toff max.</b>	1 ms
<b>Turn-on delay ton max.</b>	1 ms
<b>Utilization category</b>	DC -13
<b>Voltage drop Ud max. at Ie</b>	1 V

## Environmental conditions

Ambient temperature	-5...55 °C
EN 60068-2-27, Shock	Half-sinus, 30 gn, 11 ms, 3x6
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
Protection degree	IP67

## Material

Housing material	Aluminum, Anodized
Material sensing surface	PMMA
Surface protection	Anodized

## Mechanical data

Dimension	18 x 100 x 93.5 mm
Fork opening	50 mm
Mounting	Screw M5

## Optical features

Ambient light max.	5000 Lux
Beam characteristic	Divergent
LED group per IEC 62471	Exempt Group
Light beams, number	10
Light spot size	3 x 28 mm Light exit
Light type	LED, red light
Principle of optical operation	Through-beam sensor
Special optical feature	Light array
Switching function, optical	dark-on/light-on
Wave length	633 nm

## Output/Interface

Analog output	Analog, current 4...20 mA
Supplementary output	Error output PNP
Switch function, supplementary output	NO/NC
Switching output	PNP normally open/normally closed (NO/NC)

## Range/Distance

Active length AL 1	28 mm
Hysteresis H max.	0.4 mm
Repeat accuracy lateral max.	150 µm
Resolution	≤ 0.08 mm

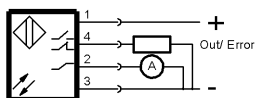
## Remarks

For additional information, refer to user's guide.  
 Order accessories separately.  
 Do not press key using a pointed tool.  
 Reference object (target): Steel plate, 50 x 50, thickness 0.5 mm, lateral approach.  
 The sensor is functional again after the overload has been eliminated.

## Connector Drawings



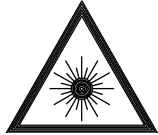
## Wiring Diagrams



## Opto Symbols



## Warning Symbols



LED light– DO NOT LOOK INTO THE BEAM!

Exempt Group per IEC 62471:2006-07