

1) Pulse extender, 2) LED Power indicator, 3) Switching function, 4) Object resolution, 5) LED warning indicator, 6) LED function indicator, 7) Optical axis



## Basic features

Additional features	Static switching output with automatic readjustment of the switching threshold Contamination compensation up to 60% intensity loss and reduced object resolution depending on degree of contamination.
Approval/Conformity	CE UKCA WEEE
Basic standard	IEC 60947-5-2
Principle of operation	Optical window sensor
Series	B
Style	Frame

## Display/Operation

Adjuster	Potentiometer 270° (3x)
Display	Output function- LED yellow LED green: Power Error - LED red
Setting	Object resolution (3 levels) Light-on/dark-on Delay time on/off

## Electrical connection

Connection	Connector, M8x1-Male, 4-pin
Contact, surface protection	Gold plated
Polarity reversal protected	yes
Short-circuit protection	yes

## Electrical data

Load capacitance max. at Ue	0.1 µF
No-load current I <sub>0</sub> max. at Ue	195 mA
Operating voltage U <sub>b</sub>	15...30 VDC
Rated insulation voltage U <sub>i</sub>	75 V DC
Rated operating current I <sub>e</sub>	200 mA
Rated operating voltage U <sub>e DC</sub>	24 V
Ready delay t <sub>v</sub> max.	300 ms
Residual current I <sub>r</sub> max.	50 µA
Ripple max. (% of U <sub>e</sub> )	15 %
Switching frequency	400 Hz
Turn-off delay t <sub>off</sub> max.	1.25 ms
Turn-on delay t <sub>on</sub> max.	1.25 ms
Voltage drop U <sub>d</sub> max. at I <sub>e</sub>	3.5 V

## Environmental conditions

Ambient temperature	-10...55 °C
IP rating	IP65

#### Interface

Duration of time function	T = 50 ms
Switching output	NPN static normally open/ normally closed (NO/NC) PNP static normally open/ normally closed (NO/NC)
Time function	switch-off delay

#### Material

Housing material	Aluminium, anodized, black
Material sensing surface	PMMA
Surface protection	anodized, black

#### Mechanical data

Active window (PL x AL)	200 x 200 mm
Dimension	15 x 250 x 244 mm
Mounting part	Screw M6

#### Optical features

Ambient light max.	2000 Lux
Beam characteristic	Divergent
Light type	Infrared
Principle of optical operation	Through-beam sensor
Smallest part typ.	2.0 mm (resolution "High")
Switching function, optical	dark-on/light-on
Wave length	850 nm

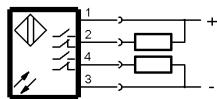
#### Remarks

Order accessories separately.  
For additional information, refer to user's guide.  
Do not route connection cable parallel to high voltage lines.  
Reference object (target): Steel ball, diameter 4.0 mm, lateral approach.  
The sensor is functional again after the overload has been eliminated.

#### Connector Drawings



#### Wiring Diagrams



#### Opto Symbols

