

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	Pulse extension (On/Off) Object resolution (3 levels) Light-on/dark-on

### Electrical connection

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

### Electrical data

No-load current $I_0$ max. at $U_e$	180 mA
Operating voltage $U_b$	15...30 VDC
Rated insulation voltage $U_i$	75 V DC
Rated operating current $I_e$	200 mA
Rated operating voltage $U_e$ DC	24 V
Ready delay $t_v$ max.	300 ms
Residual current $I_r$ max.	50 $\mu$ A
Ripple max. (% of $U_e$ )	15 %
Switching frequency	667 Hz
Turn-off delay $t_{off}$ max.	0.75 ms
Turn-on delay $t_{on}$ max.	0.75 ms
Voltage drop $U_d$ max. at $I_e$	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 120 mm
Dimension	15 x 210 x 174 mm
Mounting part	Screw M6

Optical features

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

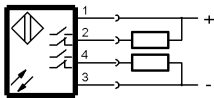
Remarks

Order accessories separately.  
For additional information, refer to user's guide.  
Do not route connection cable parallel to high voltage lines.  
The sensor is functional again after the overload has been eliminated.  
Reference object (target): Steel ball, diameter 2.0 mm, lateral approach.

Connector Drawings



Wiring Diagrams



Opto Symbols

