

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_o max. at Ue	135 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 µA
Ripple max. (% of U_e)	15 %
Switching frequency	500 Hz
Turn-off delay t_{off} max.	1 ms
Turn-on delay t_{on} max.	1 ms
Voltage drop U_d max. at I_e	3.5 V

Environmental conditions

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

Photoelectric Sensors
BOW B-1216-DU-C-S75
Order Code: BOW0033



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)	120 x 160 mm
Dimension	15 x 170 x 214 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

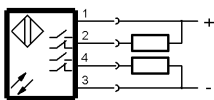
Remarks

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

