

1) Power, 2) Output function, 3) Delay time, 4) Sensitivity



### Basic features

Approval/Conformity	CE UKCA WEEE
Basic standard	IEC 60947-5-2
Principle of operation	Optical window sensor
Series	A
Style	Frame

### Display/Operation

Adjuster	Potentiometer 270° (2x)
Display	Output function dynamic - LED red LED green: Power
Setting	Delay time Sensitivity dynamic

### Electrical connection

Connection	Connector, M8x1-Male, 3-pin
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

### Electrical data

Load capacitance max. at $U_e$	0.1 $\mu$ F
No-load current $I_o$ max. at $U_e$	100 mA
Operating voltage $U_b$	10...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.	100 ms
Residual current $I_r$ max.	50 $\mu$ A
Ripple max. (% of $U_e$ )	15 %
Switching frequency	100 Hz Dynamic
Turn-off delay $t_{off}$ max.	0.4 ms dyn.
Turn-on delay $t_{on}$ max.	0.4 ms dyn.
Utilization category	DC -13
Voltage drop $U_d$ max. at $I_e$	2.5 V

### Environmental conditions

Ambient temperature	-10...55 °C
Contamination scale	3
EN 60068-2-27, Shock	Half-sinus, 30 $g_n$ , 11 ms, 3x6
EN 60068-2-6, Vibration	10...55 Hz, 0.5 mm, 3x5 min 55 Hz, 0.5 mm, 3x30 min
IP rating	IP67

### Interface

Duration of time function	$T = 5...300$ ms
Switching output	NPN dynamic normally open (NO)
Time function	Turn-off delay dynamic

Photoelectric Sensors  
**BOW A-1616-NS-C-S49**  
Order Code: BOW002A



**Material**

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

**Mechanical data**

Active window (PL x AL)	160 x 160 mm
Dimension	18 x 210 x 220 mm
Mounting part	Screw M6 Screw M4

**Optical features**

Ambient light max.	5000 Lux
Beam characteristic	Divergent
Light type	Infrared
Principle of optical operation	Through-beam sensor
Smallest part typ.	1.5 mm dynamic
Switching function, optical	dark-on
Wave length	880 nm

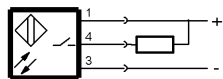
**Remarks**

Order accessories separately.  
For additional information, refer to user's guide.  
Reference object (target): Steel ball, diameter 2.0 mm, lateral approach.  
The sensor is functional again after the overload has been eliminated.

**Connector Drawings**



**Wiring Diagrams**



**Opto Symbols**

