

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 Ue	0.1 µF
No-load current I <sub>o</sub> max. at Ue	75 mA
Operating voltage U <sub>b</sub>	10...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</sub> DC	24 V
Ready delay t <sub>v</sub> max.	100 ms
Residual current I <sub>r</sub> max.	50 µA
Ripple max. (% of U <sub>e</sub> )	15 %
Switching frequency	100 Hz Dynamic
Turn-off delay t <sub>off</sub> max.	0.4 ms dyn.
Turn-on delay t <sub>on</sub> max.	0.4 ms dyn.
Utilization category	DC -13
Voltage drop U <sub>d</sub> max. at I <sub>e</sub>	2.5 V

**Environmental conditions**

Ambient temperature	-10...55 °C
Contamination scale	3
EN 60068-2-27, Shock	Half-sinus, 30 g <sub>n</sub> , 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-0816-NS-C-S49**  
Order Code: BOW0028

# BALLUFF

## Material

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

## Mechanical data

Active window (PL x AL)	80 x 160 mm
Dimension	18 x 130 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.	1.0 mm dynamic
Switching function, optical	dark-on
Wave length	880 nm

## Remarks

Order accessories separately.

For additional information, refer to user's guide.

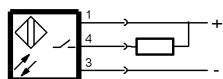
Reference object (target): Steel ball, diameter 2.0 mm, lateral approach.

The sensor is functional again after the overload has been eliminated.

## Connector Drawings



## Wiring Diagrams



## Opto Symbols

