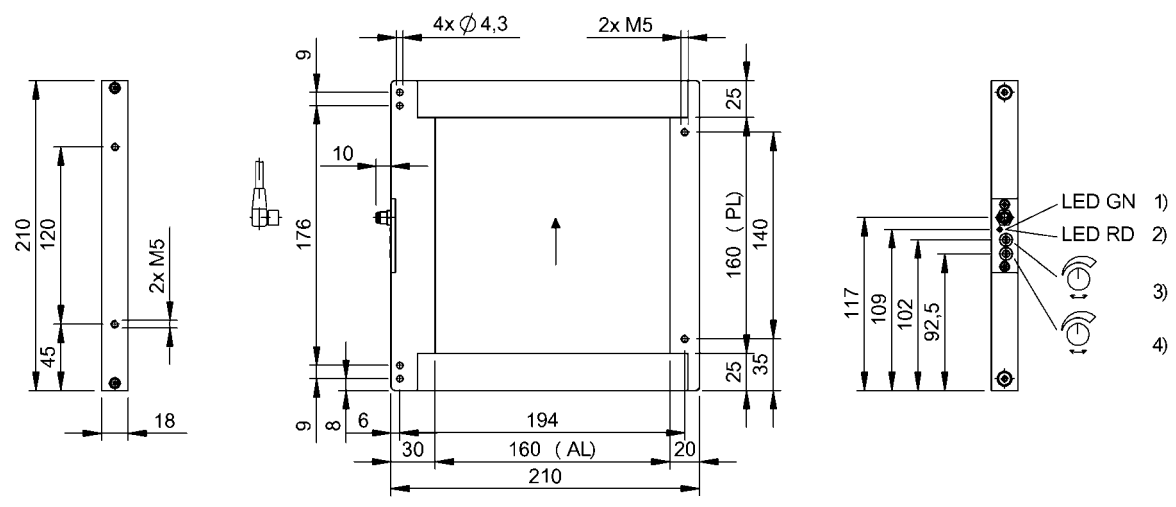


Photoelectric Sensors
BOW A-1616-PS-C-S49
Order Code: BOW002J



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 _o max. at Ue	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 µA
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	PNP dynamic normally open (NO)
Time function	Turn-off delay dynamic

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

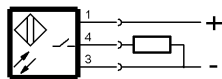
Remarks

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

