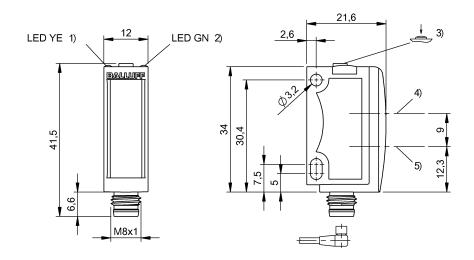
BALLUFF



1) Output function, 2) Operating voltage, 3) Sn, light/dark, 4) Optical axis receiver, 5) Optical axis emitter







IND. CONT. EQ 77HA for use in the secondary of a class 2 source of supply



Basic features

Approval/Conformity	cULus
	CE
	EAC
	WEEE
Basic standard	IEC 60947-5-2
Principle of operation	Photoelectric sensor
Series	6K
Style	Square
	Connection 90°

Display/Operation

Adjuster	button
Display	Output function- LED yellow
	LED green: Power
Setting	Rated switching distance (Sn)
	Light-on/dark-on
	Teach mode Stand./Dyn./Obj.

Electrical connection

Connection	Connector, M8x1-Male, 4-pin
Polarity reversal protected	yes
Short-circuit protection	yes

Electrical data

Input function	Same function as button
	Key disable on/off
No-load current lo max. at Ue	30 mA
Operating voltage Ub	1030 VDC
Rated operating current le	100 mA
Rated operating voltage Ue DC	24 V
Ripple max. (% of Ue)	12 %
Switching frequency	1000 Hz
Turn-off delay toff max.	0.5 ms
Turn-on delay ton max.	0.5 ms
Voltage drop Ud max. at le	2.4 V

Environmental conditions

MTTF (40 °C)	476 a
Functional safety	
Protection degree	IP67
IP rating per DIN 40050	IP69K
	3x30 min
EN 60068-2-6, Vibration	1055 Hz, amplitude 0.5 mm,
EN 60068-2-27, Shock	Half-sinus, 30 gn, 11 ms, 3x6
Ambient temperature	-2060 °C

ABS

PMMA

Housing material

Material sensing surface

Photoelectric Sensors

BOS 6K-PU-RH11-S75 Order Code: BOS01L3



Mechanical data

 Dimension
 12 x 41.5 x 21.6 mm

 Mounting
 Screw M3

Optical features

Ambient light max. 5000 Lux

Beam characteristicFocus, typical at 60 mmLight spot size8 x 8 mm at focal pointLight typeLED, red light

Principle of optical operation

Special optical feature

Switching function, optical

Wave length

Diffuse sensor, triangulation

Background suppression

Light/dark switching

640 nm

Output/Interface

Switching output PNP normally open/normally closed (NO/NC)

Range/Distance

Distance deviation 18 % max. (% of

Sr)

Range 3...400 mm

Rated operating distance Sn 400 mm Adjustable

Remarks

When using as a UL product the ambient temperature Ta max. must not exceed 50°C.

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

Only for applications per NFPA 79 (machines with a supply voltage of maximum 600 V). Use an R/C (CYJV2) cable with suitable properties for attaching the device.

For additional information, refer to user's guide.

Order accessories separately.

Do not press key using a pointed tool.

Reference object (target): gray card, 200 x 200, 90 % remission, axial approach.

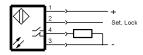
For more information about MTTF and B10d see MTTF / B10d Certificate

Indication of the MTTF- / B10d value does not represent a binding composition and/or life expectancy assurance; these are simply experiential values with no warranty implications. These declared values also do not extend the expiration period for defect claims or affect it in any way.

Connector Drawings



Wiring Diagrams



Opto Symbols

