

1) Fiber clamp, 2) Receiver, 3) Emitter, 4) Display and control panel, 5) For DIN rail 35mm



**Basic features**

<b>Approval/Conformity</b>	cULus CE WEEE
<b>Basic standard</b>	IEC 60947-5-2
<b>Principle of operation</b>	Fiber optic device
<b>Series</b>	75K
<b>Style</b>	Square Straight connection

**Display/Operation**

<b>Adjuster</b>	Key (3x)
<b>Display</b>	Output function- LED yellow LED green: Power Setup mode active - LED red Function selected - LED red Switching function NC - LED red Switching point - LCD Signal strength - LCD Special mode active - LED red Key disable active: LED red Time function active: LED red

Photoelectric Sensors  
**BFB 75K-002-N-S75**  
Order Code: BFB0005

# BALLUFF

Setting	LCD read direction Time function Factory setting (Reset) Mode normal/fine/fast/far Duration of single pulse Rated switching distance (Sn), 2 values Display on/off Delay time Key disable on/off Light-on/dark-on Sensitivity (Sn)
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## Electrical connection

Connection	Connector, M8x1-Male, 4-pin
Fiber optics connection	Ø 2.2 mm
Polarity reversal protected	yes
Short-circuit protection	yes

## Electrical data

Input function	Teach Sn Key disable on/off
No-load current I <sub>o</sub> max. at U <sub>e</sub>	25 mA
Operating voltage U <sub>b</sub>	10...30 VDC
Protection class	II
Rated insulation voltage U <sub>i</sub>	75 V DC
Rated operating current I <sub>e</sub>	100 mA
Rated operating voltage U <sub>e</sub> DC	24 V
Ripple max. (% of U <sub>e</sub> )	10 %
Switching frequency	8000 Hz /1000 Hz/125 Hz
Turn-off delay t <sub>off</sub> max.	0.06/0.5/8 ms
Turn-on delay t <sub>on</sub> max.	0.06/0.5/8 ms
Voltage drop U <sub>d</sub> max. at I <sub>e</sub>	2.4 V

## Environmental conditions

Ambient temperature	-20...60 °C
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
IP rating	IP64

## Interface

Duration of time function	1/5.../2000 ms (15 steps)
Switching output	NPN normally open/normally closed (NO/NC)
Time function	switch-off delay Turn-on delay Single pulse

## Material

Housing material	ABS
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## Mechanical data

Dimension	10.4 x 35.4 x 84 mm
Mounting part	Screw M3 DIN rail 35 mm

## Optical features

Ambient light max.	5000 Lux
Light type	LED, red light
Principle of optical operation	depends on fiber optics
Switching function, optical	Light/dark switching
Wave length	660 nm

## Range/Distance

Hysteresis H max. (% of S <sub>r</sub> )	10.0 %
Range	depends on fiber optics

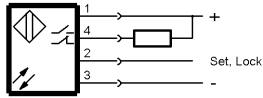
## Remarks

Order accessories separately.  
For additional information, refer to user's guide.  
The sensor is functional again after the overload has been eliminated.  
Do not press key using a pointed tool.

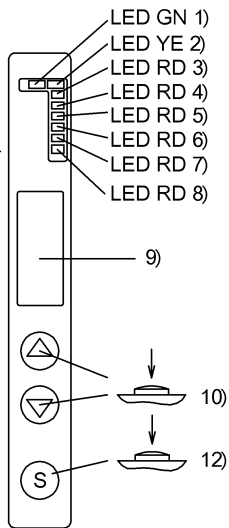
## Connector Drawings



**Wiring Diagrams**



**Help Views**



- 1) Output function
- 2) Operating voltage
- 3) Setup mode active
- 4) Key disable active
- 5) Switching function NC
- 6) Teach-in active
- 7) Time function active
- 8) Special mode active
- 9) Signal strength/switchpoint
- 10) Function/mode select
- 11) Confirm teach-in/selection

**Opto Symbols**

