

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



Basic features

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

Display/Operation

Adjuster	Key (3x)
Display	Output function- LED yellow LED green: Power Teach-in active - LED red Setup mode active - 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-003-N-02
Order Code: BFB0007



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

Environmental conditions

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

Interface

Analog output	Analog, voltage 0...10 V
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

Electrical connection

Cable diameter D	4.00 mm
Cable length L	2 m
Conductor cross-section	0.14 mm ²
Connection	Cable, 2.00 m, PVC
Fiber optics connection	Ø 2.2 mm
Number of conductors	4
Polarity reversal protected	yes
Short-circuit protection	yes

Material

Housing material	ABS
Material jacket	PVC

Mechanical data

Dimension	10.4 x 35.4 x 79.3 mm
Mounting part	Screw M3 DIN rail 35 mm

Electrical data

Input function	Teach Sn Key disable on/off
No-load current I_o max. at U_e	25 mA
Operating voltage U_b	10...30 VDC
Protection class	II
Rated insulation voltage U_i	75 V DC
Rated operating current I_e	100 mA
Ripple max. (% of U_e)	10 %
Switching frequency	8000 Hz /1000 Hz/125 Hz
Turn-off delay t_{off} max.	0.06/0.5/8 ms
Turn-on delay t_{on} max.	0.06/0.5/8 ms
Voltage drop U_d max. at I_e	2.4 V

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

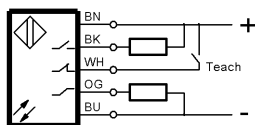
Range/Distance

Hysteresis H max. (% of S_r)	10.0 %
Range	depends on fiber optics

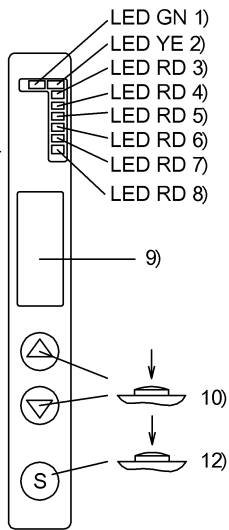
Remarks

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

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

