



Model Number

RLK61-LL-IR-Z/31/135

Fiber optic sensor
with V95 quick disconnect

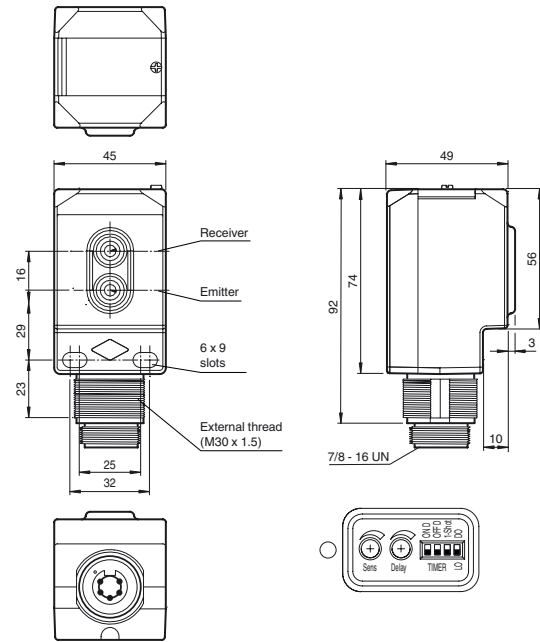
Features

- Cost-optimized series for standard tasks in a special design
- Compact design
- Wide range of mounting options thanks to cubic housing design with M30 thread
- 360° high visibility LEDs
- Programmable ON-delay, OFF-delay, and One-shot timers
- Version for universal voltages
- Relay output
- Includes universal fiber adapter kit

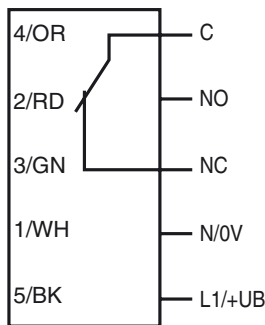
Product information

The Series 61 sensor family is a comprehensive product line, offering five sensing modes. Each sensor is equipped with four LEDs that are highly visible from all directions, indicating Power-On, target presence and marginal excess gain. The widely recognized, polycarbonate housing provides a IP67 protection degree rating. Color-coded labels are clearly printed on the housing to easily identify the sensing mode. DC models offer a 4-in-1 output while AC/DC models have a SPDT relay output rated to 3 A. All versions come standard with an integral multifunction timer, sensitivity adjustment and Light-ON/Dark-ON switch. Series 61 sensors are cross-talk protected and have a high degree of resistance to ambient lighting. Each sensor can be mounted via front and rear slots, rear dovetail guide or M30 x 1.5 mounting base. Additionally, cabled sensor models provide 1/2" - 14 NPT internal threads for use with flexible conduit.

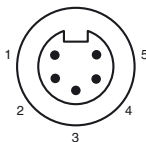
Dimensions



Electrical connection



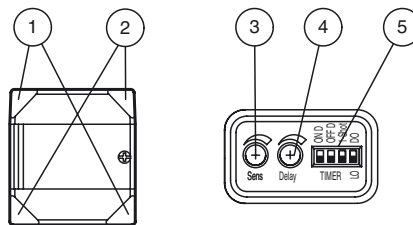
Pinout



Wire colors

1	WH	(white)
2	RD	(red)
3	GN	(green)
4	OR	(orange)
5	BK	(black)

Indicators/operating means



1	Operating display	green
2	Signal display	yellow
3	Sensing range adjuster	
4	Time adjuster	
5	DIP-switches	

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Technical data**General specifications**

Detection range	Dependent on fibers selected
Light source	IRED
Light type	modulated infrared light , 850 nm
Ambient light limit	5000 Lux ; according EN 60947-5-2

Indicators/operating means

Operation indicator	2 LEDs green
Function indicator	2 LEDs yellow lights up when receiving the light beam ; flashes when falling short of the stability control; OFF: object outside the sensing range
Control elements	Light-on/dark-on changeover switch
Control elements	Sensing range adjuster
Control elements	Time adjuster (0 ... 10 s)

Electrical specifications

Operating voltage	U_B	24 ... 240 V AC 12 ... 240 V DC
No-load supply current	I_0	≤ 35 mA
Protection class		II , rated voltage ≤ 250 V AC with pollution degree 1-2 according to IEC 60664-1 Output circuit basis insulation of input circuit according to EN 50178, rated insulation voltage 240 V AC
Power consumption	P_0	≤ 2 VA

Output

Switching type	light/dark on, switchable
Signal output	1 SPDT relay
Switching voltage	max. 250 V AC/DC
Switching current	max. 3 A
Switching power	DC: max. 150 W AC: max. 750 VA
Switching frequency	f 20 Hz
Response time	≤ 25 ms
Timer function	DIP-switch for selection of operating modes

Ambient conditions

Ambient temperature	-40 ... 55 °C (-40 ... 131 °F)
Storage temperature	-40 ... 70 °C (-40 ... 158 °F)

Mechanical specifications

Degree of protection	IP67
Connection	V95 quick disconnect
Material	
Housing	PC (Polycarbonate)
Optical face	PMMA
Mass	approx. 140 g
Tightening torque, fastening screws	≤ 2 Nm

Compliance with standards and directives

Directive conformity	
EMC Directive 2004/108/EC	EN 60947-5-2:2007+A1:2012
Standard conformity	
Product standard	EN 60947-5-2:2007 IEC 60947-5-2:2007
Standards	EN 50178, UL 508

Approvals and certificates

EAC conformity	TR CU 020/2011 TR CU 004/2011
UL approval	cULus Listed, Type 1 enclosure For overcurrent protection, install a fuse with a rated current of max. 5 A and min. 240 V AC/DC
CCC approval	Certified by China Compulsory Certification (CCC)

Accessories**FE-BTS6S-5**

Glass fiber optic - diffuse

FE-BTS6S-10

Glass fiber optic - diffuse

FE-BTS6M-3

Glass fiber optic - diffuse

MPGKITC

Fiber cable adapter kit

MPZB01

Mounting bracket with vertical slots

MPZB02

Mounting bracket with circular slots

MPZB06

Ball and Swivel Mounting Bracket

MPZB07

Ball and Swivel Vertical Mounting Plate

FE-BTS6S-3

Glass fiber optic - diffuse

FE-BTSAS6S-3

Glass fiber optic - diffuse

FE-BTSAS6M-3

Glass fiber optic - diffuse

FE-BNSRA5S-3

Glass fiber optic - diffuse

FE-BRL7S-3

Glass fiber optic - diffuse

FE-BRL7M-3

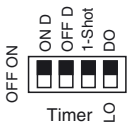
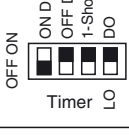
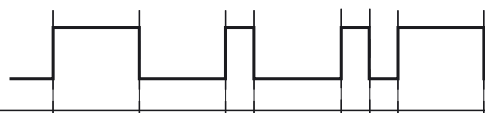
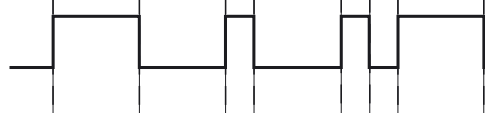
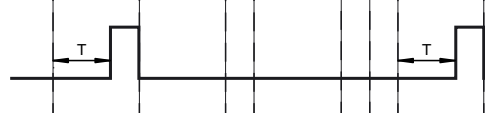
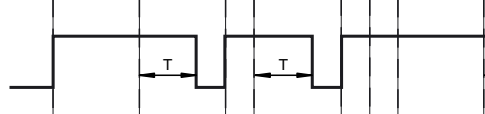
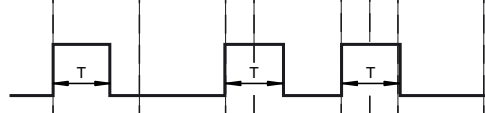
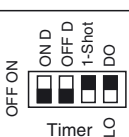
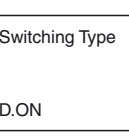
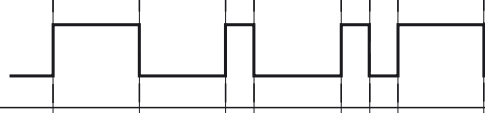
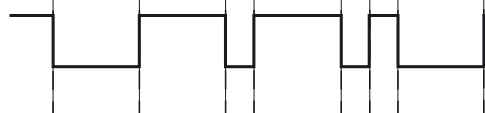
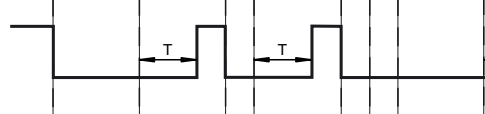

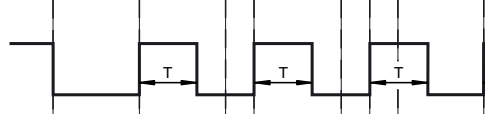
Glass fiber optic - diffuse


FE-BNSRA5M-3

Glass fiber optic - diffuse

Other suitable accessories can be found at www.pepperl-fuchs.com

Timer Functions

Switching Type	Detection Status		Light Received	No Light Received
	Operation Mode			
L.ON  Timer LO	OFF ON  Timer LO	No Delay (Timer OFF)		ON
		ON Delay		OFF
		OFF Delay		ON
		One-Shot Delay		OFF
		ON Delay and OFF Delay		ON
D.ON  Timer LO	OFF ON  Timer LO	No Delay (Timer OFF)		ON
		ON Delay		OFF
		OFF Delay		ON
		One-Shot Delay		OFF
		ON Delay and OFF Delay		ON

DIP-Switch position 

Time (T) is adjustable from 0 to 10 sec

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