



**Model Number**

**RLK61-LL-IR-Z/31/115**

Fiber optic sensor  
with fixed cable

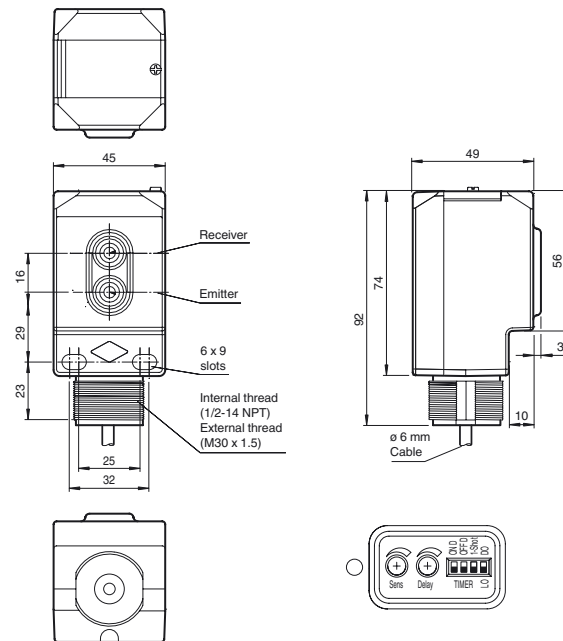
**Features**

- 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

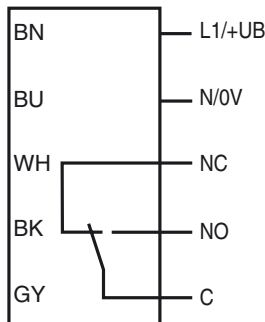
**Product information**

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.

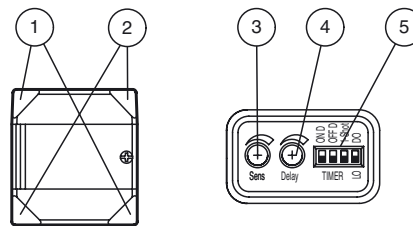
**Dimensions**



**Electrical connection**



**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	IREL
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	2 m fixed cable , 5-wire
Material	
Housing	PC (Polycarbonate)
Optical face	PMMA
Mass	approx. 240 g
Tightening torque, fastening screws	≤ 2 Nm
Cable length	2 m

**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](http://www.pepperl-fuchs.com)

Timer Functions

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



Time (T) is adjustable from 0 to 10 sec

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