



**Model Number**

**RLK61-LL-IR-Z/31/135**

Fiber optic sensor  
with V95 quick disconnect

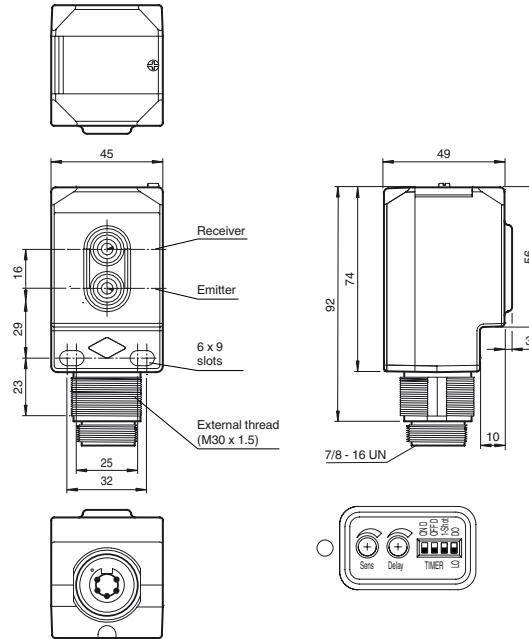
**Features**

- 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

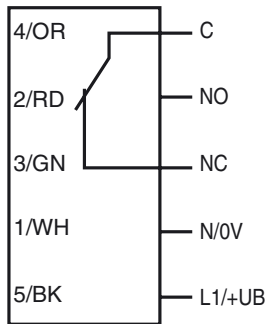
**Product information**

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.

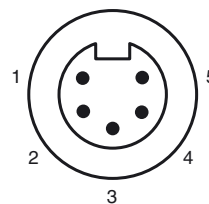
**Dimensions**



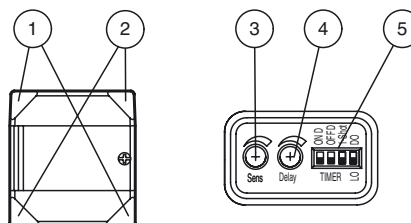
**Electrical connection**



**Pinout**



**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".

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**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 ON: object inside the scanning range OFF: object outside the scanning range
Control elements	Light/Dark switch
Control elements	Detection 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	Relay, Form C
Switching voltage	max. 250 V AC/DC
Switching current	max. 3 A
Switching power	DC: max. 50 W AC: max. 500 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	130 g
Tightening torque, fastening screws	≤ 2 Nm

**Compliance with standards and directives**

Standard conformity	
Product standard	EN 60947-5-2:2007 IEC 60947-5-2:2007

**Approvals and certificates**

UL approval	cULus
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

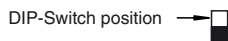
**FE-BNSRA5M-3**

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				
 Timer LO	No Delay (Timer OFF)		ON	OFF
 Timer LO	ON Delay		ON	OFF
 Timer LO	OFF Delay		ON	OFF
 Timer LO	One-Shot Delay		ON	OFF
 Timer LO	ON Delay and OFF Delay		ON	OFF
D.ON				
 Timer LO	No Delay (Timer OFF)		ON	OFF
 Timer LO	ON Delay		ON	OFF
 Timer LO	OFF Delay		ON	OFF
 Timer LO	One-Shot Delay		ON	OFF
 Timer LO	ON Delay and OFF Delay		ON	OFF



Time (T) is adjustable from 0 to 10 sec

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