



**Model Number**

**LA61/LK61-Z/31/135**

Thru-beam sensor  
7/8"-16 UN connector

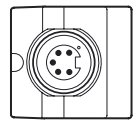
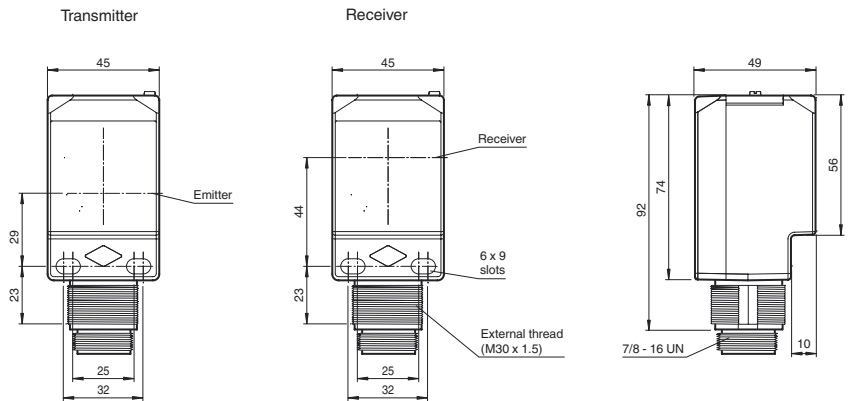
**Features**

- 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

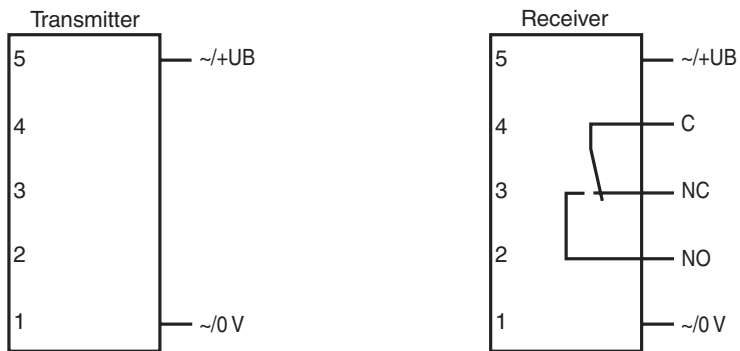
**Product information**

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.

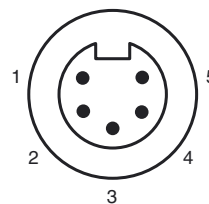
**Dimensions**



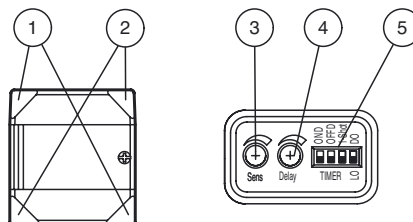
**Electrical connection**



**Pinout**



**Indicators/operating means**



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

Release date: 2014-11-10 11:56 Date of issue: 2014-11-10 913909\_eng.xml

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

**Technical data****System components**

Emitter	LA61/135
Receiver	LK61-Z/31/135

**General specifications**

Effective detection range	0 ... 60 m
Threshold detection range	85 m
Light source	IREL
Light type	modulated infrared light , 850 nm
Diameter of the light spot	approx. 1600 mm at a distance of 60 m
Angle of divergence	Emitter: 1.5 ° , Receiver: 1.5 °
Ambient light limit	5000 Lux ; according EN 60947-5-2

**Indicators/operating means**

Operation indicator	2 LEDs green
Function indicator	2 LEDs yellow Receiver: receiver LED yellow, lights up when light beam is free, flashes when falling short of the stability control ; OFF when light beam is interrupted
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, 1 alternator	
Switching voltage	max. 240 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	7/8"-16 UN connector
Material	
Housing	PC (glass-fiber-reinforced Makrolon)
Optical face	PMMA
Mass	Emitter: 120 g Receiver: 120 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****MPZB01**

Mounting bracket with vertical slots

**MPZB02**

Mounting bracket with circular slots

**MPZB06**

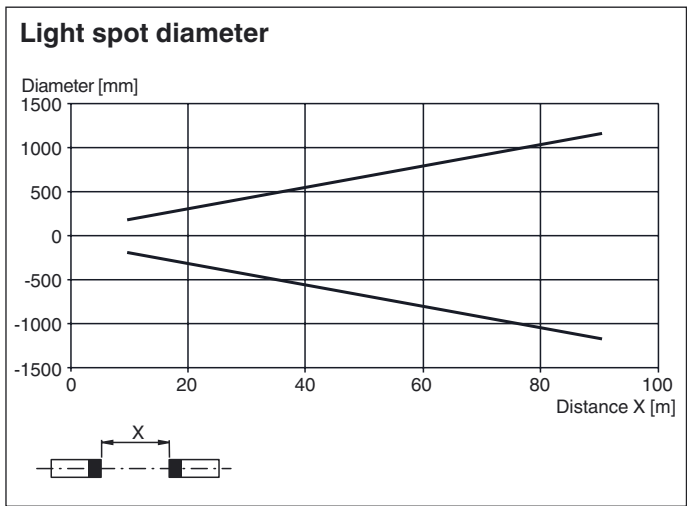
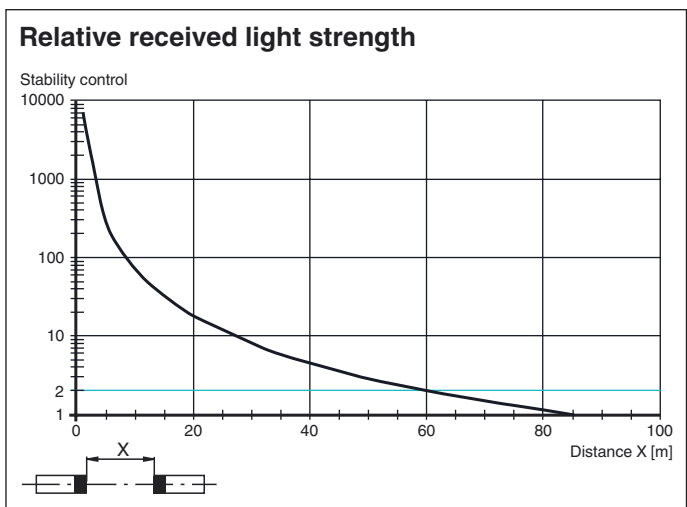
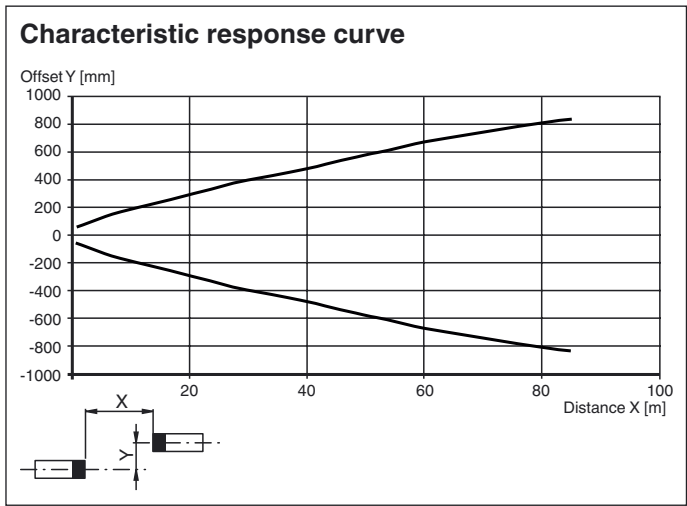
Ball and Swivel Mounting Bracket

**MPZB07**

Ball and Swivel Vertical Mounting Plate

Other suitable accessories can be found at [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com)

Curves/Diagrams



Release date: 2014-11-10 11:56 Date of issue: 2014-11-10 913909\_eng.xml

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

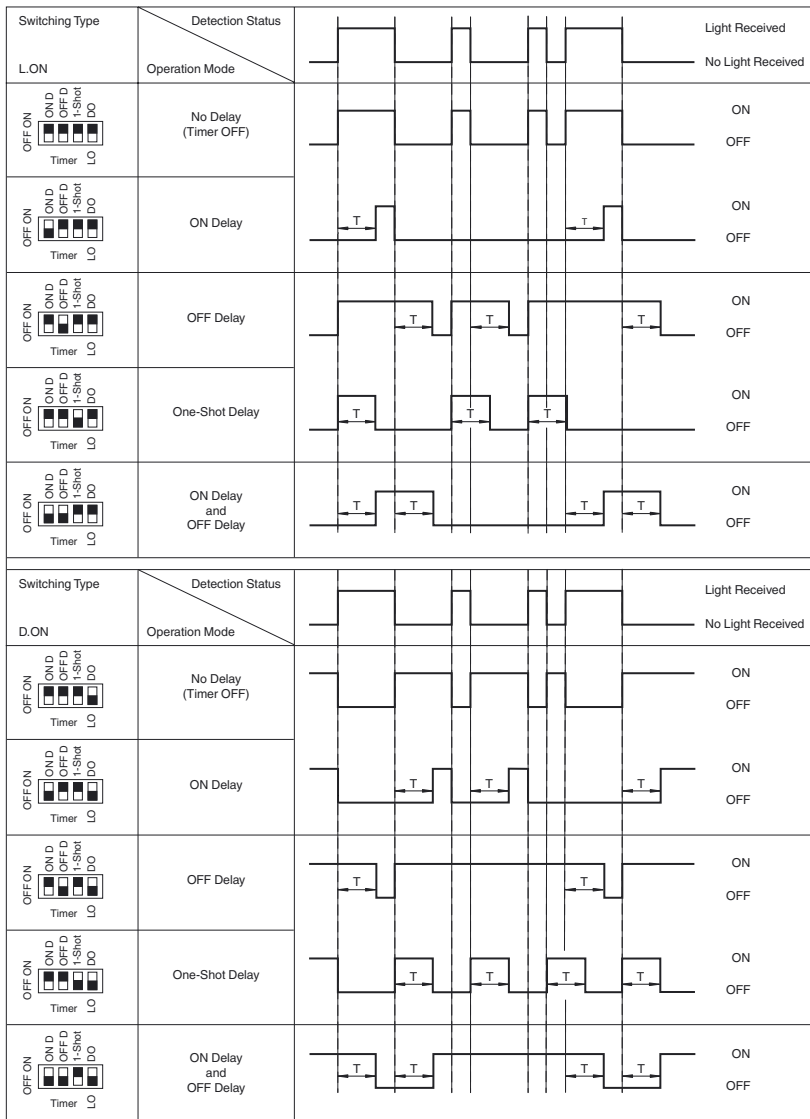
Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0001  
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 4411  
fa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

Timer Functions



Time (T) is adjustable from 0 to 10 s

Release date: 2014-11-10 11:56 Date of issue: 2014-11-10 913909\_eng.xml