

MULTIPLE OPTIONS IN AN INDUSTRY-STANDARD HOUSING



"4-IN-1" OUTPUT



Reduce your inventory by having one sensor replace four with Pepperl+Fuchs' 4-in-1 output. The 4-in-1 technology offers a normally open and a normally closed output, which will automatically detect the connected load. A single sensor can operate in NPN normally open, NPN normally closed, PNP normally open, or PNP normally closed. No external wiring to select the mode. No sinking or sourcing confusion.

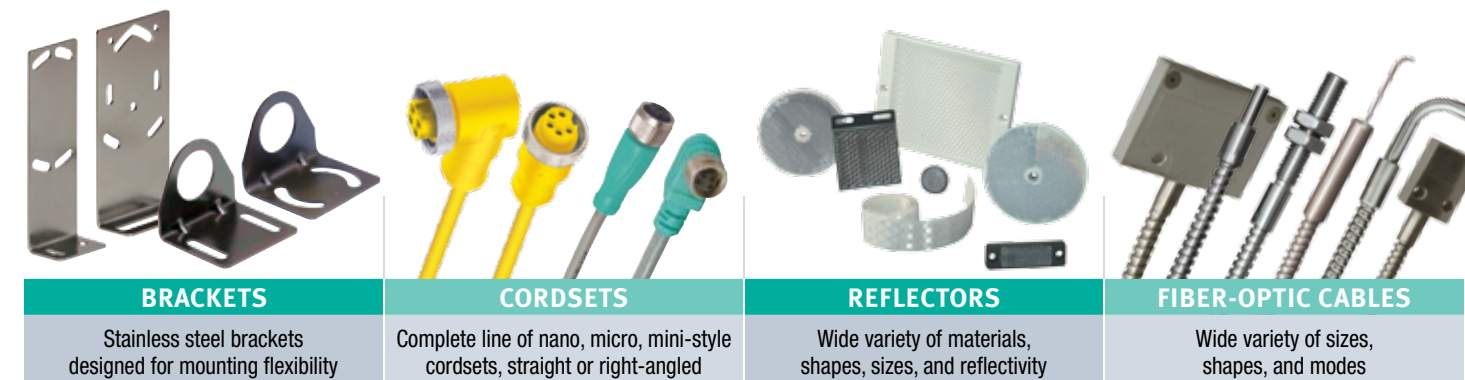


UNIVERSAL POWER SUPPLY

With both DC and AC/DC models, whatever your application, RL(K) 61 has you covered. These flexible sensors offer a built-in SPDT relay in AC/DC models and a 4-in-1 output in DC models.

ACCESSORIES

Simplify your installation with Pepperl+Fuchs' accessories. From simple mounting solutions to cordsets and reflectors, our broad range of accessories will complement and extend the capability of your Series 61 photoelectric sensor.



FACTORY AUTOMATION – SENSING YOUR NEEDS



Pepperl+Fuchs sets the standard in quality and innovative technology for the world of automation. Our expertise, dedication, and heritage of innovation have driven us to develop the largest and most versatile line of industrial sensor technologies and interface components in the world. With our global presence, reliable service, and flexible production facilities, Pepperl+Fuchs delivers complete solutions for your automation requirements—wherever you need us.



Contact
 Pepperl+Fuchs Inc.
 1600 Enterprise Parkway
 Twinsburg, Ohio 44087 · USA
 Tel. +1 330 486-0001 · Fax +1 330 405-4710
 E-mail: fa-info@us.pepperl-fuchs.com

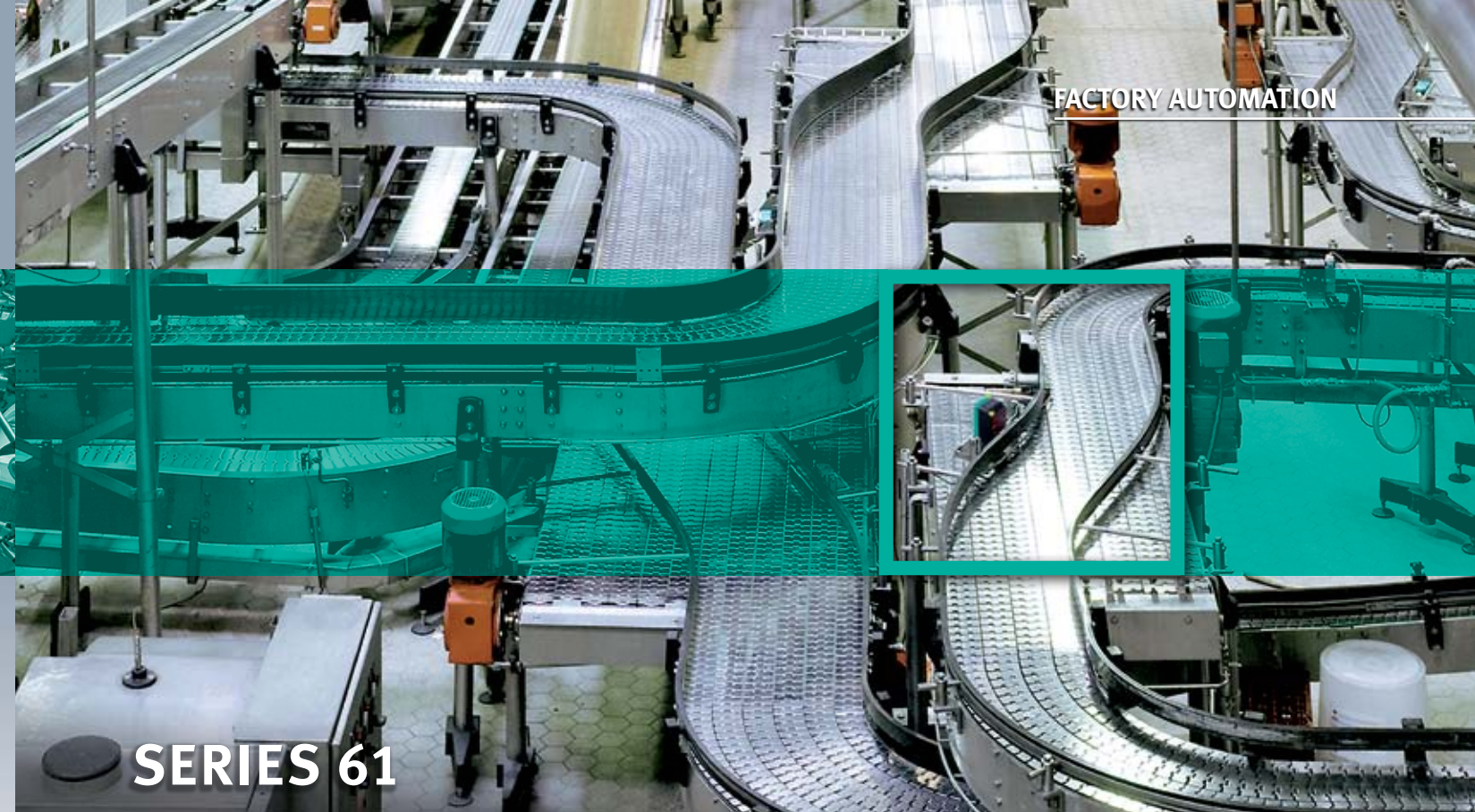
Worldwide Headquarters
 Pepperl+Fuchs GmbH · Mannheim · Germany
 E-mail: fa-info@de.pepperl-fuchs.com

USA Headquarters
 Pepperl+Fuchs Inc. · Twinsburg · USA
 E-mail: fa-info@us.pepperl-fuchs.com

Asia Pacific Headquarters
 Pepperl+Fuchs Pte Ltd · Singapore
 Company Registration no. 199003130E
 E-mail: fa-info@sg.pepperl-fuchs.com

www.pepperl-fuchs.us

Subject to modifications • © 2012 PEPPERL+FUCHS, INC. • Printed in USA • Part No. 912983 02/12 • TDOCT-B0488USA



SERIES 61

HIGH-PERFORMANCE PHOTOELECTRIC SENSORS



SIMPLE, POWERFUL, AND MULTIPURPOSE

SIMPLY POWERFUL

- Easy to set up using DIP switches and potentiometers
- Timer adjustment via pot (0-50 ms DC, 0-10 s AC/DC)
- Sensitivity adjustment
- ON delay, OFF delay, and one-shot timers
- Light ON/Dark ON selectable



Fiber-optic model compatible with glass fiber cables

Single captive screw enables easy access to the controls

Strong optical performance

Multipurpose, rugged, IP67 housing

Integral timers, sensitivity adjustment, and Light ON/Dark ON selectable

Powerful "4-in-1" or relay output

Cabled or quick-disconnect versions

High ambient light resistance

Automatic cross-talk protection

FOUR SENSING MODES

Easy identification of sensing modes provided by color-coded labels



Note: No label for fiber-optic models.

SENSING MODES

A comprehensive and powerful product line offering five sensing modes.

- BACKGROUND SUPPRESSION:** 500 mm (1.64 ft.) & 2 m (5.56 ft.)
- DIFFUSE:** 1 m (3.28 ft.) & 4 m (13.12 ft.)
- POLARIZED RETROREFLECTIVE:** 18 m (59 ft.)
- THRU BEAM:** 60 m (196.8 ft.)

Note: Fiber-optic range is dependent on which fiber cable is used.

HIGH-VISIBILITY LED INDICATION

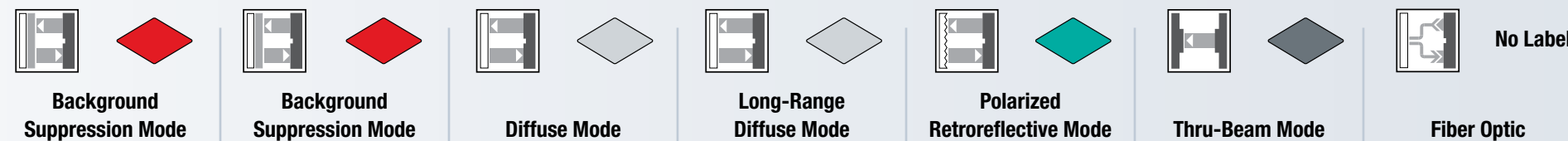
Yellow LED indicates when light is received and flashes to indicate marginal excess gain

Green LED for power status

Universal footprint thru-hole mounting

M30 x 1.5 mounting snout

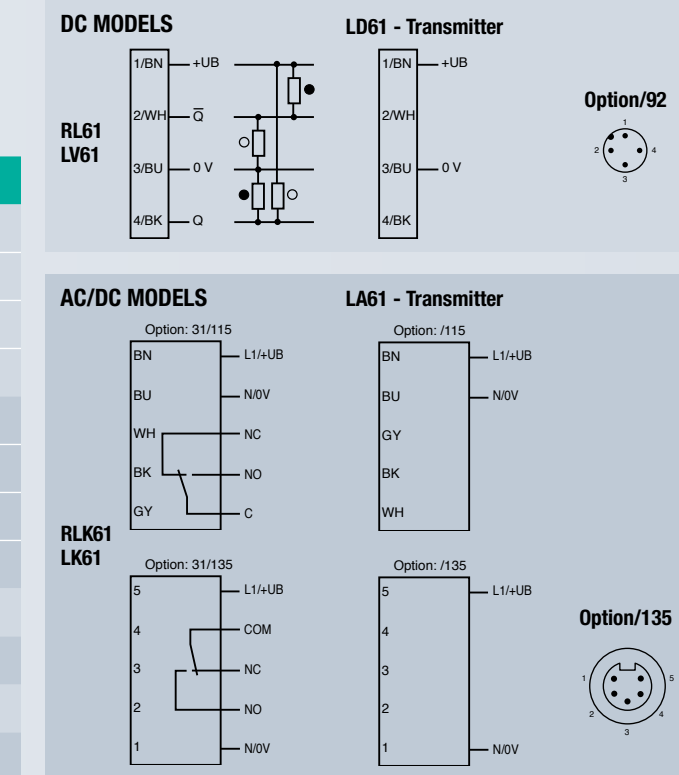
Quick disconnect (M12, 4-pin for DC or Mini, 5-pin for AC/DC)



SENSING RANGE		500 mm	2 m	0 – 1 m	0 – 4 m	0 – 18 m	0 – 60 m	Dependent on cable used
DC Models								
	2-meter cable	4-in-1 Output	RL61-8-H-500-IR-Z/115/136	RL61-8-H-2000-IR-Z/115/136	RL61-8-1000-Z/115/136	RL61-8-4000-Z/115/136	RL61-55-Z/115/136	LV61-Z/115/136
	Thru-Beam Transmitter		-	-	-	-	-	LD61/115
	Quick disconnect	4-in-1 Output	RL61-8-H-500-IR-Z/92/136	RL61-8-H-2000-IR-Z/92/136	RL61-8-1000-Z/92/136	RL61-8-4000-Z/92/136	RL61-55-Z/92/136	LV61-Z/92/136
	M12, 4-pin (V1)	Thru-Beam Transmitter	-	-	-	-	-	LD61/92
AC/DC Models								
	2-meter cable	Relay Output	RLK61-8-H-500-IR-Z/31/115	RLK61-8-H-2000-IR-Z/31/115	RLK61-8-1000-Z/31/115	RLK61-8-4000-Z/31/115	RLK61-55-Z/31/115	LK61-Z/31/115
	Thru-Beam Transmitter		-	-	-	-	-	LA61/115
	Mini 5-pin (V95)	Relay Output	RLK61-8-H-500-IR-Z/31/135	RLK61-8-H-2000-IR-Z/31/135	RLK61-8-1000-Z/31/135	RLK61-8-4000-Z/31/135	RLK61-55-Z/31/135	LK61-Z/31/135
	Thru-Beam Transmitter		-	-	-	-	-	LA61/135
Sensitivity Adjustment		Yes	Yes	Yes	Yes	Yes	Yes	Yes
LEDs		Yes (4)	Yes (4)	Yes (4)	Yes (4)	Yes (4)	Yes (4)	Yes (4)
Light Spot Diameter		≈ 6 mm at 500 mm range	≈ 24 mm at 2 m range	≈ 17 mm at 1 m range	≈ 45 mm at 4 m range	≈ 350 mm at 18 m range	≈ 840 mm at 20 m range	Fiber dependent
Light Beam Angle		≈ 0.7°	≈ 0.7°	≈ 1°	≈ 0.7°	≈ 1.1°	≈ 2.4°	Fiber dependent

COMMON SPECIFICATIONS	DC Models	AC/DC Models
Load Current/Electrical Contact Rating	100 mA max.	3 A max.
Voltage Drop	≤ 2.5 VDC	
Short Circuit And Overload Protection	Yes	
Reverse Polarity Protection	Yes	
Supply Voltage	10-30 VDC	24-240 VAC/12-240 VDC
Voltage Ripple	10%	
Current/Power Consumption	≤ 40 mA	≤ 2 VA
Response Time	≤ 1 ms	≤ 25 ms
Switching Frequency	500 Hz	20 Hz
Light Source	Infrared or Visible Red (Retroreflective) LED	
Standards	EN 60947-5-2	
Protection (IEC)	IP67	
Ambient Light Resistance	≤ 40,000 lux	
Temperature Range	<i>Working</i>	-22 °F to +131 °F
	<i>Storage</i>	-40 °F to +158 °F
Housing Material	<i>Body</i>	Plastic
	<i>Lens</i>	PMMA
Approvals		

ELECTRICAL CONNECTIONS



PRODUCT DIMENSIONS

