



Model Number

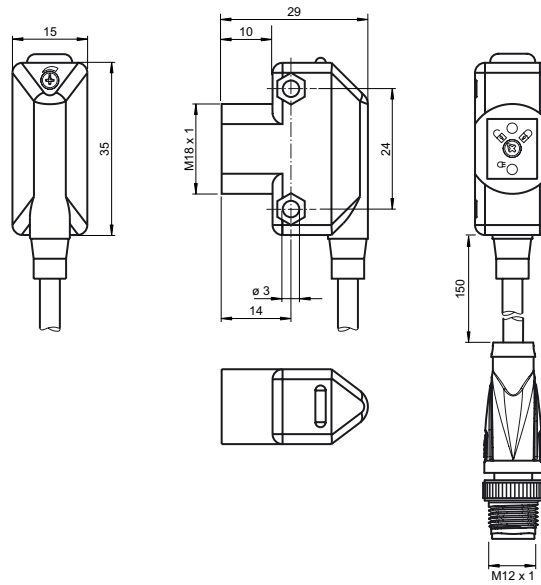
ML17-LL-K/115b/136

Fiber optic sensor
with fixed cable and M12 connector, 4-pin

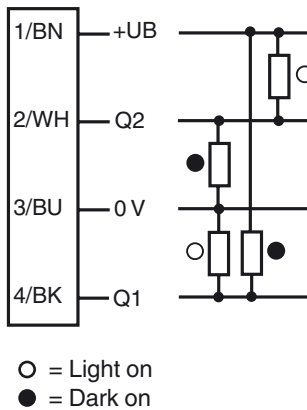
Features

- Miniature design
- Ultra bright LEDs for power on and switching state
- Quick attachment of plastic fiber optic cable
- Adjustable sensitivity
- Front mounting with M18-threads or side mounting holes
- Compact, versatile housing
- 360° visibility ultra bright status LEDs

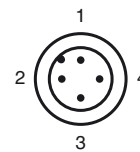
Dimensions



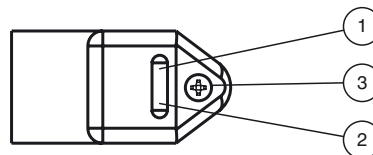
Electrical connection



Pinout



Indicators/operating means



1	Signal display	yellow
2	Operating display	green
3	Sensitivity adjustment	

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

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Technical data**General specifications**

Effective detection range	depends on the fiber optic cable being used
Light source	LED
Light type	modulated visible red light , 670 nm
Ambient light limit	≤ 10000 Lux

Indicators/operating means

Operation indicator	LED green, statically lit : Power on green LED , flashing: Short circuit/overload indication
Function indicator	LED yellow, lights up when light beam is free, flashes when falling short of the stability control
Control elements	sensitivity adjustment

Electrical specifications

Operating voltage	U_B	10 ... 30 V DC , class 2
Ripple		± 10 %
No-load supply current	I_0	< 25 mA
Time delay before availability	t_v	≤ 100 ms

Output

Switching type	light/dark on
Signal output	2 push-pull (4 in 1) outputs, short-circuit protected, reverse polarity protected, overvoltage protected
Switching voltage	max. 30 V DC
Switching current	max 100 mA per output

Voltage drop	U_d	≤ 2.5 V DC
Switching frequency	f	500 Hz
Response time		≤ 1 ms

Ambient conditions

Ambient temperature	-20 ... 55 °C (-4 ... 131 °F)
Storage temperature	-20 ... 75 °C (-4 ... 167 °F)

Mechanical specifications

Degree of protection	IP67
Connection	fixed cable 150 mm with M12 x 1 male connector, 4 pin
Material	
Housing	ABS
Optical face	Acrylic
Mass	23 g

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	CCC approval / marking not required for products rated ≤36 V

Accessories

KLR-C02-2,2-2,0-K146
Plastic fiber optic - diffuse

KLR-C02-2,2-2,0-K70
Plastic fiber optic - diffuse

KLR-C02-1,0-2,0-K75
Plastic fiber optic - diffuse

KLR-C09-1,25-2,0-K76
Plastic fiber optic - diffuse

KLR-C09-1,25-2,0-K74
Plastic fiber optic - diffuse

KLR-C16-2,2-2,0-K71
Plastic fiber optic - diffuse

KLR-A32-2,2-2,0-K83
Plastic fiber optic - diffuse

KHR-C02-2,2-2,0-K131
Plastic fiber optic - diffuse

KHTR-C02-2,2-2,0-K88
Plastic fiber optic - diffuse

KLE-C01-2,2-2,0-K116
Plastic fiber optic - thru-beam

KLE-C01-2,2-2,0-K103
Plastic fiber optic - thru-beam

KLE-C01-2,2-2,0-K102
Plastic fiber optic - thru-beam

KLE-C01-2,2-2,0-K100
Plastic fiber optic - thru-beam

KLE-C01-2,2-2,0-K101
Plastic fiber optic - thru-beam

KLE-C01-2,2-2,0-K113
Plastic fiber optic - thru-beam

KLE-C01-1,0-2,0-K120
Plastic fiber optic - thru-beam

KHE-C01-2,2-2,0-K122
Plastic fiber optic - thru-beam

KHTE-C01-2,2-2,0-K118
Plastic fiber optic - thru-beam

Additional accessories can be found in the Internet.