



Model Number

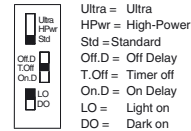
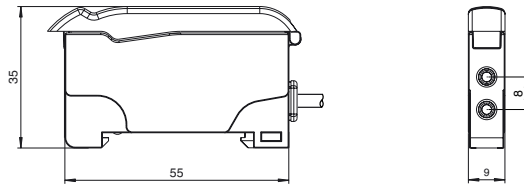
SU18/16/35/40a/110/115a

Fiber optic sensor
fixed cable with 3-pin M8 x 1 connector

Features

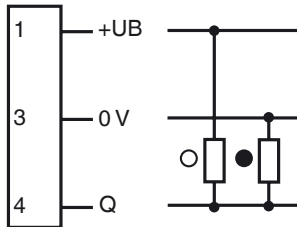
- Basic line for DIN rail installation
- High power version
- Sleek design
- 3 response times selectable
- Protected against mutual interference (no cross-talk)

Dimensions



Electrical connection

Option:



- = Light on
- = Dark on

Pinout



Release date: 2014-05-13 14:02 Date of issue: 2014-05-13 808702_eng.xml

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

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Technical data**General specifications**

| | |
|---------------------|--------------------------------------|
| Sensor range | up to 460 mm (KLR-C02-2,2-2,0-K146) |
| Detection range | up to 1500 mm (KLE-C01-2,2-2,0-K116) |
| Light source | LED |
| Light type | modulated visible red light , 640 nm |
| Ambient light limit | 10000 Lux |

Functional safety related parameters

| | |
|--------------------------------|-------|
| MTTF _d | 690 a |
| Mission Time (T _M) | 20 a |
| Diagnostic Coverage (DC) | 0 % |

Indicators/operating means

| | |
|---------------------|--|
| Operation indicator | LED green, statically lit Power on , Undervoltage indicator: Green LED, pulsing (approx. 0.8 Hz) , short-circuit : LED green flashing (approx. 4 Hz) |
| Function indicator | LED yellow: static illumination switching state, flashes when falling short of the stability control |
| Control elements | Potentiometer for setting sensitivity slide switch 2 positions: light/dark switching slide switch 3 positions: timer function - timer off, on delay 40 ms, off-delay 40 ms slide switch 3 positions: operating mode - Standard, High Power, Ultra |

Electrical specifications

| | | |
|------------------------|----------------|----------------|
| Operating voltage | U _B | 10 ... 30 V DC |
| Ripple | | 10 % |
| No-load supply current | I ₀ | ≤ 30 mA |

Output

| | | |
|---------------------|---|--|
| Switching type | light/dark on, switchable | |
| Signal output | 1 push-pull (4 in 1) output NPN/PNP , short-circuit protected | |
| Switching voltage | max. 30 V DC | |
| Switching current | max. 100 mA , resistive load | |
| Voltage drop | U _d | ≤ 2 V DC at 100 mA ; ≤ 0.7 V at 10 mA |
| Switching frequency | f | Standard mode: 3 kHz , High power mode: 1 kHz , Ultra mode: 100 Hz |
| Response time | | Standard mode: 160 μs , High power mode: 500 μs , Ultra mode: 5 ms |
| Repeat accuracy | R | ≤ 0.5 % of adjusted sensor range |

Ambient conditions

| | |
|---------------------|-------------------------------|
| Ambient temperature | -10 ... 55 °C (14 ... 131 °F) |
| Storage temperature | -20 ... 70 °C (-4 ... 158 °F) |

Mechanical specifications

| | |
|----------------------|--|
| Degree of protection | IP50 |
| Connection | 200 mm, PVC cable with M8 connector, 3-pin |
| Material | |
| Housing | PC |
| Mass | 45 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 Listed, Class 2 Power Source, Type 1 enclosure |
| CCC approval | CCC approval / marking not required for products rated ≤36 V |

Accessories**HPF-D032**

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

LHR 00-0,8-1,0-20M4
Glass fiber optic - diffuse with silicon covering

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

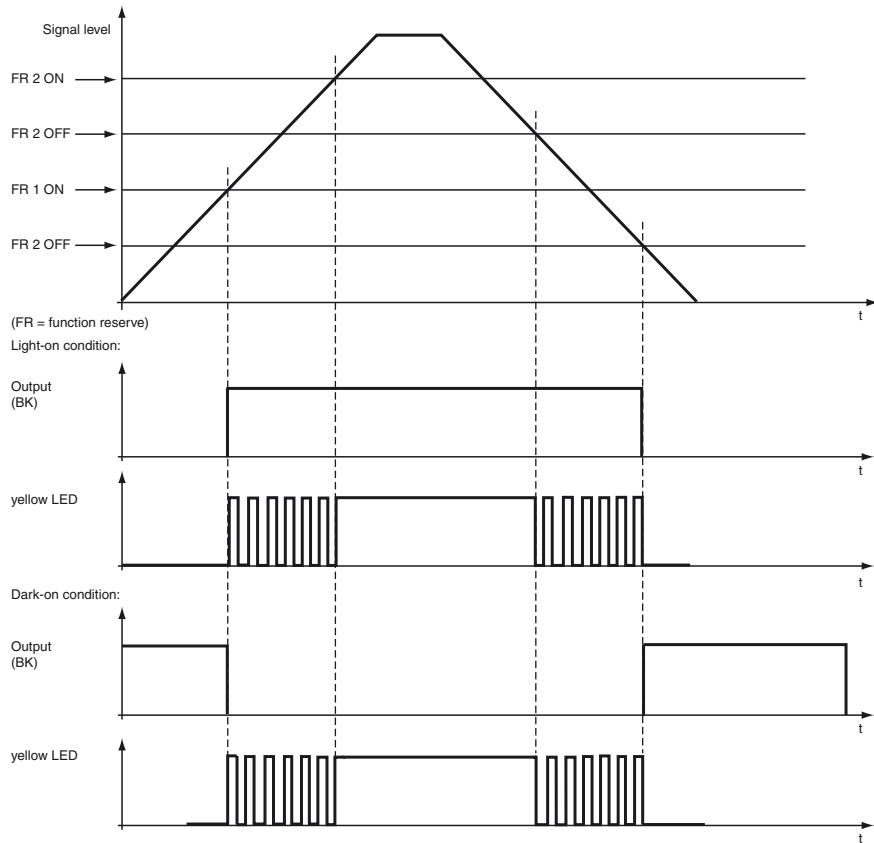
LHE 00-1,1-1,0-20M4
Glass fiber optic - thru-beam with silicon covering

Bracket SU
Mounting bracket for DIN rail

Other suitable accessories can be found at
www.pepperl-fuchs.com

Curves/Diagrams

LED indicators and operating chart:



Indications

Indications for the Green and Yellow LEDs in detection mode (normal operation):

- Yellow LED is stable ON to indicate that signal received is > FR2
- Yellow LED will flash at 4 Hz to indicate function reserve, FR1 < signal level < FR2
- Green LED stable ON to indicate power supply is ON, sensor is ready.
- Green LED will flash once for each key actuation, e.g. actuation of the Teach button
- Green LED will flash at 4 Hz to indicate a short-circuit fault at the output(s)
- Green LED will flash at 0.8 Hz to indicate an under voltage fault at the power supply

Selection table - thru-beam fiber optic cable

| Head shape | Moun-ting | Model number | Core | Detection distance * | Fiber cross section | minimum Object size | Fiber optic length | Bend radius | Dimensions | Special features |
|-----------------------|-----------|----------------------|------|--|---------------------|---------------------|--------------------|-------------|------------|---|
| Highly precise | | | | | | | | | | |
| Threaded | M3 | KLE-C01-1.0-2.0-K120 | PMMA | Ultra: 80 mm HiPwr: 45 mm Std: 20 mm | 0.25 mm | 0.05 mm | 2 m | min. 10 mm | | |
| Threaded | M4 | KLE-C01-1.0-2.0-K119 | PMMA | Ultra: 80 mm HiPwr: 45 mm Std: 20 mm | 0.25 mm | 0.05 mm | 2 m | min. 10 mm | | 4 x high Detection range with Auxillary lens K-LA01/ 8 x high Detection range with Auxillary lens K-LA06/ Side view / Periscope with K-LA02 |
| Threaded | M3 x 0.5 | KLE-C04-1.0-2.0-K104 | PMMA | Ultra: 300 mm HiPwr: 165 mm Std: 70 mm | 4 x 0.25 mm | 0.12 mm | 2 m | min. 15 mm | | |

Release date: 2014-05-13 14:02 Date of issue: 2014-05-13 808702_eng.xml

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| Head shape | Moun-ting | Model number | Core | Detection distance * | Fiber cross section | minimum Object size | Fiber optic length | Bend radius | Dimensions | Special features |
|------------------------|----------------|----------------------|------|---|---------------------|---------------------|--------------------|-------------|------------|--|
| Cylindrical | dia. 2 mm | KLE-C01-1.0-2.0-K105 | PMMA | Ultra: 80 mm HiPwr: 45 mm Std: 20 mm | 0.25 mm | 0.05 mm | 2 m | min. 10 mm | | |
| Cylindrical | dia. 1.5 mm | KLE-C01-1.0-2.0-K107 | PMMA | Ultra: 80 mm HiPwr: 45 mm Std: 20 mm | 0.25 mm | 0.05 mm | 2 m | min. 10 mm | | |
| Cylindrical | dia. 1.5 mm | KLE-C04-1.0-2.0-K108 | PMMA | Ultra: 300 mm HiPwr: 165 mm Std: 70 mm | 4 x 0.25 mm | 0.12 mm | 2 m | min. 15 mm | | |
| Cylindrical | dia. 2 mm | KLE-C04-1.0-2.0-K106 | PMMA | Ultra: 300 mm HiPwr: 165 mm Std: 70 mm | 4 x 0.25 mm | 0.05 mm | 2 m | min. 15 mm | | |
| Highly flexible | | | | | | | | | | |
| Threaded | M3 | KHE-C01-1.0-2.0-K125 | PMMA | Ultra: 210 mm HiPwr: 120 mm Std: 50 mm | 0.5 mm | 0.15 mm | 2 m | min. 1 mm | | only 1 mm Bend radius |
| Threaded | M3 | KHE-C01-2.2-2.0-K122 | PMMA | Ultra: 800 mm HiPwr: 480 mm Std: 200 mm | 1 mm | 0.25 mm | 2 m | min. 2 mm | | only 2 mm Bend radius |
| Threaded | M4 x 0.7 /M2.6 | KHE-C01-1.0-2.0-K124 | PMMA | Ultra: 210 mm HiPwr: 120 mm Std: 50 mm | 0.5 mm | 0.15 mm | 2 m | min. 1 mm | | 4 x High Detection range with Auxiliary lens K-LA01/ 8 x High Detection range with Auxiliary lens K-LA06 Side view / Periscope with K-LA02/ only 1 mm Bend radius |
| Threaded | M6 | KHE-C01-2.2-2.0-K121 | PMMA | Ultra: 800 mm HiPwr: 480 mm Std: 200 mm | 1.0 mm | 0.25 mm | 2 m | min. 2 mm | | only 2 mm Bend radius |
| Cylindrical | dia. 1.5 mm | KHE-C01-1.0-2.0-K139 | PMMA | Ultra: 210 mm HiPwr: 120 mm Std: 50 mm | 0.5 mm | 0.05 mm | 2 m | min. 1 mm | | only 1 mm Bend radius |
| Cylindrical | dia. 3 mm | KHE-C01-2.2-2.0-K126 | PMMA | Ultra: 210 mm HiPwr: 120 mm Std: 50 mm | 0.5 mm | 0.15 mm | 2 m | min. 1 mm | | only 1 mm Bend radius |
| Cylindrical | dia. 3 mm | KHE-C01-2.2-2.0-K123 | PMMA | Ultra: 800 mm HiPwr: 480 mm Std: 200 mm | 1 mm | 0.25 mm | 2 m | min. 2 mm | | only 2 mm Bend radius |

Release date: 2014-05-13 14:02 Date of issue: 2014-05-13 808702_eng.xml

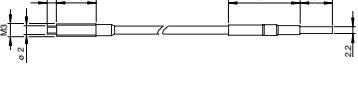
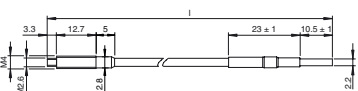
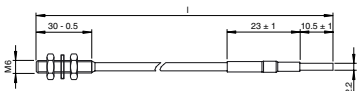
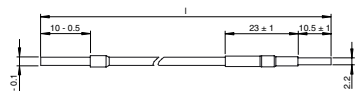
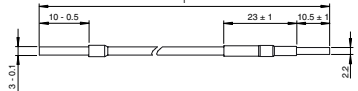
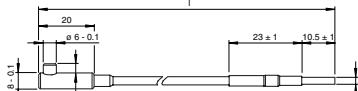

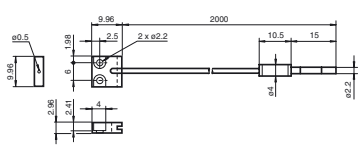
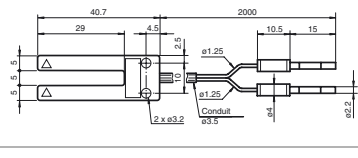
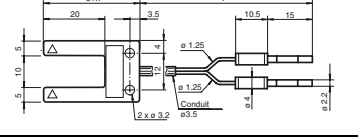
| Head shape | Moun-ting | Model number | Core | Detection distance * | Fiber cross section | minimum Object size | Fiber optic length | Bend radius | Dimensions | Special features |
|-----------------------------|----------------|----------------------|------|--|---------------------|---------------------|--------------------|-------------|------------|--|
| Right angle | dia. 15 x 5 | KHE-C01-2.2-2.0-K137 | PMMA | Ultra: 140 mm HiPwr: 80 mm Std: 35 mm | 0.5 mm | 0.15 mm | 2 m | min. 1 mm | | only 1 mm Bend radius |
| Right angle | dia. 15 x 5 | KHE-C01-2.2-2.0-K140 | PMMA | Ultra: 600 mm HiPwr: 350 mm Std: 150 mm | 1 mm | 0.25 mm | 2 m | min. 2 mm | | only 2 mm Bend radius |
| Flexible | | | | | | | | | | |
| Threaded | M3 x 0.5 /M2.6 | KLE-C01-1.3-2.0-K112 | PMMA | Ultra: 800 mm HiPwr: 480 mm Std: 200 mm | 1 mm | 0.25 mm | 2 m | min. 25 mm | | 4 x high Detection range with Auxiliary lens K-LA01/ 8 x high Detection range with Auxiliary lens K-LA06 Side view / Periscope with K-LA02 |
| Threaded | M3 x 0.5 | KLE-C01-2.2-2.0-K103 | PMMA | Ultra: 920 mm HiPwr: 520 mm Std: 220 mm | 1 mm | 0.25 mm | 2 m | min. 25 mm | | |
| Threaded | M4 x 0.7 /M2.6 | KLE-C01-2.2-2.0-K102 | PMMA | Ultra: 920 mm HiPwr: 520 mm Std: 220 mm | 1 mm | 0.25 mm | 2 m | min. 25 mm | | 4 x high Detection range with Auxiliary lens K-LA01/ 8 x high Detection range with Auxiliary lens K-LA06 Side view / Periscope with K-LA02 |
| Threaded | M6 | KLE-C01-2.2-2.0-K100 | PMMA | Ultra: 920 mm HiPwr: 520 mm Std: 220 mm | 1 mm | 0.32 mm | 2 m | min. 25 mm | | |
| Threaded | M2.6 | KLE-C01-2.2-2.0-K113 | PMMA | Ultra: 800 mm HiPwr: 480 mm Std: 200 mm | 1 mm | 0.25 mm | 2 m | min. 25 mm | | 4 x high Detection range with Auxiliary lens K-LA01/ 8 x high Detection range with Auxiliary lens K-LA06 Side view / Periscope with K-LA02 |
| Cylindrical | dia. 2 mm | KLE-C01-1.3-2.0-K114 | PMMA | Ultra: 920 mm HiPwr: 520 mm Std: 220 mm | 1 mm | 0.25 mm | 2 m | min. 25 mm | | |
| Cylindrical | dia. 5 mm | KLE-C01-2.2-2.0-K101 | PMMA | Ultra: 920 mm HiPwr: 520 mm Std: 220 mm | 1 mm | 0.32 mm | 2 m | min. 25 mm | | |
| Bendable tip | | | | | | | | | | |
| Threaded | M4 | KLE 00-2.2-2.0-K55 | PMMA | Ultra: 872 mm HiPwr: 500 mm Std: 228 mm | 1 mm | | 2 m | min. 25 mm | | |
| High detection range | | | | | | | | | | |
| Threaded | M3 | KLE-C01-2.2-2.0-K116 | PMMA | Ultra: 1500 mm HiPwr: 950 mm Std: 450 mm | 1.5 mm | 0.35 mm | 2 m | min. 40 mm | | |


Release date: 2014-05-13 14:02 Date of issue: 2014-05-13 808702_eng.xml

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|-----------------------------|--------------|-----------------------|------|---|---------------------|---------------------|--------------------|-------------|------------|-----------------------|
| Threaded | M6 | KLE-C01-2.2-2.0-K115 | PMMA | Ultra: 1500 mm HiPwr: 950 mm Std: 450 mm | 1.5 mm | 0.35 mm | 2 m | min. 40 mm | | |
| Threaded | M8 x 1 | FEF-PLT1 | PMMA | Ultra: 25620 mm HiPwr: 15070 mm Std: 6000 mm calculated values related on 2 m Fiber optic length | 1 mm | | 1 m | min. 25 mm | | Narrow beam |
| Threaded | M8 x 1 | FEF-PLT1-L2 | PMMA | Ultra: 25620 mm HiPwr: 15070 mm Std: 6000 mm calculated values related on 2 m Fiber optic length | 1 mm | | 2 m | min. 25 mm | | Narrow beam |
| Threaded | M8 x 1 | FEF-PLT1-L5 | PMMA | Ultra: 25620 mm HiPwr: 15070 mm Std: 6000 mm calculated values related on 2 m Fiber optic length | 1 mm | | 4 m | min. 25 mm | | Narrow beam |
| Cylindrical | dia. 3 mm | KLE-C01-2.2-2.0-K117 | PMMA | Ultra: 1360 mm HiPwr: 820 mm Std: 400 mm | 1.5 mm | 0.35 mm | 2 m | min. 25 mm | | |
| Side view / Periscope | | | | | | | | | | |
| Cylindrical | dia. 4.75 mm | KHE-C01-2.2-2.0-K136 | PMMA | Ultra: 200 mm HiPwr: 110 mm Std: 50 mm | 0.5 mm | 0.15 mm | 2 m | min. 1 mm | | only 1 mm Bend radius |
| Array | | | | | | | | | | |
| Rectangular | 3 x M2 x 0.5 | KLE-A16-2.2-2.0-K109 | PMMA | Ultra: 420 mm HiPwr: 240 mm Std: 100 mm | 16 x 0.25 mm | 0.05 mm | 2 m | min. 25 mm | | |
| Rectangular | 3 x M3 x 0.5 | KLE-A16-2.2-2.0-K110 | PMMA | Ultra: 420 mm HiPwr: 240 mm Std: 100 mm | 16 x 0.25 mm | 0.05 mm | 2 m | min. 25 mm | | |
| Rectangular | 3 x M3 x 0.5 | KLE-A16-2.2-2.0-K111 | PMMA | Ultra: 420 mm HiPwr: 240 mm Std: 100 mm | 16 x 0.25 mm | 0.05 mm | 2 m | min. 25 mm | | |
| Rectangular | 2 x 3.2 mm | KLE-A32-2.2-2.0-K142 | PMMA | Ultra: 140 mm HiPwr: 80 mm Std: 35 mm | 32 x 0.25 mm | | 2 m | min. 25 mm | | |
| High temperature resistance | | | | | | | | | | |
| Cylindrical | dia. 3 mm | KHTE-C01-2.2-2.0-K118 | PMMA | Ultra: 475 mm HiPwr: 270 mm Std: 115 mm | 1 mm | 0.35 mm | 2 m | min. 25 mm | | - 55°C ... + 115 °C |

Release date: 2014-05-13 14:02 Date of issue: 2014-05-13 808702_eng.xml

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|-----------------------|----------------|-----------------------|-------|---|---------------------|---------------------|--------------------|-------------|--|--|
| Sturdy design | | | | | | | | | | |
| Threaded | M3 | LHE 00-1.1-1.0-14M3 | glass | Ultra: 710 mm HiPwr: 420 mm Std: 195 mm | 1.1 mm | | 1 m | 4 mm static |  | - 40°C ... + 180 °C |
| Threaded | M4 x 0.7 /M2.6 | LHE 00-1.1-1.0-20M4 | glass | Ultra: 710 mm HiPwr: 420 mm Std: 195 mm | 1.1 mm | | 1 m | 4 mm static |  | 4 x high Detection range with Auxiliary lens K-LA01/ 8 x high Detection range with Auxiliary lens K-LA06 Side view / Periscope with K-LA02/ - 40°C ... + 180 °C |
| Threaded | M6 | LHE 00-1.1-1.0-G | glass | Ultra: 710 mm HiPwr: 420 mm Std: 195 mm | 1.1 mm | | 1 m | 4 mm static |  | - 40°C ... + 180 °C |
| Cylindrical | dia. 1.5 mm | LHE 00-1.1-1.0-10C1.5 | glass | Ultra: 710 mm HiPwr: 420 mm Std: 195 mm | 1.1 mm | | 1 m | 4 mm static |  | - 40°C ... + 180 °C |
| Cylindrical | dia. 3 mm | LHE 00-1.1-1.0-15C3 | glass | Ultra: 710 mm HiPwr: 420 mm Std: 195 mm | 1.1 mm | | 1 m | 4 mm static |  | - 40°C ... + 180 °C |
| Right angle | Bar 3 mm | LHE 00-1.1-1.0-WC3 | glass | Ultra: 710 mm HiPwr: 420 mm Std: 195 mm | 1.1 mm | | 1 m | 4 mm static |  | - 40°C ... + 180 °C |
| Right angle | Bar 10 mm | LHE 00-1.1-1.0-K9 | glass | Ultra: 710 mm HiPwr: 420 mm Std: 195 mm | 1.1 mm | | 1 m | 4 mm static |  | - 40°C ... + 180 °C |
| Special design | | | | | | | | | | |
| Rectangular | 2 x 2.2 mm | KHE-A01-1.0-2.0-K138 | PMMA | Ultra: 100 mm HiPwr: 60 mm Std: 25 mm | 0.5 mm | 0.05 mm | 2 m | min. 1 mm |  | only 1 mm Bend radius |
| Slot | 2 x 3.2 mm | KLE-C02-1.25-2.0-K134 | PMMA | 5 mm | 2 x 0.25 m m | | 2 m | min. 10 mm |  | |
| Slot | 2 x 3.2 mm | KLE-C02-1.25-2.0-K135 | PMMA | 10 mm | 2 x 0.25 m m | | 2 m | min. 10 mm |  | |

| | |
|---|--|
|  | Std: Standard Mode, 160 μs HiPwr: HighPower Mode, 500 μs Ultra: Ultra Mode, 5 ms |
|---|--|

Selection table - diffuse mode fiber optic cable

Release date: 2014-05-13 14:02 Date of issue: 2014-05-13 808702_eng.xml

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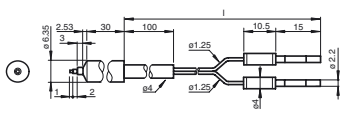
| Head shape | Mounting | Model number | Core | Detection distance * | Fiber cross-section | Fiber optic length | Bend radius | Dimensions | Special features |
|------------------------------------|--------------|-----------------------|------|---|---------------------|--------------------|-------------|------------|-----------------------|
| Cylindrical | dia. 5.0 mm | KLR-C02-2.2-2.0-K85 | PMMA | Ultra: 280 mm HiPwr: 180 mm Std: 80 mm | 2 x 1.0 mm | 2 m | min. 25 mm | | |
| Bendable tip | | | | | | | | | |
| Threaded | M3 x 0.5 | KLR 00-1.0-2.0-K58 | PMMA | Ultra: 68 mm HiPwr: 40 mm Std: 20 mm | | 2 m | min. 15 mm | | |
| Threaded | M6 | KLR 00-2.2-2.0-K57 | PMMA | Ultra: 210 mm HiPwr: 130 mm Std: 60 mm | | 2 m | min. 15 mm | | |
| High detection range | | | | | | | | | |
| Threaded | | KLR-C02-2.2-2.0-K146 | PMMA | Ultra: 460 mm HiPwr: 270 mm Std: 150 mm | | 2 m | mind. 40 mm | | |
| Threaded | | KLR-C10-1.25-2.0-K144 | PMMA | Ultra: 95 mm HiPwr: 60 mm Std: 30 mm | | 2 m | mind. 15 mm | | |
| Side view / Periscope | | | | | | | | | |
| Threaded | M6 | KHR-C02-2.2-2.0-K131 | PMMA | Ultra: 210 mm HiPwr: 135 mm Std: 60 mm | 2 x 1.0 mm | 2 m | min. 2 mm | | only 2 mm Bend radius |
| Threaded | dia. 5.0 mm | KHR-C02-1.0-2.0-K132 | PMMA | Ultra: 52 mm HiPwr: 33 mm Std: 15 mm | 2 x 0.5 mm | 2 m | min. 1 mm | | only 1 mm Bend radius |
| Array | | | | | | | | | |
| Rectangular | 3 x M2 x 0.5 | KLR-A18-1.3-2.0-K82 | PMMA | Ultra: 86 mm HiPwr: 55 mm Std: 25 mm | 18 x 0.25 m | 2 m | min. 25 mm | | |
| Rectangular | 3 x M3 x 0.5 | KLR-A32-2.2-2.0-K83 | PMMA | Ultra: 120 mm HiPwr: 78 mm Std: 35 mm | 10.85 mm | 2 m | min. 25 mm | | |
| Rectangular | 2 x 3.2 m | KLR-A32-2.2-2.0-K141 | PMMA | Ultra: 120 mm HiPwr: 78 mm Std: 35 mm | 16 x 0.25 mm | 2 m | mind. 25 mm | | |
| High temperature resistance | | | | | | | | | |
| Threaded | M6 | KHTR-C02-2.2-2.0-K88 | PMMA | Ultra: 280 mm HiPwr: 180 mm Std: 80 mm | 2 x 1.0 mm | 2 m | min. 25 mm | | - 55°C ... + 115°C |


Release date: 2014-05-13 14:02 Date of issue: 2014-05-13 808702_eng.xml

| Head shape | Mounting | Model number | Core | Detection distance * | Fiber cross-section | Fiber optic length | Bend radius | Dimensions | Special features |
|-----------------------|--------------|-----------------------|-------|--|---------------------|--------------------|-------------|------------|--|
| Cylindrical | dia. 5.0 mm | KHTR-C02-2.2-2.0-K89 | PMMA | Ultra: 280 mm HiPwr: 180 mm Std: 80 mm | 2 x 1.0 mm | 2 m | min. 25 mm | | - 55°C ... + 115°C |
| Sturdy design | | | | | | | | | |
| Threaded | M3 x 0.5 | LHR 00-0.8-1.0-14M3 | glass | Ultra: 195 mm HiPwr: 100 mm Std: 40 mm | 0.8 mm | 1 m | 4 mm static | | - 40°C ... + 180°C |
| Threaded | M4 x 0.7 | LHR 00-0.8-1.0-20M4 | glass | Ultra: 195 mm HiPwr: 100 mm Std: 40 mm | 0.8 mm | 1 m | 4 mm static | | - 40°C ... + 180°C |
| Threaded | M6 | LHR 00-1.1-1.0-G | glass | Ultra: 230 mm HiPwr: 156 mm Std: 70 mm | 1.1 mm | 1 m | 4 mm static | | - 40°C ... + 180°C |
| Cylindrical | dia. 3 mm | LHR 00-1.1-1.0-Z1 | glass | Ultra: 230 mm HiPwr: 156 mm Std: 70 mm | 1.1 mm | 1 m | 4 mm static | | - 40°C ... + 180°C |
| Cylindrical | dia. 4.5 mm | LHR 00-1.1-1.0-K1 | glass | Ultra: 230 mm HiPwr: 156 mm Std: 70 mm | 1.1 mm | 1 m | 4 mm static | | - 40°C ... + 180°C |
| Right angle | 10 mm Bar | LHR 00-1.1-1.0-K9 | glass | Ultra: 230 mm HiPwr: 156 mm Std: 70 mm | 1.1 mm | 1 m | 4 mm static | | - 40°C ... + 180°C |
| Special design | | | | | | | | | |
| Rectangular | | KHR-C02-1.0-2.0-K129 | PMMA | 5 ~ 10 mm | 2 x 0.5 mm | 2 m | min. 1 mm | | crossed beam to background blanking only 1 mm Bend radius |
| Rectangular | | KLR-C02-1.3-2.0-K130 | PMMA | 1 ~ 8 mm | 2 x 1.0 mm | 2 m | min. 25 mm | | crossed beam to background blanking |
| Rectangular | 3 x M3 x 0.5 | KHR-A02-2.2-2.0-K127 | PMMA | Ultra: 175 mm HiPwr: 112 mm Std: 50 mm | 2 x 1.0 mm | 2 m | min. 2 mm | | only 2 mm Bend radius |
| Rectangular | | KLR-C02-1.25-2.0-K128 | PMMA | 4~26 mm | 2 x 0.5 mm | 2 m | min. 15 mm | | Level measurement |

Release date: 2014-05-13 14:02 Date of issue: 2014-05-13 808702_eng.xml

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

| Head shape | Mounting | Model number | Core | Detection distance * | Fiber cross-section | Fiber optic length | Bend radius | Dimensions | Special features |
|-------------|----------|-----------------------|------|----------------------|---------------------|--------------------|-------------|--|------------------|
| Cylindrical | | KLR-C02-1,25-2,0-K147 | PMMA | | | 2 m | mind. 40 mm |  | Fluid detection |

| | |
|---|---|
|  | <p>Std: Standard Mode, 160 μs HiPwr: HighPower Mode, 500 μs Ultra: Ultra Mode, 5 ms</p> |
|---|---|

Release date: 2014-05-13 14:02 Date of issue: 2014-05-13 808702_eng.xml