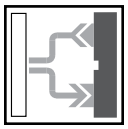
Introduction to Fiber Optic Cables

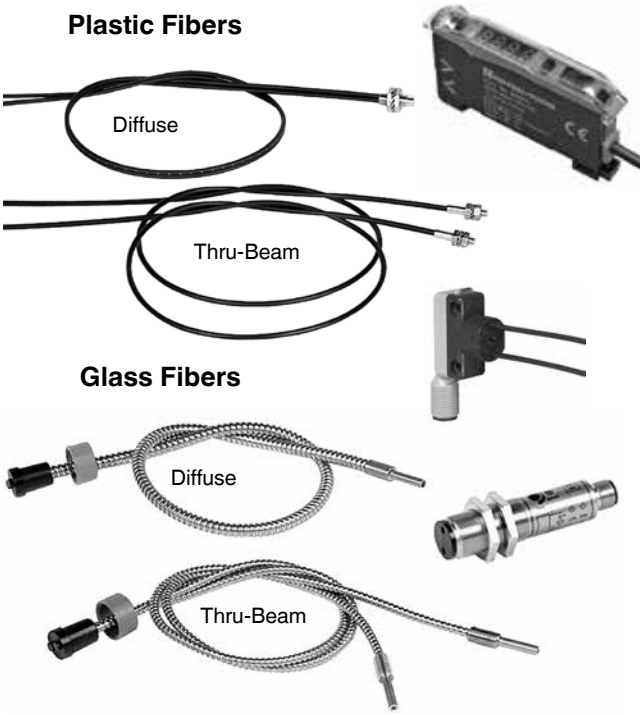


Fiber Optic Diffuse and Thru-Beam Mode

In applications involving small targets or unfavorable conditions, fiber optic cables may be the sensible solution. Glass fiber optic cables are constructed from tiny strands of glass that are bundled together inside an application-specific sheath. Plastic fiber optic cables are manufactured from a light conductive plastic monofilament material, which is protected by a PVC jacket.

When attached to the end of certain photoelectric sensors, they guide the light through the cable and out at the sensing head. A separate fiber attached to the receiver returns the light. Pepperl+Fuchs offers both glass and plastic fiber optic cables. The diameter of the glass fiber optic cables is generally larger than plastic and provides a longer sensing range. Pepperl+Fuchs' glass cables can withstand temperatures as high as 900 °F while the plastic cables are rated as high as 221 °F. The plastic cables are typically used due to their small size and narrow beam diameter. This enables easy detection of small parts such as pins on an IC chip. Plastic cables can be "cut-to-length" in the field; therefore, the correct length doesn't have to be specified when ordering. Obtaining the maximum light intensity possible in each application is accomplished by customizing the plastic cables to the shortest possible length. This reduces the inherent "light losses" that occur inside the cable. Pepperl+Fuchs offers three standard types of sheaths: stainless steel, silicone, and PVC.

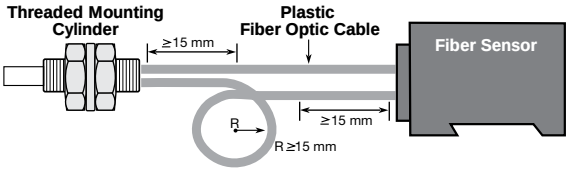
In diffuse mode sensing, a bifurcated cable (2 in 1) is used. Thru-beam requires two individual cables.

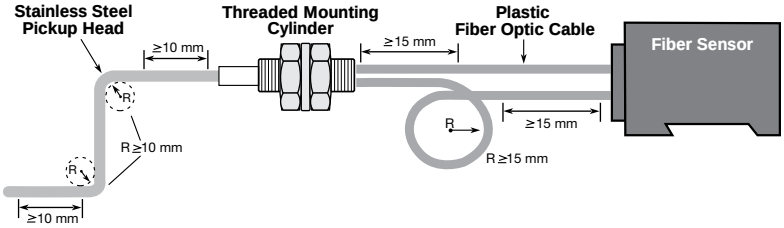


Mounting and Fitting

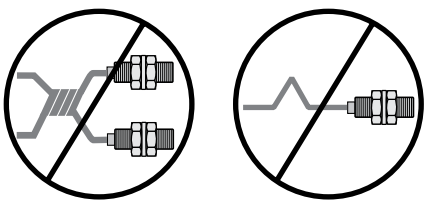
When positioning plastic fiber optic cable, a minimum bending radius of 15 mm must be maintained. In addition, a straight section of ≥15 mm must be maintained at both ends of fiber optic cable between the threaded mounting cylinder and optical sensor.

Some fiber optic cables have a flexible stainless steel pickup attached. In such a case, a minimum bending radius of 10 mm must be maintained. Also, to avoid damage to the pickup head light guide, a straight section of 10 mm must be maintained at both ends.



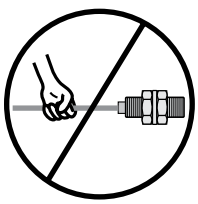


Please Note!



Do not twist or kink plastic fiber optic cables.

Avoid contact with petroleum or organic solvents.



Excessive pulling will lead to severe damage.

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USA: +1 330 486 0001 fa-info@us.pepperl-fuchs.com
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Singapore: +65 6779 9091 fa-info@sg.pepperl-fuchs.com
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Specifications for Glass Fiber Optic Cables

(with Model Numbers L...)

	PVC Sheathing	Stainless Steel Sheathing	Silicone Sheathing
Protection (IEC)	IP67	IP40	IP67
Bending Radius	≤ 30 mm	≤ 20 mm	≤ 25 mm
Working Temperature Range	-58 °F to +248 °F	-58 °F to +572 °F	-58 °F to +356 °F

Minimum Bend Radius for HPF and FE Cables

To help prevent possible damage to fiber optic cables, do not exceed the minimum bend radius.

Glass Stainless Steel Sheathing Cables	1 inch (25 mm)
Glass PVC Sheathing Cables	0.75 inch (19 mm)
Plastic Cables - 1 mm diameter core	1 inch (25 mm)
Plastic Cables - 0.5 mm diameter core	0.5 inch (12.5 mm)

Temperature Ranges for HPF and FE Cables

Plastic Fiber Optic Sensor Head	-22 °F to +158 °F (-30 °C to +70 °C)
Plastic Cable	-22 °F to +158 °F (-30 °C to +70 °C)
Plastic Cable Lens Accessories	-22 °F to +158 °F (-30 °C to +70 °C)
Glass Cable (PVC Sheathing)	-40 °F to +250 °F (-40 °C to +120 °C)
Glass Cable (Stainless Steel Sheathing)	-40 °F to +450 °F (-40 °C to +232 °C)
Glass Cable (High Temperature)	-40 °F to +900 °F (-40 °C to +482 °C)
Glass Cable End Tips	-40 °F to +585 °F (-40 °C to +307 °C)
Glass Cable for SU18, SU19, SU17.1, and ML17-LL (Stainless Steel Sheathing)	-67 °F to +392 °F (-55 °C to +200 °C)
Glass Cable for SU18, SU19, SU17.1, and ML17-LL (PVC Sheathing)	-67 °F to +149 °F (-55 °C to +65 °C)

Note: SU19 Series sensing ranges are reduced by 50% in high-speed or glass modes.

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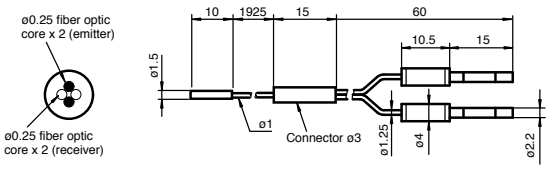
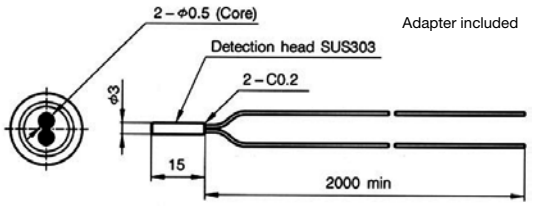
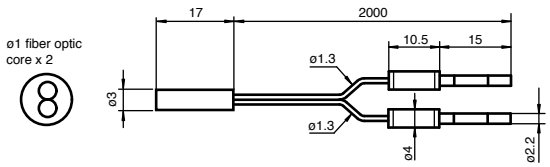
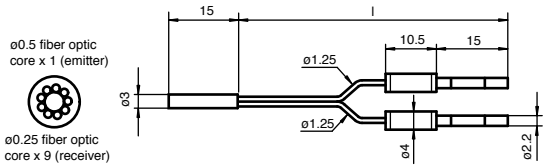
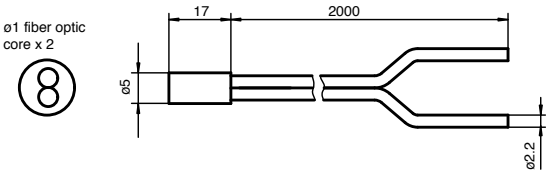
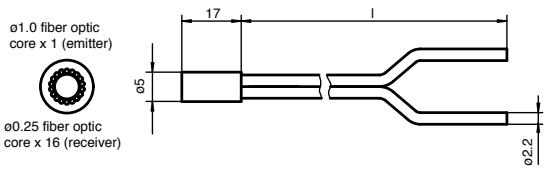
Singapore: +65 6779 9091 fa-info@sg.pepperl-fuchs.com

Plastic Fiber Optic Cables

Diffuse Plastic Fiber Optic Cables

for SU18, SU19, SU17.1, ML17-LL, and MHP-FR Sensors

Nonthreaded Cylindrical

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
KLR-C04-1.0-2.0-K133	2 m	1 mm	PVC	SU18 High Power	25 mm	
				SU18 High Speed	7 mm	
				SU19	7 mm	
				SU17.1	21 mm	
				ML17-LL	4 mm	
				MHP-FR	not compatible	
HPF-D005-H	2 m	1.0 mm	Black polyethylene	SU18 High Power	118 mm	
				SU18 High Speed	14 mm	
				SU19	14 mm	
				SU17.1	100 mm	
				ML17-LL	18 mm	
				MHP-FR	not compatible	
KLR-C02-1.3-2.0-K86	2 m	1.3 mm	PVC	SU18 High Power	280 mm	
				SU18 High Speed	80 mm	
				SU19	80 mm	
				SU17.1	238 mm	
				ML17-LL	45 mm	
				MHP-FR	not compatible	
KLR-C09-1.25-2.0-K77	2 m	1.25 mm	PVC	SU18 High Power	110 mm	
				SU18 High Speed	30 mm	
				SU19	30 mm	
				SU17.1	94 mm	
				ML17-LL	18 mm	
				MHP-FR	not compatible	
KLR-C02-2.2-2.0-K85	2 m	2.2 mm	PVC	SU18 High Power	280 mm	
				SU18 High Speed	80 mm	
				SU19,	80 mm	
				SU17.1	238 mm	
				ML17-LL	45 mm	
				MHP-FR	18 mm	
KLR-C16-2.2-2.0-K72	2 m	2.2 mm	PVC	SU18 High Power	300 mm	
				SU18 High Speed	85 mm	
				SU19	85 mm	
				SU17.1	255 mm	
				ML17-LL	48 mm	
				MHP-FR	20 mm	

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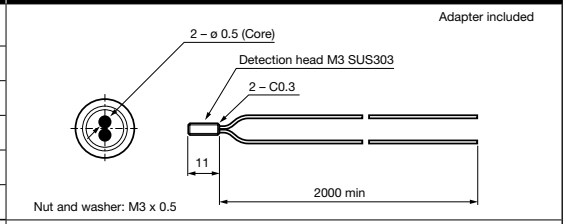
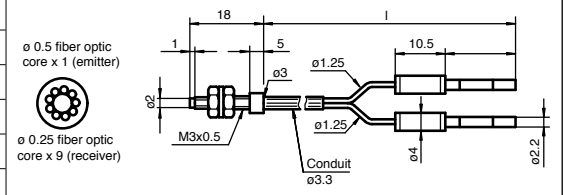
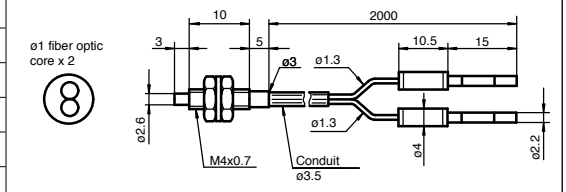
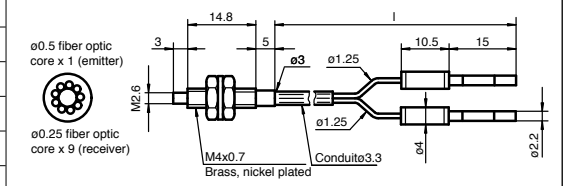
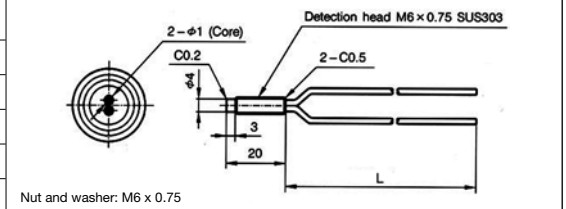
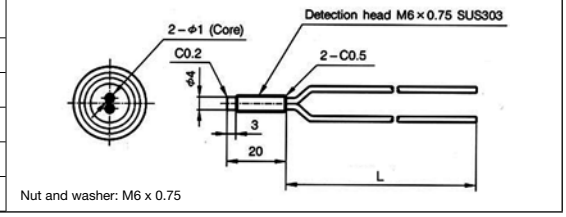
Plastic Fiber Optic Cables

Diffuse Plastic Fiber Optic Cables
for SU18, SU19, SU17.1, ML17-LL, and MHP-FR Sensors

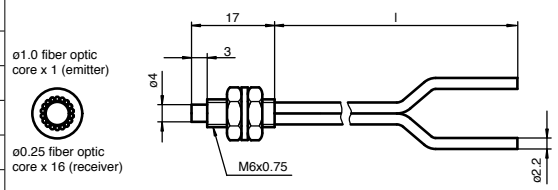
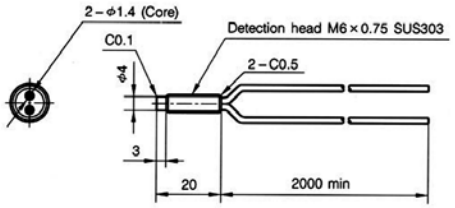
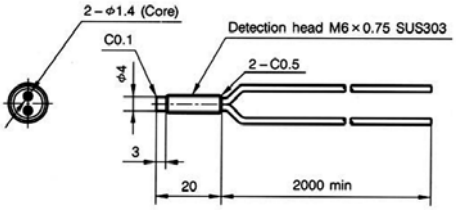
Threaded Cylindrical

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
HPF-D004-H	2 m	1.0 mm	Black polyethylene	SU18 High Power	118 mm	
				SU18 High Speed	16 mm	
				SU19	16 mm	
				SU17.1	100 mm	
				ML17-LL	13 mm	
				MHP-FR	not compatible	
KLR-C09-1.25-2.0-K76	2 m	1.25 mm	PVC	SU18 High Power	100 mm	
				SU18 High Speed	30 mm	
				SU19	30 mm	
				SU17.1	85 mm	
				ML17-LL	16 mm	
				MHP-FR	not compatible	
KLR-C02-1.3-2.0-K84	2 m	1.3 mm	PVC	SU18 High Power	280 mm	
				SU18 High Speed	80 mm	
				SU19	80 mm	
				SU17.1	238 mm	
				ML17-LL	45 mm	
				MHP-FR	not compatible	
KLR-C09-1.25-2.0-K74	2 m	1.25 mm	PVC	SU18 High Power	100 mm	
				SU18 High Speed	30 mm	
				SU19	30 mm	
				SU17.1	85 mm	
				ML17-LL	16 mm	
				MHP-FR	not compatible	
HPF-D002-H	2 m	2.2 mm	Black polyethylene	SU18 High Power	471 mm	
				SU18 High Speed	66 mm	
				SU19	66 mm	
				SU17.1	400 mm	
				ML17-LL	60 mm	
				MHP-FR	18 mm	
HPF-D002-HL5	5 m	2.2 mm	Black polyethylene	SU18 High Power	471 mm	
				SU18 High Speed	50 mm	
				SU19	50 mm	
				SU17.1	400 mm	
				ML17-LL	60 mm	
				MHP-FR	18 mm	

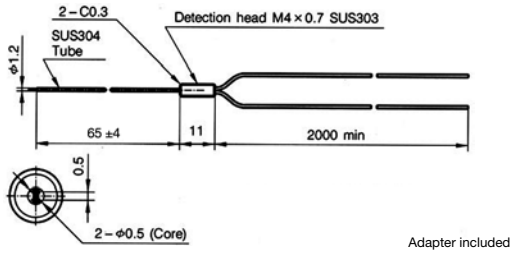
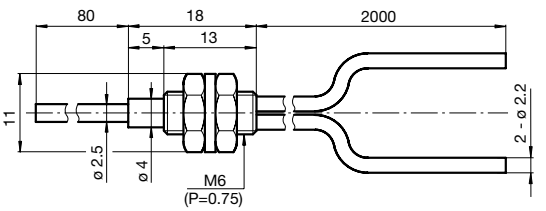
Plastic Fiber Optic Cables

Diffuse Plastic Fiber Optic Cables
for SU18, SU19, SU17.1, ML17-LL, and MHP-FR Sensors

Threaded Cylindrical (cont.)

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
KLR-C16-2.2-2.0-K71	2 m	2.2 mm	PVC	SU18 High Power	300 mm	
				SU18 High Speed	85 mm	
				SU19	85 mm	
				SU17.1	255 mm	
				ML17-LL	48 mm	
				MHP-FR	20 mm	
HPF-D001-H	2 m	2.2 mm	Black polyethylene	SU18 High Power	647 mm	
				SU18 High Speed	88 mm	
				SU19	88 mm	
				SU17.1	550 mm	
				ML17-LL	85 mm	
				MHP-FR	33 mm	
HPF-D001-HL03	3 m	2.2 mm	Black polyethylene	SU18 High Power	647 mm	
				SU18 High Speed	88 mm	
				SU19	88 mm	
				SU17.1	550 mm	
				ML17-LL	85 mm	
				MHP-FR	33 mm	

Bendable Probe

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
HPF-D006	2 m	1 mm	Black polyethylene	SU18 High Power	122 mm	
				SU18 High Speed	23 mm	
				SU19	23 mm	
				SU17.1	104 mm	
				ML17-LL	20 mm	
				MHP-FR	not compatible	
KLR 00-2.2-2.0-K57	2 m	2.2 mm	PVC	SU18 High Power	210 mm	
				SU18 High Speed	60 mm	
				SU19	60 mm	
				SU17.1	179 mm	
				ML17-LL	34 mm	
				MHP-FR	6 mm	

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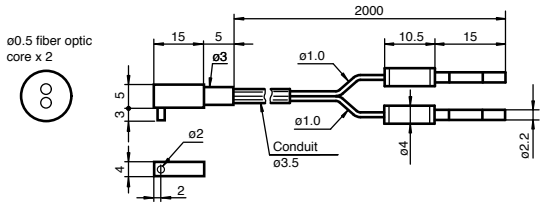
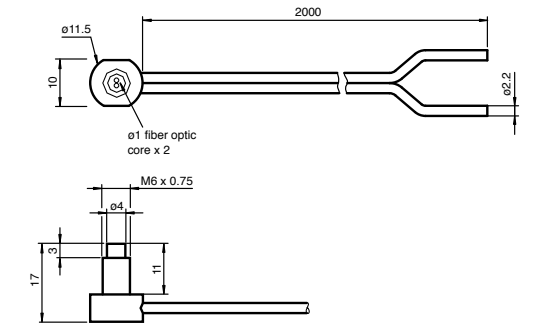
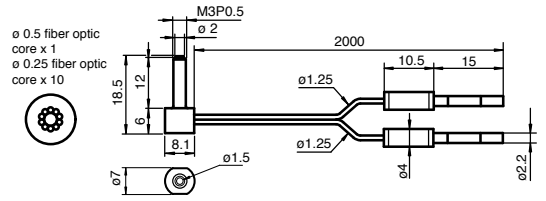
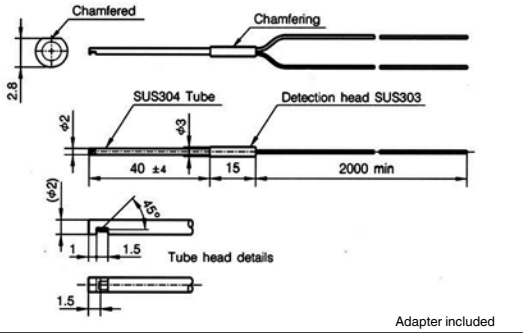
Side-view/Periscope

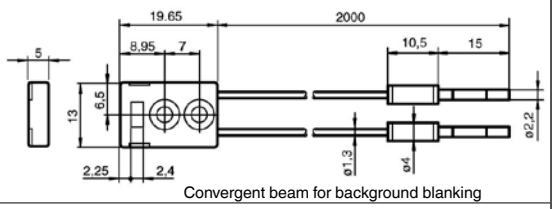
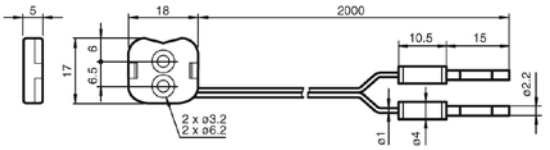
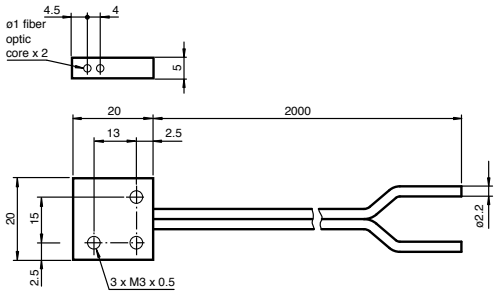
Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
KHR-C02-1.0-2.0-K132	2 m	1 mm	PVC	SU18 High Power	52 mm	
				SU18 High Speed	15 mm	
				SU19	15 mm	
				SU17.1	44 mm	
				ML17-LL	8 mm	
				MHP-FR	not compatible	
KHR-C02-2.2-2.0-K131	2 m	2.2 mm	PVC	SU18 High Power	210 mm	
				SU18 High Speed	60 mm	
				SU19	60 mm	
				SU17.1	179 mm	
				ML17-LL	34 mm	
				MHP-FR	14 mm	
KLR-C10-1.25-2.0-K144	2 m	1.25 mm	PVC	SU18 High Power	95 mm	
				SU18 High Speed	30 mm	
				SU19	30 mm	
				SU17.1	81 mm	
				ML17-LL	15 mm	
				MHP-FR	not compatible	
HPF-D011	2 mm	1.0 mm	Black polyethylene	SU18 High Power	45 mm	
				SU18 High Speed	27 mm	
				SU19	27 mm	
				SU17.1	38 mm	
				ML17-LL	6 mm	
				MHP-FR	not compatible	

Plastic Fiber Optic Cables

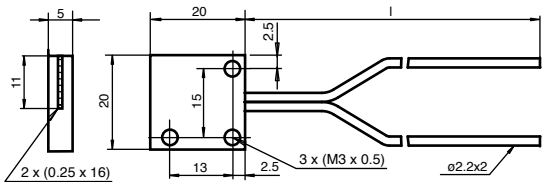
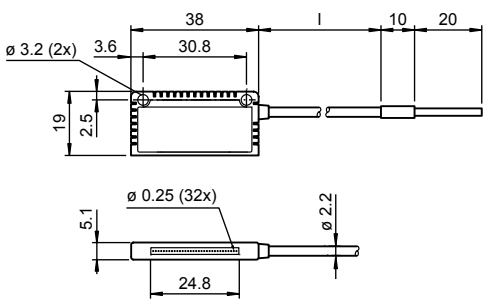
Diffuse Plastic Fiber Optic Cables

for SU18, SU19, SU17.1, ML17-LL, and MHP-FR Sensors

Rectangular

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
KLR-C02-1.3-2.0-K130	2 m	1.3 mm	PVC	SU18 High Power	8 mm	 Convergent beam for background blanking
				SU18 High Speed	8 mm	
				SU19	8 mm	
				SU17.1	8 mm	
				ML17-LL	8 mm	
				MHP-FR	not compatible	
KHR-C02-1.0-2.0-K129	2 m	1 mm	PVC	SU18 High Power	10 mm	 Convergent beam for background blanking
				SU18 High Speed	10 mm	
				SU19	10 mm	
				SU17.1	10 mm	
				ML17-LL	10 mm	
				MHP-FR	not compatible	
KHR-A02-2.2-2.0-K127	2 m	2.2 mm	PVC	SU18 High Power	175 mm	
				SU18 High Speed	50 mm	
				SU19	50 mm	
				SU17.1	149 mm	
				ML17-LL	28 mm	
				MHP-FR	12 mm	

Array

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
KLR-A32-2.2-2.0-K83	2 m	2.2 mm	PVC	SU18 High Power	120 mm	
				SU18 High Speed	35 mm	
				SU19	35 mm	
				SU17.1	102 mm	
				ML17-LL	19 mm	
				MHP-FR	8 mm	
KLR-A32-2.2-2.0-K141	2 m	2.2 mm	PVC	SU18 High Power	120 mm	
				SU18 High Speed	35 mm	
				SU19	35 mm	
				SU17.1	102 mm	
				ML17-LL	19 mm	
				MHP-FR	8 mm	

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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
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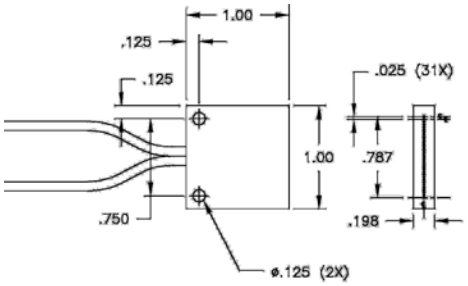
Plastic Fiber Optic Cables

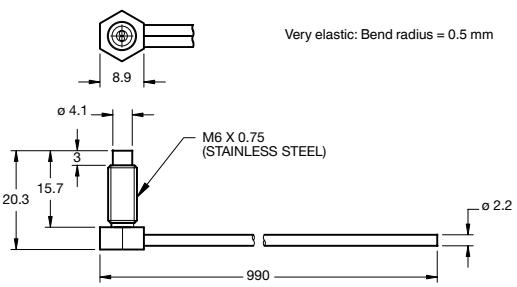
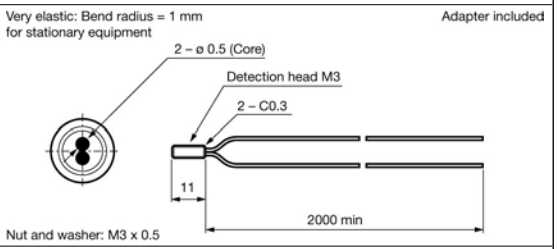
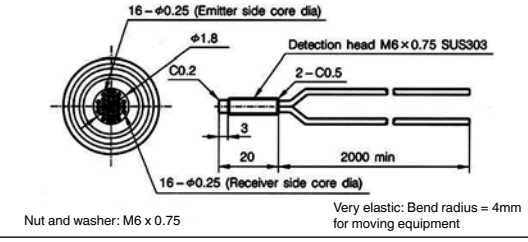
Diffuse Plastic Fiber Optic Cables
for SU18, SU19, SU17.1, ML17-LL, and MHP-FR Sensors

Array (cont.)

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
HPF-D032	2 m	2.2 mm	Plastic	SU18 High Power	191 mm	
				SU18 High Speed	46 mm	
				SU19	46 mm	
				SU17.1	162 mm	
				ML17-LL	52 mm	
				MHP-FR	21 mm	

(Inches)

High Flex Cable

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
HPF-D070-H	2 m	2.2 mm	Black polyethylene	SU18 High Power	214 mm	
				SU18 High Speed	34 mm	
				SU19	34 mm	
				SU17.1	182 mm	
				ML17-LL	46 mm	
				MHP-FR	12 mm	
HPF-D029	2 m	1.0 mm	Black polyethylene	SU18 High Power	29 mm	
				SU18 High Speed	5 mm	
				SU19	5 mm	
				SU17.1	25 mm	
				ML17-LL	11 mm	
				MHP-FR	not compatible	
HPF-D012	2 m	2.2 mm	Black polyethylene	SU18 High Power	294 mm	
				SU18 High Speed	47 mm	
				SU19	47 mm	
				SU17.1	250 mm	
				ML17-LL	51 mm	
				MHP-FR	18 mm	

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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

Plastic Fiber Optic Cables

Diffuse Plastic Fiber Optic Cables

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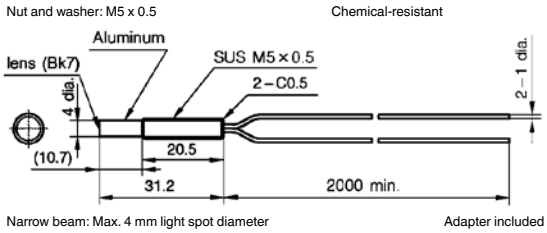
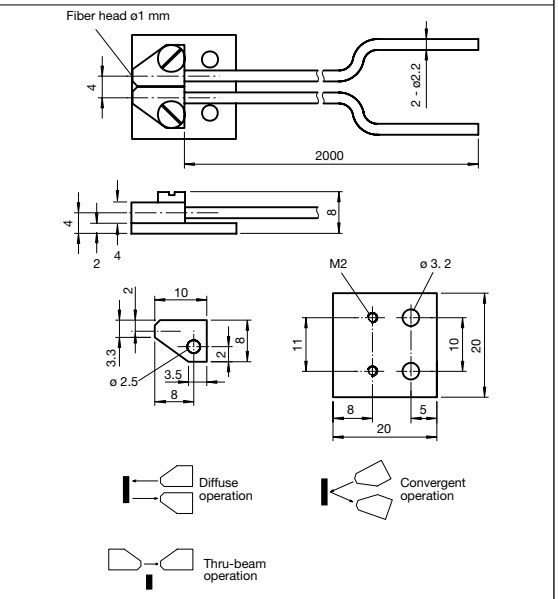
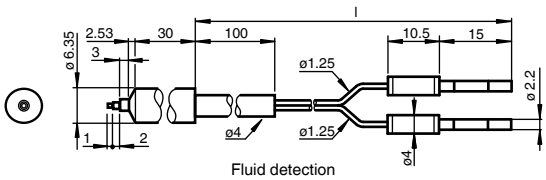
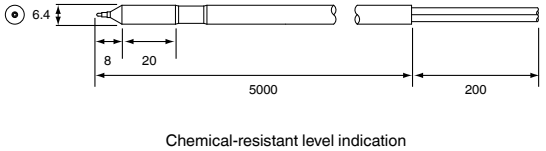
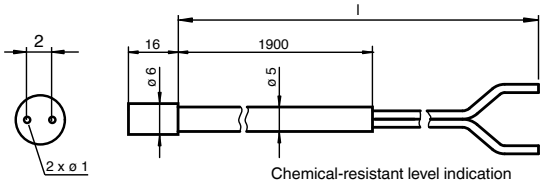
Specialty Versions

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
HPF-D025	2 m	1.0 mm	Black polyethylene	SU18 High Power	29 mm	
				SU18 High Speed	29 mm	
				SU19	29 mm	
				SU17.1	17 mm	
				ML17-LL	29 mm	
				MHP-FR	not compatible	
KLR 00-2.2-2.0-K40	2 m	2.2 mm	PVC	SU18 High Power	274 mm	
				SU18 High Speed	44 mm	
				SU19	44 mm	
				SU17.1	233 mm	
				ML17-LL	52 mm	
				MHP-FR	19 mm	
KLR-C02-1.25-2.0-K147	2 m	1.25 mm	PTFE	SU18 High Power	N/A	
				SU18 High Speed	N/A	
				SU19	N/A	
				SU17.1	N/A	
				ML17-LL	N/A	
				MHP-FR	not compatible	
HPF-D027-L05	5 m	2.2 mm	Fluorine	SU18 High Power	N/A	
				SU18 High Speed	N/A	
				SU19	N/A	
				SU17.1	N/A	
				ML17-LL	N/A	
				MHP-FR	N/A	
HPF-D014	2 m	2.2 mm	Fluorine	SU18 High Power	224 mm	
				SU18 High Speed	36 mm	
				SU19	36 mm	
				SU17.1	109 mm	
				ML17-LL	36 mm	
				MHP-FR	15 mm	

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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
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Diffuse Plastic Fiber Optic Cables

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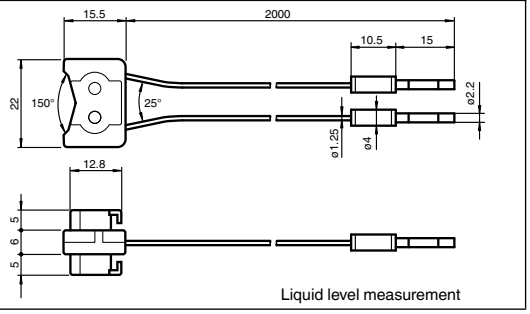
Specialty Versions (cont.)

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
KLR-C02-1.25-2.0-K128	2 m	1.25 mm	PVC	SU18 High Power	26 mm	
				SU18 High Speed	26 mm	
				SU19	26 mm	
				SU17.1	26 mm	
				ML17-LL	26 mm	
				MHP-FR	not compatible	

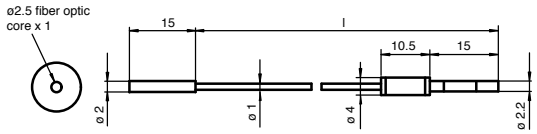
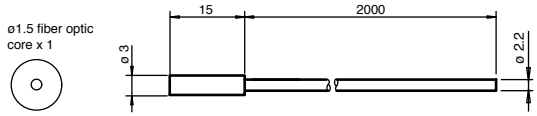
Liquid level measurement

All thru-beam mode plastic fiber optic cables are sold as pairs.

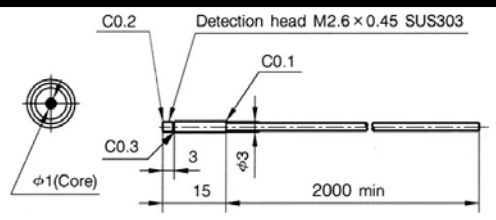
Thru-beam Plastic Fiber Optic Cables

for SU18, SU19, SU17.1, ML17-LL, and MHP-FR Sensors

Nonthreaded Cylindrical

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
KLE-C01-1.0-2.0-K105	2 m	1 mm	PVC	SU18 High Power	80 mm	
				SU18 High Speed	20 mm	
				SU19	20 mm	
				SU17.1	68 mm	
				ML17-LL	13 mm	
				MHP-FR	not compatible	
KLE-C01-2.2-2.0-K117	2 m	2.2 mm	PVC	SU18 High Power	1360 mm	
				SU18 High Speed	400 mm	
				SU19	400 mm	
				SU17.1	1156 mm	
				ML17-LL	218 mm	
				MHP-FR	90 mm	

Threaded Cylindrical

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
HPF-T004-H	2 m	2.2 mm	Black polyethylene	SU18 High Power	1294 mm	
				SU18 High Speed	190 mm	
				SU19	190 mm	
				SU17.1	1100 mm	
				ML17-LL	263 mm	
				MHP-FR	90 mm	

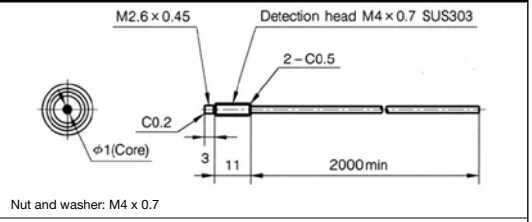
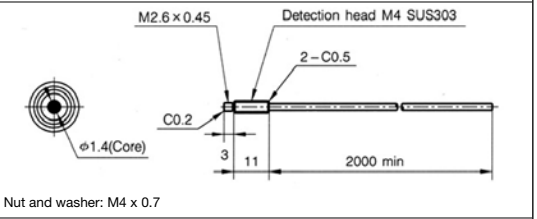
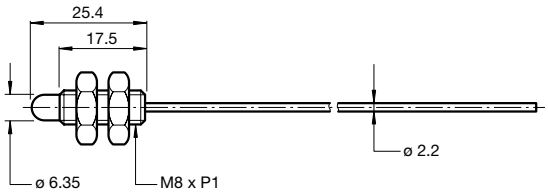
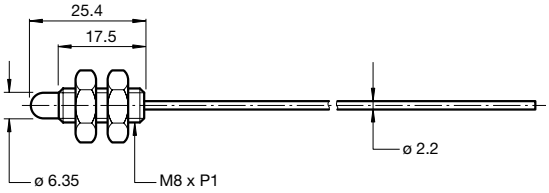
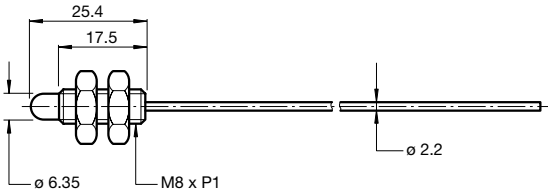
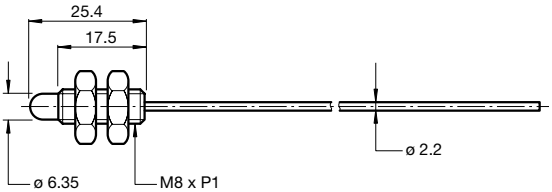
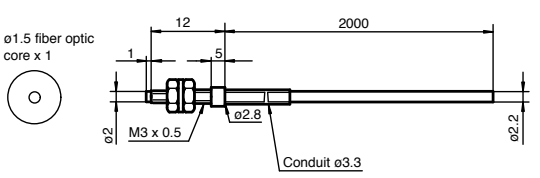
Plastic Fiber Optic Cables

Thru-beam Plastic Fiber Optic Cables

for SU18, SU19, SU17.1, ML17-LL, and MHP-FR Sensors

All thru-beam mode plastic fiber optic cables are sold as pairs.

Threaded Cylindrical (cont.)

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
HPF-T003	2 m	2.2 mm	Black polyethylene	SU18 High Power	1294 mm	
				SU18 High Speed	213 mm	
				SU19	213 mm	
				SU17.1	1100 mm	
				ML17-LL	123 mm	
				MHP-FR	63 mm	
HPF-T001	2 m	2.2 mm	Black polyethylene	SU18 High Power	2470 mm	
				SU18 High Speed	370 mm	
				SU19	370 mm	
				SU17.1	2100 mm	
				ML17-LL	363 mm	
				MHP-FR	170 mm	
FEF-PLT1	1 m	2.2 mm	Black polyethylene	SU18 High Power	25620 mm	
				SU18 High Speed	2867 mm	
				SU19	2867 mm	
				SU17.1	10488 mm	
				ML17-LL	3528 mm	
				MHP-FR	1300 mm	
FEF-PLT1-L2	2 m	2.2 mm	Black polyethylene	SU18 High Power	22859 mm	
				SU18 High Speed	2558 mm	
				SU19	2558 mm	
				SU17.1	19430 mm	
				ML17-LL	3148 mm	
				MHP-FR	1160 mm	
FEF-PLT1-L5	5 m	2.2 mm	Black polyethylene	SU18 High Power	15853 mm	
				SU18 High Speed	1774 mm	
				SU19	1774 mm	
				SU17.1	13475 mm	
				ML17-LL	2183 mm	
				MHP-FR	804 mm	
FEF-PLT1-L10	10 m	2.2 mm	Black polyethylene	SU18 High Power,	6503 mm	
				SU18 High Speed,	1049 mm	
				SU19	1049 mm	
				SU17.1	5530 mm	
				ML17-LL	1291 mm	
				MHP-FR	476 mm	
KLE-C01-2.2-2.0-K116	2 m	2.2 mm	PVC	SU18 High Power	1500 mm	
				SU18 High Speed	450 mm	
				SU19	450 mm	
				SU17.1	1275 mm	
				ML17-LL	241 mm	
				MHP-FR	99 mm	

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Germany: +49 621 776-4411 fa-info@de.pepperl-fuchs.com
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Thru-beam Plastic Fiber Optic Cables
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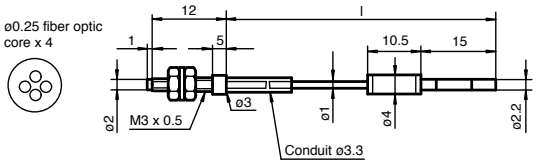
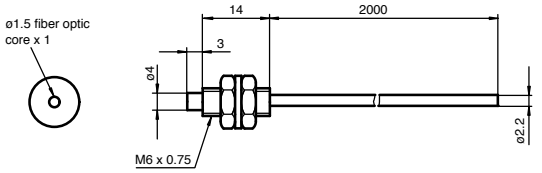
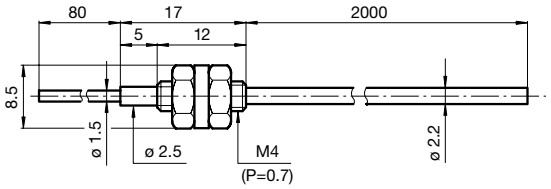
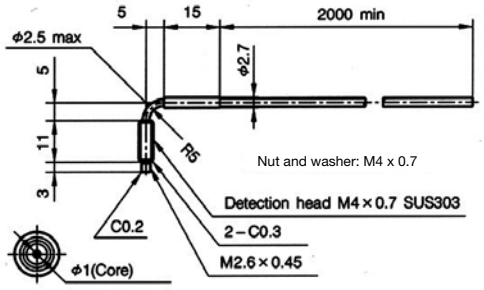
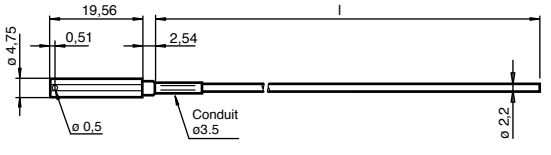
Threaded Cylindrical (cont.)

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
KLE-C04-1.0-2.0-K104	2 m	1 mm	PVC	SU18 High Power	300 mm	
				SU18 High Speed	70 mm	
				SU19	70 mm	
				SU17.1	255 mm	
				ML17-LL	48 mm	
				MHP-FR	not compatible	
KLE-C01-2.2-2.0-K115	2 m	2.2 mm	PVC	SU18 High Power	1500 mm	
				SU18 High Speed	450 mm	
				SU19	450 mm	
				SU17.1	1275 mm	
				ML17-LL	241 mm	
				MHP-FR	99 mm	

Bendable Probe

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
KLE 00-2.2-2.0-K55	2 m	2.2 mm	PVC	SU18 High Power	872 mm	
				SU18 High Speed	228 mm	
				SU19	228 mm	
				SU17.1	1208 mm	
				ML17-LL	157 mm	
				MHP-FR	74 mm	

Side-view/Periscope

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
HPF-T010	2 m	2.2 mm	Black polyethylene	SU18 High Power	964 mm	
				SU18 High Speed	150 mm	
				SU19	150 mm	
				SU17.1	820 mm	
				ML17-LL	116 mm	
				MHP-FR	73 mm	
KHE-C01-2.2-2.0-K136	2 m	2.2 mm	PVC	SU18 High Power	200 mm	
				SU18 High Speed	50 mm	
				SU19	50 mm	
				SU17.1	170 mm	
				ML17-LL	32 mm	
				MHP-FR	13 mm	

Plastic Fiber Optic Cables

Thru-beam Plastic Fiber Optic Cables
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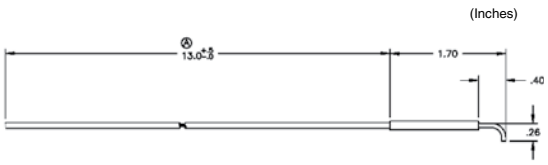
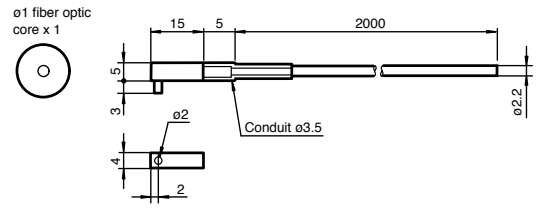
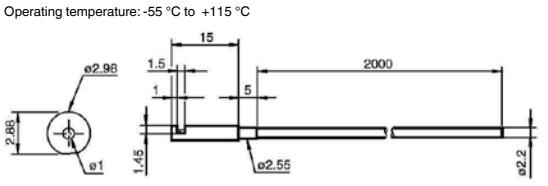
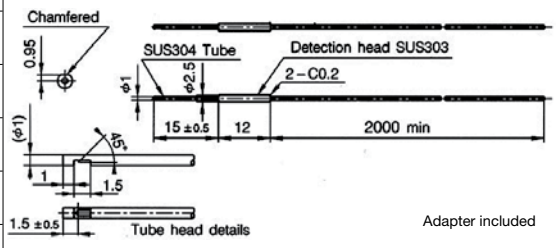
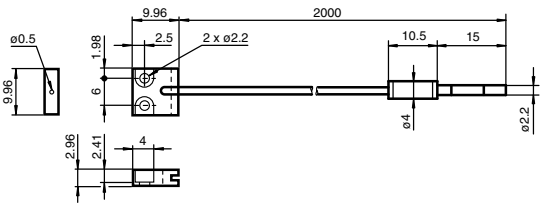
Side-view/Periscope (cont.)

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
HPF-T050	330 mm	2.2 mm	Plastic	SU18 High Power	953 mm	
				SU18 High Speed	153 mm	
				SU19	153 mm	
				SU17.1	810 mm	
				ML17-LL	153 mm	
				MHP-FR	not compatible	
KHE-C01-2.2-2.0-K140	2 m	2.2 mm	PVC	SU18 High Power	600 mm	
				SU18 High Speed	150 mm	
				SU19	150 mm	
				SU17.1	510 mm	
				ML17-LL	96 mm	
				MHP-FR	39 mm	
KHTE-C01-2.2-2.0-K118	2 m	2.2 mm	PVC	SU18 High Power	475 mm	
				SU18 High Speed	115 mm	
				SU19	115 mm	
				SU17.1	404 mm	
				ML17-LL	76 mm	
				MHP-FR	31 mm	
HPF-T007	2 m	1.0 mm	Black polyethylene	SU18 High Power	171 mm	
				SU18 High Speed	28 mm	
				SU19	28 mm	
				SU17.1	145 mm	
				ML17-LL	41 mm	
				MHP-FR	not compatible	

Rectangular

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
KHE-A01-1.0-2.0-K138	2 m	1 mm	PVC	SU18 High Power	100 mm	
				SU18 High Speed	25 mm	
				SU19	25 mm	
				SU17.1	85 mm	
				ML17-LL	16 mm	
				MHP-FR	not compatible	

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Plastic Fiber Optic Cables

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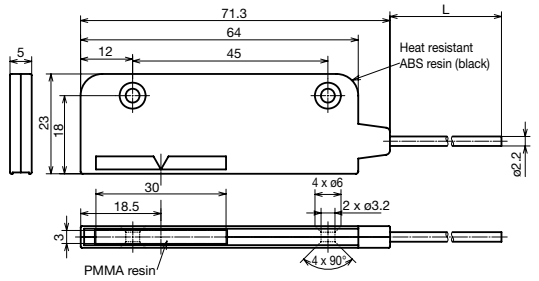
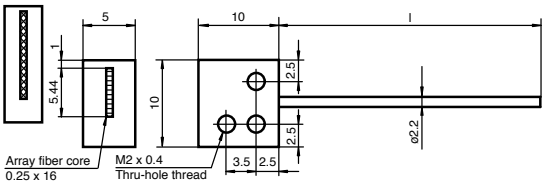
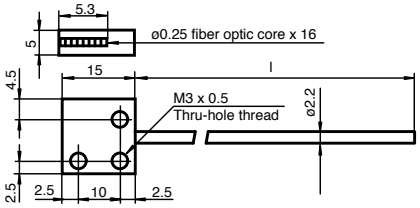
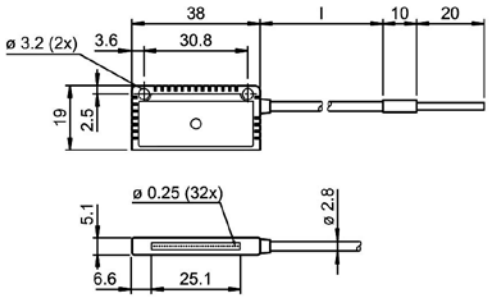
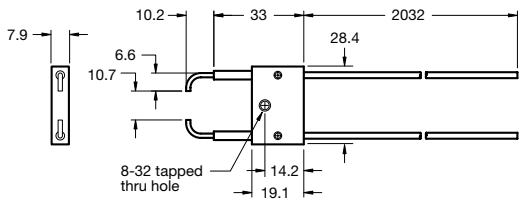
Thru-beam Plastic Fiber Optic Cables
for SU18, SU19, SU17.1, ML17-LL, and MHP-FR Sensors

Array

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
HPF-T021WT	2 m	2.2 mm	PVC	SU18 High Power	4235 mm	
				SU18 High Speed	682 mm	
				SU19	682 mm	
				SU17.1	3600 mm	
				ML17-LL	568 mm	
				MHP-FR	54 mm	
KLE-A16-2.2-2.0-K109	2 m	2.2 mm	PVC	SU18 High Power	420 mm	
				SU18 High Speed	100 mm	
				SU19	100 mm	
				SU17.1	357 mm	
				ML17-LL	67 mm	
				MHP-FR	28 mm	
KLE-A16-2.2-2.0-K110	2 m	2.2 mm	PVC	SU18 High Power	420 mm	
				SU18 High Speed	100 mm	
				SU19	100 mm	
				SU17.1	357 mm	
				ML17-LL	67 mm	
				MHP-FR	28 mm	
KLE-A32-2.8-2.0-K142	2 m	2.2 mm	PVC	SU18 High Power	140 mm	
				SU18 High Speed	35 mm	
				SU19	35 mm	
				SU17.1	119 mm	
				ML17-LL	22 mm	
				MHP-FR	9 mm	

Slot

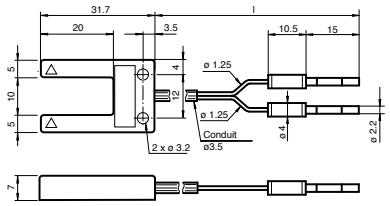
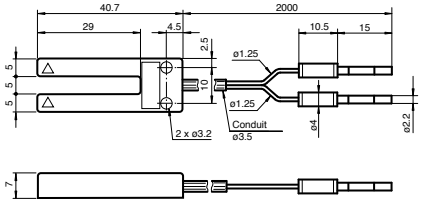
Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
HPF-T022-H	2 m	2.2 mm	Black polyethylene	SU18 High Power	10.7 mm	
				SU18 High Speed	10.7 mm	
				SU19	10.7 mm	
				SU17.1	10.7 mm	
				ML17-LL	10.7 mm	
				MHP-FR	10.7 mm	

Plastic Fiber Optic Cables

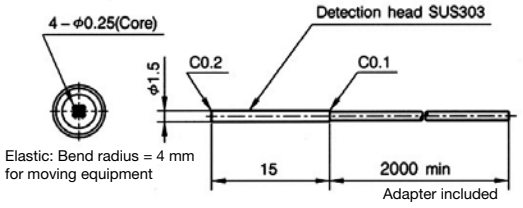
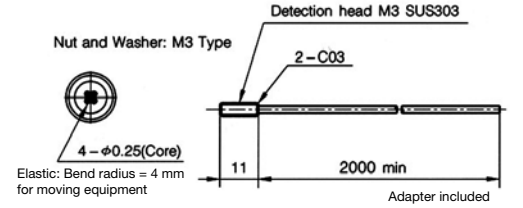
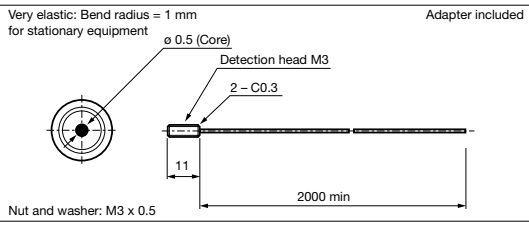
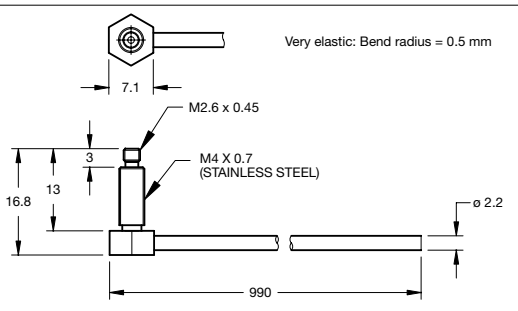
Thru-beam Plastic Fiber Optic Cables
for SU18, SU19, SU17.1, ML17-LL, and MHP-FR Sensors

All thru-beam mode plastic fiber optic cables are sold as pairs.

Slot (cont.)

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
KLE-C02-1.25-2.0-K135	2 m	1.25 mm	PVC	SU18 High Power	10 mm	
				SU18 High Speed	10 mm	
				SU19	10 mm	
				SU17.1	10 mm	
				ML17-LL	10 mm	
				MHP-FR	not compatible	
KLE-C02-1.25-2.0-K134	2 m	1.25 mm	PVC	SU18 High Power	5 mm	
				SU18 High Speed	5 mm	
				SU19	5 mm	
				SU17.1	5 mm	
				ML17-LL	5 mm	
				MHP-FR	not compatible	

High Flex Cable

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
HPF-T009	2 m	1.0 mm	Black polyethylene	SU18 High Power	194 mm	
				SU18 High Speed	63 mm	
				SU19	63 mm	
				SU17.1	165 mm	
				ML17-LL	57 mm	
				MHP-FR	not compatible	
HPF-T008	2 m	1.0 mm	Black polyethylene	SU18 High Power	194 mm	
				SU18 High Speed	31 mm	
				SU19	31 mm	
				SU17.1	165 mm	
				ML17-LL	49 mm	
				MHP-FR	not compatible	
HPF-T024	2 m	1.0 mm	Black polyethylene	SU18 High Power	165 mm	
				SU18 High Speed	27 mm	
				SU19	27 mm	
				SU17.1	140 mm	
				ML17-LL	26 mm	
				MHP-FR	not compatible	
HPF-T070-H	990 mm	2.2 mm	Black polyethylene	SU18 High Power	957 mm	
				SU18 High Speed	154 mm	
				SU19	154 mm	
				SU17.1	813 mm	
				ML17-LL	164 mm	
				MHP-FR	67 mm	

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Thru-beam Plastic Fiber Optic Cables
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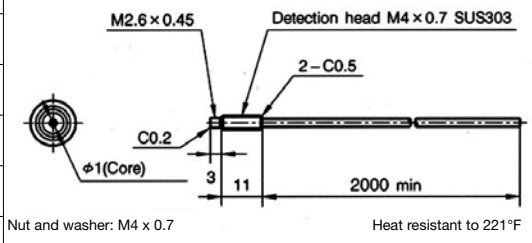
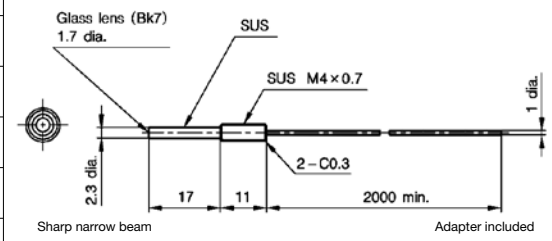
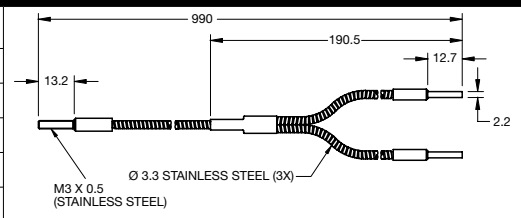
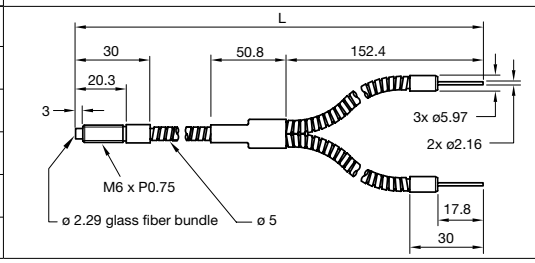
Specialty Versions

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
HPF-T012	2 m	2.2 mm	Black polyethylene	SU18 High Power	788 mm	
				SU18 High Speed	127 mm	
				SU19	127 mm	
				SU17.1	670 mm	
				ML17-LL	118 mm	
				MHP-FR	59 mm	
HPF-T023	2 m	1.0 mm	Black polyethylene	SU18 High Power	4205 mm	
				SU18 High Speed	677 mm	
				SU19	677 mm	
				SU17.1	3400 mm	
				ML17-LL	467 mm	
				MHP-FR	not compatible	

Glass Fiber Optic Cables

Diffuse Mode Glass Fiber Optic Cables
SU18, SU19, SU17.1 and ML17-LL Sensors

Threaded Cylindrical

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
LMR 00-1.5-1.0-K154	990 mm	2.2 mm	Stainless Steel	SU18 High Power	185 mm	
				SU18 High Speed	30 mm	
				SU19	30 mm	
				SU17.1	157 mm	
				ML17-LL	109 mm	
				MHP-FR	not compatible	
LMR 00-2.0-1.0-K156	1 m	2.29 mm	Stainless Steel	SU18 High Power	190 mm	
				SU18 High Speed	116 mm	
				SU19	116 mm	
				SU17.1	152 mm	
				ML17-LL	86 mm	
				MHP-FR	not compatible	

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Germany: +49 621 776-4411
fa-info@de.pepperl-fuchs.com
Singapore: +65 6779 9091
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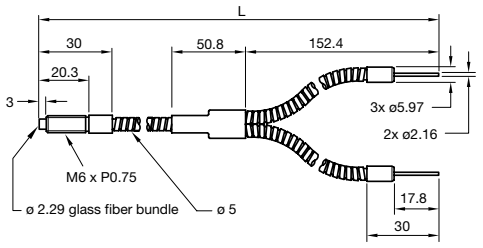
Glass Fiber Optic Cables

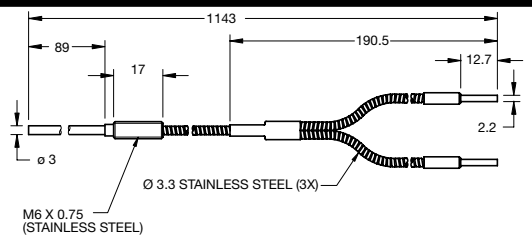
Diffuse Mode Glass Fiber Optic Cables

SU18, SU19, SU17.1 and ML17-LL Sensors

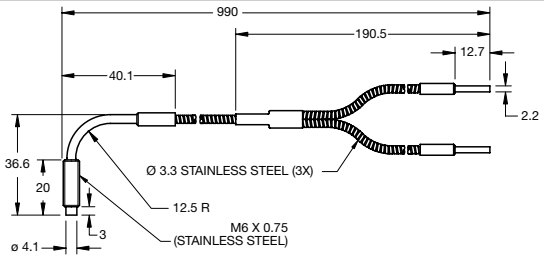
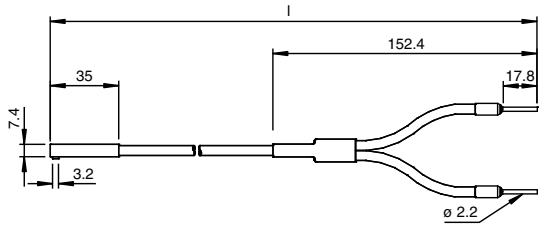
Threaded Cylindrical (cont.)

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
LMR 00-2.0-2.0-K156	2 m	2.29 mm	Stainless Steel	SU18 High Power	190 mm	
				SU18 High Speed	116 mm	
				SU19	116 mm	
				SU17.1	152 mm	
				ML17-LL	86 mm	
				MHP-FR	not compatible	

Bendable Probe

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
LMR 00-1.5-1.1-K155	1143 mm	2.2 mm	Stainless Steel	SU18 High Power	160 mm	
				SU18 High Speed	76 mm	
				SU19	76 mm	
				SU17.1	136 mm	
				ML17-LL	85 mm	
				MHP-FR	not compatible	

Side-view / Periscope

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
LMR 00-1.5-1.0-K157	990 mm	2.2 mm	Stainless Steel	SU18 High Power	160 mm	
				SU18 High Speed	76 mm	
				SU19	76 mm	
				SU17.1	136 mm	
				ML17-LL	85 mm	
				MHP-FR	not compatible	
LCR 00-2.0-0.9-K158	914 mm	2 mm	PVC	SU18 High Power	190 mm	
				SU18 High Speed	116 mm	
				SU19	116 mm	
				SU17.1	152 mm	
				ML17-LL	86 mm	
				MHP-FR	not compatible	

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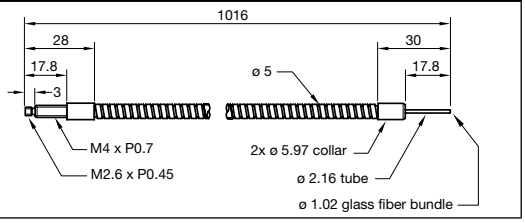
Glass Fiber Optic Cables

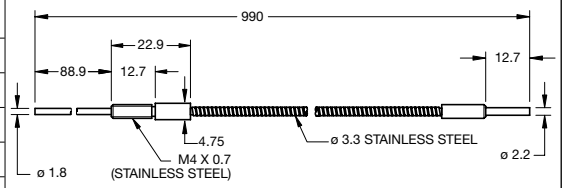
Sold individually. To complete a thru-beam pair, two units are required.

Thru-Beam Mode Glass Fiber Optic Cables
for SU18, SU19, SU17.1 and ML17-LL Sensors

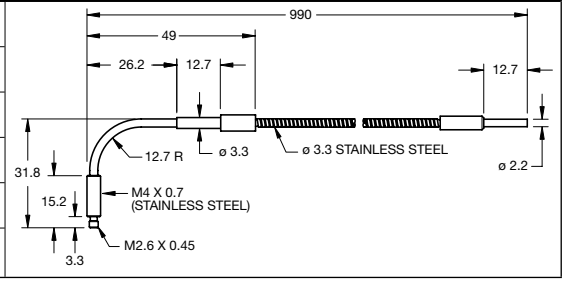
Threaded Cylindrical

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
LME 00-1.0-1.0-K151	1 m	1.02 mm	Stainless Steel	SU18 High Power	892 mm	
				SU18 High Speed	144 mm	
				SU19	144 mm	
				SU17.1	616 mm	
				ML17-LL	197 mm	
				MHP-FR	not compatible	

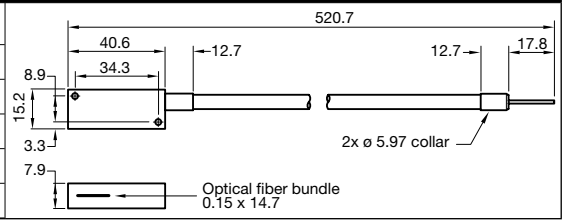
Bendable Probe

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
LME 00-1.2-1.0-K150	990 mm	2.2 mm	Stainless Steel	SU18 High Power	892 mm	
				SU18 High Speed	144 mm	
				SU19	144 mm	
				SU17.1	616 mm	
				ML17-LL	197 mm	
				MHP-FR	not compatible	

Side-view /Periscope

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
LME 00-1.2-1.0-K153	990 mm	2.2 mm	Stainless Steel	SU18 High Power	892 mm	
				SU18 High Speed	144 mm	
				SU19	144 mm	
				SU17.1	616 mm	
				ML17-LL	197 mm	
				MHP-FR	not compatible	

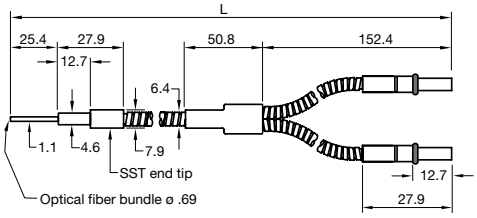
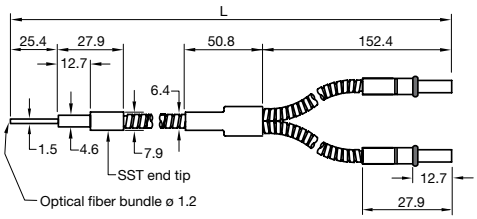
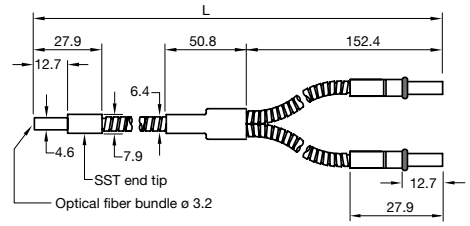
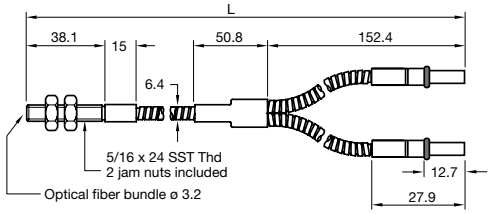
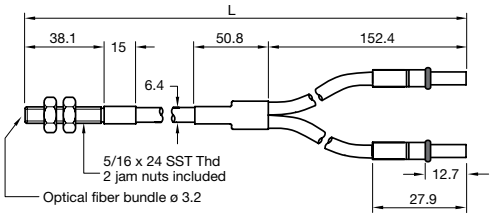
Array

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
LCE 00-1.6-0.5-K152	520.7 mm	2.2 mm	PVC	SU18 High Power	2681 mm	
				SU18 High Speed	432 mm	
				SU19	432 mm	
				SU17.1	761 mm	
				ML17-LL	246 mm	
				MHP-FR	not compatible	

Glass Fiber Optic Cables

Diffuse Mode Glass Fiber Optic Cables
for RL(K)61-LL, MPG and MHP-F Sensors

Cylindrical Sensing Head

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
FE-BHS1S-3*	3 ft	0.69 mm	Stainless Steel	MHP-F Visible Red	5 mm	
				MHP-F Infrared	11 mm	
FE-BHS1S-5	5 ft			RL(K)61-LL	20 mm	
				MPG Infrared	23 mm	
FE-BHS3S-3*	3 ft	1.2 mm	Stainless Steel	MHP-F Visible Red	10 mm	
				MHP-F Infrared	30 mm	
FE-BHS3S-5	5 ft			RL(K)61-LL	46 mm	
				MPG Infrared	51 mm	
FE-BFS6S-3*	3 ft	3.2 mm	Stainless Steel	MHP-F Visible Red	48 mm	
				MHP-F Infrared	95 mm	
FE-BFS6S-5	5 ft			RL(K)61-LL	170 mm	
				MPG Infrared	190 mm	
FE-BTS6S-3*	3 ft	3.2 mm	Stainless Steel	MHP-F Visible Red	45 mm	
FE-BTS6S-3HT†				MHP-F Infrared	90 mm	
FE-BTS6S-5	5 ft			RL(K)61-LL	160 mm	
FE-BTS6S-5HT†				MPG Infrared	180 mm	
FE-BTS6M-3*	3 ft	3.2 mm	PVC	MHP-F Visible Red	45 mm	
				MHP-F Infrared	90 mm	
FE-BTS6M-5	5 ft			RL(K)61-LL	160 mm	
				MPG Infrared	180 mm	

* Sensing ranges based on this model.
† High-temperature model.

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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
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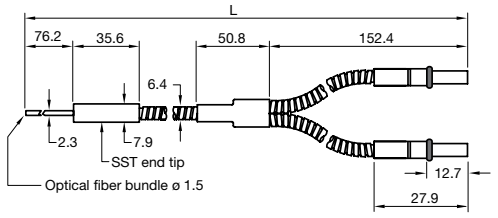
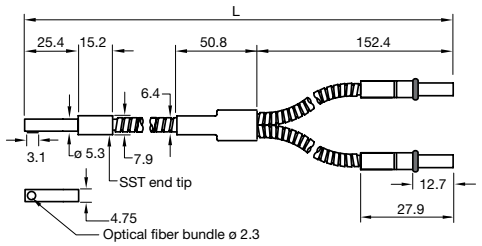
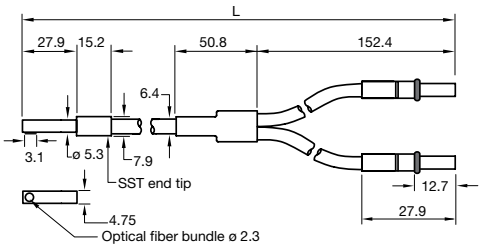
Glass Fiber Optic Cables

Diffuse Mode Glass Fiber Optic Cables
for RL(K)61-LL, MPG and MHP-F Sensors

Bendable Sensing Tip

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
FE-BPS4S-3*	3 ft	1.5 mm	Stainless Steel	MHP-F Visible Red	12 mm	
				MHP-F Infrared	39 mm	
FE-BPS4S-5	5 ft			RL(K)61-LL	69 mm	
				MPG Infrared	77 mm	

Side View/Periscope Sensing Head

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
FE-BNSRA5S-3*	3 ft	2.3 mm	Stainless Steel	MHP-F Visible Red	32 mm	
				MHP-F Infrared	62 mm	
FE-BNSRA5S-5	5 ft			RL(K)61-LL	155 mm	
				MPG Infrared	170 mm	
FE-BNSRA5M-3	3 ft	2.3 mm	PVC	MHP-F Visible Red	32 mm	
				MHP-F Infrared	62 mm	
				RL(K)61-LL	155 mm	
				MPG Infrared	170 mm	

* Sensing ranges based on this model.

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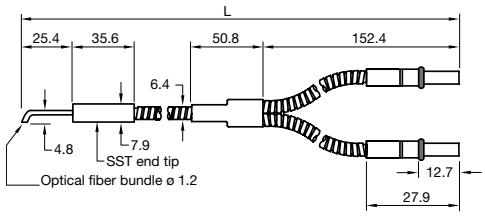
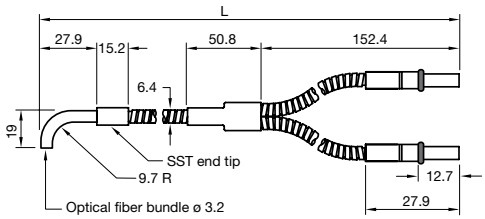
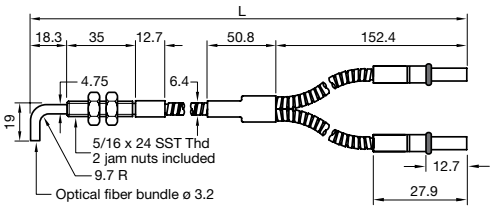
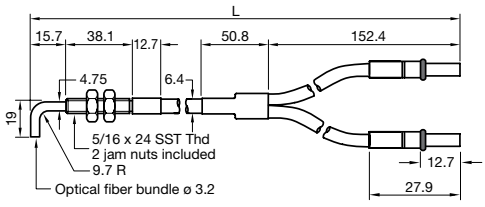
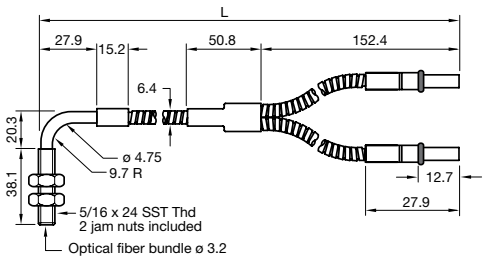
www.pepperl-fuchs.com
USA: +1 330 486 0001
fa-info@us.pepperl-fuchs.com
Germany: +49 621 776-4411
fa-info@de.pepperl-fuchs.com
Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

Glass Fiber Optic Cables

Diffuse Mode Glass Fiber Optic Cables

for RL(K)61-LL, MPG and MHP-F Sensors

Right Angle Sensing Head

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
FE-BHSRA3S-3*	3 ft	1.2 mm	Stainless Steel	MHP-F Visible Red	6 mm	
				MHP-F Infrared	12 mm	
FE-BHSRA3S-5	5 ft			RL(K)61-LL	27 mm	
				MPG Infrared	30 mm	
FE-BAS6S-3*	3 ft	3.2 mm	Stainless Steel	MHP-F Visible Red	45 mm	
				MHP-F Infrared	97 mm	
FE-BAS6S-5	5 ft			RL(K)61-LL	160 mm	
				MPG Infrared	180 mm	
FE-BTSAS6S-3*	3 ft	3.2 mm	Stainless Steel	MHP-F Visible Red	36 mm	
				MHP-F Infrared	80 mm	
FE-BTSAS6S-5	5 ft			RL(K)61-LL	155 mm	
				MPG Infrared	170 mm	
FE-BTSAS6M-3*	3 ft	3.2 mm	PVC	MHP-F Visible Red	36 mm	
				MHP-F Infrared	80 mm	
FE-BTSAS6M-5	5 ft			RL(K)61-LL	155 mm	
				MPG Infrared	170 mm	
FE-BASTS6S-3*	3 ft	3.2 mm	Stainless Steel	MHP-F Visible Red	52 mm	
				MHP-F Infrared	100 mm	
FE-BASTS6S-5	5 ft			RL(K)61-LL	170 mm	
				MPG Infrared	190 mm	

* Sensing ranges based on this model.

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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
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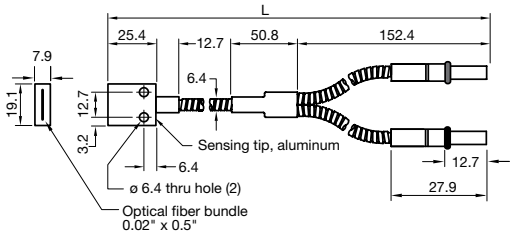
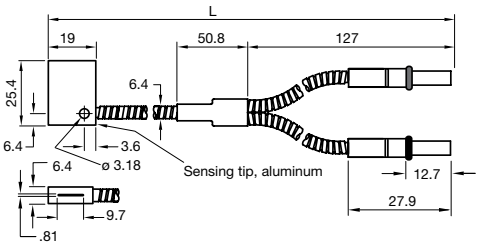
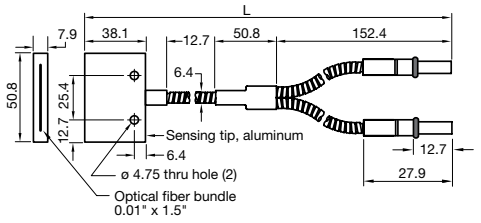
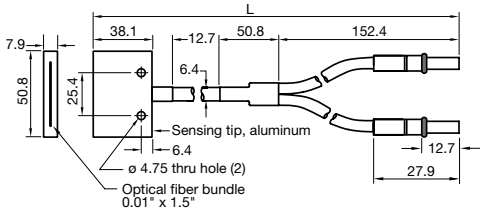
Glass Fiber Optic Cables

Diffuse Mode Glass Fiber Optic Cables
for RL(K)61-LL, MPG and MHP-F Sensors

Array Sensing Head

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
FE-BRL6S-3*	3 ft	0.02" x 0.5"	Stainless Steel	MHP-F Visible Red	42 mm	
				MHP-F Infrared	92 mm	
FE-BRL6S-5	5 ft			RL(K)61-LL	190 mm	
				MPG Infrared	212 mm	
FE-BRL6S-3RA*	3 ft	0.81 mm x 9.7 mm	Stainless Steel	MHP-F Visible Red	40 mm	
				MHP-F Infrared	86 mm	
FE-BRL6S-5RA	5 ft			RL(K)61-LL	190 mm	
				MPG Infrared	210 mm	
FE-BRL7S-3*	3 ft	0.01" x 1.5"	Stainless Steel	MHP-F Visible Red	46 mm	
				MHP-F Infrared	104 mm	
FE-BRL7S-5	5 ft			RL(K)61-LL	205 mm	
				MPG Infrared	230 mm	
FE-BRL7M-3	3 ft	0.01" x 1.5"	PVC	MHP-F Visible Red	46 mm	
				MHP-F Infrared	104 mm	
				RL(K)61-LL	205 mm	
				MPG Infrared	230 mm	

* Sensing ranges based on this model.

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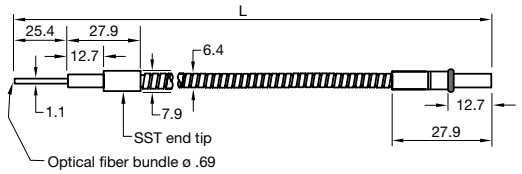
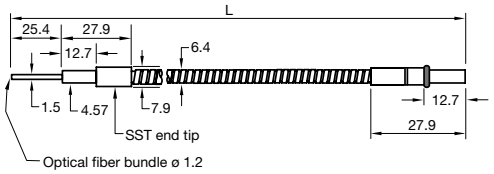
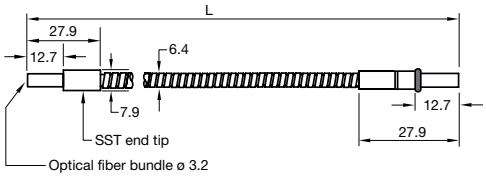
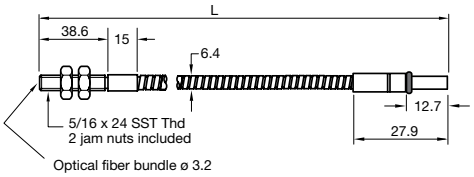
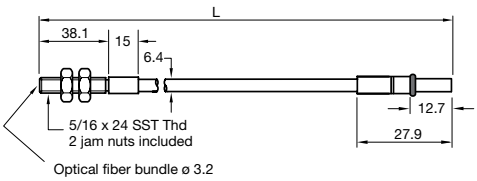
Glass Fiber Optic Cables

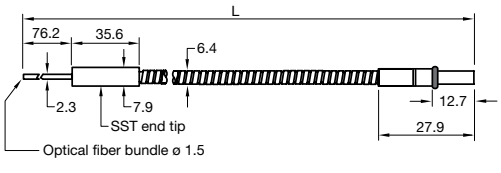
Thru-Beam Mode Glass Fiber Optic Cables
for RL(K)61-LL, MPG and MHP-F Sensors

Sold individually. To complete a thru-beam pair, two units are required.

Cylindrical Sensing Head

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
FE-IHS1S-3*	3 ft	0.69 mm	Stainless Steel	MHP-F Visible Red	90 mm	
				MHP-F Infrared	210 mm	
FE-IHS1S-5	5 ft			RL(K)61-LL	460 mm	
				MPG Infrared	510 mm	
FE-IHS3S-3*	3 ft	1.2 mm	Stainless Steel	MHP-F Visible Red	95 mm	
				MHP-F Infrared	220 mm	
FE-IHS3S-5	5 ft			RL(K)61-LL	470 mm	
				MPG Infrared	520 mm	
FE-IFS6S-3*	3 ft	3.2 mm	Stainless Steel	MHP-F Visible Red	320 mm	
				MHP-F Infrared	770 mm	
FE-IFS6S-5	5 ft			RL(K)61-LL	470 mm	
				MPG Infrared	1300 mm	
FE-ITS6S-3*	3 ft	3.2 mm	Stainless Steel	MHP-F Visible Red	300 mm	
FE-ITS6S-3HT†				MHP-F Infrared	825 mm	
FE-ITS6S-5	5 ft			RL(K)61-LL	1305 mm	
FE-ITS6S-5HT†				MPG Infrared	1450 mm	
FE-ITS6M-3*	3 ft	3.2 mm	PVC	MHP-F Visible Red	300 mm	
				MHP-F Infrared	825 mm	
FE-ITS6M-5	5 ft			RL(K)61-LL	1305 mm	
				MPG Infrared	1450 mm	

Bendable Sensing Tip

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
FE-IPS4S-3*	3 ft	1.5 mm	Stainless Steel	MHP-F Visible Red	190 mm	
				MHP-F Infrared	560 mm	
FE-IPS4S-5	5 ft			RL(K)61-LL	900 mm	
				MPG Infrared	1000 mm	

* Sensing ranges based on this model.
† High temperature model.

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Germany: +49 621 776-4411 fa-info@de.pepperl-fuchs.com
Singapore: +65 6779 9091 fa-info@sg.pepperl-fuchs.com
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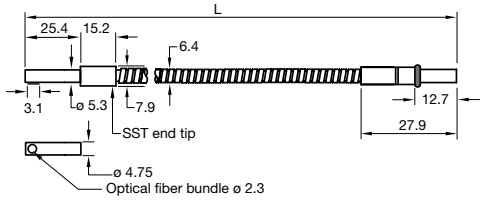
Glass Fiber Optic Cables

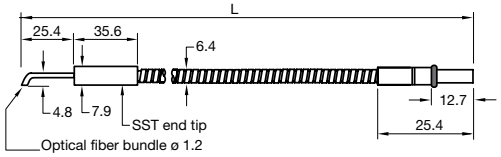
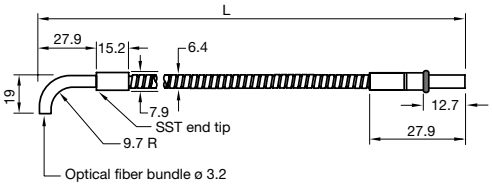
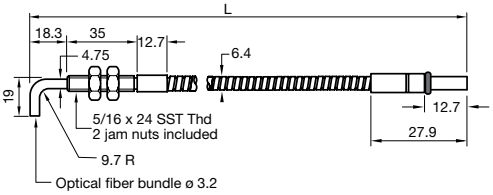
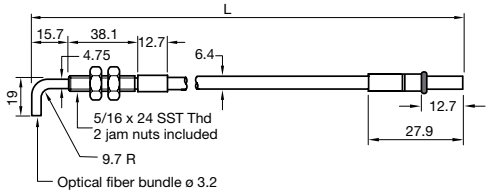
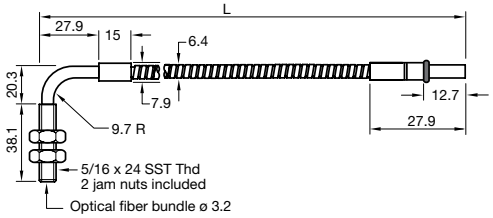
Sold individually. To complete a thru-beam pair, two units are required.

Thru-Beam Mode Glass Fiber Optic Cables
for RL(K)61-LL, MPG and MHP-F Sensors

Side View/Periscope Sensing Head

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
FE-INSRA5S-3*	3 ft	2.3 mm	Stainless Steel	MHP-F Visible Red	180 mm	
				MHP-F Infrared	400 mm	
FE-INSRA5S-5	5 ft			RL(K)61-LL	730 mm	
				MPG Infrared	810 mm	

Right Angle Sensing Head

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
FE-IHSRA3S-3*	3 ft	1.2 mm	Stainless Steel	MHP-F Visible Red	90 mm	
				MHP-F Infrared	190 mm	
FE-IHSRA3S-5	5 ft			RL(K)61-LL	485 mm	
				MPG Infrared	540 mm	
FE-IAS6S-3*	3 ft	3.2 mm	Stainless Steel	MHP-F Visible Red	340 mm	
				MHP-F Infrared	950 mm	
FE-IAS6S-5	5 ft			RL(K)61-LL	1305 mm	
				MPG Infrared	1450 mm	
FE-ITSAS6S-3*	3 ft	3.2 mm	Stainless Steel	MHP-F Visible Red	260 mm	
				MHP-F Infrared	660 mm	
FE-ITSAS6S-5	5 ft			RL(K)61-LL	1150 mm	
				MPG Infrared	1280 mm	
FE-ITSAS6M-3*	3 ft	3.2 mm	PVC	MHP-F Visible Red	260 mm	
				MHP-F Infrared	660 mm	
FE-ITSAS6M-5	5 ft			RL(K)61-LL	1150 mm	
				MPG Infrared	1280 mm	
FE-IASTS6S-3*	3 ft	3.2 mm	Stainless Steel	MHP-F Visible Red	300 mm	
				MHP-F Infrared	800 mm	
FE-IASTS6S-5	5 ft			RL(K)61-LL	1170 mm	
				MPG Infrared	1300 mm	

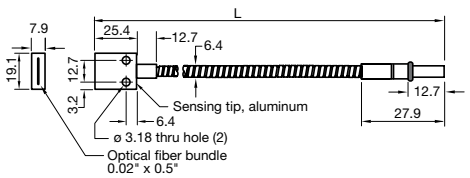
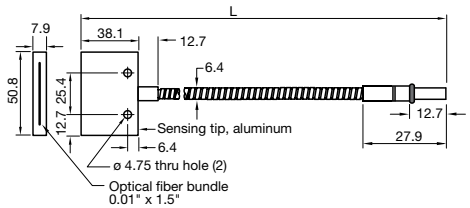
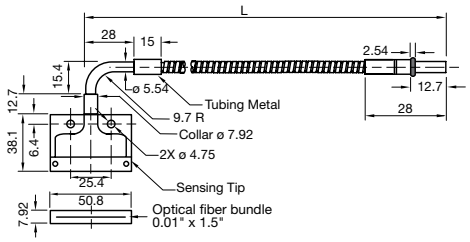
* Sensing ranges based on this model.

Glass Fiber Optic Cables

Thru-Beam Mode Glass Fiber Optic Cables
for RL(K)61-LL, MPG and MHP-F Sensors

Sold individually. To complete a thru-beam pair, two units are required.

Array Sensing Head

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
FE-IRL6S-3*	3 ft	0.02" x 0.5"	Stainless Steel	MHP-F Visible Red	280 mm	
				MHP-F Infrared	700 mm	
FE-IRL6S-5	5 ft			RL(K)61-LL	1080 mm	
				MPG Infrared	1200 mm	
FE-IRL7S-3*	3 ft	0.01" x 1.5"	Stainless Steel	MHP-F Visible Red	310 mm	
				MHP-F Infrared	750 mm	
FE-IRL7S-5	5 ft			RL(K)61-LL	1125 mm	
				MPG Infrared	1250 mm	
FE-IRL7S-3R	3 ft	0.01" x 1.5"	Stainless Steel	MHP-F Visible Red	300 mm	
				MHP-F Infrared	740 mm	
				RL(K)61-LL	1080 mm	
				MPG Infrared	1200 mm	

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Singapore: +65 6779 9091 fa-info@sg.pepperl-fuchs.com
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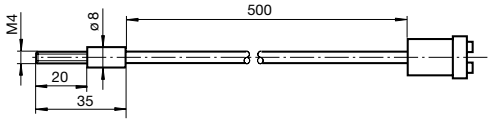
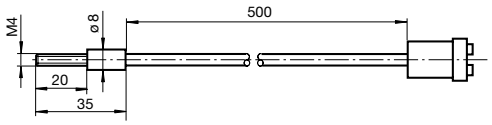
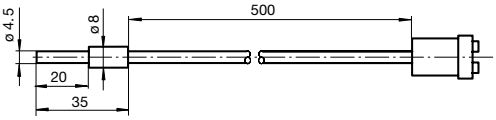
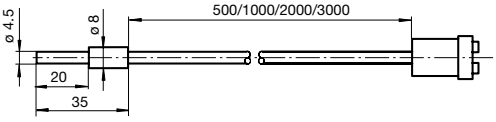
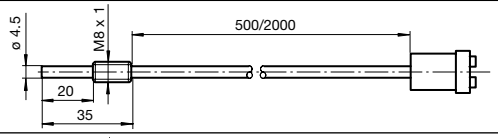
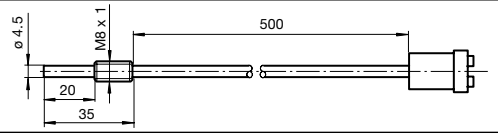
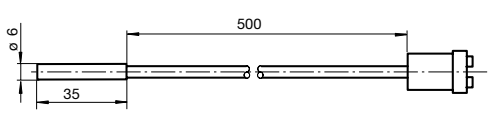
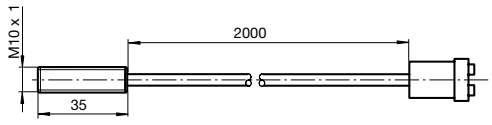
Glass Fiber Optic Cables

Diffuse Mode Glass Fiber Optic Cables
for OCT300-M1K and VL18LL Sensors

Cylindrical Sensing Head (cont.)

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
LMR 18-1.1-0.5-K3	0.5 m	1.1 mm	Stainless Steel	OJ500-M1K	24 mm	
				OCT500-M1A	24 mm	
				OCT300-M1K	9 mm	
				VL18LL	5 mm	
LMR 18-2.3-0.25-K3	0.25 m	2.3 mm	Stainless Steel	OJ500-M1K	85 mm	
				OCT500-M1A	85 mm	
				OCT300-M1K	37 mm	
				VL18LL	25 mm	
LMR 18-2.3-0.5-K3	0.5 m	2.3 mm	Stainless Steel	OJ500-M1K	85 mm	
				OCT500-M1A	85 mm	
				OCT300-M1K	37 mm	
				VL18LL	25 mm	
LCR 18-3.2-0.5-K1	0.5 m	3.2 mm	PVC	OJ500-M1K	300 mm	
				OCT500-M1A	300 mm	
				OCT300-M1K	85 mm	
				VL18LL	variable	
LMR 18-3.2-0.5-K1	0.5 m	3.2 mm	Stainless Steel	OJ500-M1K	153 mm	
LMR 18-3.2-1.0-K1*	1 m			OCT500-M1A	153 mm	
LMR 18-3.2-2.0-K1	2 m			OCT300-M1K	62 mm	
LMR 18-3.2-3.0-K1	3 m			VL18LL	43 mm	
LCR 18-3.2-0.5-K2*	0.5 m	3.2 mm	PVC	OJ500-M1K	185 mm	
				OCT500-M1A	185 mm	
LCR 18-3.2-2.0-K2	2 m			OCT300-M1K	74 mm	
				VL18LL	44 mm	
LMR 18-2.3-0.5-K2	0.5 m	2.3 mm	Stainless Steel	OJ500-M1K	80 mm	
				OCT500-M1A	80 mm	
				OCT300-M1K	30 mm	
				VL18LL	23 mm	
LMR 18-2.3-0.5-K7	0.5 m	2.3 mm	Stainless Steel	OJ500-M1K	80 mm	
				OCT500-M1A	80 mm	
				OCT300-M1K	30 mm	
				VL18LL	23 mm	
LMR 18-3.2-2.0-K4	2 m	3.2 mm	Stainless Steel	OJ500-M1K	173 mm	
				OCT500-M1A	173 mm	
				OCT300-M1K	65 mm	
				VL18LL	40 mm	

* Sensing ranges based on this model.

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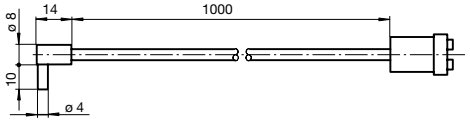
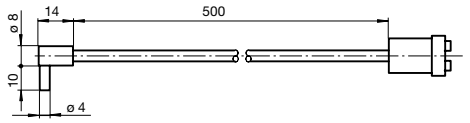
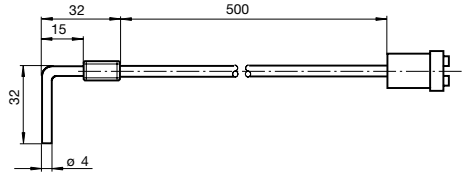
Glass Fiber Optic Cables

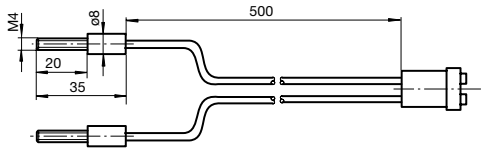
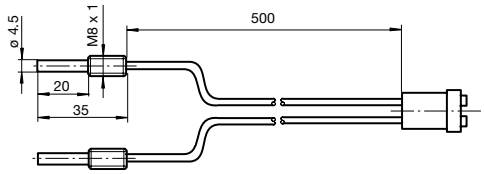
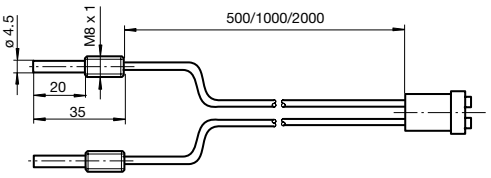
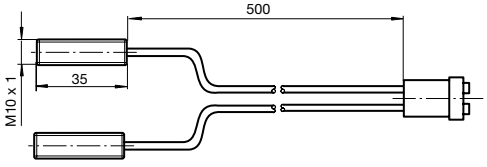
Diffuse Mode Glass Fiber Optic Cables
for OCT300-M1K and VL18LL Sensors

Right Angle Sensing Head

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
LCR 18-2.7-1.0-K9	1 m	2.7 mm	PVC	OJ500-M1K	95 mm	
				OCT500-M1A	95 mm	
				OCT300-M1K	38 mm	
				VL18LL	25 mm	
LMR 18-2.7-0.5-K9	0.5 m	2.7 mm	Stainless Steel	OJ500-M1K	95 mm	
				OCT500-M1A	95 mm	
				OCT300-M1K	38 mm	
				VL18LL	25 mm	
LSR 18-2.3-0.5-K12	0.5 m	2.3 mm	Silicone	OJ500-M1K	75 mm	
				OCT500-M1A	75 mm	
				OCT300-M1K	30 mm	
				VL18LL	21 mm	

Thru-Beam Mode Glass Fiber Optic Cables
for OCT300-M1K and VL18LL Sensors

Cylindrical Sensing Head

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
LME 18-2.3-0.5-K3	0.5 m	2.3 mm	Stainless Steel	OJ500-M1K	1300 mm	
				OCT500-M1A	1300 mm	
				OCT300-M1K	410 mm	
				VL18LL	360 mm	
LCE 18-2.3-0.5-K2	0.5 m	2.3 mm	PVC	OJ500-M1K	1300 mm	
				OCT500-M1A	1300 mm	
				OCT300-M1K	410 mm	
				VL18LL	360 mm	
LME 18-2.3-0.5-K2	0.5 m	2.3 mm	Stainless Steel	OJ500-M1K	1300 mm	
LME 18-2.3-1.0-K2*	1 m			OCT500-M1A	1300 mm	
				OCT300-M1K	410 mm	
LME 18-2.3-2.0-K2	2 m			VL18LL	360 mm	
LME 18-2.3-0.5-K4	0.5 m	2.3 mm	Stainless Steel	OJ500-M1K	1300 mm	
				OCT500-M1A	1300 mm	
				OCT300-M1K	410 mm	
				VL18LL	not compatible	

* Sensing ranges based on this model.

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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
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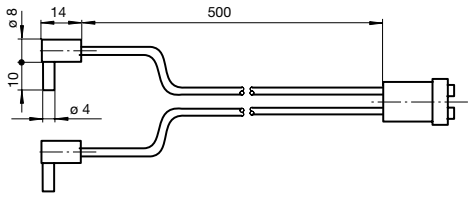
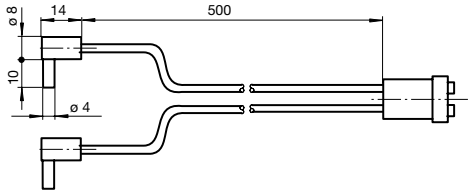
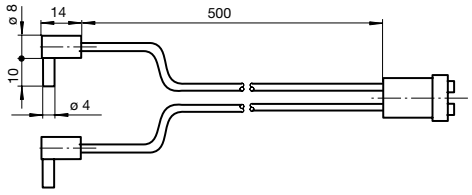
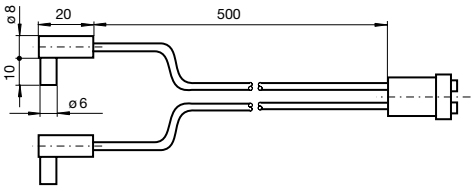
Glass Fiber Optic Cables

Thru-Beam Mode Glass Fiber Optic Cables
for OCT300-M1K and VL18LL Sensors

Right Angle Sensing Head

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
LCE 18-2.3-0.5-K9	0.5 m	2.3 mm	PVC	OJ500-M1K	830 mm	
				OCT500-M1A	830 mm	
				OCT300-M1K	240 mm	
				VL18LL	240 mm	
LSE 18-1.1-0.5-K9	0.5 m	1.1 mm	Silicone	OJ500-M1K	275 mm	
				OCT500-M1A	275 mm	
				OCT300-M1K	97 mm	
				VL18LL	89 mm	
LME 18-1.9-0.5-K9	0.5 m	1.9 mm	Stainless Steel	OJ500-M1K	1050 mm	
				OCT500-M1A	1050 mm	
				OCT300-M1K	310 mm	
				VL18LL	270 mm	
LME 18-2.3-0.5-K10	0.5 m	2.3 mm	Stainless Steel	OJ500-M1K	830 mm	
				OCT500-M1A	830 mm	
				OCT300-M1K	308 mm	
				VL18LL	not compatible	

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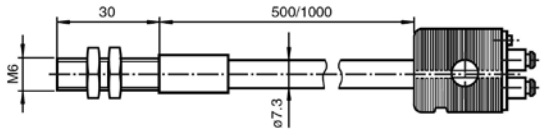
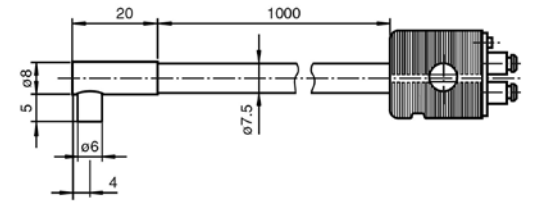
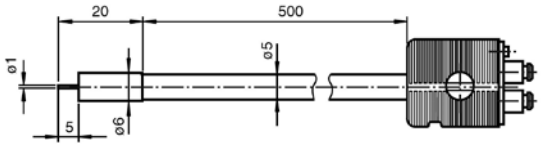
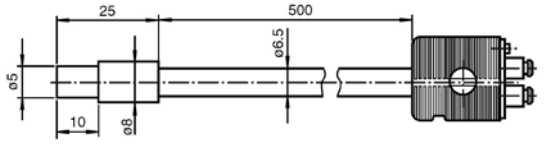
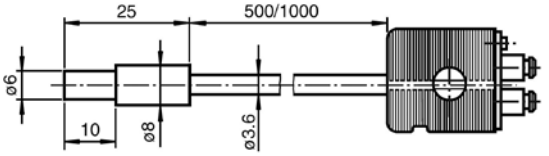
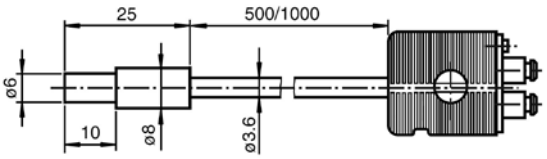
Glass Fiber Optic Cables

Diffuse Mode Glass Fiber Optic Cables
for MLV41-LL-IR and MLV41-LL-RT Sensors

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
LLR 04-1.6-0.5-G	0.5 m	1.6 mm	Metal-Silicone	MLV41-LL-IR	90 mm	
				MLV41-LL-RT	40 mm	
LLR 04-1.9-1.0-WC5	1.0 m	1.9 mm	Metal-Silicone	MLV41-LL-IR	100 mm	
				MLV41-LL-RT	50 mm	
LMR 04-0.5-0.5-Z1	0.5 m	0.5 mm	Metal	MLV41-LL-IR	7 mm	
				MLV41-LL-RT	6 mm	
LMR 04-1.9-0.5-Z1	0.5 m	1.9 mm	Metal	MLV41-LL-IR	90 mm	
				MLV41-LL-RT	40 mm	
LCR 04-1.6-0.5-Z1	0.5 m	1.6 mm	PVC	MLV41-LL-IR	80 mm	
				MLV41-LL-RT	40 m	
LCR 04-1.6-1.0-Z1	1.0 m	1.6 mm	PVC	MLV41-LL-IR	100 mm	
				MLV41-LL-RT	50 mm	

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USA: +1 330 486 0001 fa-info@us.pepperl-fuchs.com
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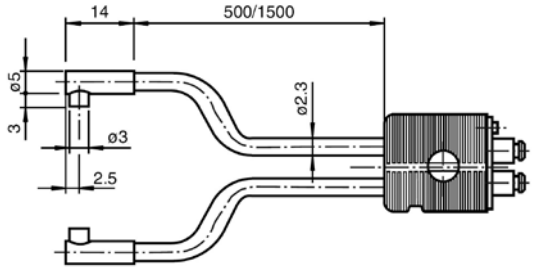
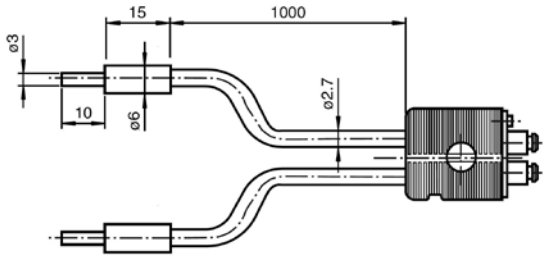
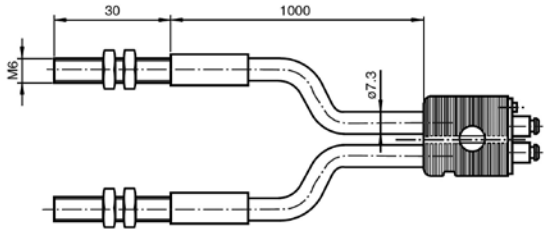
for MLV41-LL-IR and MLV41-LL-RT Sensors

Model Number	Cable Length	Fiber Diameter	Sheathing Material	Compatible Sensors	Sensing Range	Dimensions (mm)
LCE 04-1.1-0.5-WC3	0.5 m	1.1 mm	PVC	MLV41-LL-IR	100 mm	
				MLV41-LL-RT	50 mm	
LCE 04-1.6-1.0-Z1	1.0 m	1.6 mm	PVC	MLV41-LL-IR	280 mm	
				MLV41-LL-RT	80 mm	
LLE 04-1.6-1.0-G	1.0 m	1.6 mm	Metal-Silicone	MLV41-LL-IR	280 mm	
				MLV41-LL-RT	40 mm	

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Fiber Optic Cables Accessories

Accessories for Plastic Fiber Optic Cables

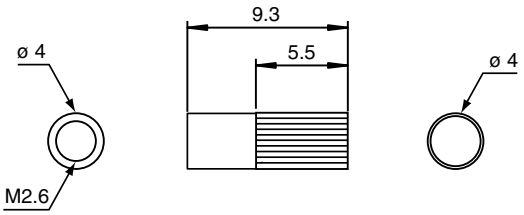
(Dimensions in mm)

MHP-FOA
One-piece adapter that allows use of 2.2 mm diameter plastic fiber optic cables with MHP-FR sensors.

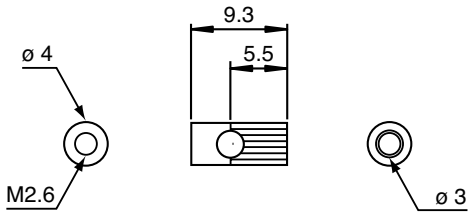
PFA-1MM
This adapter must be used to ensure proper connection of all 1 mm bundle diameter plastic fiber optic cables. Sold individually. Two units are required for a fiber optic cable.
Adapter included with all 1 mm bundle diameter fiber optic cables.

KL-CUT2
Plastic fiber optic cable cutter.

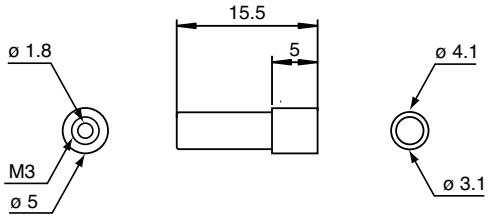
K-LA01
Lens for M2.6 threaded tip thru-beam plastic fiber optics, stainless steel, increases operating distance. Sold individually.



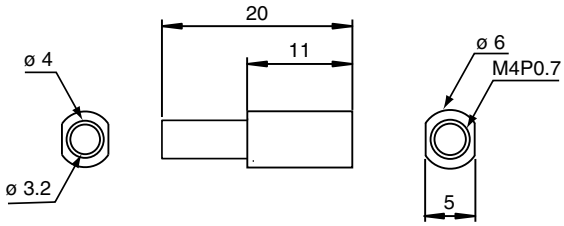
K-LA02
Right–angled lens for M2.6 threaded tip thru-beam plastic fiber optics, stainless steel. Sold individually.



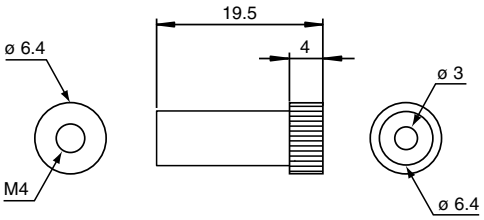
K-LA03
Lens for M3 threaded tip diffuse plastic fiber optics, plastic. Focuses light spot to 0.5 mm diameter.



K-LA04
Lens for M4 threaded tip diffuse plastic fiber optics, plastic. Focuses light spot to 0.7 mm diameter.



K-LA06
Collimation lens for M4 threaded tip diffuse fiber optics, plastic. Increases operating range up to eight times.



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