



fibers LL3, Fibers, through-beam system

LL3-TR02



Model Name > [LL3-TR02](#)
Part No. > [5308053](#)



At a glance

- Quick and easy mounting
- Models with hexagonal flange for trouble-free mounting with only one nut
- Optional tip adapter for a larger detection distance and small objects

Your benefits

- Very large selection of fiber-optic cables with plastic and glass fibers, giving users more application flexibility
- Resistant to damage caused by mechanical and chemical stress, as well as high temperatures
- Standard and customer-specific types
- Simple installation saves time
- For detection of objects, surfaces, leading edges, and fluid levels

Features

For fiber-optic sensor:	WLL160(T), WLL170-2/WLL170T-2, WLL180T, WLL190T-2
Device type:	Fibers
Jacket material:	PE
Core material:	PMMA
Sleeve material:	Stainless steel ¹⁾
Diameter, connection:	1 mm
Mounting sleeve dimension:	M3
Bend radius, fibre-optic cable:	4 mm
Heat resistance:	70 °C
Ambient operating temperature:	-40 °C ... 70 °C
Minimal object diameter:	0.1 mm ²⁾
Core structure:	4 x Ø 0.25 mm
Fiber-optic cable cuttable ³⁾ :	✓
Thread sleeve:	✓
Sleeve:	-
90° offset:	-
Flat housing:	-
High flexible:	✓
Long end sleeve:	-
Array:	-
High temperature:	-
Oil/chemical resistant:	-
Lcd/clear material/semiconductor:	-
Vacuum:	-

Robotics:	✓
Retro-reflective:	-
Liquid level:	-
Special features:	Flexible fiber-optic cable, extra-small end sleeve
Category fiber-optic cables:	Flexible fiber-optic cable, Threaded sleeve
Fiber length:	2,000 mm

1) Stainless steel 2) Minimum detectable object was determined at optimal measuring distance and optimal setting 3) FC fiber optic cable cutter included in delivery

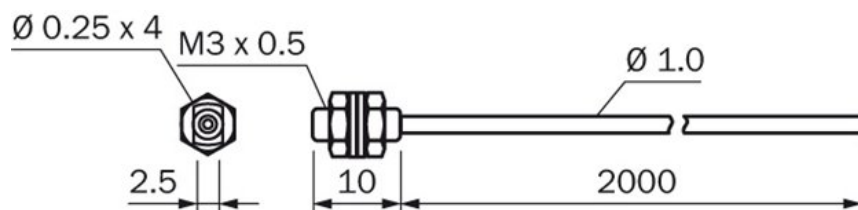
Sensing range with WLL180T

Operating mode 16 µs:	60 mm
Operating mode 70 µs:	175 mm
Operating mode 250 µs:	330 mm
Operating mode 2 ms:	750 mm
Operating mode 8 ms:	1,100 mm

Sensing range with WLL170-2

Redlight 250 µs:	115 mm
Greenlight 250 µs:	23 mm
Highspeed 50 µs:	38 mm

Dimensional drawing



All dimensions in mm

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