



fibers  
LL3, Fibers, through-beam system

LL3-TR01



**Model Name** > [LL3-TR01](#)  
**Part No.** > [5308052](#)



**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**

Device type:	Fibers
Jacket material:	PE
Core material:	PMMA
Sleeve material:	Brass (Br)
Diameter, connection:	2.2 mm
Mounting sleeve dimension:	M4
Bend radius, fibre-optic cable:	4 mm
Heat resistance:	+70 °C
Ambient operating temperature:	-40 °C ... +70 °C
Minimal object diameter:	0.3 mm <sup>1)</sup>
Core structure:	16 x Ø 0,265 mm
Fiber-optic cable cuttable <sup>2)</sup> :	✓
Thread sleeve:	✓
Sleeve:	-
Suitable tip adaptor:	LL3-TA01, LL3-TA02
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, standard, large sensing range
Category fiber-optic cables:	Flexible fiber-optic cable, Threaded sleeve
Fiber length:	2,000 mm
For fiber-optic sensor:	WLL160(T), WLL170-2/WLL170T-2, WLL180T, WLL190T-2

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

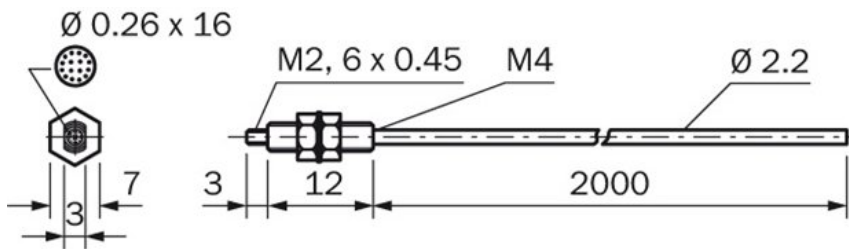
### Sensing range with WLL180T

Operating mode 16 µs:	200 mm
Operating mode 70 µs:	600 mm
Operating mode 250 µs:	1,000 mm
Operating mode 2 ms:	2,400 mm
Operating mode 8 ms:	4,000 mm

### Sensing range with WLL170-2

Redlight 250 µs:	340 mm
Greenlight 250 µs:	125 mm
Highspeed 50 µs:	125 mm

### Dimensional drawing



All dimensions in mm

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