



**fibers**  
**LL3, Fibers, through-beam system**

LL3-TV04



**Model Name** > [LL3-TV04](#)  
**Part No.** > [5308060](#)



**At a glance**

- Sensor tip can be positioned closely to the object
- Flexible end sleeve is available as an option
- Extremely narrow access to place of detection

**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 <sup>1)</sup>
Diameter, connection:	1 mm
Mounting sleeve dimension:	M3
Bend radius, fibre-optic cable:	15 mm
Heat resistance:	70 °C
Ambient temperature operation:	-40 °C ... 70 °C
Minimal object diameter:	0.1 mm <sup>2)</sup>
Core structure:	Ø 0,5 mm
Fiber-optic cable cuttable <sup>3)</sup> :	✓
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:	90° deflection, compact, M3
Category fiber-optic cables:	90° deflection, Threaded sleeve, Long end 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

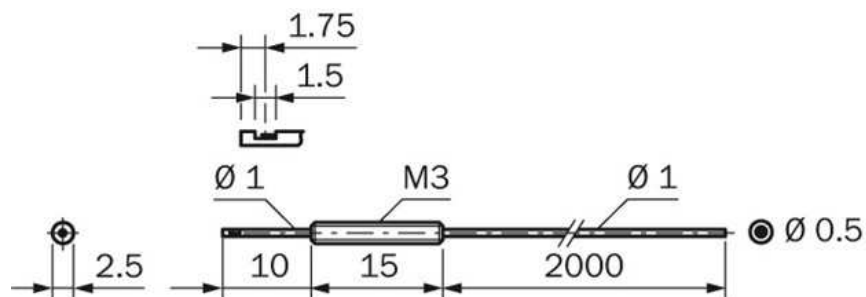
### Sensing range with WLL180T

Operating mode 16 µs:	30 mm
Operating mode 70 µs:	130 mm
Operating mode 250 µs:	250 mm
Operating mode 2 ms:	550 mm
Operating mode 8 ms:	800 mm

### Sensing range with WLL170-2

Redlight 250 µs:	77 mm
Greenlight 250 µs:	16 mm
Highspeed 50 µs:	27 mm

### Dimensional drawing



All dimensions in mm

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