



fibers LL3, Fibers, through-beam system

LL3-TG04



Model Name > [LL3-TG04](#)
Part No. > [5324499](#)



At a glance

- Detection of glass substrates
- Detection of solar wafers
- Indexation in FOUP for example

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
Diameter, connection:	1 mm
Mounting sleeve dimension:	20 x 1.5 x 1.7 mm
Bend radius, fibre-optic cable:	10 mm
Heat resistance:	60 °C
Ambient operating temperature:	-40 °C ... 60 °C
Minimal object diameter:	0.02 mm ¹⁾
Core structure:	Ø 0,5 mm
Fiber-optic cable cuttable ²⁾ :	✓
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:	-
Category fiber-optic cables:	LCDs/transparent objects/semiconductors
Fiber length:	2,000 mm

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

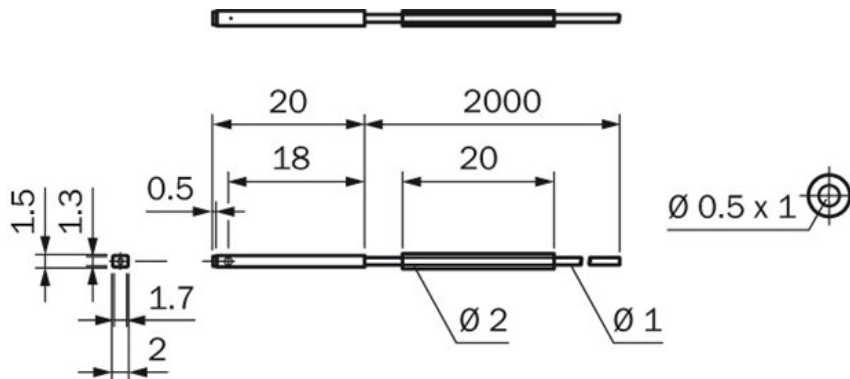
Sensing range with WLL180T

Operating mode 16 μ s:	100 mm
Operating mode 70 μ s:	290 mm
Operating mode 250 μ s:	500 mm
Operating mode 2 ms:	1,000 mm
Operating mode 8 ms:	1,100 mm

Sensing range with WLL170-2

Redlight 250 μ s:	250 mm
Greenlight 250 μ s:	120 mm
Highspeed 50 μ s:	120 mm

Dimensional drawing



All dimensions in mm

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