LTF12UC2LDQ
Photoelectric Sensor – Laser Scanning System
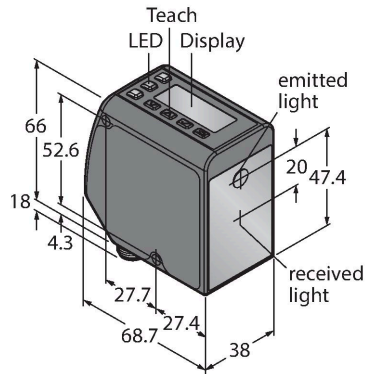

Technical data

Type	LTF12UC2LDQ
ID no.	3094853
Optical data	
Function	Proximity switch
Operating mode	Runtime
Light type	Red
Wavelength	660 nm
Laser class	⚠ 2
Optical resolution	3 mm
Repeatability	1.5 mm
Range	50…12000 mm
Ambient light immunity	40000 lux
Electrical data	
Operating voltage	12…30 VDC
DC rated operational current	≤ 85 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	NO contact, PNP/NPN
Output 2	Analog output
Type of analog output	0…10 V
Voltage output	0…10 V
Switching frequency	≤ 250 Hz
Readiness delay	≤ 2 s
Readiness delay	≤ 2000 ms
Response time typical	< 1.5 ms
Mechanical data	
Design	Rectangular, LTF

Features

■ 2-line, 8-segment display
■ M12 × 1 male connector, rotatable, 5-pin
■ Range: 0.05…12 m
■ Laser class 2, red, 660 nm, acc. to IEC 60825-1:2007
■ Resolution: 0.3…3 mm
■ Operating voltage: 12…30 VDC
■ PNP/NPN-switching output, switchable
■ Analog output: 0…10 V

Wiring diagram
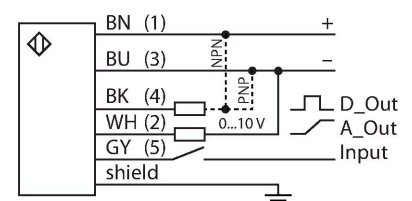
Functional principle

The LTF laser sensors measure the distance to an object up to a range of 12 m. The settings are made via buttons on the housing. The built-in display assists with the menu navigation and serves to display the measured distance. The switching output is re-programmable and the analog output is, depending on the type, either laid out as current or voltage output. The integrated connector is rotatable by 90° degrees which makes it easy to mount. The transmitter LED can be turned off via the menu or the gray wire (PIN 5). The same wire can be used to operate two devices in the synch mode, which prevents mutual influence. The measuring accuracy can be obtained from the excess gain curve.

Technical data

Dimensions	77 x 26 x 56 mm
Housing material	Metal, Die-cast zinc alloy, Black
Lens	plastic, Polycarbonate
Electrical connection	Connectors, M12 × 1, PVC
Number of cores	5
Ambient temperature	-20…+55 °C
Storage temperature	-30…+65 °C
Relative humidity	90 %
Protection class	IP67
Special features	keep/defer
Power-on indication	LED, Green
Switching state	LED, Yellow
Tests/approvals	
Vibration resistance	acc. to IEC 60947-5-2
Shock test	acc. to IEC 60947-5-2
Approvals	CE

Excess Gain Curve
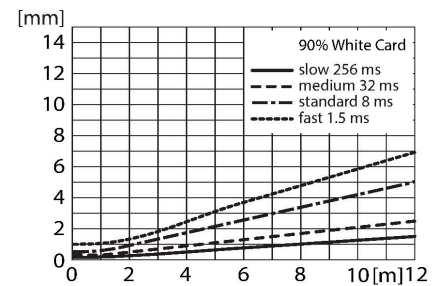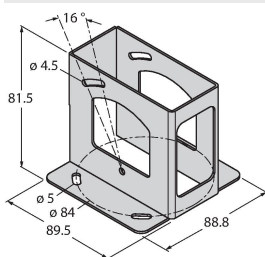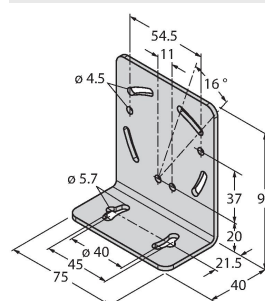

Accessories

SMBLTFU	3094757

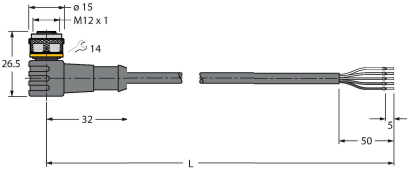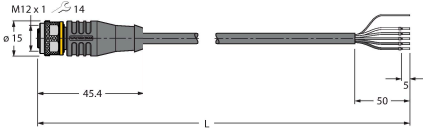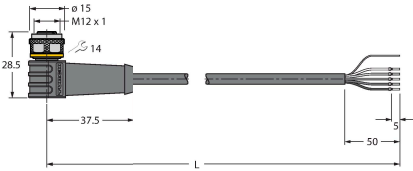Protective housing, stainless steel, for sensors of the LTF series

SMBLTFL	3094756

Mounting bracket, rectangular, stainless steel, for sensors of the LTF series

Accessories

Dimension drawing	Type	ID no.	
	RKC4.5T-2/TEL	6625016	Connection cable, female M12, straight, 5-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com
	WKC4.5T-2/TEL	6625028	Connection cable, female M12, angled, 5-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com
	RKS4.5T-2/TEL	6626361	Connection cable, M12 female connector, straight, 5-pin, cable length: 2 m, sheath material: PVC, black; shielded; cULus approval; other cable lengths and qualities available, see www.turck.com
	WKS4.5T-2/TEL	6626364	Connection cable, M12 female connector, angled, 5-pin, cable length: 2 m, sheath material: PVC, black; shielded; cULus approval; other cable lengths and qualities available, see www.turck.com