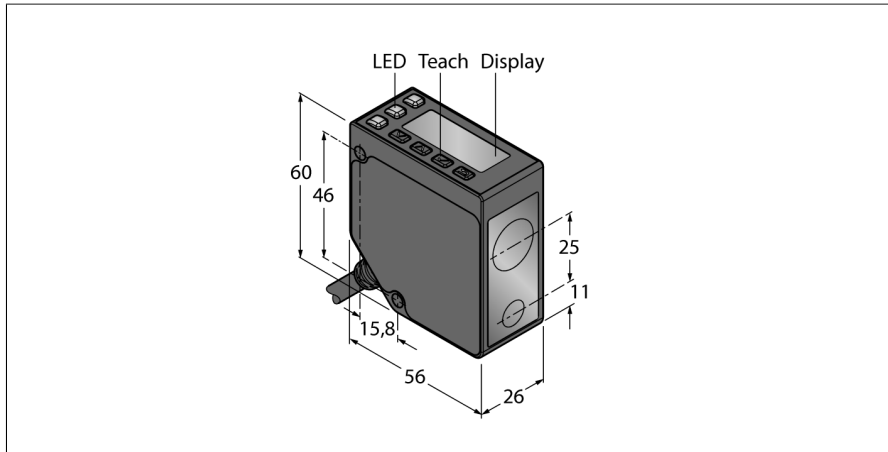


Photoelectric Sensor

Diffuse-Mode Laser Sensor (Runtime Measurement)

With Analog Output

LTF12UC2LD W/30



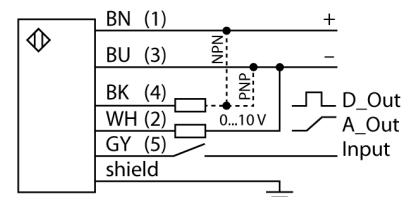
Type	LTF12UC2LD W/30
ID	3094856

Optical data	
Function	Proximity switch
Operating mode	Time-of-Flight
Light type	Red
Wavelength	660 nm
Laser class	▲ 2
Optical resolution	3 mm
Repeatability	1.5 mm
Range	50...12000 mm
Ambient light immunity	40,000 lux

Electrical data	
Operating voltage U_s	12...30 VDC
DC rated operating current I_s	≤ 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

- 2-line, 8-segment display
- Cable, PVC, 9 m
- 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

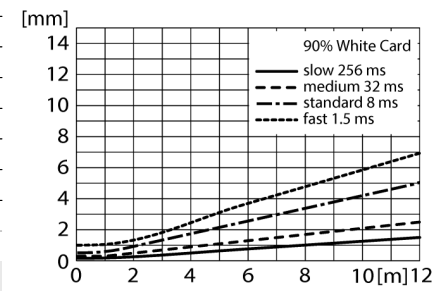


Functional principle

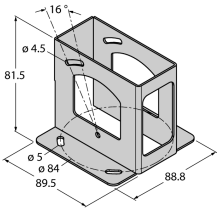
The LTF laser sensors measure the distance to an object up to a range of 12 m. The settings are made via buttons on the housing. The built-in display assists with the menu navigation and serves to display the measured distance. The switching output is re-programmable and the analog output is, depending 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.

Mechanical data	
Design	Rectangular, LTF
Housing material	Metal, Zinc Alloy Die-Cast, Black
Lens	plastic, Polycarbonate
Electrical connection	Cable, 9 m, PVC
Number of cores	5
Ambient temperature	-20...+55 °C
Storage temperature	-30...+65°C
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

Type code	Ident no.		Dimension drawing
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	