

LTF24IC2LDQ Photoelectric Sensor – Laser Measuring System



Technical data

Туре	LTF24IC2LDQ
ID no.	3801449
Optical data	
Function	Proximity switch
Operating mode	Runtime
Light type	Red
Wavelength	660 nm
Laser class	<u>A</u> 2
Optical resolution	3 mm
Repeatability	1.5 mm
Range	5024000 mm
Ambient light immunity	40000 lux
Electrical data	
Operating voltage	1230 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	420 mA
Current output	420 mA
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...24 m Laser class 2, red, 660 nm, acc. to IEC
- 60825-1:2007
- Resolution: 0.3...4 mm
- Operating voltage: 12...30 VDC
- PNP/NPN-switching output, switchable
- Analog output: 4...20 mA

Wiring diagram



Functional principle

The LTF laser sensors measure the distance to an object up to a range of 24 m. The devices are configured 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	Pump function 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



3094756

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



Accessories

