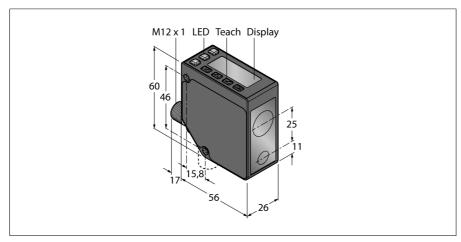
Photoelectric sensor laser scanning system LE250DQ

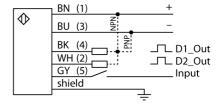




Type designation	LE250DQ 3094200		
Ident no.			
Operating mode	Laser sensor, diffuse mode (triangulation)		
Light type	red		
Wavelength	650 nm		
Laser class	<u></u> 2		
Optical resolution	0.2 mm		
Repeatability	0.1 mm		
Range	100400 mm		
Ambient temperature	-20+55 °C		
Ambient light immunity	> 10000 lux		
Operating voltage	1230 VDC		
DC rated operational current	≤ 70 mA		
Short-circuit protection	yes		
Reverse polarity protection	yes		
Output 2	Switching output		
Switching frequency	≤ 250 Hz		
Readiness delay	≤ 2 s		
Approvals	CE, cULus listed		
Design	Rectangular, LE250		
Dimensions	56 mm x 26 mm x 77 mm		
busing material Die-cast zinc, ZN, Black			
Lens	plastic, Polycarbonate		
Electrical connection Connector, M12 — 1			
Protection class	IP67		
Special features	Synchronization		
Power-on indication	LED green		
Switching state	LED yellow		

- 2-line, 8-segment display
- Rotatable connector, male M12 x 1, 5pin
- Range: 100...400 mm
- Laser class 2, red, 650 nm, acc. to IEC 60825-1:2007
- Resolution at 100 mm 250 mm distance: < 0.02 mm</p>
- Resolution at 250 mm 400 mm distance: < 0.2 mm</p>
- Operating voltage: 12...30 VDC
- Two switching outputs PNP/NPN configurable

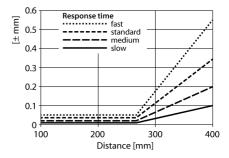
Wiring Diagram



Functional principle

The laser distance sensors of the LE250 Series measure the distance to the object to 400 mm. The devices are set with buttons on the housing. The built-in display assists with the menu navigation and serves to display the measured distance. The switching output is reprogrammable 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 grey wire (PIN 5). The same wire can be used to operate two devices in the synch mode, which prevents mutual influence. The measuring accuracy is 0.02 mm at a distance of 250 mm and 0.2 mm at a distance of 400 mm.

Excess Gain Curve



Photoelectric sensor laser scanning system LE250DQ



Accessories

Type code	Ident no.	Description	
SMBLEL	3086754	Mounting bracket, rectangular, stainless steel, for side mounting of LE250/550 sensors	2.8 50.8 64.5 (8x) 64.5 (8x) 64.5 (8x) 65.7 (2x) 65.7 (2x)
SMBLEFA	3088226	Mounting bracket, rotatable, stainless steel, for sensors of the LE250/550 series	15.4 60 46 23 2,8 3/16-16 UNC 43.8
SMBLEU	3086755	Protective housing, stainless steel, for sensors of the LE250/550 series	69.5 1 46 10.6 6 47.8 68 63.8

Wiring accessories

Type code	Ident no.	Description	
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	
			M12 x 1 Ø 15 1/5 14
			11.5 - - 42 - - 50 -
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	0 15 M12 x 1
			32 50

Photoelectric sensor laser scanning system LE250DQ



Wiring accessories

Type code	ldent no.	Description	
RKS4.5T-2/TEL	6626361	Connection cable, M12 female connector, straight, 5-pin, cable length: 2 m, sheath material: PVC, black; shielded; cU-Lus approval; other cable lengths and qualities available, see www.turck.com	M12 x 1
WKS4.5T-2/TEL	6626364	Connection cable, M12 female connector, angled, 5-pin, cable length: 2 m, sheath material: PVC, black; shielded; cU-Lus approval; other cable lengths and qualities available, see www.turck.com	28.5