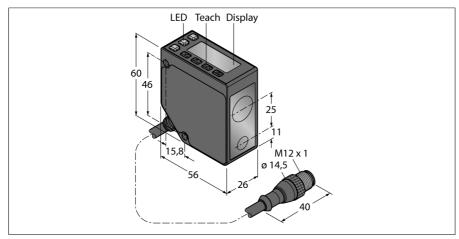
# Photoelectric sensor laser scanning system LE250DQP

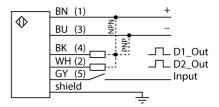




Type designation	LE250DQP	
Ident no.	3094201	
Operating mode	Laser sensor, diffuse mode (triangulation)	
Light type	red	
Wavelength	650 nm	
Laser class	<u>▲</u> 2	
Optical resolution	0.2 mm	
Repeatability	0.1 mm	
Range	100400 mm	
Ambient temperature	-20+55 °C	
Ambient light immunity	> 10000 lux	
Operating 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	
imensions 56 mm x 26 mm x 60 mm		
using material Die-cast zinc, ZN, Black		
Lens	plastic, Polycarbonate	
Electrical connection	trical connection Cable with connector, M12 -( 1, PVC	
Protection class	IP67	
Special features	Synchronization	
wer-on indication LED green		
tching state LED yellow		

- 2-line, 8-segment display
- Cable with male end M12 x 1, 5-pin, PVC, 150 mm
- 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

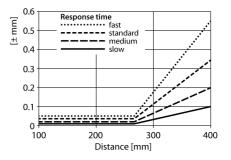
# Wiring Diagram



#### **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 LE250DQP



### **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	
			M12×1 Ø15
			+ 11.5 + + - 50 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 26.5
			- 32 50 50 -

# Edition • 2017-02-26T13:22:50+01:00

# Photoelectric sensor laser scanning system LE250DQP



# 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	M12x1
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	0 15 M12x 1 28.5 37.5