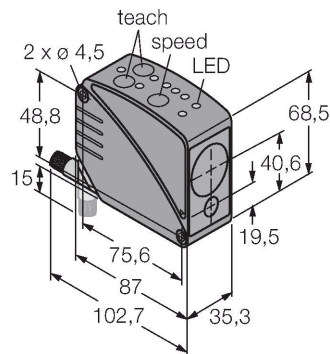


DO2L5M-Q68-LI2P5X5-H1181

Photoelectric Sensor – Diffuse Mode Sensor

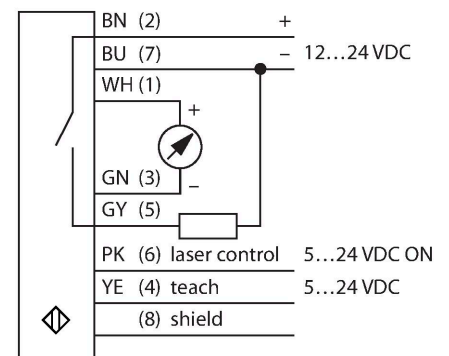
Laser Running Time Meter



Features

- Male, M12 x 1, 8-pin
- Indication of signal intensity
- Protection class IP67
- Measuring range (distance to white object): 5 m
- 3 response times adjustable for switching output
- Operating voltage: 12...24 VDC
- Hysteresis and measuring range independently adjustable
- Edge of the analog output invertible

Wiring diagram



Functional principle

This distance sensor uses pulsed time-of-flight technology and is thus extremely powerful. The laser pulses one million times per second. The microprocessor records the time required for each pulse to travel to the object and back to the sensor. Every millisecond, one thousand pulse times are averaged and the corresponding value is transferred to the output. The sensor achieves its highest accuracy after a 30-min. warm-up period.

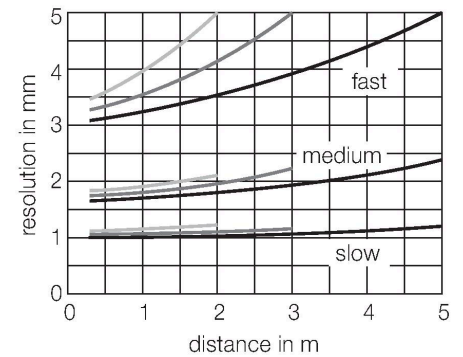
Technical data

Type	DO2L5M-Q68-LI2P5X5-H1181
ID	7700461
Function	Laser sensor, diffuse mode (time-of-flight)
Light type	Red
Wavelength	658 nm
Laser class	▲ 2
Repeatability	1 mm
Range	300...5000 mm
Operating voltage	12...24 VDC
Residual ripple	< 10 % U _{ss}
DC rated operational current	≤ 100 mA
No-load current	≤ 108 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	NO contact, PNP/Analog output
Current output	4...20 mA
Load resistance	≤ 1000 Ω
Switching frequency	≤ 1000 Hz
Readiness delay	≤ 1 s
Design	Rectangular, LT3
Dimensions	87 x 35.3 x 68.5 mm
Housing material	Plastic, ABS, Black
Lens	plastic, Acryl
Electrical connection	Connector, M12 x 1
Ambient temperature	0...+50 °C
Protection class	IP67

Technical data

Special features	Laser Teach input
Power-on indication	LED, Green
Switching state	LED, Yellow
Error indication	LED
Excess gain indication	LED, red
MTTF	15 years acc. to SN 29500 (Ed. 99) 40 °C

Resolution in Dependence on Distance

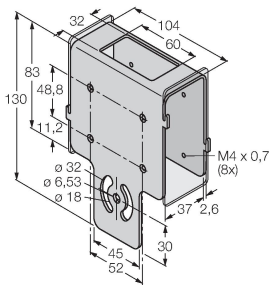


Accessories

TMBMSQ68IP

7700410

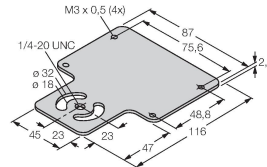
Protective housing with safety glass, stainless steel, for Q68



TMBMSQ68P

7700411

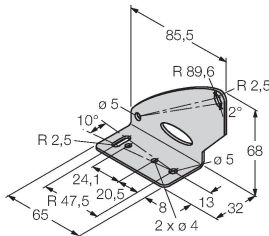
Mounting plate, stainless steel, for Q68



TMBQ68

7700412

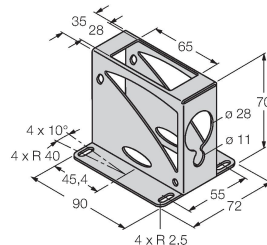
Mounting bracket, stainless steel, for Q68



TMBQ68E

7700413

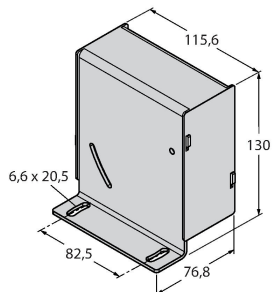
Protective housing, stainless steel, for Q68



TMBQ68IP

7700414

Protective housing, stainless steel, for Q68



Accessories

Dimension drawing	Type	ID	
	WKC8T-2/TEL	6625133	Connection cable, M12 female connector, angled, 8-pin, cable length: 2 m, jacket material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com
	RKC8T-2/TEL	6625130	Connection cable, M12 female, straight, 8-pin, cable length: 2 m, jacket material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com