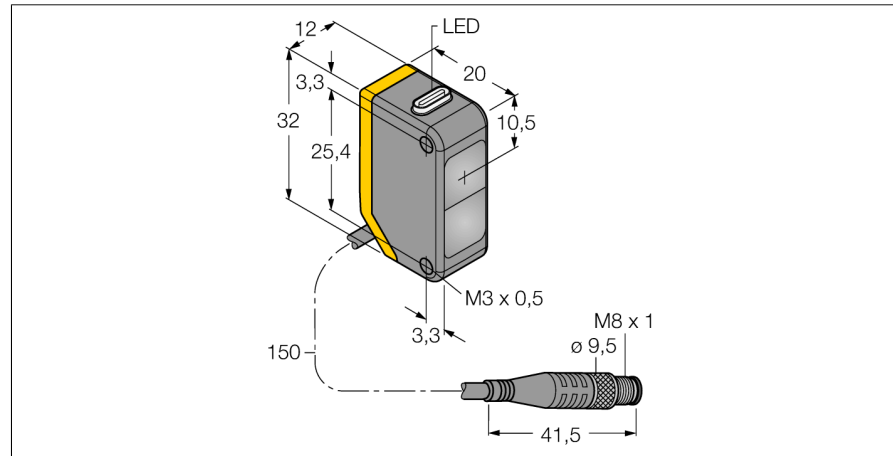


**Photoelectric sensor
opposed mode sensor (emitter)
Q20EQ**



- Cable with male end, PVC, M8 x 1, 4-pin, 150 mm
- Protection class IP67
- LED all-round visible
- Operating voltage: 10...30 VDC

Wiring diagram

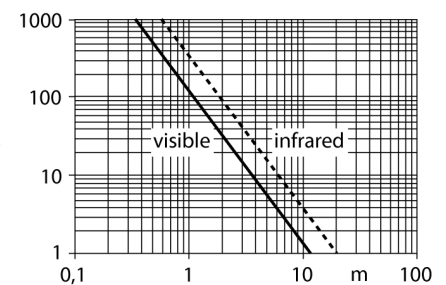


Type code	Q20EQ
Ident no.	3078225
Operating mode	opposed mode sensor (emitter)
Light type	red
Wavelength	630 nm
Range	0...12000 mm
Ambient temperature	-20...+60 °C
Operating voltage	10...30VDC
Residual ripple	< 10 % U _s
No-load current I ₀	≤ 18 mA
Reverse polarity protection	yes
Design	rectangular, Q20
Dimensions	20 x 12 x 32 mm
Housing material	plastic, ABS
Lens	plastic, acrylic
Connection	cable with connector, PVC, M8 x 1
Cable length	0.15 m
Protection class	IP67
Power-on indication	LED green

Functional principle

Opposed mode sensors consist of an emitter and receiver. They are installed opposite each other so that the light from the emitter is aimed directly at the receiver. When an object interrupts or weakens the light beam, the sensor switches. Opposed mode sensors are the most reliable photoelectric sensors for detection of opaque targets. An excellent contrast between light and dark conditions and an extremely high excess gain are typical of this sensing mode, thus allowing operation over larger distances and under difficult conditions.

Excess gain curve

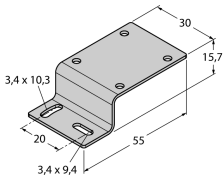
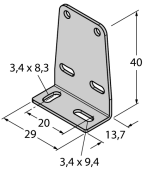
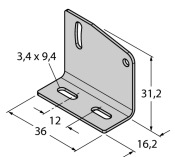
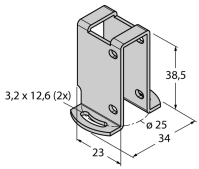


**Photoelectric sensor
opposed mode sensor (emitter)
Q20EQ**

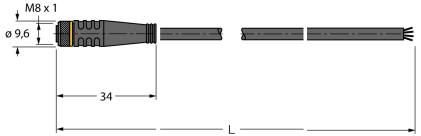
TURCK

Industrial
Automation

Accessories

Type code	Ident no.	Description	Dimension drawing
SMBQ20H	3079041	Mounting bracket, stainless steel, horizontally mounted, for Q20	
SMBQ20L	3079040	Mounting bracket, stainless steel, rectangular, for Q20	
SMBQ20LV	3079042	Mounting bracket, stainless steel, rectangular, for Q20	
SMBQ20U	3079043	Protective housing, stainless steel, for Q20	

Wiring accessories

Type code	Ident no.	Description	Dimension drawing
PKG4M-2/TEL	6625061	Connection cable, female M8, straight, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com	

**Photoelectric sensor
opposed mode sensor (emitter)
Q20EQ**

Wiring accessories

Type code	Ident no.	Description	Dimension drawing
PKW4M-2/TEL	6625067	Connection cable, female M8, angled, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com	
PKG4S-2/TEL	6627370	Connection cable, female Ø 8 mm, straight, 4-pin, snap-on type, cable length: 2 m; sheath material: PVC, sheath color: black, cULus approved, RoHS conform, protection class IP67	
PKW4S-2/TEL	6627373	Connection cable, female Ø 8 mm, straight, 4-pin, snap-on type, cable length: 2 m; sheath material: PVC, sheath color: black, cULus approved, RoHS conform, protection class IP67	