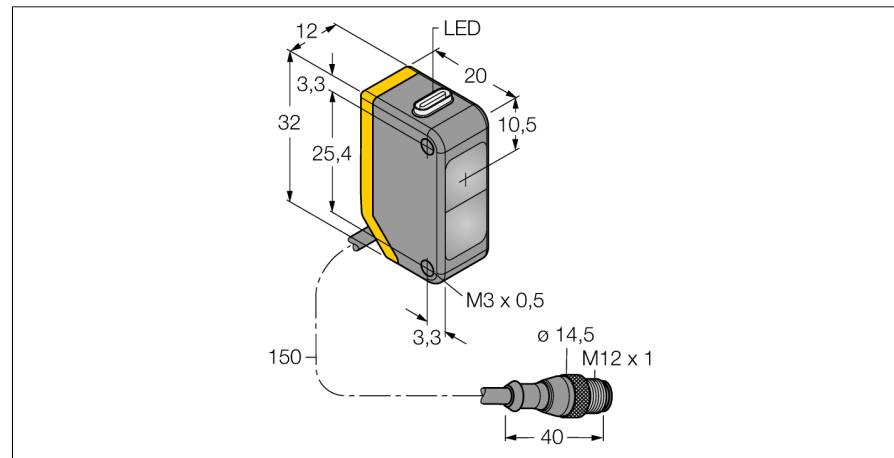


**Photoelectric sensor  
opposed mode sensor (emitter)  
Q20EQ5**



- Cable with male end, M12 x 1, 4-pin, PVC, 150 mm
- Protection class IP67
- LED all-round visible
- Operating voltage: 10...30 VDC

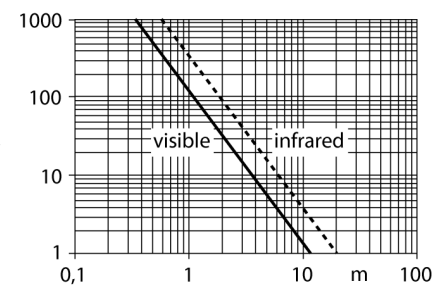
**Wiring diagram**



**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**



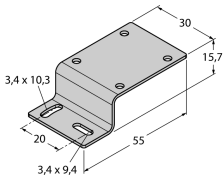
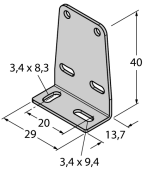
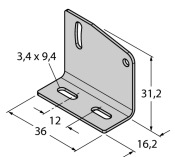
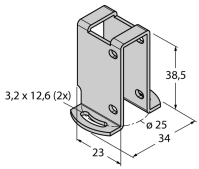
<b>Type code</b>	Q20EQ5
Ident no.	3078205
<b>Operating mode</b>	opposed mode sensor (emitter)
Light type	red
Wavelength	630 nm
Range	0...12000 mm
Ambient temperature	-20...+60 °C
<b>Operating voltage</b>	10...30VDC
Residual ripple	< 10 % U <sub>ss</sub>
No-load current I <sub>0</sub>	≤ 18 mA
Reverse polarity protection	yes
<b>Design</b>	rectangular, Q20
Dimensions	20 x 12 x 32 mm
Housing material	plastic, ABS
Lens	plastic, acrylic
Connection	cable with connector, PVC, M12 x 1
Cable length	0.15 m
Protection class	IP67
<b>Power-on indication</b>	LED green

**Photoelectric sensor  
opposed mode sensor (emitter)  
Q20EQ5**

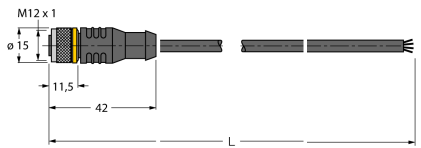
**TURCK**

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
RKC4.4T-2/TEL	6625013	Connection cable, female M12, straight, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see <a href="http://www.turck.com">www.turck.com</a>	

**Photoelectric sensor  
opposed mode sensor (emitter)  
Q20EQ5**

**Wiring accessories**

Type code	Ident no.	Description	Dimension drawing
WKC4.4T-2/TEL	6625025	Connection cable, female M12, angled, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see <a href="http://www.turck.com">www.turck.com</a>	