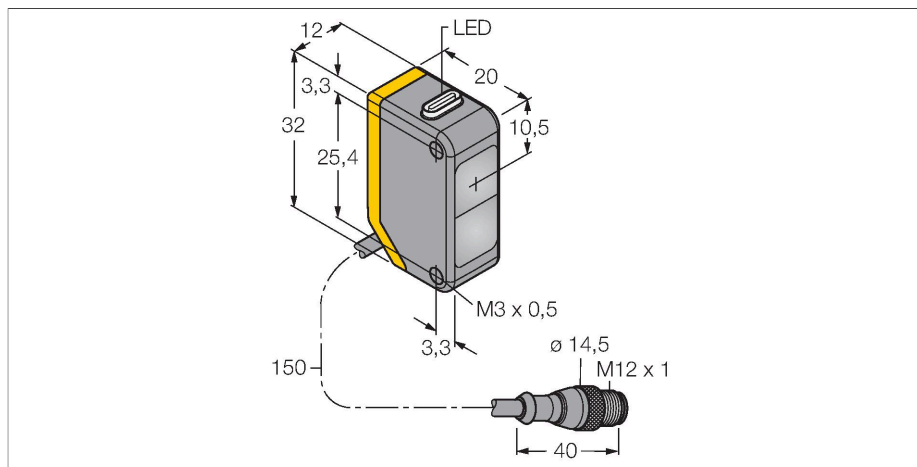


# Q20EQ5

## Photoelectric Sensor – Opposed Mode Sensor (Emitter)



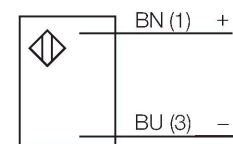
### Technical data

Type	Q20EQ5
ID	3078205
<b>Optical data</b>	
Function	Opposed mode sensor
Operating mode	Emitter
Light type	Red
Wavelength	655 nm
Range	0...12000 mm
<b>Electrical data</b>	
Operating voltage	10...30 VDC
Residual ripple	< 10 % U <sub>ss</sub>
No-load current	≤ 18 mA
Reverse polarity protection	yes
Readiness delay	≤ 100 ms
<b>Mechanical data</b>	
Design	Rectangular, Q20
Dimensions	20 x 12 x 32 mm
Housing material	Plastic, Thermoplastic material
Lens	plastic, Acrylic
Electrical connection	Cable with connector, M12 x 1, 0.15 m, PVC
Number of cores	4
Ambient temperature	-20...+60 °C
Protection class	IP67
Power-on indication	LED, Green
Excess gain indication	LED

### Features

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

### Wiring diagram



### Functional principle

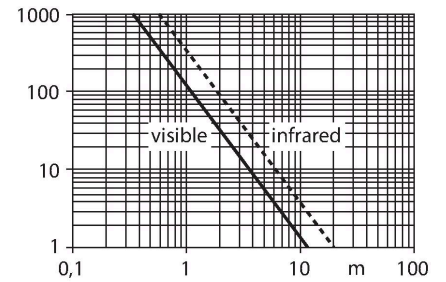
Opposed mode sensors consist of an emitter and receiver. They are installed opposite each other so that the light from the emitter is aimed directly at the receiver. When an object interrupts or weakens the light beam, the sensor switches. Opposed mode sensors are the most reliable photoelectric sensors 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.

## Technical data

### Tests/approvals

Approvals CE

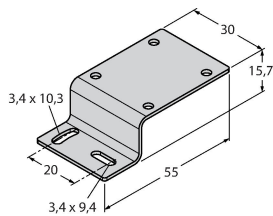
### Excess Gain Curve



## Accessories

SMBQ20H

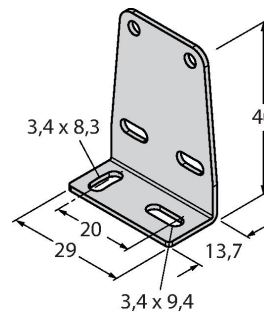
3079041



Mounting bracket, stainless steel, horizontally mounted, for Q20

SMBQ20L

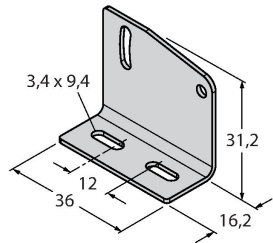
3079040



Mounting bracket, stainless steel, rectangular, for Q20

SMBQ20LV

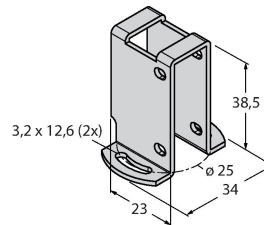
3079042



Mounting bracket, stainless steel, rectangular, for Q20

SMBQ20U

3079043



Protective housing, stainless steel, for Q20

## Accessories

Dimension drawing

Type

ID

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 [www.turck.com](http://www.turck.com)



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 [www.turck.com](http://www.turck.com)

