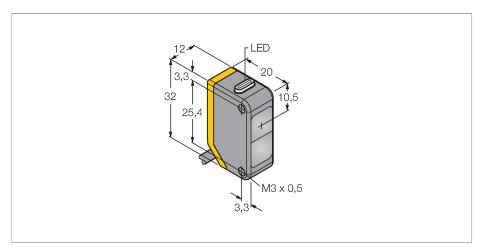
Q20E | 19-01-2022 00-59 | Technical modifications reserved

Q20E Photoelectric Sensor – Opposed Mode Sensor (Emitter)



Technical data

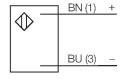
Туре	Q20E
ID	3077781
Optical data	
Function	Opposed mode sensor
Operating mode	Emitter
Light type	Red
Wavelength	655 nm
Range	012000 mm
Electrical data	
Operating voltage	1030 VDC
Residual ripple	< 10 % U _{ss}
No-load current	≤ 18 mA
Reverse polarity protection	yes
Readiness delay	≤ 100 ms
Mechanical data	
Design	Rectangular, Q20
Dimensions	20 x 12 x 32 mm
Housing material	Plastic, Thermoplastic material
Lens	plastic, Acrylic
Electrical connection	Cable, 2 m, PVC
Number of cores	4
Core cross-section	0.35 mm ²
Ambient temperature	-20+60 °C
Protection class	IP67
Power-on indication	LED, Green
Excess gain indication	LED



Features

- Cable, PVC, 2 m
 Protection class IP67
 LED all-round visible
 Operating voltage: 10...30 VDC

Wiring diagram



Functional principle

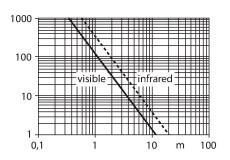
Opposed mode sensors consist of an emitter and receiver. They are installed opposite each other so that the light from the emitter is aimed directly at the receiver. When an object interrupts or weakens the light beam, the sensor switches. Opposed mode sensors are the most reliable photoelectric sensors for detection of opaque targets. An excellent contrast between light and dark conditions and an extremly 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

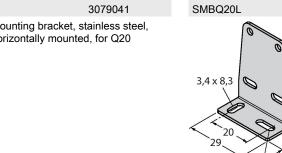
Excess Gain Curve



Accessories

SMBQ20H 3079041

Mounting bracket, stainless steel, horizontally mounted, for Q20



3079040 Mounting bracket, stainless steel, rectangular, for Q20

SMBQ20LV

Mounting rectangular rectangular

Mounting bracket, stainless steel, rectangular, for Q20

3079042



3,4 x 9,4

Protective housing, stainless steel, for Q20

3079043