

1) Sensing surface



### Basic features

<b>Approval/Conformity</b>	CE cULus EAC
<b>Basic standard</b>	IEC 60947-5-2
<b>Principle of operation</b>	Photoelectric sensor
<b>Reference receiver</b>	BOS Q08M-...KE20-..
<b>Series</b>	Q08M
<b>Style</b>	Square Connection 90°

### Electrical connection

<b>Cable length L</b>	0.2 m
<b>Connection</b>	Cable with connector, M8x1-Male, 3-pin, 0.20 m, PUR
<b>Polarity reversal protected</b>	yes
<b>Protection against device mix-ups</b>	yes

### Electrical data

<b>No-load current I<sub>0</sub> max. at U<sub>e</sub></b>	20 mA
<b>Operating voltage U<sub>b</sub></b>	10...30 VDC
<b>Rated insulation voltage U<sub>i</sub></b>	75 V DC
<b>Rated operating voltage U<sub>e</sub> DC</b>	24 V
<b>Ripple max. (% of U<sub>e</sub>)</b>	15 %

### Environmental conditions

<b>Ambient temperature</b>	-10...60 °C
<b>EN 60068-2-27, Shock</b>	Half-sinus, 100 gn, 2 ms, 3x8000 Half-sinus, 30 gn, 11 ms, 3x6
<b>EN 60068-2-6, Vibration</b>	10...55 Hz, amplitude 1 mm, 3x30 min 10...2000 Hz, amplitude 1 mm, 30 gn, 3x5 h
<b>Protection degree</b>	IP67

### Functional safety

<b>MTTF (40 °C)</b>	632 a
---------------------	-------

### Material

<b>Housing material</b>	Zinc, Die casting
<b>Material jacket</b>	PUR
<b>Material sensing surface</b>	PMMA
<b>Surface protection</b>	nickel plated

### Mechanical data

<b>Dimension</b>	8 x 44 x 8 mm
<b>Mounting</b>	Screw M3

## Optical features

Beam characteristic	Divergent
LED group per IEC 62471	Exempt Group
Light spot size	Ø 3.0 mm Light exit
Light type	Red light
Principle of optical operation	Through-beam sensor (Emitter)

Smallest part typ.	0.4 mm at 1 m. R0 = 2 m
Wave length	655 nm

## Range/Distance

Range	0...2.2 m
Rated operating distance Sn	2.2 m

## Remarks

Order accessories separately.

Only for applications per NFPA 79 (machines with a supply voltage of maximum 600 V). Use an R/C (CYJV2) cable with suitable properties for attaching the device.

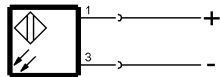
For more information about MTTF and B10d see MTTF / B10d Certificate

Indication of the MTTF- / B10d value does not represent a binding composition and/or life expectancy assurance; these are simply experiential values with no warranty implications. These declared values also do not extend the expiration period for defect claims or affect it in any way.

## Connector Drawings



## Wiring Diagrams



1) Emitter

## Opto Symbols

