

1) Optical axis receiver, 2) Output function



IND. CONT. EQ.
 81U2
 Class 2 Type 1



Display/Operation

| | |
|----------------|--|
| Display | Limit range - LED yellow, flashing LED yellow: Light received |
|----------------|--|

Electrical connection

| | |
|--|--|
| Cable diameter D | 3.00 mm |
| Cable length L | 0.2 m |
| Connection | Cable with connector, M8x1-Male, 3-pin, 0.20 m, PUR |
| Contact, surface protection | Gold plated |
| Polarity reversal protected | yes |
| Protection against device mix-ups | yes |
| Short-circuit protection | yes |

Electrical data

| | |
|---|-------------|
| Load capacitance max. at Ue | 0.05 µF |
| No-load current I_o max. at Ue | 10 mA |
| Operating voltage U_b | 10...30 VDC |
| Rated insulation voltage U_i | 75 V DC |
| Rated operating current I_e | 100 mA |
| Rated operating voltage U_e DC | 24 V |
| Ready delay t_v max. | 20 ms |
| Ripple max. (% of U_e) | 10 % |
| Switching frequency | 500 Hz |
| Turn-off delay t_{off} max. | 1 ms |
| Turn-on delay t_{on} max. | 1 ms |
| Utilization category | DC -13 |
| Voltage drop U_d max. at I_e | 0.7 V |

Environmental conditions

| | |
|--------------------------------|--|
| Ambient temperature | -5...55 °C |
| EN 60068-2-27, Shock | Half-sinus, 30 gn, 11 ms, 3x6 Half-sinus, 100 gn, 2 ms, 3x8000 |
| EN 60068-2-6, Vibration | 10...55 Hz, amplitude 1 mm, 3x30 min 10...2000 Hz, amplitude 1 mm, 30 gn, 3x5 h |
| IP rating | IP67 |

General data

| | |
|-------------------------------|--------------------------|
| Approval/Conformity | cULus CE WEEE |
| Basic standard | IEC 60947-5-2 |
| Principle of operation | Photoelectric sensor |
| Series | Q08M |
| Style | Square Connection 90° |

Material

| | |
|---------------------------------|-------------------|
| Housing material | Zinc, Die casting |
| Material jacket | PUR |
| Material sensing surface | PMMA |
| Surface protection | nickel plated |

Mechanical data

| | |
|------------------|---------------|
| Dimension | 8 x 44 x 8 mm |
| Mounting | Screw M3 |

Optical data

| | |
|--------------------------------|--------------------------------|
| Light type | Red light |
| Principle of optical operation | Through-beam sensor (receiver) |
| Switching function, optical | dark-on |

Output/Interface

| | |
|------------------|------------------------|
| Switching output | PNP normally open (NO) |
|------------------|------------------------|

Range/Distance

| | |
|--------------------------------|-----------|
| Range | 0...2.2 m |
| Rated operating distance S_n | 2.2 m |

Remarks

Order accessories separately.

For additional information, refer to user's guide.

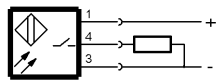
Only for applications per NFPA 79 (machines with a supply voltage of maximum 600 V). Use an R/C (CYJV2) cable with suitable properties for attaching the device.

The sensor is functional again after the overload has been eliminated.

Connector Drawings



Wiring Diagrams



Opto Symbols

