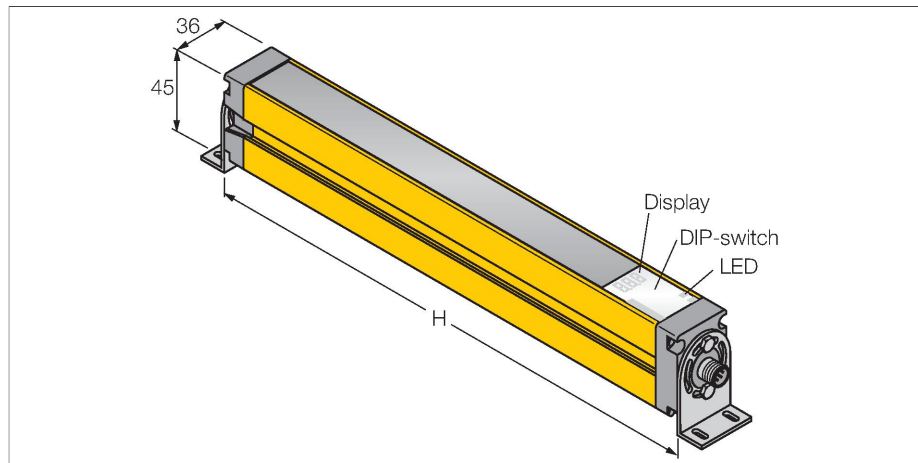


# RO18M-Q45L450-2RP5X2-H1181

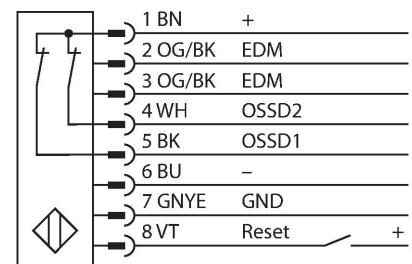
## Safety light screen – Receiver



### Features

- Male, M12 x 1, 8-pin
- Blanking function
- Protection class IP65
- Adjustments via DIP switch
- Operating voltage 24 VDC  $\pm 15\%$
- Resolution 30 mm
- Scan field 450 mm
- Personnel safety Cat 4, PL e acc. to EN ISO 13849-1:2008
- Type 4 acc. to IEC 61496-1,-2
- SIL 3 to IEC 61508

### Wiring diagram



### Functional principle

The high-resolution safety light screen is emitter and receiver in one. As the system is optically synchronized, emitter/receiver wiring is superfluous. The receiver's safety switching outputs are directly connected to a load relay and trigger an immediate stop of the dangerous machine cycle. Personnel safety category Typ 4 nach IEC 61496 is fulfilled through 2-channel monitoring of the switching device and the principle of diverse redundancy by which two processors control each other mutually.

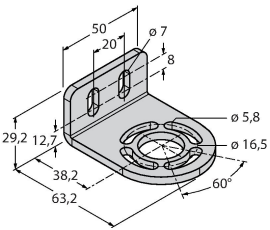
### Technical data

|                             |                                   |
|-----------------------------|-----------------------------------|
| Type                        | RO18M-Q45L450-2RP5X2-H1181        |
| ID                          | 7700305                           |
| Function                    | Light screen                      |
| Optical resolution          | 30 mm                             |
| Range                       | 100...18000 mm                    |
| Scan field                  | 450 mm                            |
| Operating voltage           | 20...28 VDC                       |
| Residual ripple             | $< 10 \% U_{ss}$                  |
| No-load current             | $\leq 275 \text{ mA}$             |
| Short-circuit protection    | yes                               |
| Reverse polarity protection | yes                               |
| Output function             | 2 x NC (normally closed), 2 x PNP |
| Current output              | 0...500 mA                        |
| Response time typical       | $< 13 \text{ ms}$                 |
| Design                      | Rectangular, EZ-Screen            |
| Dimensions                  | 45 x 36 x 522 mm                  |
| Housing material            | Metal, AL, Yellow                 |
| Lens                        | plastic, Acryl                    |
| Cascadable                  | No                                |
| Electrical connection       | Connector, M12 x 1                |
| Ambient temperature         | 0...+50 °C                        |
| Protection class            | IP65                              |
| Power-on indication         | LED, Green                        |
| Switching state             | 2-color LED, Red                  |

Accessories

Q45-MBK-11

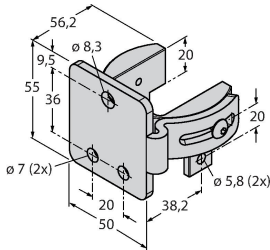
7700390



Mounting bracket, black, steel, for safety light screen Q45L

Q45-MBK-12

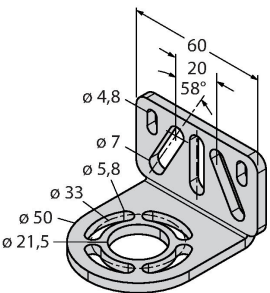
7700391



Mounting bracket, black, steel, for safety light screen Q45L

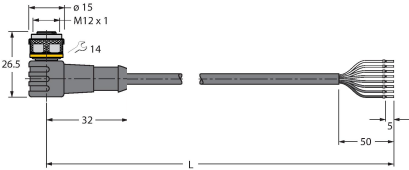
Q45-MBK-20

7700392

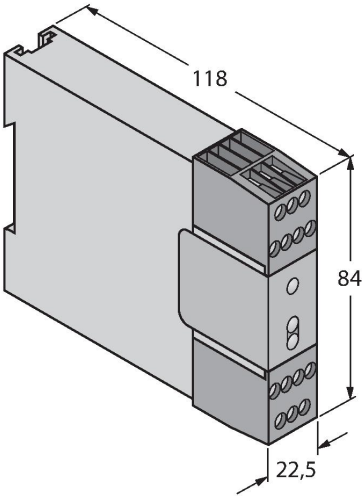
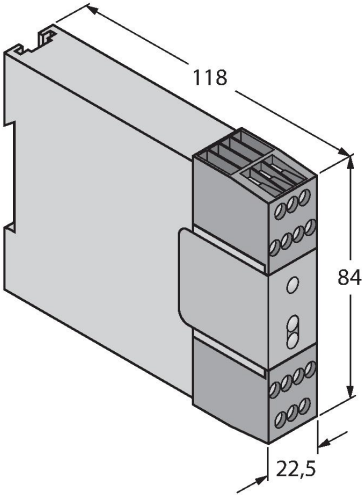


Mounting bracket, black, steel, for safety light screen Q45L

Accessories

| Dimension drawing                                                                   | Type        | ID      |                                                                                                                                                                                                                          |
|-------------------------------------------------------------------------------------|-------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | WKC8T-2/TEL | 6625133 | Connection cable, M12 female connector, angled, 8-pin, cable length: 2 m, jacket material: PVC, black; cULus approval; other cable lengths and qualities available, see <a href="http://www.turck.com">www.turck.com</a> |
|  | RKC8T-2/TEL | 6625130 | Connection cable, M12 female, straight, 8-pin, cable length: 2 m, jacket material: PVC, black; cULus approval; other cable lengths and qualities available, see <a href="http://www.turck.com">www.turck.com</a>         |

Accessories

| Dimension drawing                                                                  | Type             | ID      |                                                                                                                 |
|------------------------------------------------------------------------------------|------------------|---------|-----------------------------------------------------------------------------------------------------------------|
|   | IM73-23-R/24VDC  | 7700346 | Interface module, 2 inputs, 3 NO outputs, 24 VDC, provides max. 6 A, 20 ms response time                        |
|  | IM73-221-R/24VDC | 7700345 | Interface module, 2 inputs, 2 NO outputs, 1 NC auxiliary output, 24 VDC, provides max. 6 A, 20 ms response time |