HIGH-PRECISION

FS/FE 12 RL
FS/FE 18 RL
Laser through-beam sensors

For the needle in the haystack

We have two very compact solutions for the detection of small objects at large distances: Thanks to their small light spot, the FS/FE 12 RL and FS/FE 18 RL laser through-beam sensors are perfect for the detection of even very small parts with a size from only 0.2 mm!

The adjustment of the systems proves to be very simple: Together with the visible red light, the large output signal indicator LED behind the receiver lens facilitates the precise alignment of transmitter and receiver.

The sensitivity of the output may be adjusted in three degrees by means of a control input. With a maximum switching frequency of 10 kHz these sensors are particularly suitable for the detection of very fast processes.

Features

• Detection of very small parts from 0.2 mm
• Scanning range 5 m (FS/FE 12 RL) or 50 m (FS/FE 18 RL)
• Switching frequency 10 kHz
• Output PNP N.O.
• Small size
• Red light 650 nm Laser class 2
• Control line for the setting of three sensitivity degrees
• Test input
### Technical data

#### Optical data
- **Scanning range**: 5 m | 50 m
- **Used light**: laser red 650 nm, pulsed | laser red 650 nm, pulsed
- **Laser protection class**: 2 | 2

#### Electrical data
- **Operating voltage**: 10 ... 30 VDC integrated polarity reversal protection | 10 ... 30 VDC integrated polarity reversal protection
- **Switching frequency**: 10 kHz | 10 kHz
- **Connection**: plug M12 4-pin | plug M12 4-pin
- **Current consumption (no load)**: ≤ 30 mA | ≤ 30 mA
- **Signal output**: PNP N.O. | PNP N.O.
- **Max. output current**: 100 mA with short-circuit protection | 100 mA with short-circuit protection
- **Test input transmitter**: yes | yes
- **Function indicator**: LED yellow - unbroken light beam (receiver) | LED yellow - unbroken light beam (receiver)
- **Power-on delay**: ≤ 300 ms | ≤ 300 ms
- **Protection class**:  |  

#### Mechanical data
- **Casing material**: brass, nickelized | brass, nickelized
- **Protection standard**: IP67 | IP67
- **Ambient temperature range**: -20 ... +65 °C | -20 ... +65 °C
- **Plug connection**: M12 x 1 | M12 x 1

#### Accessory
- **Cable**: L4-2m-G-PUR (Art. n° 902-50805) | L4-2m-G-PUR (Art. n° 902-50805)

#### Wiring diagrams
- **Wiring diagram receiver**
- **Wiring diagram transmitter**

#### Dimensional drawings
- 153-00345 - FE 12 RL
- 153-00351 - FE 18 RL

---

**Sold & Serviced By:**

<a href="http://www.servo2go.com"

**Contact:**

- **Electromate**
  - 877-737-8698
  - sales@electromate.com
  - www.electromate.com

- **Servo2Go.com**
  - 877-378-0240
  - sales@servo2go.com
  - www.servo2go.com