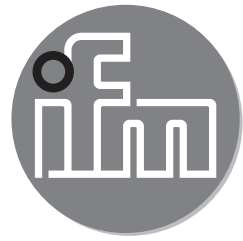


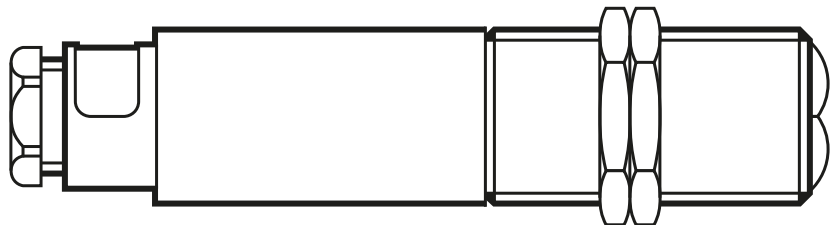
ifm electronic



Operating instructions  
Retro-reflective sensor with  
polarization filter OI  
Diffuse reflection sensor OI  
**efector200**<sup>®</sup>  
OI

UK

80234481 / 00 01 / 2016



# 1 Preliminary note

## 1.1 Symbols used

▶ Instruction

> Reaction, result

[...] Designation of pushbuttons, buttons or indications

→ Cross-reference



Important note

Non-compliance can result in malfunction or interference.

## 2 Safety instructions

- Please read this document prior to set-up of the unit. Ensure that the product is suitable for your application without any restrictions.
- Improper or non-intended use may lead to malfunctions of the unit or to unwanted effects in your application. That is why installation, electrical connection, set-up, operation and maintenance of the unit must only be carried out by qualified personnel authorised by the machine operator.
- In case of malfunction of the unit please contact the manufacturer. If the unit is tampered with and/or modified, any liability and warranty is excluded.

## 3 Functions and features

The unit is used as a photoelectric retro-reflective / diffuse reflection sensor.

## 4 Technical data

### 4.1 DC

Operating voltage:	10-55 V DC incl. residual ripple
Current consumption:	< 30 mA at 24 V
Current rating:	250 mA with short circuit, reverse polarity and overload protection
Output:	PNP / NPN transistor

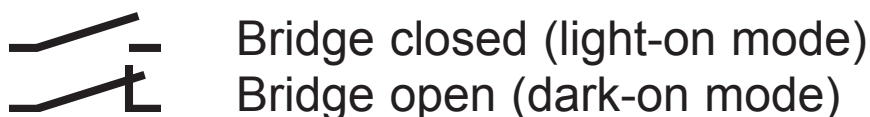
### 4.2 AC/DC

Operating voltage:	20-250 V AC, DC 47-63 Hz
Current consumption:	< 6 mA
Current rating:	350 mA AC up to +50°C 250 mA AC up to +80°C, 100 mA DC
Output:	semiconductor

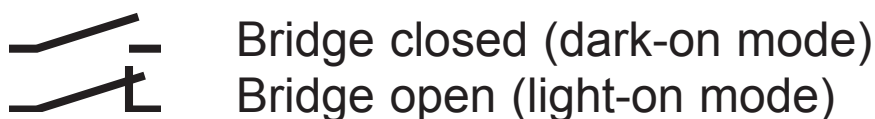
UK

## 5 Programming

### 5.1 Diffuse reflection sensor



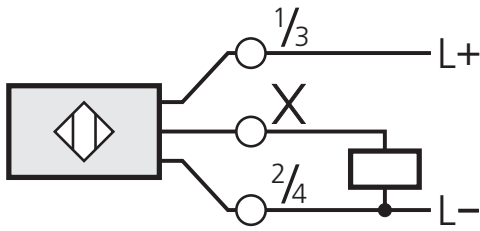
### 5.2 Retro-reflective sensor



## 6 Wiring

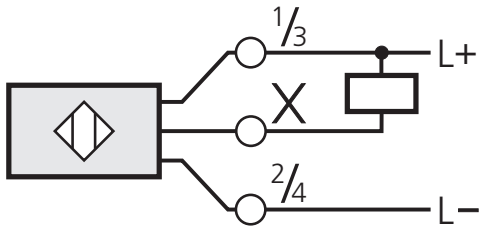
### 6.1 DC

#### 6.1.1 OIR / OIP / OIT-FPKG - PNP



 or  programmable

#### 6.1.2 OIR / OIP / OIT-FNKG - NPN



 or  programmable

### 6.2 AC/DC

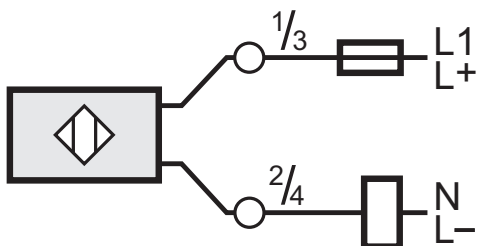


Insert a miniature fuse according to the technical data sheet, if specified.



Check the unit for reliable function after a short circuit.

#### 6.2.1 OIR / OIP / OIT-FBOA



 or  programmable

## 6.3 AC

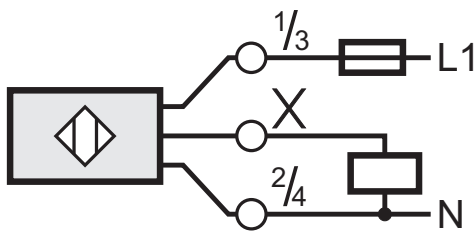


Insert a miniature fuse according to the technical data sheet, if specified.



Check the unit for reliable function after a short circuit.

### 6.3.1 OIT / OIR-FBOW



 or  programmable

UK

## 7 Maintenance, repair, disposal

- ▶ Keep the lens of the sensor free from soiling.
- ▶ For cleaning do not use any solvents or cleaning agents which could damage the plastic parts.
- ▶ After use dispose of the unit in an environmentally friendly way in accordance with the applicable national regulations.

Faulty sensors must only be repaired by the manufacturer.

Technical data and further information at unter [www.ifm.com](http://www.ifm.com)