ifm electronic

$C\epsilon$
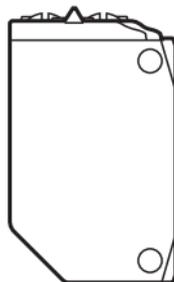
Operating instructions
Diffuse reflection sensor with
background suppression

UK

efector200

O6H3xx

1 Preliminary note

1.1 Symbols used

▶   Instruction

>   Reaction, result

[…]   Designation of pushbuttons, buttons or indications
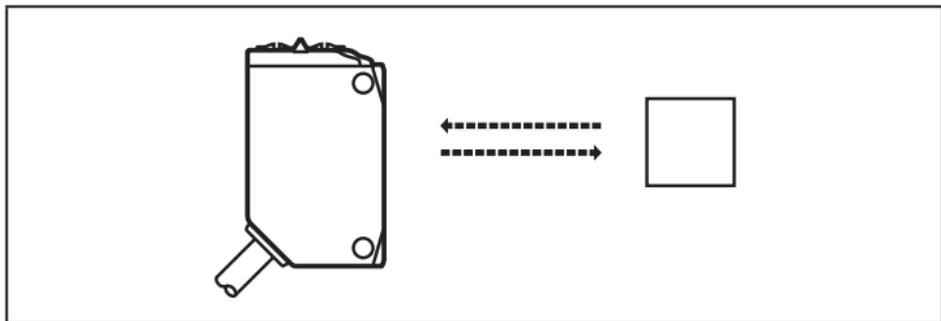
→   Cross-reference

!   Important note
Non-compliance can result in malfunctions or interference.

2 Functions and features

The diffuse reflection sensor detects objects and materials without contact and indicates their presence by a switching signal.
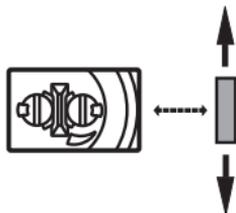
Range: → type label.

3 Installation

▶ Align the diffuse reflection sensor to the object to be detected.
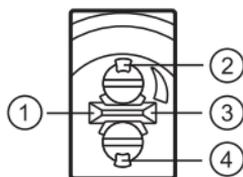
▶ Secure it to a bracket.

Note:
The objects to be detected are to move transversely to the lens of the sensor.
▶ In case of other directions of movement it should be tested before whether safe switching is guaranteed.

4 Operating and display elements

1: LED yellow
2: Setting screw
3: LED green
4: Output function switch

5 Electrical connection
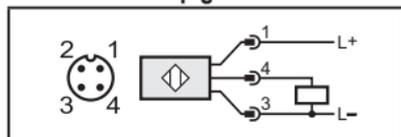
! The unit must be connected by a qualified electrician.

▶ The national and international regulations for the installation of electrical equipment must be adhered to.
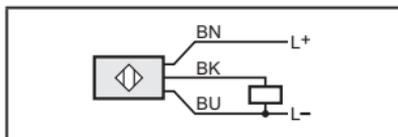
▶ Ensure voltage supply to EN 50178.

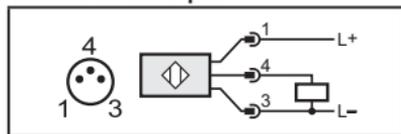▶ Disconnect power.

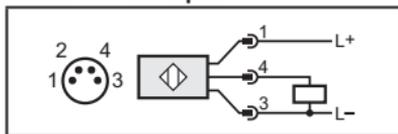▶ Connect the unit as follows:

5.1 PNP

Connector M12 pigtail
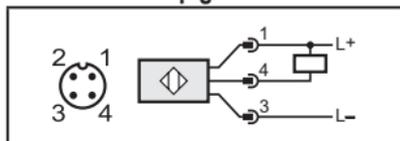

Cable *

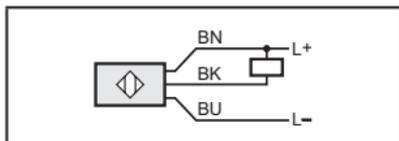**Connector M8 3-pin**

Connector M8 4-pin

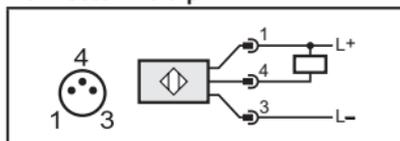* Core colours: BN = brown, BU = blue, BK = black
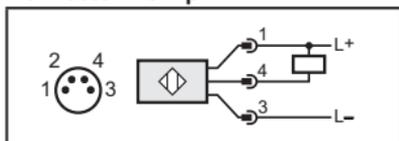
5.2 NPN

Connector M12 pigtail

Cable *

Connector M8 3-pin

Connector M8 4-pin

* Core colours: BN = brown, BU = blue, BK = black

6 Settings

6.1 Set the output function

▶ Setting D: dark-on mode
▶ Setting L: light-on mode

6.2 Set the range

▶ Increase range: turn the setting screw of the potentiometer clockwise.
▶ Decrease range: turn the setting screw of the potentiometer anti-clockwise.

7 Operation

▶ Check whether the unit operates correctly.

> The green LED is lit when the sensor is ready for operation.

> Dark-on mode: the output is switched / the yellow LED is lit when no object is detected.

> Light-on mode: the output is switched / the yellow LED is lit when an object is detected.

8 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