ifm electronic

CE
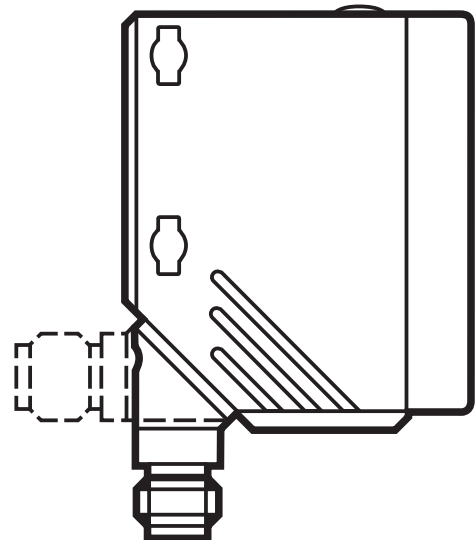
Operating instructions
Retro-reflective sensor

efector200   UK

O5P7xx

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 Safety instructions

According to the cULus approval

Caution - Use of controls or adjustments or procedures other than those specified herein may result in hazardous radiation exposure.
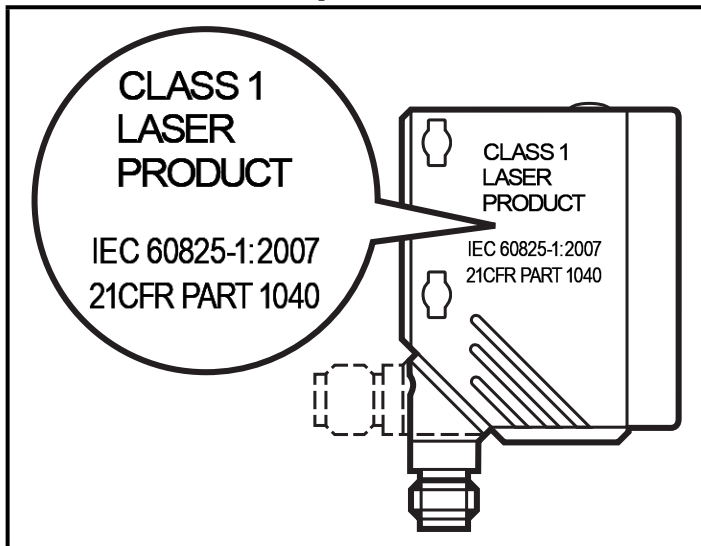
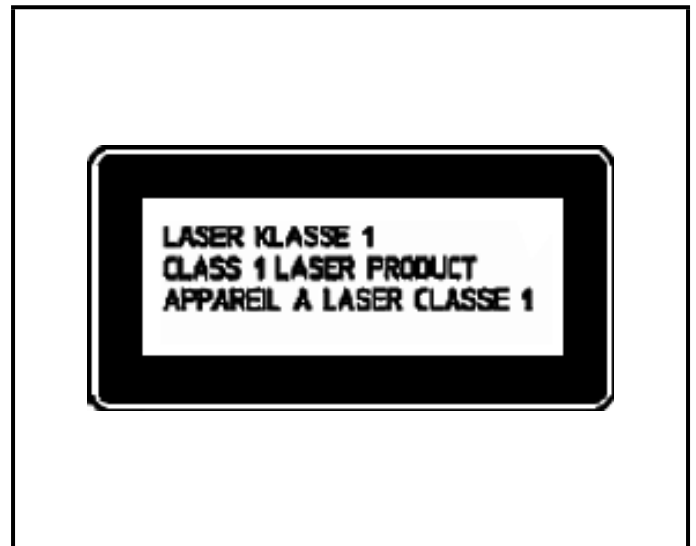Visible laser light; CLASS 1 LASER PRODUCT.
IEC 60825-1 : 2007
Complies with 21 CFR 1040.10 except for deviations pursuant to Laser Notice No. 50, dated June 2007.

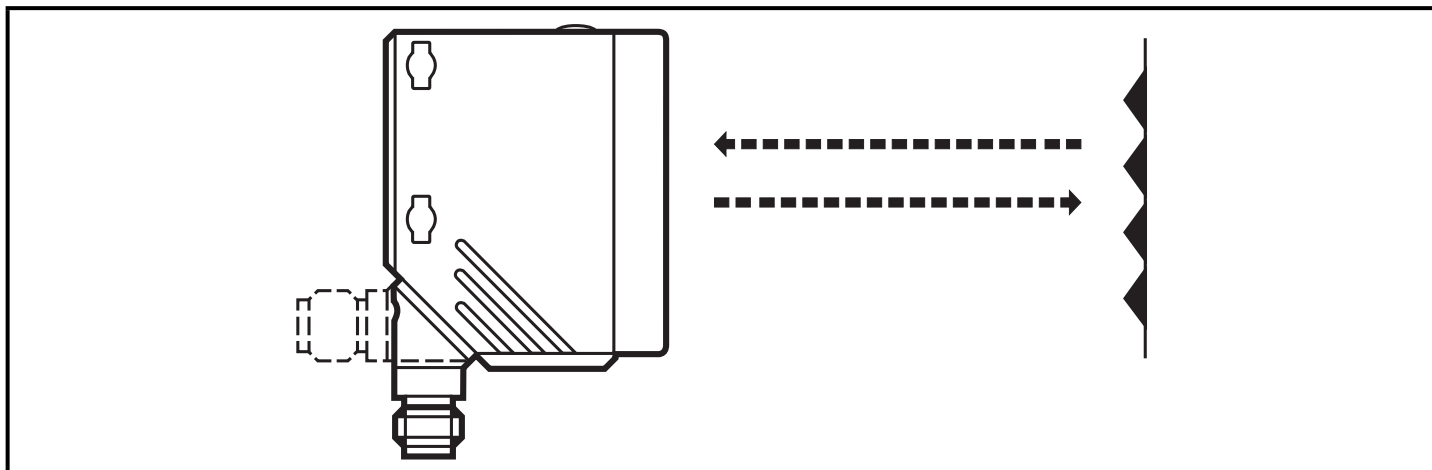**Position of the product label**

Additional label

3 Functions and features

In conjunction with a prismatic reflector or reflective tape the retro-reflective sensor detects objects and materials without contact and indicates their presence by a switching signal.

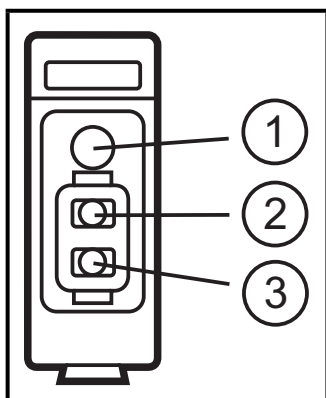Range 15 m (on prismatic reflector Ø 80 (E20005)).

4 Installation

▶ Fit the prismatic reflector or the reflective tape behind the object to be detected.

▶ Align the retro-reflective sensor to it and secure it to a bracket.

Maximum range is only possible with precise alignment.

5 Operating and display elements

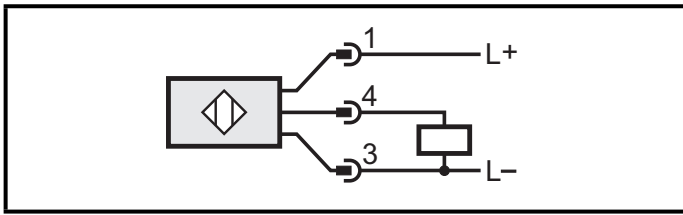1: LED
2: [OUT on]
3: [OUT off]

6 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.

▶ Voltage supply according to EN 50178.

▶ Disconnect power.

▶ Connect the unit as follows:

DC PNP

	pin 1 = L+ (10...36 V DC) (pin 2 = not connected) pin 3 = L- pin 4 = load (PNP, 200 mA)

7 Settings

7.1 The sensor is to switch when the object is detected

1	▶ Position the object.
	▶ Press [OUT on] for 2 s. > The sensitivity is set to the object. > The yellow LED flashes.
2	▶ Remove the object.
	▶ Press [OUT off]. > The sensitivity is set without object. > The yellow LED goes out. The programming is finished.

7.2 The sensor is not to switch when the object is detected

▶ Position the object (see figure 1) and press [OUT off].

▶ Remove the object (see figure 2) and press [OUT on].

The setting can also be carried out first without object (step 1) and then with object (step 2).

7.3 Setting of the maximum sensitivity

▶ Align the sensor so that no light is reflected.

The sensor is to switch when the object is detected

▶ First press [OUT on], then [OUT off].

The sensor is to switch when the object is not detected

▶ First press [OUT off], then [OUT on].

7.4 Programming unsuccessful

> The LED flashes quickly, 8 Hz.

• Measured value difference too small.

• Max. programming time of 15 min. exceeded.

7.5 Electronic lock

Lock or unlock the buttons

▶ Press [OUT on] and [OUT off] simultaneously for 10 s.

> Acknowledgement is indicated by a change of the LED status.

8 Operation

▶ Check whether the unit operates correctly.

> The LED lights when the switching output is switched.

9 Maintenance, repair and disposal

▶ Keep the front pane of the sensor free from soiling.

▶ For cleaning do not use any solvents or cleaning agents which could damage the plastic material.

▶ Do not try to open the module enclosure. There are no user - serviceable components inside.

Technical data and further information at
www.ifm.com → Select your country → Data sheet direct: