



## Operating Instructions

### ews-15/CD

### Ultrasonic one-way reflectiv barrier with one switched output

## Product Description

If an object interrupts the measuring track between two ews-15/CD, one set as a transmitter and another set as a receiver, the switched output of the receiver is set.

Via the push-button, the response time and the output function of the switched output are changeable (Teach-in).

Two LEDs indicate operation and the state of the switched output of the receiver.

## Notes

- The ews-15/CD is optimized for scanning thin films at an spacing of 60...110 mm between transmitter and receiver.
- With the Teach-in procedure the response time and an off-delay can be set to 5 ms.

## Proper use

ews ultrasonic sensors are used for non-contact detection of objects.

## Installation

- Mount two sensors ews-15/CD at the installation site (see fig. 3). Maximum torque: 0,5 Nm
- Connect the connection cables to the M8 device plugs.

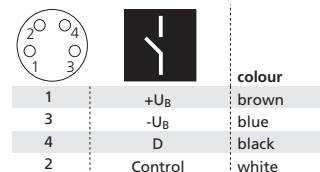


Fig. 1: Pin assignment with view onto sensor plug and colour coding of the microsonic connection cable.

- Set one ews-15/CD to function transmitter and one ews-15/CD as a receiver by corresponding assignment of pin2 (see fig. 1 and 2).

assignment pin 2	operation mode
+U <sub>B</sub>	transmitter
not connected	receiver

Fig. 2: Selection of operation mode.

## Start-Up

- Connect the power supply.
- Carry out the setting in accordance with the diagram.

## Factory Setting

- Switched output on NOC.
- Filter not active.

## Maintenance

microsonic sensors are maintenance-free. In case of excess caked-on dirt we recommend cleaning the white sensor surface

## Notes

- The ultrasonic one-way reflective barrier consists of two sensors ews-15/CD.
- In the normal operating mode, an illuminated yellow LED at the receiver signals the switched output is switched through.

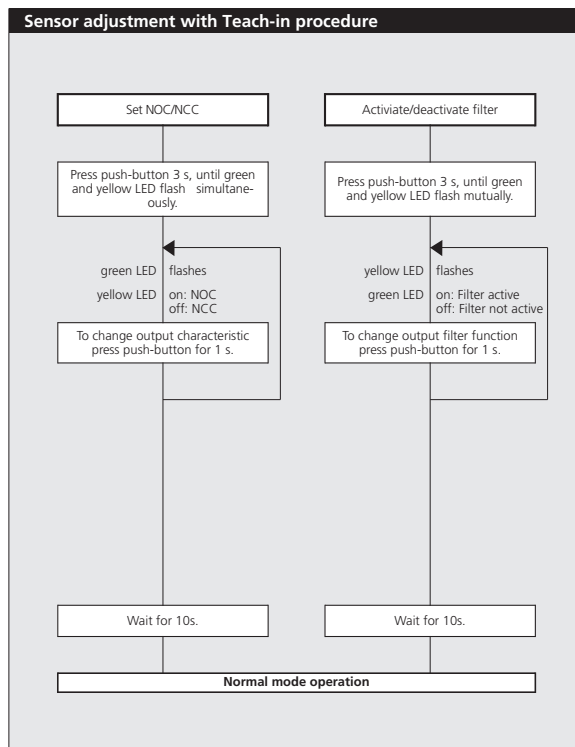
## Contact

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Technical data	
	<b>ews-15/CD</b>
spacing transmitter - receiver	50 - 250 mm
transducer frequency	380 kHz
operating voltage U <sub>B</sub>	20 - 30 V DC, reverse polarity protection
voltage ripple	±10 %
no-load current consumption	< 30 mA
housing	ABS
class of protection to EN 60 529	IP 67
type of connection	4-pin M8 initiator plug
controls	Teach-in push-button
indicators	LED green (transmitter and receiver: operation) LED yellow (only receiver: state of output)
operating temperature	-25°C to +70°C
storage temperature	-40°C to +85°C
weight	8 g
switching frequency <sup>1)</sup>	400 Hz, 80 Hz if filter active
response time <sup>1)</sup>	2,3 ms, 6,9 ms if filter active
time delay before availability	< 300 ms
norm conformity	EN 60947-5-2
order no.	<b>ews-15/CD</b>
switched output	pnp, U <sub>B</sub> -2 V, I <sub>max</sub> = 200 mA switchable NOC/NCC, short-circuit-proof

1) Can be programmed with Teach-in.

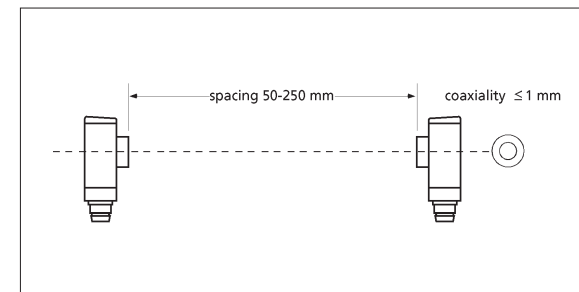


Fig. 3: Mounting of ews-15/CD