



### 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.

### Operating Instructions

#### ews-15/CD

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

### 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.

### Safety Notes

- Read the operating instructions prior to start-up.
- Connection, installation and adjustment works may only be carried out by expert personnel.
- No safety component in accordance with the EU Machine Directive.

### 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.

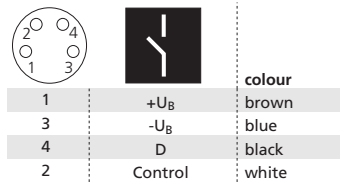


Fig. 1: Pin assignment with view onto sensor plug and colour coding of the microsonic connection cable.

- 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

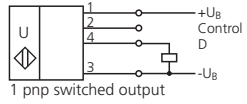
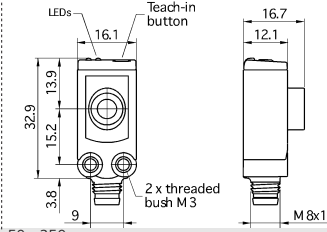
- Switched output on NOC.
- Filter not active.

### 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.

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

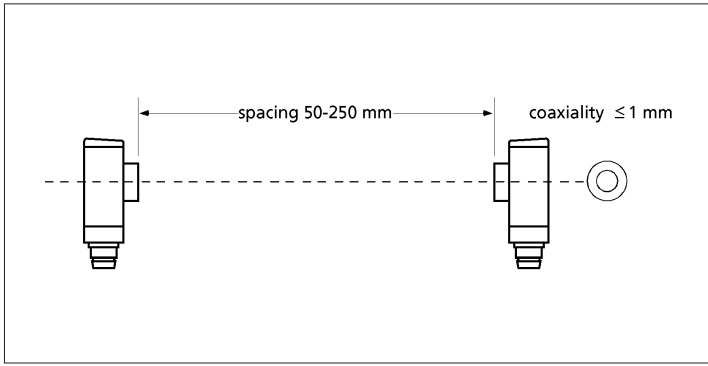
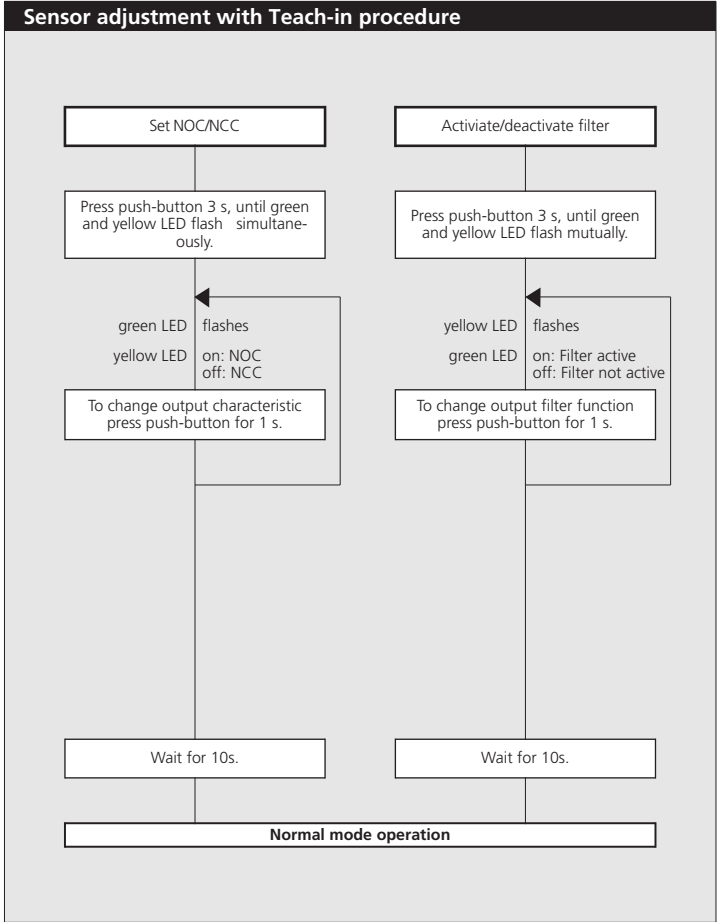


Fig. 3: Mounting of ews-15/CD

