

# Proximity Sensors Inductive Flat pack Polycarbonate Housing Types EI 5510/EI 5515, AC-Types

**SENSOTRONIK**



- Sensing distance 10 or 15 mm
- Rated operational voltage: 20 to 250 VAC
- Output: SCR, make or break switching
- LED indication for output ON
- Protection: Transients
- Inductive, Capacitive and Photoelectric flat pack series in PC housing, IP 67
- Cable and plug versions

## Product Description

AC inductive proximity switches with sensing distance 10 mm mounted in metal or 15 mm non-flush mounted. Flat pack housing size (W x H x D)

35 x 55 x 15 mm made in polycarbonate. Easy mounting with only two M 3.5 screws. Ideal for use in conveying and material handling applications.

## Ordering Key

**EI 55 10 TBO P-6**

Type \_\_\_\_\_  
Housing \_\_\_\_\_  
Range \_\_\_\_\_  
Output type \_\_\_\_\_  
Housing material \_\_\_\_\_  
Connection type \_\_\_\_\_

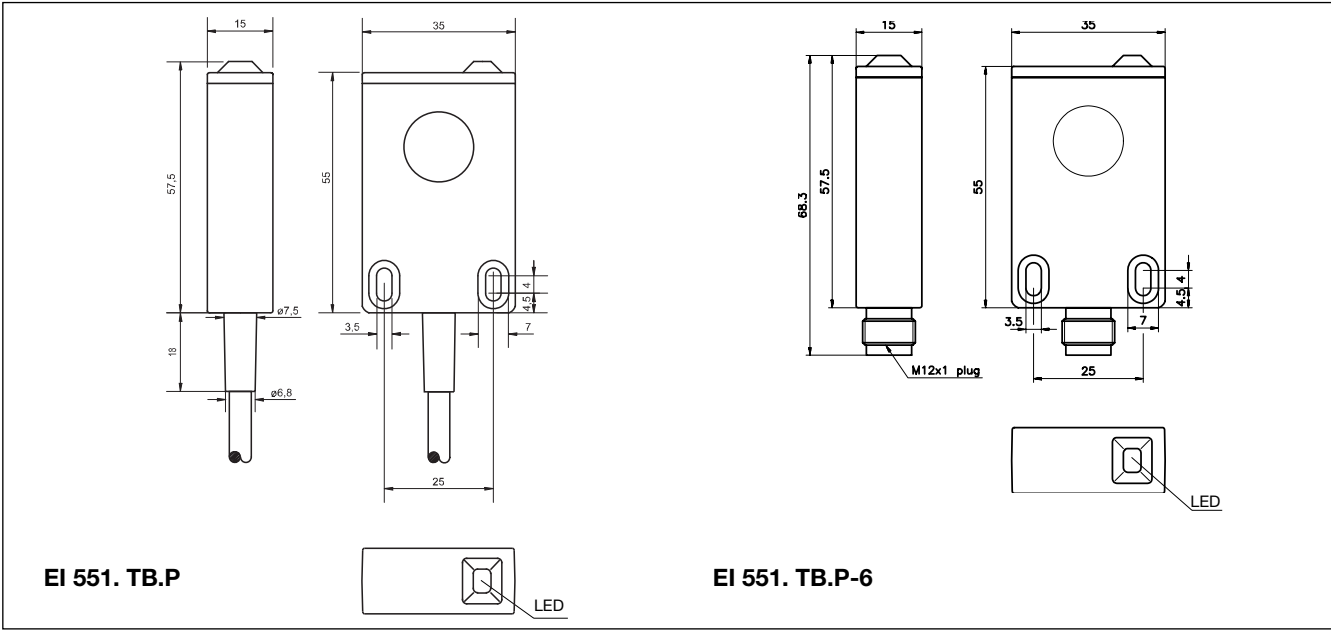
## Type Selection

Housing diameter W x H x D	Rated operating dist. (S <sub>n</sub> )	Ordering no. Cable Make switching	Ordering no. Cable Break switching	Ordering no. Plug Make switching	Ordering no. Plug Break switching
35 x 55 x 15	10 mm 15 mm	<b>EI 5510 TBOP</b> <b>EI 5515 TBOP</b>	<b>EI 5510 TBOP</b> <b>EI 5515 TBOP</b>	<b>EI 5510 TBOP-6</b> <b>EI 5515 TBOP-6</b>	<b>EI 5510 TBOP-6</b> <b>EI 5515 TBOP-6</b>

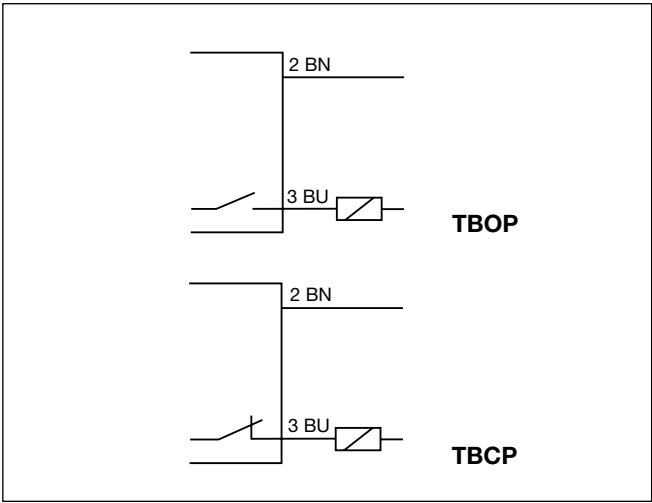
## Specifications

<b>Rated operational volt.</b> (U <sub>e</sub> ) (U <sub>B</sub> )	24 to 240 VAC 20 to 250 VAC, 50 to 60 Hz	<b>Degree of protection</b>	IP 67 (Nema 1, 3, 4, 6, 13)
<b>Rated operational current</b> (I <sub>e</sub> ) Continuous Short-time	10 to 500 mA ≤ 2.5 A, max. 20 ms	<b>Housing material</b>	Polycarbonate, grey
<b>Minimum load current</b> (I <sub>o</sub> )	≤ 5 mA	<b>Connection</b> Cable	2 m, 4 x 0.3 mm <sup>2</sup> grey PUR, oil proof
<b>OFF-state current</b> (I <sub>r</sub> )	20 mA	Plug Cables for plug (-6)	M 12 x 1 (double keyed) CONH6A-xx
<b>Voltage drop</b> (U <sub>d</sub> )	≤ 8 VAC at max. load	<b>Weight</b>	125 g cable version 40 g plug version
<b>Protection</b>	Transients	<b>EMC ratings</b>	Acc. to EN 50 082-2
<b>Transient voltage</b>	Level 3, 2.5 kV, acc. to IEC-60255-5 (500Ω, 0.5 J)	EN 61 000-4-2 ESD Contact discharge Air discharge	4 kV 8 kV
<b>Power ON delay</b>	≤ 100 ms	EN 61 000-4-4 Fast transient Rep. freq. 5 kHz	2 kV
<b>Frequency of operating cycles</b> (f)	5 Hz	ENV 50 140 RF Electromagnetic AM, 80-1000 mHz	10 V/m
<b>Indication for output ON</b>	LED, yellow	ENV 50 141 Conducted Disturbance	10 V/m
<b>Assured operating dist.</b> (S <sub>a</sub> )	0 ≤ S <sub>a</sub> ≤ 0.81 S <sub>n</sub>	ENV 50 204 RF Electromagnetic field PM, 80-900 MHz	10 V/m
<b>Repeat accuracy</b> (R)	≤ 5%	<b>Approvals</b>	UL, CSA
<b>Hysteresis</b> (H) (Differential travel)	3 to 20% of sensing distance	<b>CE-marking</b>	Yes
<b>Effective operating dist.</b> (S <sub>i</sub> )	0.9 x S <sub>n</sub> ≤ S <sub>i</sub> ≤ 1.1 x S <sub>n</sub>		
<b>Usable operating dist.</b> (S <sub>u</sub> )	0.9 x S <sub>r</sub> ≤ S <sub>u</sub> ≤ 1.1 x S <sub>r</sub>		
<b>Ambient temperature</b> Operating Storage	-25° to +70°C (-13° to +158°F) -30° to +80°C (-22° to +176°F)		

Dimensions



Wiring Diagrams



Accessories

- Plugs CONH6A.. serie, please refer to "Accessories".

Delivery Contents

- Inductive switch: EI 551. ....
- Packaging:** Corrugated cardboard (environmentally friendly recycling material).

Installation Hints

<p>To avoid interference from inductive voltage/current peaks, separate the prox. switch power cables from any other power cables, e.g. motor, contactor or solenoid cables</p> <p>10</p>	<p>Relief of cable strain</p> <p>Incorrect</p> <p>Correct</p> <p>The cable should not be pulled</p>	<p>Protection of the sensing face</p> <p>A proximity switch should not serve as mechanical stop</p>	<p>Switch mounted on mobile carrier</p> <p>Any repetitive flexing of the cable should be avoided</p>
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