

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

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- Sensing distance 10 or 15 mm
- Rated operational voltage: 10 to 40 VDC
- Output: DC 200 mA, NPN or PNP
- Make and break switching function
- LED indication for output ON
- Inductive, Capacitive and Photoelectric flat pack series in PC housing, IP 67
- Cable and plug versions

## Product Description

Inductive proximity switch with sensing distance 10 mm flush mounted in metal or 15 mm non-flush mounted. 4-wire with both make (NO) and break (NC) switching. 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 NPA P-1**

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

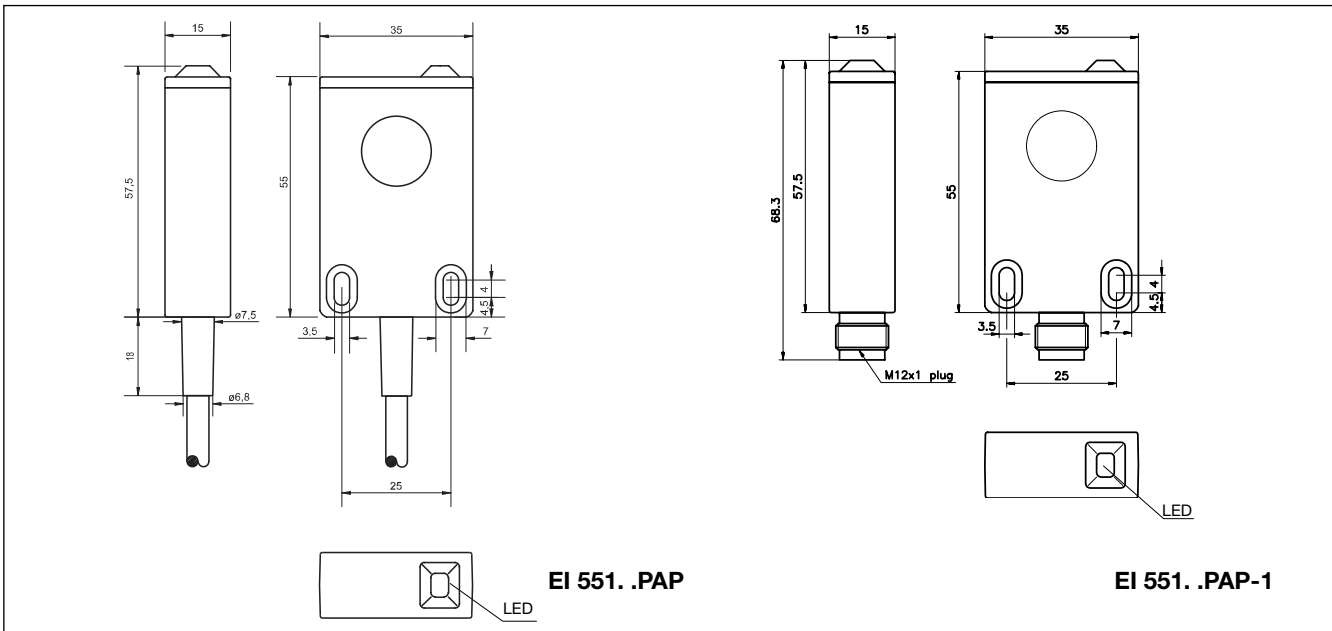
## Type Selection

Housing diameter W x H x D	Rated operating dist. (S <sub>n</sub> )	Ordering no. NPN/cable Make & break swit.	Ordering no. NPN/plug Make & break swit.	Ordering no. PNP/cable Make & break swit.	Ordering no. PNP/plug Make & break swit.
35 x 55 x 15	10 mm 15 mm	EI 5510 NPAP EI 5515 NPAP	EI 5510 NPAP-1 EI 5515 NPAP-1	EI 5510 PPAP EI 5515 PPAP	EI 5510 PPAP-1 EI 5515 PPAP-1

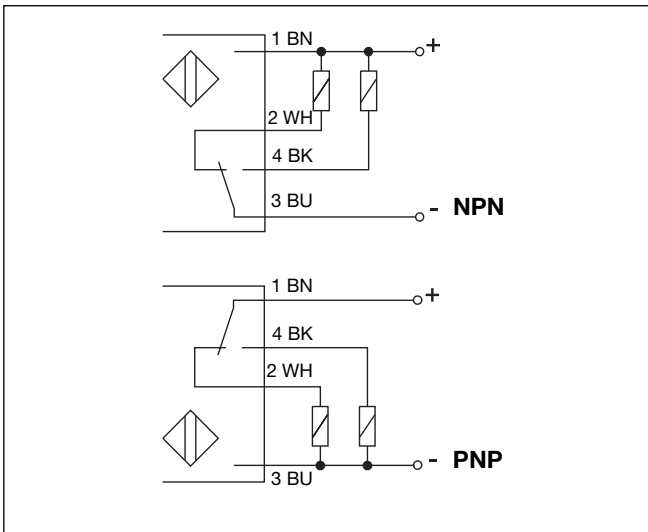
## Specifications

<b>Rated operational volt.</b> (U <sub>e</sub> ) (U <sub>B</sub> )	12 to 36 VDC 10 to 40 VDC (ripple included)	<b>Ambient temperature</b> Operating Storage	-25° to +70°C (-13° to +158°F) -30° to +80°C (-22° to +176°F)
<b>Ripple</b>	≤ 10%	<b>Degree of protection</b>	IP 67 (Nema 1, 3, 4, 6, 13)
<b>Rated operational current</b> (I <sub>o</sub> ) Continuous	≤ 200 mA	<b>Housing material</b>	Polycarbonate, grey
<b>No-load supply current</b> (I <sub>o</sub> )	≤ 7 mA	<b>Cable</b>	2 m, 4 x 0.3 mm <sup>2</sup> grey PVC, oil proof
<b>Voltage drop</b> (U <sub>d</sub> )	≤ 2 VDC at max. load	<b>Weight</b>	125 g cable version 40 g plug version
<b>Protection</b>	Reverse polarity, short-circuit	<b>EMC ratings</b>	Acc. to EN 50 082-2
<b>Power ON delay</b>	≤ 50 ms	ENV 50 140 RF Electromagnetic field AM, 80-1000 MHz, Level 3	10 V/m
<b>Frequency of operating cycles</b> (f)	EI 5510 500 Hz EI 5515 250 Hz	ENV 50 204 RF Electromagnetic field PM, 80-900 MHz, Level 3	10 V/m
<b>Indication for output ON</b>	LED, yellow	EN 61000-4-4 Fast transient Rep. freq. 5 kHz, Level 3	1 kV
<b>Assured operating dist.</b> (S <sub>a</sub> )	0 ≤ S <sub>a</sub> ≤ 0.81 S <sub>n</sub>	<b>Approvals</b>	UL, CSA
<b>Repeat accuracy</b> (R)	≤ 5%	<b>CE-marking</b>	Yes
<b>Hysteresis</b> (H) (Differential travel)	1 to 15% of sensing distance		
<b>Effective operating dist.</b> (S <sub>r</sub> )	0.9 x S <sub>n</sub> ≤ S <sub>r</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>		

## Dimensions



## Wiring Diagrams



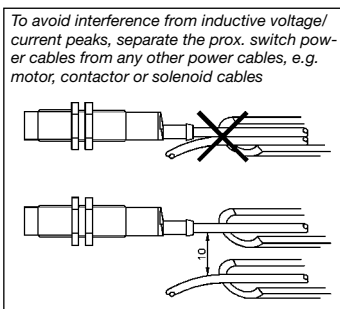
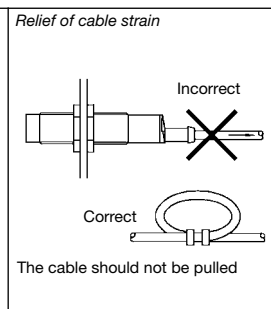
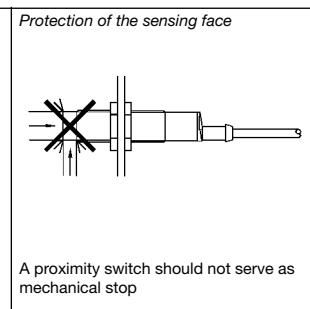
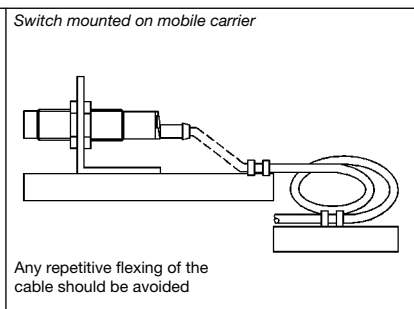
## Accessories

- Plugs CONH1A.. serie, please refer to "Accessories".

## Delivery Contents

- Inductive switch: EI 551. ....
- **Packaging:** plastic bag

## Installation Hints

<p><i>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</i></p> 	<p><i>Relief of cable strain</i></p>  <p>Incorrect</p> <p>Correct</p> <p>The cable should not be pulled</p>	<p><i>Protection of the sensing face</i></p>  <p>A proximity switch should not serve as mechanical stop</p>	<p><i>Switch mounted on mobile carrier</i></p>  <p>Any repetitive flexing of the cable should be avoided</p>
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