

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

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- Sensing distance 10 or 15 mm
- Flush and non-flush types
- Rated operational voltage: 10 to 40 VDC
- Output: DC 200 mA, NPN or PNP
- Normally open and normally closed 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 NO & NC	Ordering no. NPN/plug NO & NC	Ordering no. PNP/cable NO & NC	Ordering no. PNP/plug NO & NC
35 x 55 x 15 mm	10 mm <sup>1)</sup>	EI 5510 NPAP	EI 5510 NPAP-1	EI 5510 PPAP	EI 5510 PPAP-1
35 x 55 x 15 mm	15 mm <sup>2)</sup>	EI 5515 NPAP	EI 5515 NPAP-1	EI 5515 PPAP	EI 5515 PPAP-1

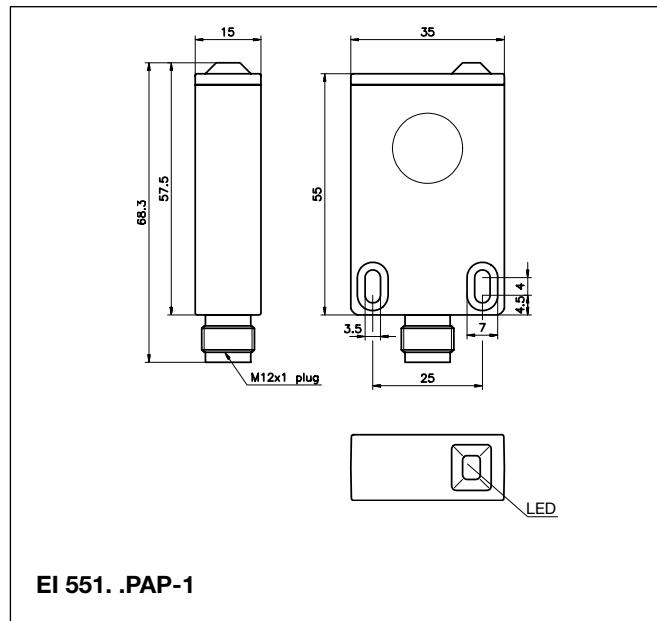
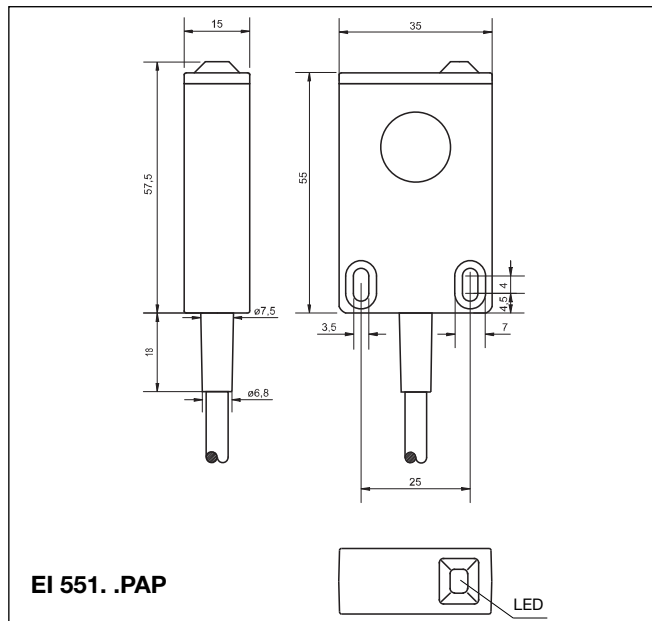
<sup>1)</sup> For flush mounting in metal

<sup>2)</sup> For non-flush mounting in metal

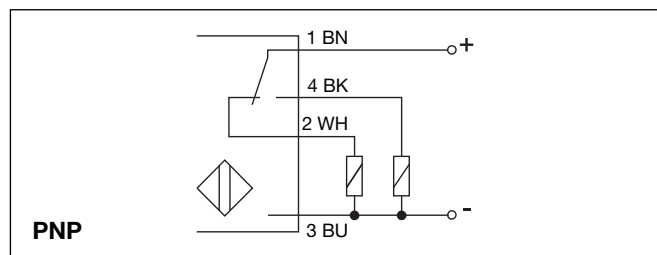
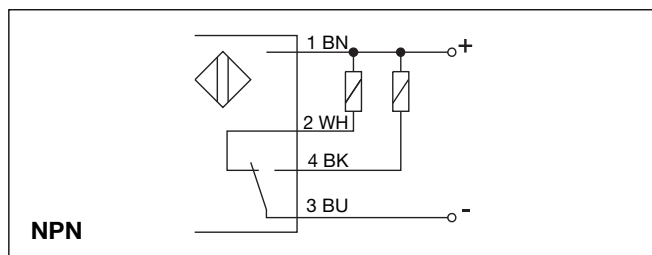
## Specifications

<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>e</sub> ) Continuous	≤ 200 mA	<b>Housing</b> Dimensions Material	35 x 55 x 15 mm 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> Cable version Plug version	125 g 40 g
<b>Protection</b>	Reverse polarity, short-circuit	<b>EMC ratings</b> ENV 50 140 RF Electromagnetic field AM, 80-1000 MHz, Level 3 ENV 50 204 RF Electromagnetic field PM, 80-900 MHz, Level 3 EN 61000-4-4 Fast transient Rep. freq. 5 kHz, Level 3	Acc. to EN 50 082-2 10 V/m 10 V/m 1 kV
<b>Power ON delay</b>	≤ 50 ms	<b>Approvals</b>	UL, CSA
<b>Frequency of operating cycles</b> (f) EI 5510 EI 5515	500 Hz 250 Hz	<b>CE-marking</b>	Yes
<b>Indication for output ON</b>	LED, yellow		
<b>Assured operating dist.</b> (S <sub>a</sub> )	0 ≤ S <sub>a</sub> ≤ 0.81 S <sub>n</sub>		
<b>Repeat accuracy</b> (R)	≤ 5%		
<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>		

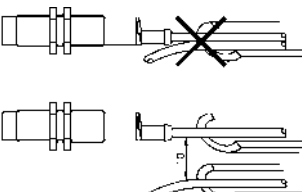
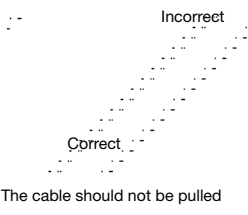
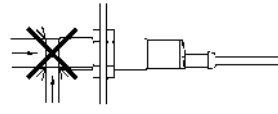
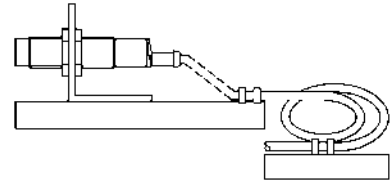
## Dimensions



## Wiring Diagrams



## 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>Relief of cable strain</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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## Accessories

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

## Delivery Contents

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