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

- **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_n)	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 [1]	**EI 5510 NPAP**	**EI 5510 NPAP-1**	**EI 5510 PPAP**	**EI 5510 PPAP-1**
35 x 55 x 15 mm	15 mm [2]	**EI 5515 NPAP**	**EI 5515 NPAP-1**	**EI 5515 PPAP**	**EI 5515 PPAP-1**

[1] For flush mounting in metal

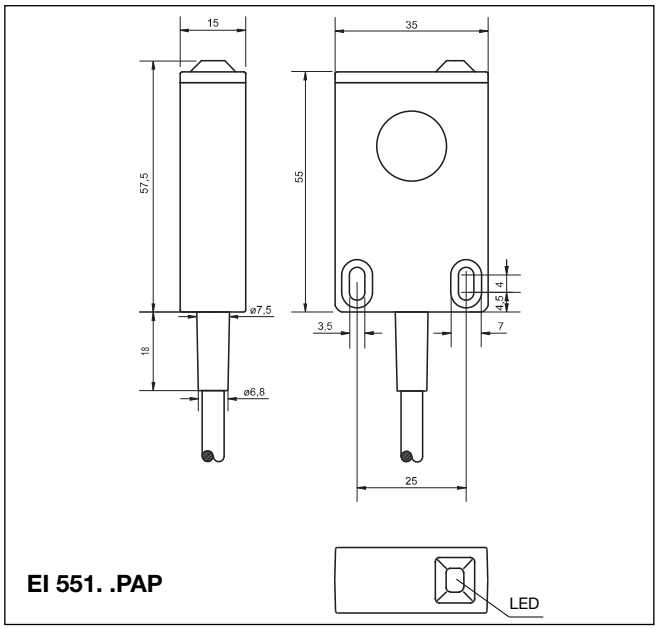
[2] For non-flush mounting in metal

Specifications

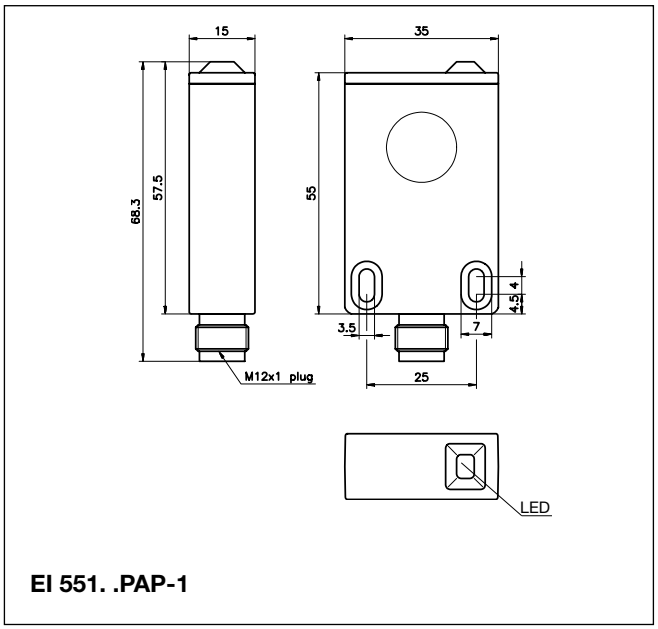
Rated operational volt. (U_e)	12 to 36 VDC
(U_B)	10 to 40 VDC (ripple included)
Ripple	≤ 10%
Rated operational current (I_e)	
Continuous	≤ 200 mA
No-load supply current (I_o)	≤ 7 mA
Voltage drop (U_d)	≤ 2 VDC at max. load
Protection	Reverse polarity, short-circuit
Power ON delay	≤ 50 ms
Frequency of operating cycles (f) **EI 5510**	500 Hz
EI 5515	250 Hz
Indication for output ON	LED, yellow
Assured operating dist. (S_a)	$0 \le S_a \le 0.81\ S_n$
Repeat accuracy (R)	≤ 5%
Hysteresis (H) (Differential travel)	1 to 15% of sensing distance
Effective operating dist. (S_r)	$0.9 \times S_n \le S_r \le 1.1 \times S_n$
Usable operating dist. (S_u)	$0.9 \times S_r \le S_u \le 1.1 \times S_r$

Ambient temperature	
Operating	-25° to +70°C (-13° to +158°F)
Storage	-30° to +80°C (-22° to +176°F)
Degree of protection	IP 67 (Nema 1, 3, 4 ,6, 13)
Housing	
Dimensions	35 x 55 x 15 mm
Material	Polycarbonate, grey
Cable	2 m, 4 x 0.3 mm² grey PVC, oil proof
Weight	
Cable version	125 g
Plug version	40 g
EMC ratings	Acc. to EN 50 082-2
ENV 50 140 RF Electromagnetic field AM, 80-1000 MHz, Level 3	10 V/m
ENV 50 204 RF Electromagnetic field PM, 80-900 MHz, Level 3	10 V/m
EN 61000-4-4 Fast transient Rep. freq. 5 kHz, Level 3	1 kV
Approvals	UL, CSA
CE-marking	Yes

Dimensions

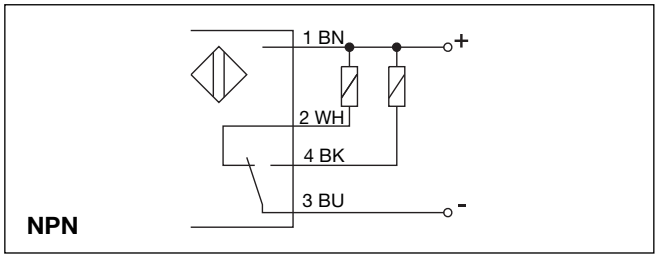


EI 551. .PAP

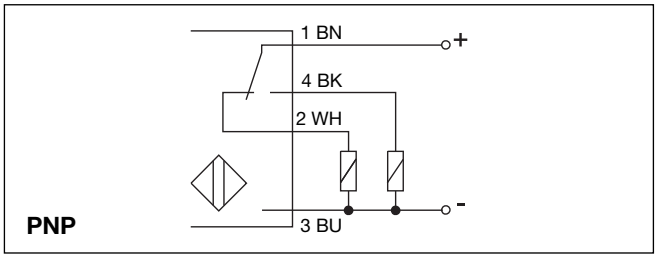


EI 551. .PAP-1

Wiring Diagrams

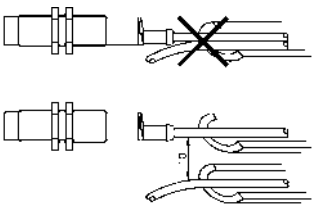
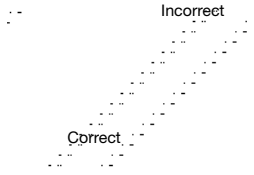
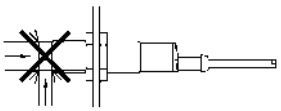
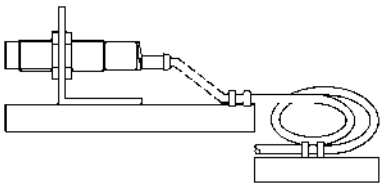


NPN



PNP

Installation Hints

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

Accessories

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

Delivery Contents

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