# Proximity Sensors Inductive Stainless Steel Housing Types El, Ø 4, 5 x 5 mm





- Miniature stainless steel housing Ø 4, aluminium 5 x 5 mm
- Sensing distance: 1 mm
- Power supply: 10 to 30 VDC
- Output: Transistor NPN/PNP, make or break switching
- Protection: Short-circuit, reverse polarity and overload
- LED-indication for output ON
- 2 m PUR cable or M8 plug

### **Product Description**

Miniature inductive proximity sensor available as  $\emptyset$  4 and 5 x 5 mm types. Output configuration for NPN/PNP with both NO and NC types as standard. Housing materials

are stainless steel for Ø 4 and aluminium for the 5 x 5 mm type. Cabled models utilise 2 meters of PUR cable and plug versions features a bright ring LED.

## Ordering Key

EI 0401 PPO SS-5

Time	
Туре ————	_
Housing diameter (mm) ——	
Rated operating dist. (mm) —	
Output type —	
Housing material	
Housing type	
<b>5</b> 5.	
Connection type ———	

## **Type Selection**

Housing diameter	Rated operating dist. (S <sub>n</sub> )	Connection type	Ordering no. Transistor NPN Make switching	Ordering no. Transistor NPN Break switching	Ordering no. Transistor PNP Make switching	Ordering no. Transistor PNP Break switching
Ø 4 mm	0.8 mm <sup>1)</sup>	Cable	EI 0401 NPOSS	EI 0401 NPCSS	EI 0401 PPOSS	EI 0401 PPCSS
Ø 4 mm	0.8 mm <sup>1)</sup>	Plug	EI 0401 NPOSS-5	EI 0401 NPCSS-5	EI 0401 PPOSS-5	EI 0401 PPCSS-5
5 x 5 mm	0.8 mm <sup>1)</sup>	Cable	EI X501 NPOSS	EI X501 NPCSS	EI X501 PPOSS	EI X501 PPCSS
5 x 5 mm	0.8 mm <sup>1)</sup>	Plug	EI X501 NPOSS-5	EI X501 NPCSS-5	EI X501 PPOSS-5	EI X501 PPCSS-5

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

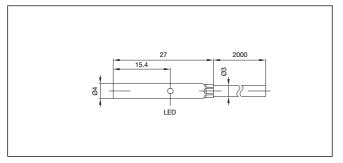
## **Specifications**

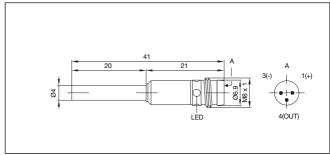
Rated operational volt. (U <sub>B</sub> )	10 to 30 VDC (ripple included)
Ripple	≤10%
Rated operational current (I <sub>e</sub> ) Continuous	≤ 150 mA @ + 25°C (+75°F)
No-load supply current (I <sub>o</sub> )	≤ 2.1 mA OFF: 1.5 mA ON: 10 mA
Voltage drop (U <sub>d</sub> )	<1V
Protection	Reverse polarity, short-circuit, overload
Transient voltage	≤ 1 kV/0.5 J (prepared)
Power ON delay	Ca. 500 µs
Frequency of operating cycles (f)	1000 Hz
Indication for output ON	LED, yellow
Assured operating dist. (Sa)	0 to 0.52 mm
Repeat accuracy (R)	± 0.01 mm
Hysteresis (H) (Differential travel)  Effective operating dist. (S <sub>r</sub> )	3 to 15% of sensing distance $0.9 \times S_n \leq S_r \leq 1.1 \times S_n$

Usable operating dist. (S <sub>u</sub> )	$0.85 \ x \ S_r \leq S_u \leq 1.15 \ x \ S_r$
Ambient temperature Operating Storage	-25° to +70°C (-13° to +158°F -30° to +80°C (-22° to +176°F
Degree of protection	Plug versions: IP 65 Cable versions: IP 67 (Nema 1, 3, 4, 6, 13)
<b>Connection</b> Cable	2 m, 3 x 0.14 mm <sup>2</sup> grey PUR, oil proof
Plug	M8, CONH5A-xxx Serie
Housing material Body	
Ø 4 5 x 5 mm Cap	Stainless steel (1.4301) Aluminium Plastic
Weight	Cable versions: 25 g Plug versions: 4 g
Tightening torque	1 Nm
CE-marking	Yes

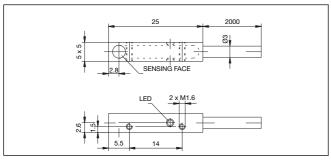


### **Dimensions**

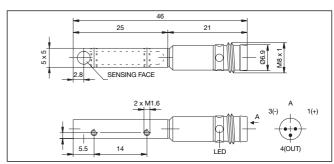




EI 0401 xPxSS



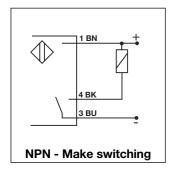
EI 0401 xPxSS-5

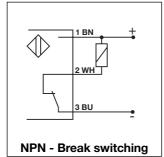


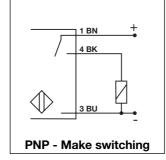
EI X501 xPxSS

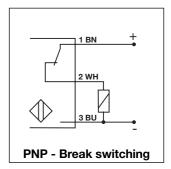
EI X501 xPxSS-5

## **Wiring Diagrams**

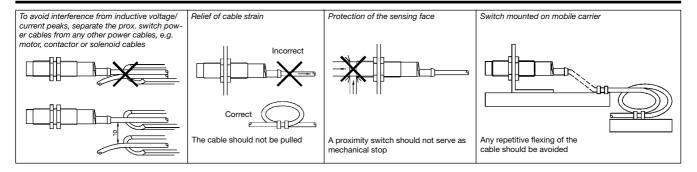








#### **Installation Hints**



## **Power Supplies**

Power supplies VDC:

> SS 130/140.

Power supplies with amplifier relays:

> SV 190.