

# Proximity Sensors Inductive Stainless Steel Housing Types EI, Ø 6.5, M 8

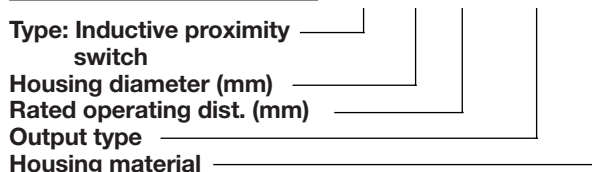


- Stainless steel housing, cylindrical
- Diameter: Ø 6.5, M 8
- Sensing distance: 1 to 2 mm
- Power supply: 10 to 40 VDC
- Output: Transistor NPN/PNP, make or break switching
- Protection: Short-circuit and reverse polarity
- LED-indication for output ON
- 2 m cable or M12 plug (M 8 types)

## Product Description

Proximity switch in Ø 6.5 and M8 housings. Short version in standard stainless steel housing. Made after euronorm EN 50 008. Plug version.

## Ordering Key EI 0601 NPO S



## Type Selection

Housing diameter	Connection	Rated operating dist. (S <sub>n</sub> )	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 6.5	Cable	1 mm <sup>1)</sup>	EI 0601 NPOS	EI 0601 NPCS	EI 0601 PPOS	EI 0601 PPCS
M 8	Cable	1 mm <sup>1)</sup>	EI 0801 NPOS	EI 0801 NPCS	EI 0801 PPOS	EI 0801 PPCS
M 8	Cable	2 mm <sup>2)</sup>	EI 0802 NPOS	EI 0802 NPCS	EI 0802 PPOS	EI 0802 PPCS
M 8	Plug	1 mm <sup>1)</sup>	EI 0801 NPOS-1	EI 0801 NPCS-1	EI 0801 PPOS-1	EI 0801 PPCS-1
M 8	Plug	2 mm <sup>2)</sup>	EI 0802 NPOS-1	EI 0802 NPCS-1	EI 0802 PPOS-1	EI 0802 PPCS-1

<sup>1)</sup> For flush mounting in metal    <sup>2)</sup> For non-flush mounting in metal

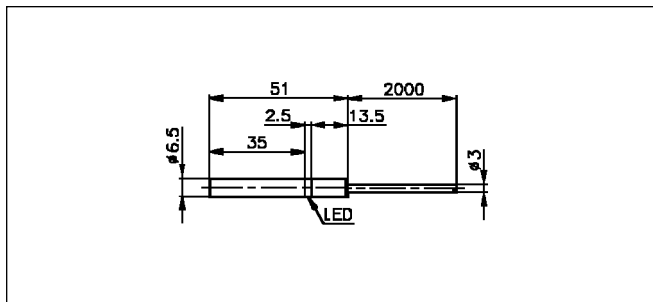
## Specifications

Rated operational volt. (U <sub>e</sub> )	12 to 36 VDC
(U <sub>B</sub> )	10 to 40 VDC (ripple incl.)
Ripple	≤ 10%
Rated operational current (I <sub>e</sub> )	≤ 200 mA
No-load supply current (I <sub>o</sub> )	≤ 8 mA
Voltage drop (U <sub>d</sub> )	≤ 2.5 VDC at max. load
Protection	Reverse polarity, short-circuit
Transient voltage	≤ 1 kV/0.5 J
Power ON delay	≤ 50 ms
Frequency of operating cycles (f)	> 2000 Hz
Indication for output ON	LED, yellow
Assured operating dist. (S <sub>a</sub> )	0 ≤ S <sub>a</sub> ≤ 0.81 S <sub>n</sub>
Repeat accuracy (R)	≤ 5%
Hysteresis (H)	
(Differential travel)	1 to 15% of sensing dist.
Effective operating dist. (S <sub>r</sub> )	0.9 x S <sub>n</sub> ≤ S <sub>r</sub> ≤ 1.1 x S <sub>n</sub>
Usable operating dist. (S <sub>u</sub> )	0.9 x S <sub>r</sub> ≤ S <sub>u</sub> ≤ 1.1 x S <sub>r</sub>

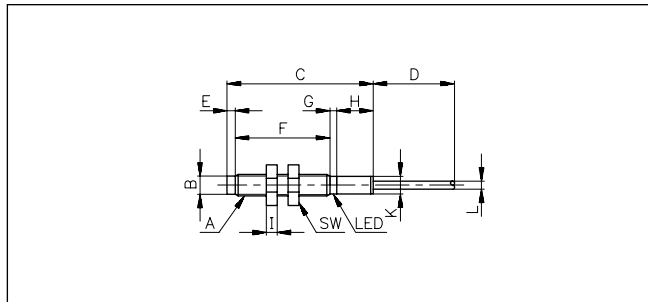
Ambient temperature	
Operating	-25° to +70°C (-13° to +158°F)
Storage	-30° to +80°C (-22° to +176°F)
Degree of protection	IP 67 (Nema 1, 3, 4, 6, 13)
Housing material	
Body	Stainless steel (1.4301)
Front	Thermoplastic polyester, oil proof
Back (plug versions)	Black PVC, oil proof
Cable	2 m, 3 x 0.14 mm <sup>2</sup> grey PVC, oil proof
Weight	EI 06 30 g EI 08 50 g
Tightening torque	EI 08 3.0 Nm (x) 7.0 Nm (y) Refer to "Terms Used"

## Dimensions

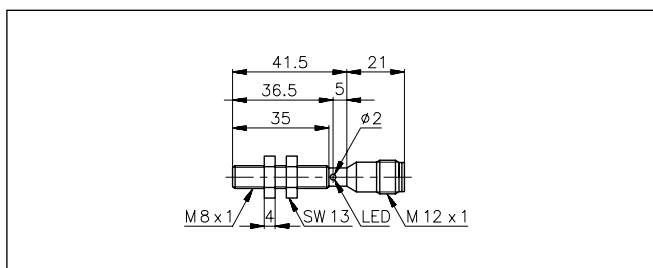
Type	A	B Ø mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	SW mm	K
EI 0801	M 8 x 1	6.7	51	2000	0	35	2.5	13.5	4	13	Ø 6.5
EI 0802	M 8 x 1	6.7	54	2000	3	35	2.5	13.5	4	13	Ø 6.5



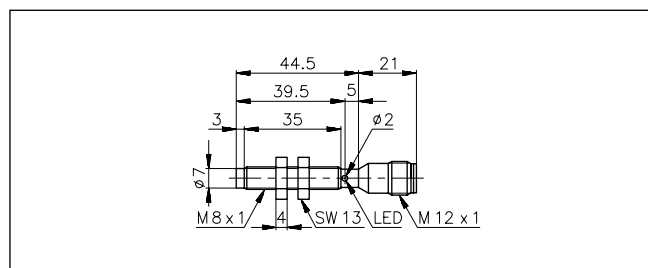
EI 06



EI 080. ....



EI 0801-1



EI 0802-1

## Wiring Diagrams

Refer to "Wiring Diagrams",  
Technical information.

## Installation Hints

Refer to "Installation Hints",  
Technical information.

## Accessories

Refer to "Accessories",  
Technical information.

## Power Supplies

Power supplies VDC:  
> SS 130/140.  
Power supplies with ampli-  
fier relays: > SV 190.