

# Proximity Sensors Inductive Stainless Steel Housing Types EI, Ø 6.5, M8, NAMUR



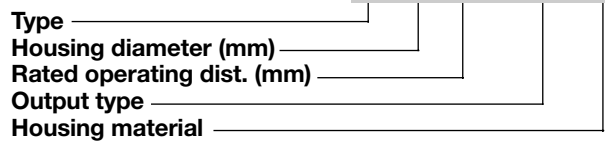
- Stainless steel housing, cylindrical
- Diameter: Ø 6.5, M8
- Short versions
- Sensing distance: 1 to 2 mm
- Output: NAMUR (DIN 19234)
- Protection: Reverse polarity
- 2 m cable

## Product Description

Proximity switch in Ø 6.5 and M8 housings. Made in accordance with NAMUR DIN 19 234. Short version in standard stainless steel housing. Amplifier relay SD ... is available.

## Ordering Key

**EI 0601 NAC S**



## Type Selection

Housing diameter	Rated operating distance (S <sub>n</sub> )	Ordering no. NAMUR	
Ø 6.5 mm	1 mm <sup>1)</sup>	EI 0601 NACS	
M8	1 mm <sup>1)</sup>	EI 0801 NACS	<sup>1)</sup> For flush mounting in metal
M8	2 mm <sup>2)</sup>	EI 0802 NACS	<sup>2)</sup> For non-flush mounting in metal

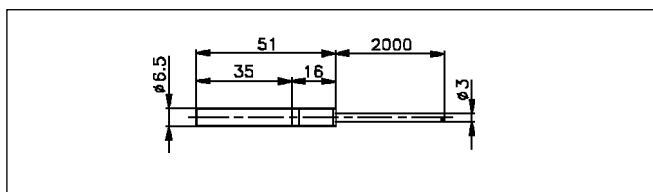
## Specifications

<b>Rated operational volt.</b> (U <sub>e</sub> ) (U <sub>B</sub> )	8.2 VDC 7 to 9 VDC (6 to 35 VDC, all specifications not observed in extended supply range)	<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>Self-inductance</b>	Max. 500 µH	<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>rZ</sub>
<b>Self-capacitance</b>	Max. 120 nF	<b>Ambient temperature</b> Operating Storage	-25° to +70°C (-13° to +158°F) -30° to +80°C (-22° to +176°F)
<b>Current consumption</b> (I <sub>o</sub> )	Activated: ≤1 mA Not activated: ≥ 2.2 mA Max.: 9.35 mA	<b>Degree of protection</b>	IP 67 (Nema 1, 3, 4, 6, 13)
<b>Protection</b>	Reverse polarity	<b>Housing material</b> Body Front Back	Stainless steel (1.4301) Thermoplastic polyester Black PVC
<b>Transient voltage</b>	≤ 1 kV/0.5 J (prepared)	<b>Cable</b>	<b>EI 06</b> 2 m, 2 x 0.14 mm <sup>2</sup> <b>EI 08</b> 2 m, 2 x 0.14 mm <sup>2</sup> grey PVC, oil proof
<b>Frequency of operating cycles</b> (f)	<b>EI 0601</b> 2000 Hz <b>EI 0801</b> 2000 Hz <b>EI 0802</b> 1500 Hz	<b>Weight</b> (cable included)	<b>EI 06</b> 30 g <b>EI 08</b> 50 g
<b>Assured operating dist.</b> (S <sub>a</sub> )	0 ≤ S <sub>a</sub> ≤ 0.81 x S <sub>n</sub>	<b>Tightening torque</b>	<b>EI 08</b> 3.0 Nm (x) 7.0 Nm (y) Refer to "Terms Used" Technical information.
<b>Repeat accuracy</b> (R)	≤ 5%	<b>Approvals</b>	UL, CSA
<b>Hysteresis</b> (H) (Differential travel)	Dependent on amplifier relay	<b>CE-marking</b>	Yes

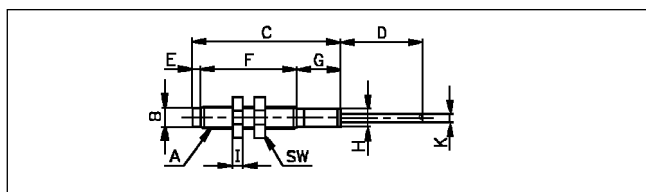


## Dimensions

Type	A	B Ø mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	SW mm	K Ø mm
EI 0801	M8 x 1	6.7	51	2000	0	35	16	Ø 6.5	4	13	3
EI 0802	M8 x 1	6.7	54	2000	3	35	16	Ø 6.5	4	13	3



EI 0601

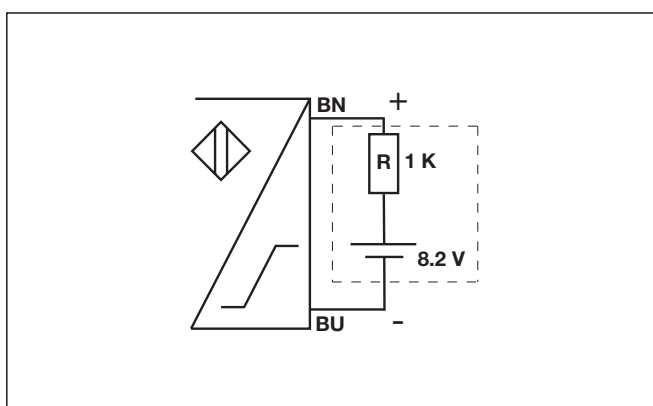


EI 08

## 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>Incorrect</p> <p>Correct</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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## Wiring Diagram



## NAMUR, Amplifier Relays

> SD 110/210.  
> SD 170/270.

Refer to Technical information.