

# Proximity Sensors Inductive Stainless Steel Housing Types EI, Ø 6.5, M 8, M 12, M 18, M 30, Namur

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- Stainless steel housing, cylindrical
- Diameter: Ø 6.5, M 8, M 12, M 18, M 30
- Short versions
- Sensing distance: 1 to 15 mm
- Output: Namur (DIN 19234)
- Protection: Reverse polarity
- 2 m cable

## Product Description

Proximity switch in Ø 6.5 to M 30 housings. Made in accordance with Namur DIN 19 234. Short version in standard stainless steel housing. Amplifier relay SD ... is available.

## Ordering Key EI 3015 NAC S

Type: Inductive proximity switch  
Housing diameter (mm)  
Rated operating dist. (mm)  
Output type  
Housing material

## Type Selection

Housing diameter	Rated operating dist. (S <sub>n</sub> )	Ordering no. Namur
Ø 6.5 mm	1 mm <sup>1)</sup>	EI 0601 NACS
M 8	1 mm <sup>1)</sup>	EI 0801 NACS
M 8	2 mm <sup>2)</sup>	EI 0802 NACS
M 12	2 mm <sup>1)</sup>	EI 1202 NACS
M 12	4 mm <sup>2)</sup>	EI 1204 NACS
M 18	5 mm <sup>1)</sup>	EI 1805 NACS
M 18	8 mm <sup>2)</sup>	EI 1808 NACS
M 30	10 mm <sup>1)</sup>	EI 3010 NACS
M 30	15 mm <sup>2)</sup>	EI 3015 NACS

<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> ) (U <sub>B</sub> )	8.2 VDC 7 to 9 VDC (6 to 35 VDC, all specifications not observed in extended supply range)	Frequency of operating cycles (f)	EI 0601 2000 Hz EI 0801 2000 Hz EI 0802 1500 Hz EI 1202 800 Hz EI 1204 800 Hz EI 1805 500 Hz EI 1808 200 Hz EI 3010 300 Hz EI 3015 100 Hz
Self-inductance	Max. 500 µH	Assured operating dist. (S <sub>a</sub> )	0 ≤ S <sub>a</sub> ≤ 0.81 x S <sub>n</sub>
Self-capacitance	Max. 120 nF	Repeat accuracy (R)	≤ 5%
Current consumption (I <sub>o</sub> )	Activated: ≤1 mA Not activated: ≥ 2.2 mA Max.: 9.35 mA	Hysteresis (H) (Differential travel)	Dependent on amplifier relay
Protection	Reverse polarity	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>
Transient voltage	≤ 1 kV/0.5 J (prepared)	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>



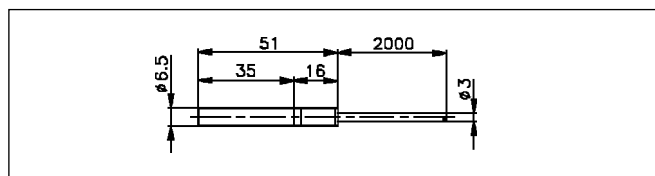
## Specifications (cont.)

<b>Ambient temperature</b>	
Operating	-25° to +70°C (-13° to +158°F)
Storage	-30° to +80°C (-22° to +176°F)
<b>Degree of protection</b>	IP 67 (Nema 1, 3, 4, 6, 13)
<b>Housing material</b>	
Body	Stainless steel (1.4301)
Front	Thermoplastic polyester
Back	Black PVC
<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> <b>EI 12</b> 2 m, 2 x 0.5 mm <sup>2</sup> <b>EI 18</b> 2 m, 2 x 0.5 mm <sup>2</sup> <b>EI 30</b> 2 m, 2 x 0.5 mm <sup>2</sup> grey PVC, oil proof

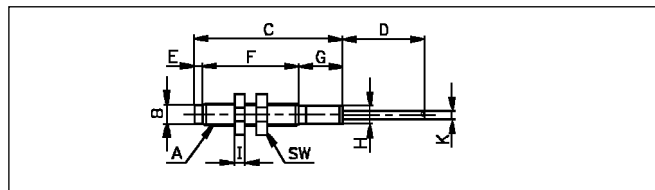
<b>Weight (cable included)</b>	<b>EI 06</b> 30 g	<b>EI 18</b> 130 g
	<b>EI 08</b> 50 g	<b>EI 30</b> 200 g
	<b>EI 12</b> 80 g	
<b>Tightening torque</b>	<b>EI 08</b> 3.0 Nm (x) 7.0 Nm (y)	
	<b>EI 12</b> 7.5 Nm (x) 17.5 Nm (y)	
	<b>EI 18</b> 27.5 Nm	
	<b>EI 30</b> 120.0 Nm	
	Refer to "Terms Used" Technical information.	

## Dimensions

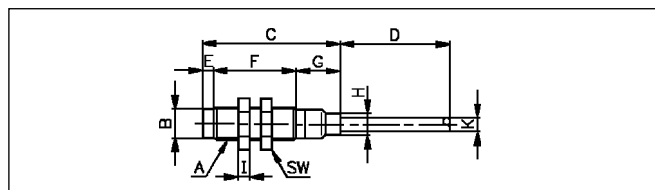
Type	A	B Ø mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	SW mm	K Ø mm	L Ø mm
<b>EI 0801</b>	M 8 x 1	6.7	51	2000	0	35	16	Ø 6.5	4	13	3	
<b>EI 0802</b>	M 8 x 1	6.7	54	2000	3	35	16	Ø 6.5	4	13	3	
<b>EI 1202</b>	M 12 x 1	10.7	46	2000	0	30	16	Ø 8	4	17	5.2	
<b>EI 1204</b>	M 12 x 1	10.7	50	2000	4	30	16	Ø 8	4	17	5.2	
<b>EI 1805</b>	M 18 x 1	16.7	40.1	16.9	2000	0	30	10.1	4	24	10	5.2
<b>EI 1808</b>	M 18 x 1	16.7	48.1	16.9	2000	8	30	10.1	4	24	10	5.2
<b>EI 3010</b>	M 30 x 1.5	28	40.6	18.4	2000	0	30	10.6	5	36	10	5.2
<b>EI 3015</b>	M 30 x 1.5	28	52.6	18.4	2000	12	30	10.6	5	36	10	5.2



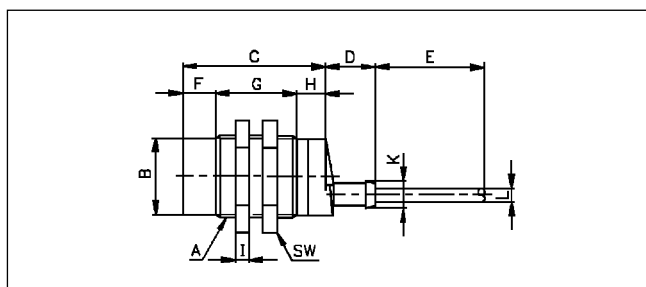
EI 0601



EI 08



EI 12



EI 18/EI 30

### Wiring Diagrams

Refer to "Wiring Diagrams", Technical information.

### Installation Hints

Refer to "Installation Hints", Technical information.

### Namur, Amplifier Relays

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

Refer to Technical information.