## **Proximity Sensors Inductive** Stainless Steel Housing Types El, AC, M 12, M 18, M 30





- Stainless steel housing, cylindrical
- Diameter: M 12, M 18, M 30
- Sensing distance: 2 to 15 mm
- Power supply: 20 to 250 VAC
- Output: SCR, make or break switching
- Protection: Overvoltage
- LED-indication for output ON
- Long or short housing
- 2 m cable or plug M 12 (double keyed)

### **Product Description**

AC proximity switches constructed in stainless steel utilizing a yellow LED clearly (1.4301) housings. Sizes available are M 12, M18 and M 30. tus. Protection rating IP 67 Length of housing is selectable with 30 mm thread or 50

mm thread. Bright LED ring gives indication of output staensures environmental compatibility.

#### **Ordering Key** EI 1202 TBOSL-6 Type: Inductive proximity switch Housing diameter (mm) -Rated operating dist. (mm) -Output type Housing material -Body style Plug .

## Type Selection AC Types, Cable and M 12 Plug

Housing diameter	Body style	Connection	Rated operating dist. (S <sub>n</sub> )	Ordering no. SCR Make switching	Ordering no. SCR Break switching
M 12	Long	Cable	2 mm <sup>1)</sup>	EI 1202 TBOSL	EI 1202 TBCSL
M 12	Long	Cable	4 mm <sup>2)</sup>	EI 1204 TBOSL	EI 1204 TBCSL
M 18	Short	Cable	5 mm <sup>1)</sup>	EI 1805 TBOSS	EI 1805 TBCSS
M 18	Short	Cable	8 mm <sup>2)</sup>	EI 1808 TBOSS	EI 1808 TBCSS
M 30	Short	Cable	10 mm <sup>1)</sup>	EI 3010 TBOSS	EI 3010 TBCSS
M 30	Short	Cable	15 mm <sup>2)</sup>	EI 3015 TBOSS	EI 3015 TBCSS



# **Specifications**

Rated operational volt. (U <sub>e</sub> )	24 to 240 VAC,
(U <sub>B</sub> )	20 to 265 VAC, 50 to 60 Hz
Rated operational current (l <sub>e</sub> )	
Continuous	10 - 500 mA
Short-time	≤ 2.5 A, max. 20 ms
Minimum load current	10 mA
OFF-state current (I <sub>r</sub> )	≤ 2 mA
Voltage drop (U <sub>d</sub> )	≤ 8 VAC at max. load
Protection	Transients
Transient voltage	Level 3, 2.5 kV,
	acc. to IEC 60255-5
	$(500 \Omega, 0.5 J)$ (prepared)
Power ON delay	≤ 100 ms
Frequency of operating	
cycles (f)	25 Hz
Indication for output ON	LED, yellow
Assured operating dist. (Sa)	$0 \leq S_a \leq 0.81 \ S_n$
Repeat accuracy (R)	≤ 5%
Hysteresis (H) (Differential travel)	3 to 20% of sensing distance

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Effective operating dist. (S <sub>r</sub> )	$0.9 \times S_n \le S_r \le 1.1 \times S_n$	
Usable operating dist. (S)	$0.9 \text{ x } S_r \le S_u \le 1.1 \text{ x } S_r$	
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 material		
Body	Stainless steel (1.4301)	
Front	Grey thermoplastic polyester	
Back	Black thermoplastic polyester	
Connection		
Cable	2 m, 2 x 0.50 mm <sup>2</sup> ,	
	grey PVC, oil proof	
Plug	M 12 x 1 (double keyed)	
Cables for plug (-6)	CONH6A-xx	
Weight (cable excluded)	<b>El 12</b> 80 g	
	<b>El 18</b> 130 g	
	<b>El 30</b> 200 g	
Tightening torque	<b>EI 12</b> 7.5 Nm (x)	
	17.5 Nm (y)	
	<b>EI 18</b> 27.5 Nm	
	<b>El 30</b> 100.0 Nm	