

Proximity Sensors Inductive Stainless Steel Housing Types EI, DC, M 12, M 18, M 30

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- Stainless steel housing, cylindrical
- Diameter: M 12, M 18, M 30
- Short or long versions
- Sensing distance: 2 to 15 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 plug M 12

Product Description

Proximity switch in housings ranging from M 12 to M 30. Short or long versions in standard stainless steel housing. Made after Euronorm EN 50 008.

Ordering Key

EI 1202 NPOSS-1

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

Type Selection DC Types, Cable and M 12 Plug

Housing diameter	Body style	Connection	Rated operating dist. (S _n)	Ordering no. Transistor NPN Make switching	Ordering no. Transistor NPN Break switching	Ordering no. Transistor PNP Make switching	Ordering no. Transistor PNP Break switching
M 12	Short	Cable	2 mm ¹⁾	EI 1202 NPOSS	EI 1202 NPCSS	EI 1202 PPOSS	EI 1202 PPCSS
M 12	Short	Cable	4 mm ²⁾	EI 1204 NPOSS	EI 1204 NPCSS	EI 1204 PPOSS	EI 1204 PPCSS
M 18	Short	Cable	5 mm ¹⁾	EI 1805 NPOSS	EI 1805 NPCSS	EI 1805 PPOSS	EI 1805 PPCSS
M 18	Short	Cable	8 mm ²⁾	EI 1808 NPOSS	EI 1808 NPCSS	EI 1808 PPOSS	EI 1808 PPCSS
M 30	Short	Cable	10 mm ¹⁾	EI 3010 NPOSS	EI 3010 NPCSS	EI 3010 PPOSS	EI 3010 PPCSS
M 30	Short	Cable	15 mm ²⁾	EI 3015 NPOSS	EI 3015 NPCSS	EI 3015 PPOSS	EI 3015 PPCSS



Specifications

Rated operational volt. (U_e) (U_B)	12 to 36 VDC 10 to 40 VDC (ripple included)	Repeat accuracy (R)	≤ 5%
Ripple	≤ 10%	Hysteresis (H) (Differential travel)	1 to 15% of sensing distance
Rated operational current (I_o) Continuous	≤ 200 mA	Effective operating dist. (S_r)	$0.9 \times S_n \leq S_r \leq 1.1 \times S_n$
No-load supply current (I_o)	Output ON: < 6.5 mA Output OFF: < 2.7 mA	Usable operating dist. (S)	$0.9 \times S_r \leq S_u \leq 1.1 \times S_r$
Voltage drop (U_d)	≤ 2 VDC at max. load	Ambient temperature	
Protection	Reverse polarity, short-circuit, transients	Operating	-25° to +70°C (-13° to +158°F)
Transient voltage	≤ 700 V/0.5 J	Storage	-30° to +80°C (-22° to +176°F)
EMC	Approved according to EN 50 080, EN 50 081	Degree of protection	IP 67 (Nema 1, 3, 4, 6, 13)
Power ON delay	< 10 ms	Housing material	
Frequency of operating cycles (f)	EI 1202 800 Hz EI 1204 500 Hz EI 1805 500 Hz EI 1808 400 Hz EI 3010 300 Hz EI 3015 100 Hz	Body	Stainless steel (1.4301)
Indication for output ON	LED, yellow	Front	Grey thermoplastic polyester
Assured operating dist. (S_a)	$0 \leq S_a \leq 0.81 S_n$	Back	Black polyester
		Connection	
		Cable	2 m, 3 x 0.3 mm ² , grey PVC, oil proof M 12 x 1
		Plug	M 12 x 1
		Cables for plug (-1)	CONH1A serie
		Weight (cable excluded)	EI 12 10 g EI 1805 18 g EI 1808 20 g EI 3010 50 g EI 3015 70 g
		Tightening torque	EI 12 7.5 Nm (x) 17.5 Nm (y) EI 18 27.5 Nm EI 30 100.0 Nm
		Approvals	UL, CSA
		CE-marking	Yes