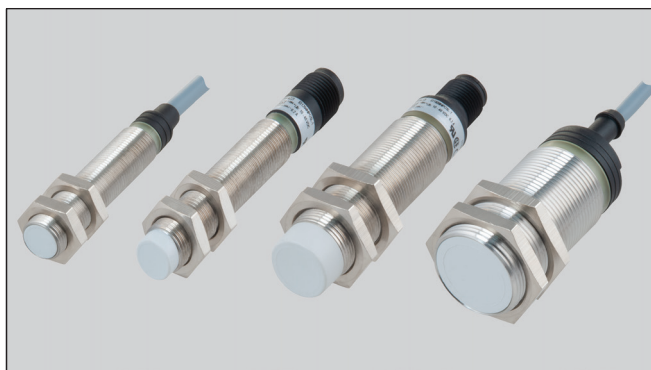


Proximity Sensors Inductive Stainless Steel Housing Types EI, DC, M12, M18, M30



- Stainless steel housing, cylindrical
- Diameter: M12, M18, M30
- Short or long versions
- Sensing distance: 2 to 15 mm
- Power supply: 10 to 32 VDC
- Output: Transistor NPN/PNP, normally open or normally closed
- Protection: Short-circuit and reverse polarity
- LED-indication for output ON
- 2 m cable or plug M12

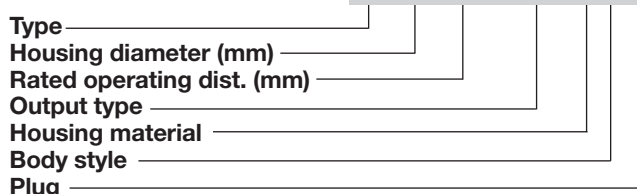
Product Description

Proximity switch in housings ranging from M12 to M30. Short or long versions in standard stainless steel housing.

Made after EN 60947-5-2.

Ordering Key

EI 1202 NPOSS-1



Type Selection DC Types, Cable and M12 Plug

Housing diameter	Body style	Connec-tion	Rated operating dist. (S _n)	Ordering no. Transistor NPN Normally open	Ordering no. Transistor NPN Normally closed	Ordering no. Transistor PNP Normally open	Ordering no. Transistor PNP Normally closed
M12	Short	Cable	2 mm ¹⁾	EI 1202 NPOSS	EI 1202 NPCSS	EI 1202 PPOSS	EI 1202 PPCSS
M12	Short	Plug	2 mm ¹⁾	EI 1202 NPOSS-1	EI 1202 NPCSS-1	EI 1202 PPOSS-1	EI 1202 PPCSS-1
M12	Long	Cable	2 mm ¹⁾	EI 1202 NPOSL		EI 1202 PPOSL	EI 1202 PPCSL
M12	Long	Plug	2 mm ¹⁾	EI 1202 NPOSL-1		EI 1202 PPOSL-1	EI 1202 PPCSL-1
M12	Short	Cable	4 mm ²⁾	EI 1204 NPOSS	EI 1204 NPCSS	EI 1204 PPOSS	EI 1204 PPCSS
M12	Short	Plug	4 mm ²⁾	EI 1204 NPOSS-1		EI 1204 PPOSS-1	EI 1204 PPCSS-1
M12	Long	Cable	4 mm ²⁾	EI 1204 NPOSL		EI 1204 PPOSL	EI 1204 PPCSL
M12	Long	Plug	4 mm ²⁾	EI 1204 NPOSL-1		EI 1204 PPOSL-1	EI 1204 PPCSL-1
M18	Short	Cable	5 mm ¹⁾	EI 1805 NPOSS	EI 1805 NPCSS	EI 1805 PPOSS	EI 1805 PPCSS
M18	Short	Plug	5 mm ¹⁾	EI 1805 NPOSS-1	EI 1805 NPCSS-1	EI 1805 PPOSS-1	EI 1805 PPCSS-1
M18	Long	Cable	5 mm ¹⁾	EI 1805 NPOSL		EI 1805 PPOSL	EI 1805 PPCSL
M18	Long	Plug	5 mm ¹⁾	EI 1805 NPOSL-1		EI 1805 PPOSL-1	EI 1805 PPCSL-1
M18	Short	Cable	8 mm ²⁾	EI 1808 NPOSS	EI 1808 NPCSS	EI 1808 PPOSS	EI 1808 PPCSS
M18	Short	Plug	8 mm ²⁾	EI 1808 NPOSS-1		EI 1808 PPOSS-1	EI 1808 PPCSS-1
M18	Long	Cable	8 mm ²⁾	EI 1808 NPOSL		EI 1808 PPOSL	EI 1808 PPCSL
M18	Long	Plug	8 mm ²⁾	EI 1808 NPOSL-1		EI 1808 PPOSL-1	EI 1808 PPCSL-1
M30	Short	Cable	10 mm ¹⁾	EI 3010 NPOSS	EI 3010 NPCSS	EI 3010 PPOSS	EI 3010 PPCSS
M30	Short	Plug	10 mm ¹⁾			EI 3010 PPOSS-1	
M30	Long	Cable	10 mm ¹⁾	EI 3010 NPOSL		EI 3010 PPOSL	EI 3010 PPCSL
M30	Long	Plug	10 mm ¹⁾			EI 3010 PPOSL-1	
M30	Short	Cable	15 mm ²⁾	EI 3015 NPOSS	EI 3015 NPCSS	EI 3015 PPOSS	EI 3015 PPCSS
M30	Short	Plug	15 mm ²⁾	EI 3015 NPOSS-1		EI 3015 PPOSS-1	
M30	Long	Cable	15 mm ²⁾	EI 3015 NPOSL	EI 3015 NPCSL	EI 3015 PPOSL	
M30	Long	Plug	15 mm ²⁾			EI 3015 PPOSL-1	

¹⁾ For flush mounting in metal

²⁾ For non-flush mounting in metal

Specifications

Rated operational volt. (U_B)	10 to 32 VDC (ripple included)	Usable operating dist. (S)	$0.9 \times S_r \leq S_u \leq 1.1 \times S_r$
Ripple	$\leq 10\%$	Ambient temperature	Operating Storage
Rated operational current (I_a) Continuous	≤ 200 mA		-25° to +70°C (-13° to +158°F) -30° to +80°C (-22° to +176°F)
No-load supply current (I_o)	Output ON: < 6.5 mA Output OFF: < 2.7 mA	Degree of protection	IP 67
Voltage drop (U_d)	≤ 2 VDC at max. load	Housing material	
Protection	Reverse polarity, short-circuit, transients	Body	Stainless steel (1.4301)
Transient voltage	≤ 700 V/0.5 J	Front	Grey thermoplastic polyester
EMC	Approved according to EN 60947-5-2	Back	Black polyester
Power ON delay	< 10 ms	Connection	
Frequency of operating cycles (f)		Cable	2 m, 3 x 0.3 mm ² , grey PVC, oil proof M12 x 1
EI 1202	800 Hz	Plug	CONx... series to be pur- chased separately
EI 1204	500 Hz	Cables for plug (-1)	
EI 1805	500 Hz		
EI 1808	400 Hz		
EI 3010	300 Hz		
EI 3015	100 Hz		
Indication for output ON	LED, yellow	Weight (cable excluded)	
Assured operating dist. (S_a)	$0 \leq S_a \leq 0.81 S_n$	EI 12	10 g
Repeatability (R)	$\leq 5\%$	EI 1805	18 g
Hysteresis (H) (Differential travel)	1 to 15% of sensing distance	EI 1808	20 g
Effective operating dist. (S_r)	$0.9 \times S_n \leq S_r \leq 1.1 \times S_n$	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

Dimensions

Type	A	B Ø mm	C mm	D mm	E mm	F mm	SW mm
EI 1202 xPxSS	M12 x 1 x 30	10.7	30	11	5.0	4	17
EI 1202 xPxSL	M12 x 1 x 50	10.7	50	11	5.0	4	17
EI 1202 xPxSS-1	M12 x 1 x 30	10.7	30	12.6	11.9	4	17
EI 1202 xPxSL-1	M12 x 1 x 50	10.7	50	12.6	11.9	4	17
EI 1204 xPxSS	M12 x 1 x 30	10.7	34	11	5.0	4	17
EI 1204 xPxSL	M12 x 1 x 50	10.7	54	11	5.0	4	17
EI 1204 xPxSS-1	M12 x 1 x 30	10.7	34	12.6	11.9	4	17
EI 1204 xPxSL-1	M12 x 1 x 50	10.7	54	12.6	11.9	4	17
EI 1805 xPxSS	M18 x 1 x 30	16.7	30	11.6	15.4	4	24
EI 1805 xPxSL	M18 x 1 x 50	16.7	50	11.6	15.4	4	24
EI 1805 xPxSS-1	M18 x 1 x 30	16.7	30	13.1	11.9	4	24
EI 1805 xPxSL-1	M18 x 1 x 50	16.7	50	13.1	11.9	4	24
EI 1808 xPxSS	M18 x 1 x 30	16.7	38	11.6	15.4	4	24
EI 1808 xPxSL	M18 x 1 x 50	16.7	58	11.6	15.4	4	24
EI 1808 xPxSS-1	M18 x 1 x 30	16.7	38	13.1	11.9	4	24
EI 1808 xPxSL-1	M18 x 1 x 50	16.7	58	13.1	11.9	4	24
EI 3010 xPxSS	M30 x 1.5 x 30	28	30	13.6	15.4	5	36
EI 3010 xPxSL	M30 x 1.5 x 50	28	50	13.6	15.4	5	36
EI 3010 xPxSS-1	M30 x 1.5 x 30	28	30	13.6	11.9	5	36
EI 3010 xPxSL-1	M30 x 1.5 x 50	28	50	13.6	11.9	5	36
EI 3015 xPxSS	M30 x 1.5 x 30	28	42	13.6	15.4	5	36
EI 3015 xPxSL	M30 x 1.5 x 50	28	62	13.6	15.4	5	36
EI 3015 xPxSS-1	M30 x 1.5 x 30	28	42	13.6	11.9	5	36
EI 3015 xPxSL-1	M30 x 1.5 x 50	28	62	13.6	11.9	5	36