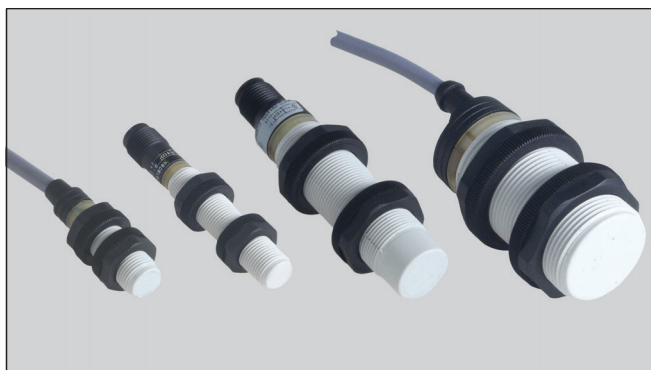


Proximity Sensors Inductive Thermoplastic Polyester Housing Types EI, DC, M12, M18, M30



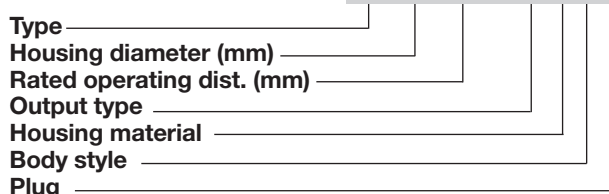
- Euronorm thermoplastic polyester housing, cylindrical
- Diameter: M12, M18, M30
- Flush and non-flush types
- Long and short body versions
- Sensing distance: 2 to 15 mm
- Power supply: 10 to 32 VDC
- Output: Transistor NPN/PNP, Normally open or Normally closed
- Protection: Short-circuit, reverse polarity and overload
- LED-indication for output ON
- 2 m cable or M12 plug

Product Description

Proximity switch in M12, M18 and M30 polyester housings. Made in accordance with EN 60947-5-2.

Ordering Key

EI 1808 PPCPL-1



Type Selection DC Types, Cable and M12 Plug

Housing diameter	Body style	Connection	Rated operating dist. (S _n)	Ordering no. Transistor NPN Normally open	Ordering no. Transistor PNP Normally open	Ordering no. Transistor PNP Normally closed
M12	Long	Cable	2 mm ¹⁾		EI 1202 PPOPL	
M12	Short	Cable	4 mm ²⁾		EI 1204 PPOPS	
M12	Long	Cable	4 mm ²⁾	EI 1204 NPOPL	EI 1204 PPOPL	
M18	Long	Cable	5 mm ¹⁾	EI 1805 NPOPL	EI 1805 PPOPL	
M18	Short	Cable	8 mm ²⁾	EI 1808 NPOPS	EI 1808 PPOPS	
M18	Short	Plug	8 mm ²⁾		EI 1808 PPOPS-1	
M18	Long	Cable	8 mm ²⁾	EI 1808 NPOPL	EI 1808 PPOPL	EI 1808 PPCPL
M18	Long	Plug	8 mm ²⁾		EI 1808 PPOPL-1	EI 1808 PPCPL-1
M30	Long	Cable	10 mm ¹⁾	EI 3010 NPOPL	EI 3010 PPOPL	EI 3010 PPCPL
M30	Short	Cable	15 mm ²⁾	EI 3015 NPOPS		
M30	Long	Cable	15 mm ²⁾		EI 3015 PPOPL	

¹⁾ For flush mounting in metal

²⁾ For non-flush mounting in metal

Specifications

Rated operational volt. (U_B)	10 to 32 VDC (ripple incl.)	Frequency of operating cycles (f)	
Ripple	≤ 10%	EI 1202	800 Hz
Rated operational current (I_e)		EI 1204	500 Hz
Continuous	≤ 200 mA	EI 1805	500 Hz
No-load supply current (I_o)	Output ON: < 6.5 mA Output OFF: < 2.7 mA	EI 1808	400 Hz
Voltage drop (U_d)	≤ 2 VDC at max. load	EI 3010	300 Hz
Protection	Reverse polarity, short-circuit, transients	EI 3015	100 Hz
Transient voltage	≤ 700 V/0.5 J	Indication for output ON	LED, yellow
Power ON delay	< 10 ms	Assured operating dist. (S_a)	0 ≤ S _a ≤ 0.81 S _n
		Repeatability (R)	≤ 5%
		Hysteresis (H) (Differential travel)	1 to 15% of sensing distance
		Effective operating dist. (S_r)	0.9 x S _n ≤ S _r ≤ 1.1 x S _n
		Usable operating dist. (S)	0.9 x S _r ≤ S _u ≤ 1.1 x S _r



Specifications (cont.)

Ambient temperature		Weight (cable excluded)	
Operating	-25° to +70°C (-13° to +158°F)	EI12	10 g
Storage	-30° to +80°C (-22° to +176°F)	EI 1805	18 g
Degree of protection	IP 67	EI 1808	20 g
Housing material		EI 3010	50 g
Body	Grey thermoplastic polyester	EI 3015	70 g
Back	Black polyester	Tightening torque	
Connection		EI 12	1.8 Nm
Cable	2 m, 3 x 0.3 mm ² , grey PVC, oil proof	EI 18	2.6 Nm
Plug	M 12 x 1	EI 30	7.5 Nm
Cables for plug (-1)	CONx... series to be purchased separately	Approvals	UL, CSA
		CE-marking	Yes
		EMC	Approved acc. to EN 60947-5-2

Dimensions

Type	A	B (Ø mm)	C (mm)	D (mm)	E (mm)	F (mm)	SW (mm)
EI 1202 xPxPL	M 12 x 1 x 50	10.7	50	11	5.0	8	17
EI 1204 xPxPS	M 12 x 1 x 30	10.7	34	11	5.0	8	17
EI 1204 xPxPL	M 12 x 1 x 50	10.7	54	11	5.0	8	17
EI 1805 xPxPL	M 18 x 1 x 50	16.7	50	11.6	15.4	8	24
EI 1808 xPxPS	M 18 x 1 x 30	16.7	38	11.6	15.4	8	24
EI 1808 xPxPL	M 18 x 1 x 50	16.7	58	11.6	15.4	8	24
EI 1808 xPxPS-1	M 18 x 1 x 30	16,7	38	13,1	11,9	8	24
EI 1808 xPxPL-1	M 18 x 1 x 50	16.7	58	13.1	11.9	8	24
EI 3010 xPxPL	M 30 x 1.5 x 50	28	50	13.6	15.4	10	36
EI 3015 xPxPS	M 30 x 1.5 x 30	28	42	13.6	15.4	10	36
EI 3015 xPxPL	M 30 x 1.5 x 50	28	62	13.6	15.4	10	36

