

Proximity Sensors Inductive Thermoplastic Polyester Housing Types EI, M30



- Euronorm thermoplastic polyester housing, cylindrical
- Diameter: M30.
- Sensing distance: 10 and 15 mm
- Power supply: 20 to 250 ADC
- Output: SPDT relay, make & break switching
- LED-indication for output ON
- 2 m cable or M12 plug

Product Description

Proximity switch in M30 polyester housings. euronorms EN 50 008 and EN 50 036. For metal versions Made in accordance with refer to type. EI ...S.

Ordering Key

EI 1202 NPOPS-1

Type _____
Housing diameter (mm) _____
Rated operating dist. (mm) _____
Output type _____
Housing material _____
Body style _____
Plug _____

Type Selection Relay Output

Housing diameter	Rated operating dist. (S_n)	Ordering no. Make & break swit. 12 VAC/DC	Ordering no. Make & break swit. 24 VAC/DC	Ordering no. Make & break swit. 115 VAC	Ordering no. Make & break swit. 230 VAC
30 mm	10 mm ¹⁾	EI 3010 RNAP 912	EI 3010 RNAP 924	EI 3010 RNAP 115	EI 3010 RNAP 230
30 mm	15 mm ²⁾	EI 3015 RNAP 912	EI 3015 RNAP 924	EI 3015 RNAP 115	EI 3015 RNAP 230

¹⁾ For flush mounting in metal²⁾ For non-flush mounting in metal

Make switching = Normally Open (NO)

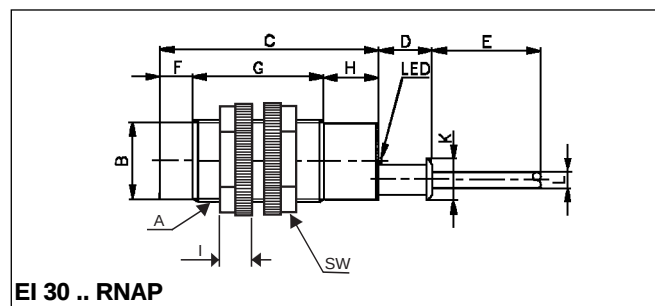
Break switching = Normally Closed (NC)

Specifications

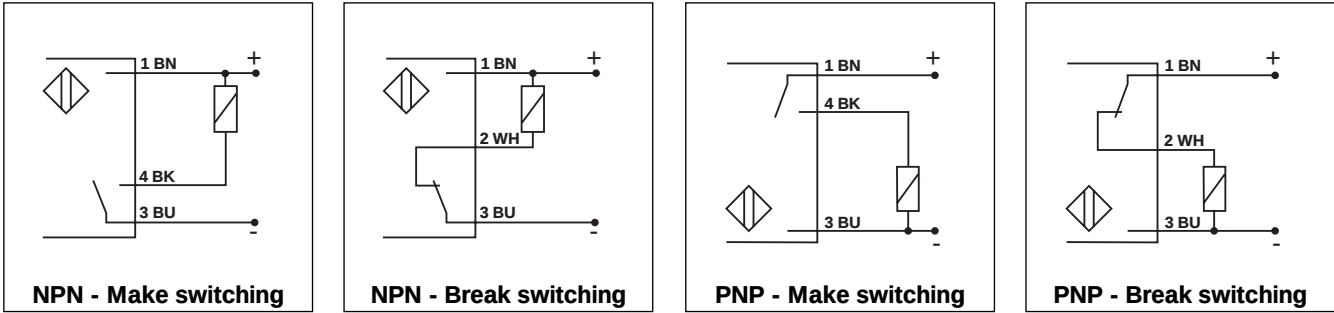
	SPDT relay
Rated operational volt. (U_e) (U_B)	912: 10.8 to 13.2 VAC/DC, 50 to 60 Hz 924: 21.6 to 26.2 VAC/DC, 50 to 60 Hz 115: 97 to 135 VAC, 50 to 60 Hz 230: 207 to 250 VAC, 50 to 60 Hz
Rated operational current (I_e) Continuous Short-time	≤ 2 A ≤ 10 A, max. 25 ms
Max. power	AC: 760 VA DC: 150 W
No-load supply current (I_o)	12 VAC/DC: 65/35 mA 24 VAC/DC: 34/13 mA 115 VAC: 16 mA 230 VAC: 16 mA
Voltage drop (U_d)	-
Protection	None
Transient voltage	≤ 1 kV/0.5 J (prepared)
-	
Power ON delay	≤ 60 ms
Frequency of operating cycles (f)	10 Hz
Indication for output ON	LED, yellow
Assured operating dist. (S_a)	$0 \leq S_a \leq 0.81 S_n$
Repeat accuracy (R)	$\leq 5\%$
Hysteresis (H) (Differential travel)	3 to 20% of sensing distance
Effective operating dist. (S_r)	$0.9 \times S_n \leq S_r \leq 1.1 \times S_n$
Usable operating dist. (S)	$0.9 \times S_r \leq S_u \leq 1.1 \times S_r$
Ambient temperature Operating Storage	-25° to +70°C (-13° to +158°F) -30° to +80°C (-22° to +176°F)
Degree of protection	IP 67 (Nema 1, 3, 4, 6, 13)
Housing material Body Back	Blue thermoplastic polyester Blue thermoplastic polyester
Connection Cable Plug Cables for plug (-1)	2 m, 5 x 0.50 mm ² , grey PVC, oil proof
Weight (cable excluded)	180 g
Tightening torque	7.5 Nm
Approvals	UL, CSA
CE-marking	Yes

Dimensions

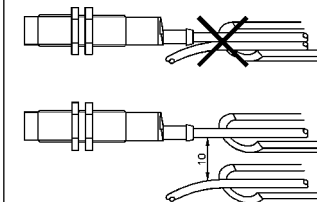
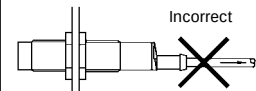
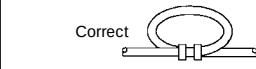
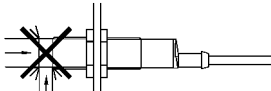
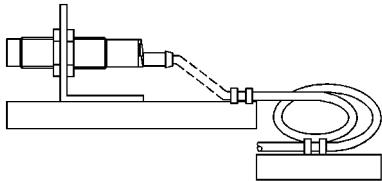
Type	A	B Ø mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	SW mm	K Ø mm	L Ø mm
EI 3010 XPXPS	M 30 x 1.5 x 30	28	30	13.6	15.4	10				36		
EI 3010 XPXPL	M 30 x 1.5 x 50	28	50	13.6	15.4	10				36		
EI 3010 XPXPS-1	M 30 x 1.5 x 30	28	30	13.6	11.9	10				36		
EI 3010 XPXPL-1	M 30 x 1.5 x 50	28	50	13.6	11.9	10				36		
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		
EI 3015 XPXPS-1	M 30 x 1.5 x 30	28	42	13.6	11.9	10				36		
EI 3015 XPXPL-1	M 30 x 1.5 x 50	28	62	13.6	11.9	10				36		
RNAP												
EI 3010	M 30 x 1.5	28.16	80	19.5	2000	1	59	20	10	36	15	6.7
EI 3015	M 30 x 1.5	28.16	80	19.5	2000	12	48	20	10	36	15	6.7



Wiring Diagrams



Installation Hints

To avoid interference from inductive voltage/current peaks, separate the prox. switch power cables from any other power cables, e.g. motor, contactor or solenoid cables 	Relief of cable strain Incorrect  Correct  The cable should not be pulled	Protection of the sensing face  A proximity switch should not serve as mechanical stop	Switch mounted on mobile carrier  Any repetitive flexing of the cable should be avoided
---	--	---	---

Power Supplies

- Power supplies VAC: > SS 110.
Power supplies VDC: > SS 130/140.
Power supplies with amplifier relays: > SV 190.