

Proximity Sensors Inductive Stainless Steel Housing Type EI, M30, High Noise Immunity

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- Stainless steel housing, cylindrical
- Diameter: M30
- Sensing distance: 9 mm
- Hysteresis: 25 - 45%
- Power supply: 24 VDC
- Output: Transistor PNP, make switching
- Protection: Short-circuit and reverse polarity
- LED-indication for output ON
- 2 m PUR cable, shield connected internally to housing
- Internal 4,7 k Ω , 0,5 W pull down resistor

Product Description

Proximity switch in stainless steel housing M30. Made after Euronorm EN 50 008. High immunity to electromag-

netic disturbances. Decreased sensitivity to unwanted axle displacements.

Ordering Key

EI 3010 PPOSS 1556

Type: Inductive proximity switch

Housing diameter (mm)

Rated operating dist. (mm)

Output type

Housing material

Body style

Special type number

Type Selection

Housing diameter	Body style	Connection	Rated operating distance (S _n)	Ordering no. Transistor PNP, make switching
M 30	Short	Cable	9 mm ¹⁾	EI 3010 PPOSS 1556

¹⁾ For flush mounting in metal
Make switching = Normally Open (NO)

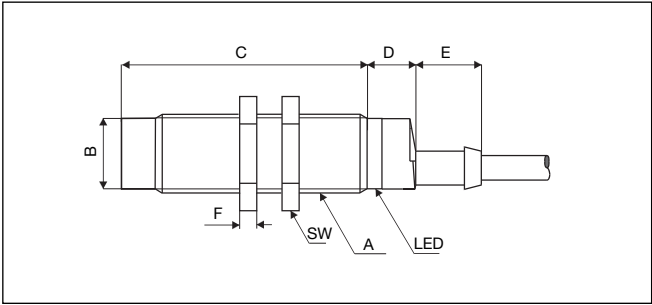
Specifications

Rated operational volt. (U _e) (U _B)	20 to 30 VDC 18 to 33 VDC (ripple included)	Repeat accuracy (R)	≤ 5%
Ripple	≤ 10%	Hysteresis (H) (Differential travel)	25 to 45% of sensing distance
Rated operational current (I_e) Continuous	≤ 200 mA	Effective operating dist. (S_r)	0.9 x S _n ≤ S _r ≤ 1.1 x S _n
No-load supply current (I_o)	Output ON: < 6.5 mA Output OFF: < 2.7 mA	Usable operating dist. (S)	0.9 x S _r ≤ S _u ≤ 1.1 x S _r
Voltage drop (U_d)	≤ 2 VDC at max. load	Ambient temperature Operating Storage	-25° to +70°C (-13° to +158°F) -30° to +80°C (-22° to +176°F)
Protection	Reverse polarity, short-circuit, transients	Degree of protection	IP 67 (Nema 1, 3, 4, 6, 13)
Transient voltage	≤ 700 V/0.5 J	Housing material Body Front Back	Stainless steel (1.4301) Grey thermoplastic polyester Black polyester
EMC	Approved according to IEC 60947-5-2	Connection Cable	3,1 m, 3 x 0.3 mm ² , grey PUR, shield cable
Power ON delay	< 10 ms	Weight (cable excluded)	50 g
Frequency of operating cycles (f)	300 Hz	Tightening torque	100.0 Nm
Indication for output ON	LED, yellow	CE-marking	Yes
Assured operating dist. (S_a)	0 ≤ S _a ≤ 0.81 S _n		



Dimensions

Type	A	B Ø mm	C mm	D mm	E mm	F mm	SW mm
EI 3010 PPOSS 1556	M 30 x 1.5 x 30	28	30	13.6	15.4	5	36



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

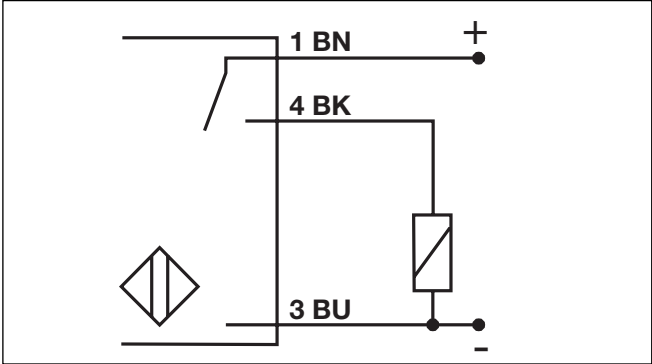
Protection of the sensing face

A proximity switch should not serve as mechanical stop

Switch mounted on mobile carrier

Any repetitive flexing of the cable should be avoided

Wiring Diagrams



Power Supplies

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