

# Proximity Sensors Inductive Extended Range, Aluminium Micro Switch Housing Type IG12FSF04DO, DC, 2-wire

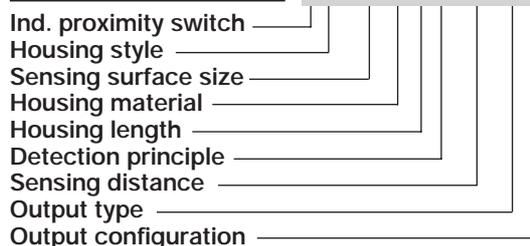


- Sensing distance: 4 mm
- Flush type
- Power supply: 10 to 40 VDC
- Output: Transistor
- Make or Break switching
- Protection: Reverse polarity, short-circuit and transients
- 2 m cable - PUR/PVC
- Dimensions: Body: 30 x 19 x 15 mm  
Tip: Ø12 x 16 mm

## Product Description

Flush mountable inductive proximity switch in micro switch aluminium housing with 2 m PUR cable. This type of sensor can replace mechanical limit switches. The sensor has an extreme low No-load supply current of typical 0.3 mA. Mounting with 4 mm captive screws or 3 mm screws (front mounted).

## Ordering Key **IG12FSF04DO**



## Type Selection

Housing dimensions	Connection	Rated operating dist. (S <sub>n</sub> )	Ordering no. 2 wire DC, Normally open	Ordering no. 2 wire DC, Normally closed
30 x 19 x 15 mm	Cable	4 mm <sup>1)</sup>	IG 12 FSF 04 DO	IG 12 FSF 04 DC

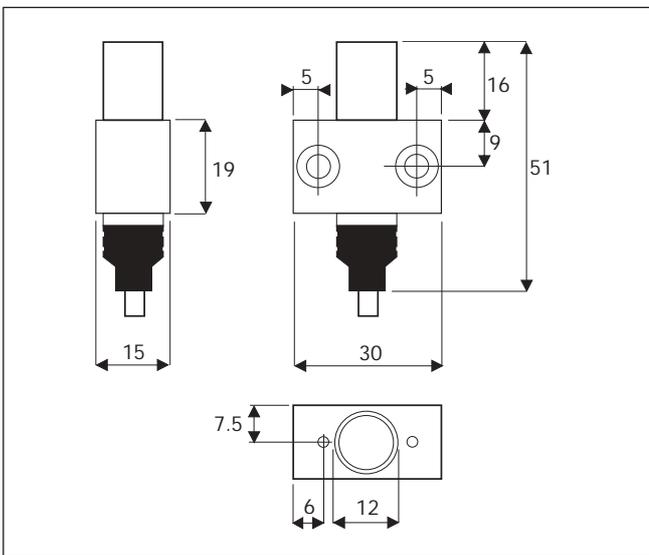
<sup>1)</sup> For flush mounting in metal

## Specifications

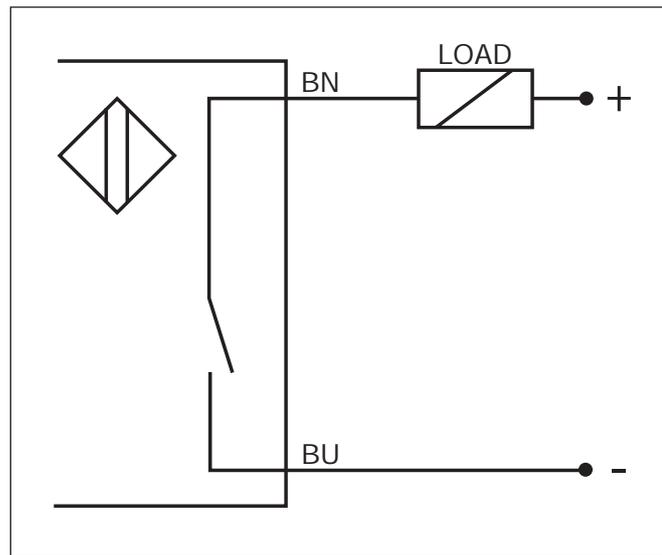
Rated operational volt. (U <sub>e</sub> ) (U <sub>B</sub> )	12 to 36 VDC 10 to 40 VDC (ripple included)	Degree of protection	IP 67 (Nema 1, 3, 4, 6, 13)
Ripple	≤ 10%	Housing material	Anodized Aluminium, type EN AW-6802 Anodized Aluminium and grey thermoplastic polyester (CPBT)
Rated operational current (I <sub>e</sub> ) Continuous	≤ 5-100 mA	Body	
No-load supply current (I)	≤ 0.4 mA	Front	
Voltage drop (U <sub>d</sub> )	≤ 3 VDC at max. load	Connection	2 m, 2 x 0.34 mm <sup>2</sup> , Ø5.1 mm grey PUR/PVC, oil proof
Protection	Reverse polarity, short-circuit, transients	Cable	
Transient voltage	≤ 1 kV/500 Ω	Mounting	2 x M4 screws for side mounting or 2 x M3 screws for front mounting
Power ON delay	< 100 ms	Weight (cable included 2 m)	Approx. 85 g
Frequency of op. cycles (f)	1 kHz		
Repeat accuracy (R)	≤ 10%		
Hysteresis (H) (Differential travel)	1 to 20% of sensing distance		
Assured operating dist. (S <sub>a</sub> )	0 ≤ S <sub>a</sub> ≤ 0.81 S <sub>n</sub>		
Effective operating dist. (S <sub>r</sub> )	0.9 x S <sub>n</sub> ≤ S <sub>r</sub> ≤ 1.1 x S <sub>n</sub>		
Usable operating dist. (S <sub>m</sub> )	0.9 x S <sub>r</sub> ≤ S <sub>m</sub> ≤ 1.1 x S <sub>r</sub>		
Ambient temperature			
Operating	-25° to +70°C (-13° to +158°F)		
Storage	-30° to +80°C (-22° to +176°F)		



## Dimensions



## Wiring Diagram



## Installation Hints

<p><i>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</i></p>	<p><i>Relief of cable strain</i></p> <p>Incorrect</p> <p>Correct</p> <p>The cable should not be pulled</p>	<p><i>Protection of the sensing face</i></p> <p>A proximity switch should not serve as mechanical stop</p>	<p><i>Switch mounted on mobile carrier</i></p> <p>Any repetitive flexing of the cable should be avoided</p>
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## Delivery Contents

Inductive proximity switch IG12FSF04D.  
Packaging: plastic bag