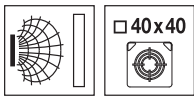


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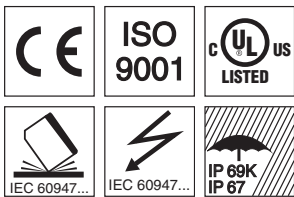


**40mm**



**non-embedded**

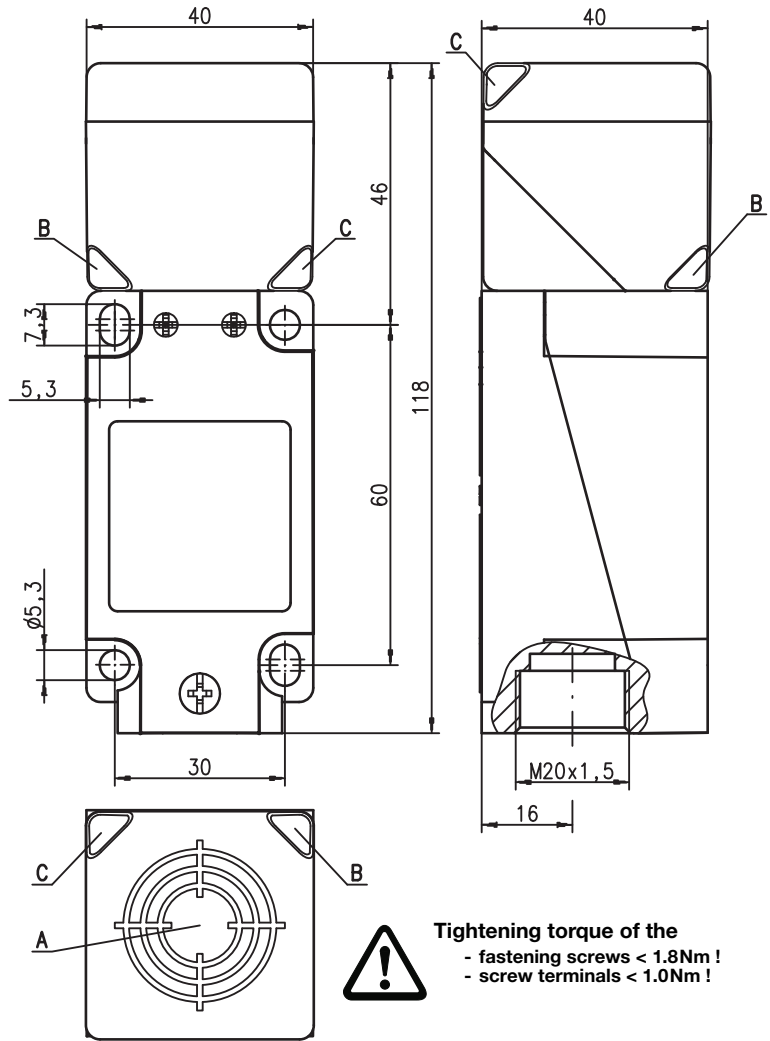
- Plastic 40 x40mm cubical housing
- Connection via screw terminals
- Built-in short circuit protection, polarity reversal protection
- LED for switching state



**Accessories:**

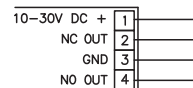
(available separately)

**Dimensioned drawing**



- A** Active surface
- B** Yellow indicator diode
- C** Green indicator diode

**Electrical connection**



We reserve the right to make changes • IS\_244\_N\_en.fm

## Specifications

### General specifications

Type of installation	IS 244...-40N... non-embedded installation
Typ. operating range limit $S_n$	40.0mm
Operating range $S_a$	0 ... 32.4mm

### Electrical data

Operating voltage $U_B$ 1)	10 ... 30VDC
Residual ripple $\sigma$	$\leq 20\%$ of $U_B$
Output current $I_L$	$\leq 200$ mA
Open-circuit current $I_0$	$\leq 20$ mA
Residual current $I_r$	$\leq 500$ $\mu$ A
Switching output/function	.../44... PNP transistor, make-contact + break-contact (NO + NC), complementary .../22... NPN transistor, make-contact + break-contact (NO + NC), complementary
Voltage drop $U_d$	$\leq 2$ V
Hysteresis H of $S_r$	typ. 5%
Repeatability of $S_r$	$\leq 10\%$ 2)

### Timing

Switching frequency $f$	$\leq 150$ Hz
Delay before start-up	$\leq 300$ ms

### Indicators

Yellow LED (visible from 360°)	switching state
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### Mechanical data

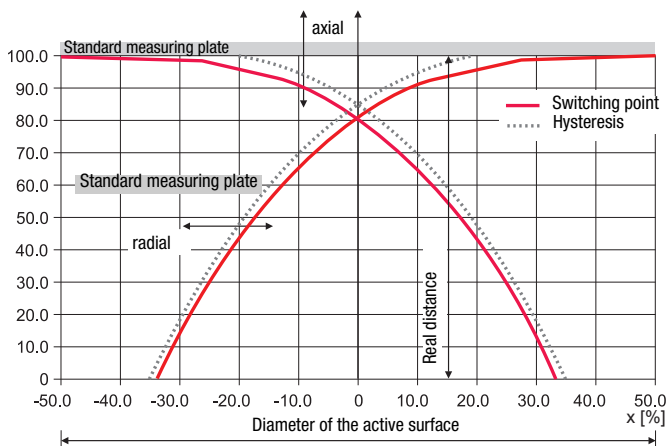
Housing	PA, metal
Standard measuring plate	120 x 120mm <sup>2</sup> , Fe360
Active surface	PA
Weight (M12 plug/cable)	approx. 225g
Connection type	M20 terminal compartment, wire cross section $\leq 2.5$ mm <sup>2</sup>

### Environmental data

Ambient temperature	-25°C ... +85°C	
Protection class	IP 67, IP 69K	
Protective circuit 3)	1, 2	
Standards applied	IEC/EN 60947-5-2	Air 8kV (ESD)
Electromagnetic compatibility	IEC 61000-4-2	10V/m (RFI)
	IEC 61000-4-3	2kV (Burst)
	IEC 61000-4-4	

- 1) Observe the safety regulations and installation instructions regarding power supply and wiring; for UL applications: only for use in "Class 2" circuits acc. to NEC
- 2) For  $U_B$  ambient temperature  $T_a = 23^\circ\text{C} \pm 5^\circ\text{C}$
- 3) 1=polarity reversal protection, 2=short-circuit protection, for all outputs

## Typical approach curve:



## Order guide

The sensors listed here are preferred types; current information at [www.leuze.com](http://www.leuze.com).

$S_n = 40$ mm	Designation	Part No.
	IS 244 PP/44-40N-TB.4	50114214
	IS 244 PP/22-40N-TB.4	50114212

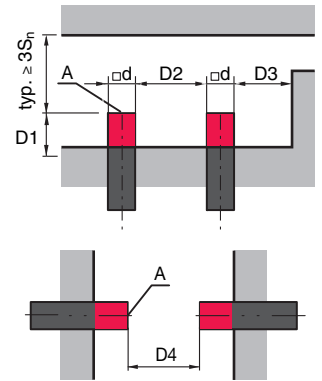
## Tables

Reduction factors:  
for  $S_n = 40.0$ mm

Steel Fe360	1
Copper	0.30
Aluminum	0.31
Brass	0.39
Stainless steel	0.74

## Mounting

### Non-embedded installation:



A: active surface

Ferromagnetic and non-ferromagnetic materials				
$S_n$ [mm]	D1 [mm]	D2 [mm]	D3 [mm]	D4 [mm]
40	40	160	42	300

## Remarks

- **Approved purpose:**  
The inductive switches are electronic sensors for the inductive, contactless detection of objects. This product may only be used by qualified personnel and must only be used for the approved purpose. This sensor is not a safety sensor and is not to be used for the protection of persons.