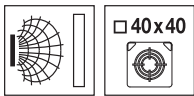
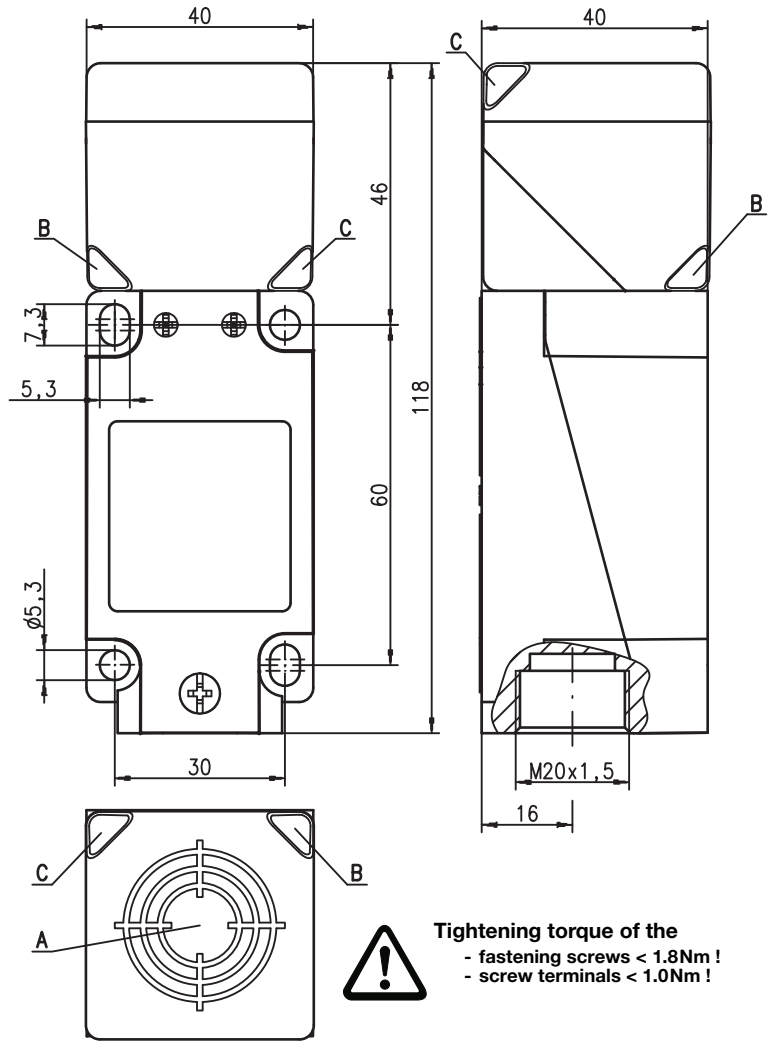


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Dimensioned drawing

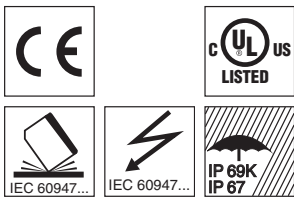


40mm



non-embedded

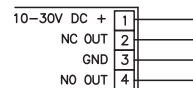
- Plastic 40 x40mm cubical housing
- Connection via screw terminals
- Built-in short circuit protection, polarity reversal protection
- LED for switching state



Accessories:
(available separately)

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

Electrical connection



Tightening torque of the
- fastening screws < 1.8Nm !
- screw terminals < 1.0Nm !

We reserve the right to make changes • IS_244_N_en.fm

Specifications

General specifications

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

Electrical data

Operating voltage U_B 1)	10 ... 30VDC
Residual ripple σ	$\leq 20\%$ of U_B
Output current I_L	≤ 200 mA
Open-circuit current I_0	≤ 20 mA
Residual current I_r	≤ 500 μ 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	≤ 2 V
Hysteresis H of S_r	typ. 5%
Repeatability of S_r	$\leq 10\%$ 2)

Timing

Switching frequency f	≤ 150 Hz
Delay before start-up	≤ 300 ms

Indicators

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

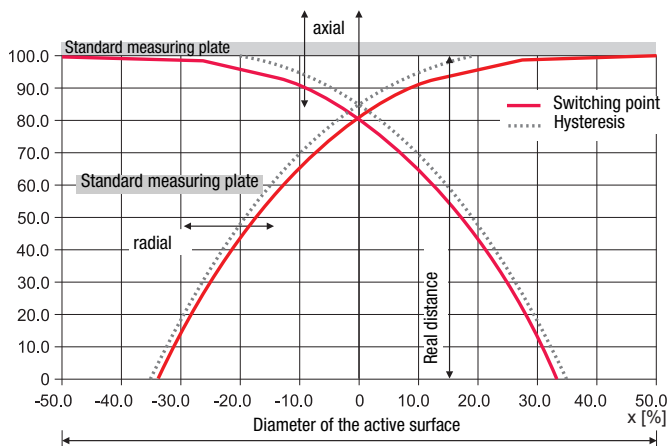
Housing	PA, metal
Standard measuring plate	120 x 120mm ² , Fe360
Active surface	PA
Weight (M12 plug/cable)	approx. 225g
Connection type	M20 terminal compartment, wire cross section ≤ 2.5 mm ²

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.

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

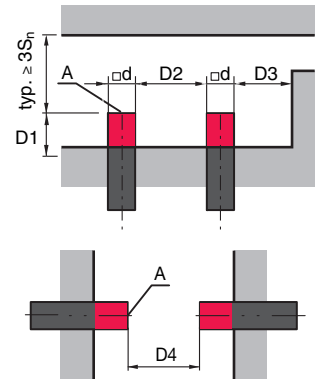
Tables

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.