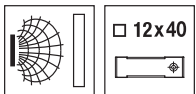


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8mm



non-embedded

- Plastic 40 x 12mm cubical housing
- Built-in short circuit protection, polarity reversal protection
- LED for switching state

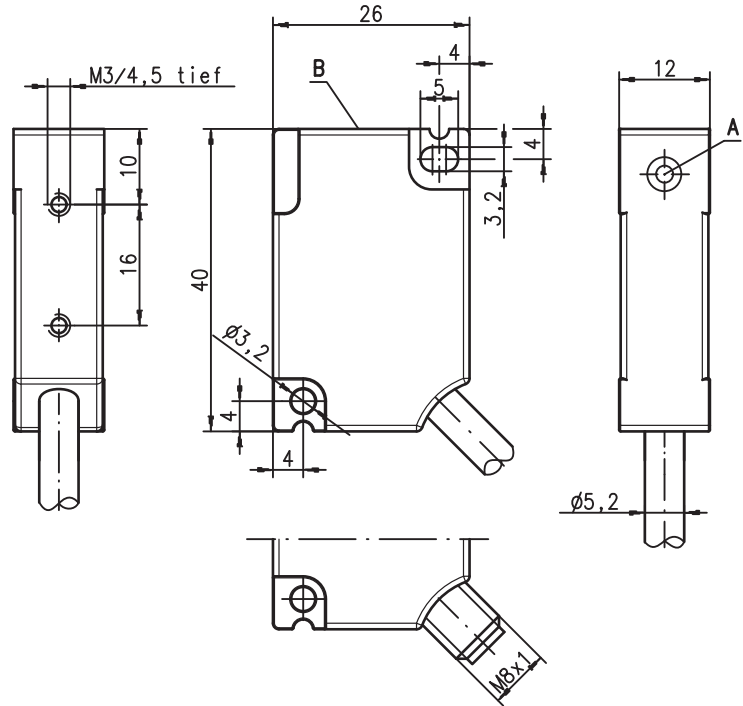


Accessories:

(available separately)

- M8 connectors (KD ...)
- Ready-made cables (K-D ...)

Dimensioned drawing



Tightening torque of the fastening screws < 1.1 Nm !

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

Electrical connection

10-30V DC +	1	br/BN	10-30V DC +	br/BN
NC OUT	2	ws/WH	NC OUT	ws/WH
GND	3	bl/BU	GND	bl/BU
NO OUT	4	sw/BK	NO OUT	sw/BK

We reserve the right to make changes • IS_240_N_en.fm

Specifications

General specifications

Type of installation	IS 240...-8N0...
Typ. operating range limit S_n	non-embedded installation
Operating range S_a	8.0mm
	0 ... 6.4mm

Electrical data

Operating voltage U_B 1)	10 ... 30VDC
Residual ripple σ	$\leq 20\%$ of U_B
Output current I_L	≤ 250 mA
Open-circuit current I_0	≤ 20 mA
Residual current I_r	≤ 10 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	≤ 2.5 V
Hysteresis H of S_r	typ. 5%
Repeatability of S_r	$\leq 10\%$ 2)

Timing

Switching frequency f	≤ 1400 Hz
Delay before start-up	≤ 300 ms

Indicators

Yellow LED	switching state
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Mechanical data

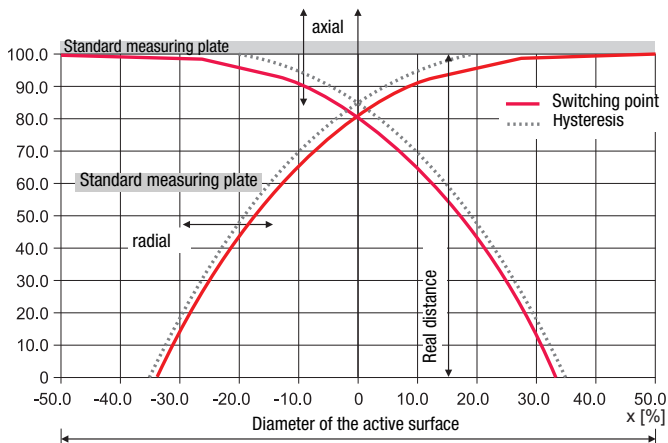
Housing	PA
Standard measuring plate	12 x 12mm ² , Fe360
Active surface	PA
Weight (M8 plug/cable)	approx. 18g/108g
Connection type	M8 connector, cable: 2m, PVC, 4 x 0.5mm ² , \varnothing 5.2mm

Environmental data

Ambient temperature	-25°C ... +70°C	
Protection class	IP 67	
Protective circuit 3)	1, 2	
Standards applied	IEC/EN 60947-5-2	
Electromagnetic compatibility	IEC 61000-4-2	Air 8kV (ESD)
	IEC 61000-4-3	10V/m (RFI)
	IEC 61000-4-4	2kV (Burst)

- 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.

$S_n = 8.0$ mm	Designation	Part No.
	IS 240 PP/44-8N0	50114209
	IS 240 PP/44-8N0-S8.4	50114210
	IS 240 PP/22-8N0	50114205
	IS 240 PP/22-8N0-S8.4	50114206

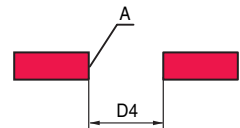
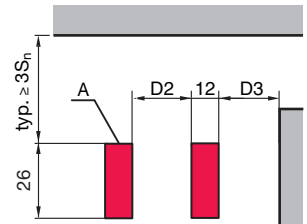
Tables

Reduction factors:
for $S_n = 20.0$ mm

Steel Fe360	1
Copper	0.45
Aluminum	0.40
Brass	0.55
Stainless steel	0.80

Mounting

Non-embedded installation:



A: active surface

Ferromagnetic and non-ferromagnetic materials				
S_n [mm]	D1 [mm]	D2 [mm]	D3 [mm]	D4 [mm]
4.0	-	10	8	25

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.