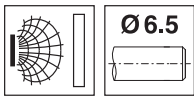


Part No. 501 11723



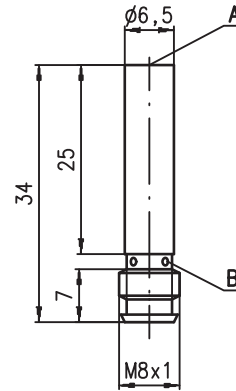
2mm



embedded

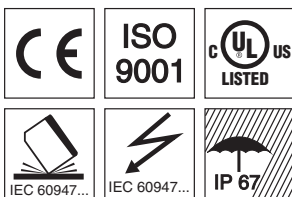
- Slim and very short cylindrical metal housing Ø 6.5mm
- Chromium-plated brass or stainless steel housing
- Built-in short circuit protection, inductive protection and polarity reversal protection
- LED for switching state visible from 360°

Dimensioned drawing



- A Active surface
- B Yellow indicator diode

Electrical connection

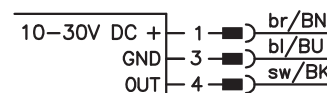


Accessories:

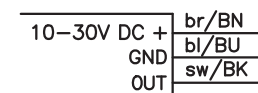
(available separately)

- M8 connectors (D M8...)
- Ready-made cables (K-D ...)
- Mounting clamp (MC 006...)

M8 connector



Cable



We reserve the right to make changes • 206_02gb.fm

Specifications

General specifications

Type of installation	ISS 206...-2E0... embedded installation
Typ. operating range limit S_n	2.0mm
Operating range S_a	0 ... 1.6mm

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	≤ 10 mA
Residual current I_r	≤ 100 μ A
Switching output/function	.../4NO... PNP transistor, make-contact (NO) .../4NC... PNP transistor, break-contact (NC) .../2NO... NPN transistor, make-contact (NO) .../2NC... NPN transistor, break-contact (NC)

Voltage drop U_d	≤ 2 V
Hysteresis H of S_r	$\leq 10\%$
Temperature drift of S_r	$\leq 10\%$ ²⁾
Repeatability	$\leq 2\%$ ³⁾

Timing

Switching frequency f	5kHz
Delay before start-up	≤ 10 ms

Indicators

Yellow LED (visible from 360°)	switching state
--------------------------------	-----------------

Mechanical data

Housing	stainless steel
Standard surface plate	6.5 x 6.5mm ² , Fe360
Active surface	PA12
Weight (M8 plug/cable)	approx. 5g/approx. 60g
Connection type	M8 connector 3-pin or cable: 2m, PVC, 3 x 0.14mm ² , \varnothing 3.5mm

Environmental data

Ambient temperature	-25°C ... +70°C
Protection class	IP 67
Protective circuit ⁴⁾	1, 2, 3
Standards applied	IEC/EN 60947-5-2
Electromagnetic compatibility	IEC 60255-5 IEC 61000-4-2 IEC 61000-4-3 IEC 61000-4-4
	1 kV Level 3 air 8kV (ESD) Level 3 10V/m (RFI) Level 3 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) Over the entire operating temperature range
- 3) For $U_B = 20 \dots 30$ VDC, ambient temperature $T_a = 23^\circ\text{C} \pm 5^\circ\text{C}$
- 4) 1=polarity reversal protection, 2=short circuit protection, 3=inductive protection for all outputs

Order guide

The sensors listed here are preferred types; current information at www.leuze.com.

$S_n = 2$ mm	Designation	Part No.
	ISS 206 MP/4NO-2E0-S8.3	501 11438

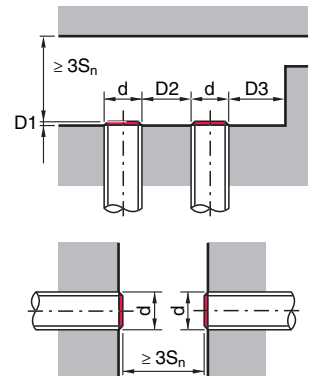
Tables

Reduction factors:
for $S_n = 2.0$ mm

Steel Fe360	1
Copper	0.25
Aluminum	0.30
Brass	0.40
Stainless steel	0.70

Mounting

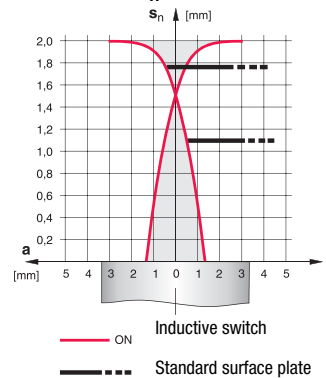
Embedded installation:



Ferromagnetic and non-ferromagnetic materials			
S_n [mm]	D1 [mm]	D2 [mm]	D3 [mm]
2.0	0	4.5	1.75

Diagrams

Models with $S_n = 2.0$ mm



Type key

I	S	S	2	0	6	M	P	/	4	N	0	-	2	E	0	-	S	8	.	3
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Operating principle / construction

ISS Inductive switch / short construction

Series

206 series with Ø 6.5 mm

Housing / thread

MP metal housing (active surface: plastic) / smooth (without thread)

Output function

4NO PNP transistor, make-contact (NO)

4NC PNP transistor, break-contact (NC)

2NO NPN transistor, make-contact (NO)

2NC NPN transistor, break-contact (NC)

Measurement range / type of installation

2E0 typ. scan range limit 2.0mm / embedded installation

Electrical connection

N/A cable, PVC, standard length 2000 mm

S8.3 M8 connector, 3-pin, axial

200-S8.3 cable, PVC, length 200mm with M8 connector, 3-pin, axial

Remarks

- **Approved purpose:**
Inductive switches are electronic sensors used for the inductive, contactless detection of objects.

