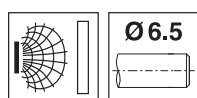


Part No. 501 11723



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°

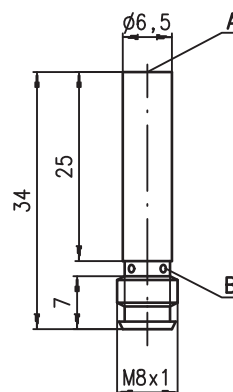


Accessories:

(available separately)

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

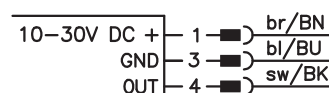
Dimensioned drawing



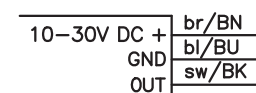
- A** Active surface
B Yellow indicator diode

Electrical connection

M8 connector



Cable



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

Specifications

General specifications

Type of installation
Typ. operating range limit S_n
Operating range S_a

ISS 206...-2E0...

embedded installation
2.0mm
0 ... 1.6mm

Electrical data

Operating voltage U_B 1)
Residual ripple σ
Output current I_L
Open-circuit current I_0
Residual current I_r
Switching output/function

10 ... 30VDC
 $\leq 20\%$ of U_B
 $\leq 200\text{mA}$
 $\leq 10\text{mA}$
 $\leq 100\mu\text{A}$
.../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
Hysteresis H of S_r
Temperature drift of S_r
Repeatability

$\leq 2\text{V}$
 $\leq 10\%$
 $\leq 10\%$ 2)
 $\leq 2\%$ 3)

Timing

Switching frequency f
Delay before start-up

5kHz
 $\leq 10\text{ms}$

Indicators

Yellow LED (visible from 360°)

switching state

Mechanical data

Housing
Standard surface plate
Active surface
Weight (M8 plug/cable)
Connection type

stainless steel
6.5 x 6.5mm², Fe360
PA12
approx. 5g/approx. 60g
M8 connector 3-pin or
cable: 2m, PVC, 3 x 0.14mm², Ø 3.5mm

Environmental data

Ambient temperature
Protection class
Protective circuit 4)
Standards applied
Electromagnetic compatibility

-25°C ... +70°C
IP 67
1, 2, 3
IEC/EN 60947-5-2
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 $U_B = 20 \dots 30\text{VDC}$, 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.

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

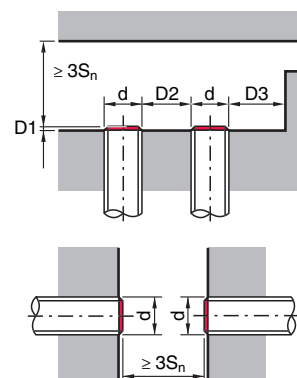
Tables

Reduction factors:
for $S_n = 2.0\text{mm}$

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

Mounting

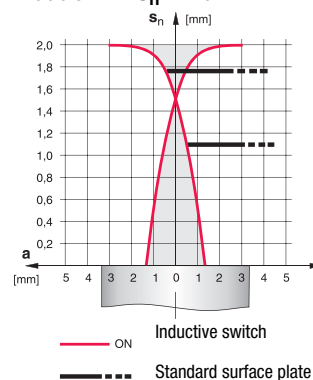
Embedded installation:



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

Diagrams

Models with $S_n = 2.0\text{mm}$



ISS 206

Inductive switches

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 2.0 mm / 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 200 mm with M8 connector, 3-pin, axial

Remarks

● Approved purpose:

Inductive switches are electronic sensors used for the inductive, contactless detection of objects.

