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Part no.: 50109682 IS 212MM/2NO-6E0 Inductive switch



Figure can vary

Contents

- Technical data
- Dimensioned drawings
- · Electrical connection
- Diagrams
- · Operation and display
- · Part number code
- Notes
- Accessories

Part no.: 50109682 – IS 212MM/2NO-6E0 – Inductive switch

Technical data

Basic data			
Series	212		
Typ. operating range limit S _n	6 mm		
Operating range Sa	0 4.8 mm		
Characteristic parameters			
MTTF	890 years		
	030 years		
Electrical data			
Protective circuit	Inductive protection Polarity reversal protection Short circuit protected		
Performance data			
Supply voltage UB	10 30 V , DC		
Residual ripple	0 20 % , From U _B		
Open-circuit current	0 10 mA		
Temperature drift, max. (in % of Sr)	10 % , Over the entire operating temperature range		
Repeatability, max. (in % of S_r)	5 % , For UB = 20 … 30 V DC, ambient temperature Ta = 23 °C \pm 5 °C		
Switching hysteresis	10 %		
Outputs			
Number of digital switching outputs	1 Piece(s)		
Switching outputs			
Voltage type	DC		
Switching current, max.	200 mA		
Residual current, max.	0.1 mA		
Voltage drop	≤ 2 V		
Switching output 1			
Switching element	Transistor , NPN		
Switching principle	NO (normally open)		
Timing			
Switching frequency	800 Hz		
Readiness delay	50 ms		
Connection			
Number of connections	1 Piece(s)		
Connection 1			
Type of connection	Cable		
Function	Signal OUT Voltage supply		
Cable length	2,000 mm		
Sheathing material	PVC		
Cable color	Gray		
Number of conductors	3 -wire		
Wire cross section	0.34 mm ²		

Mechanical data

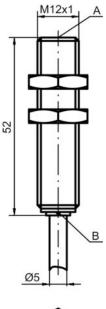
Part no.: 50109682 – IS 212MM/2NO-6E0 – Inductive switch

Thread size M12 x 1 mm Dimension (Ø x L) 12 mm x 82 mm Dimension (Ø x L) 12 mm x 82 mm Type of installation Embedded Housing material Metal. Chromed brass Sensing face material Plastic., Polybutylene (PBT) Net weight 92 Housing color Red, RAL 3000 Standard measuring plate 18 x 18 mm ² , Fe360 Operation and display Type of display LED Number of LEDs Projection Projection Degree of protection Protection data Certifications	Design	Cylindrical		
Type of installation Embedded Housing material Metal, Chromed brass Sensing face material Plastic, Polybutylene (PBT) Net weight 92 g Housing color Red, RAL 3000 Silver Type of fastening Mounting thread Standard measuring plate 18 x 18 mm*, Fe360 Operation and display Type of display LED Number of LEDS 1 Plece(s) Environmental data Ambient temperature, operation Cortifications Degree of protection Ple 67 (1900-42) IEC (1900-42) Cortifications Curtifications Curtificati	Thread size			
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Dimensioned drawings

All dimensions in millimeters

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A Active surface B Yellow LED

Electrical connection

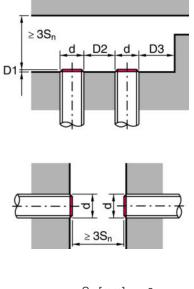
Connection 1	
Type of connection	Cable
Function	Signal OUT Voltage supply
Cable length	2,000 mm
Sheathing material	PVC
Cable color	Gray
Number of conductors	3 -wire
Wire cross section	0.34 mm ²

Conductor color	Conductor assignment
Brown	V+
Blue	GND
Black	OUT 1

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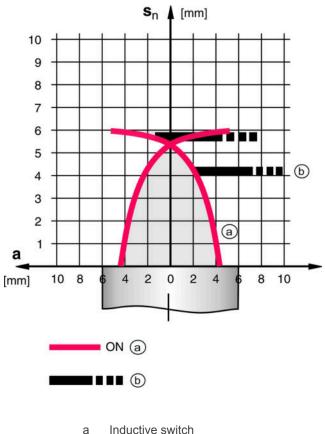
Diagrams

Embedded installation



6
2
18
6

Types with $S_n = 6.0 \text{ mm}$



a Inductive switchb Standard measuring plate

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Operation and display

LEDs

LED	Display	Meaning
1	Yellow, continuous light	Switching output/switching state

Part number code

Part designation: ISX YYY ZZ/AAA.BB-CCC-DDD-DDD

ISX	Operating principle / construction:
	IS: inductive switch, standard design ISS: inductive switch, short construction
ΥΥΥ	Series: 203: series with Ø 3 mm 204: series with Ø 4 mm 205: series with M5 x 0.5 external thread 206: series with Ø 6.5 mm 208: series with M12 x 1 external thread 212: series with M12 x 1 external thread 230: series with M30 x 1.5 external thread 24: series with M30 x 1.5 external thread 24: series in cubic design 24: series with 5 x 5 mm² cross section 28: series with 8 x 8 mm² cross section
ZZ	Housing / thread: MM: metal housing (active surface: plastic) / metric thread FM: full-metal housing (active surface: stainless steel AISI 316L) / metric thread MP: metal housing (active surface: plastic) / smooth (without thread)
AAA	Output current / supply: 4NO: PNP transistor, NO contact 4NC: PNP transistor, NC contact 2NO: NPN transistor, NC contact 2NC: NPN transistor, NC contact 1NO: relay, NC contact / AC/DC 1NC: relay, NC contact / AC/DC 44: 2 PNP transistor switching outputs, antivalent (NO + NC) 22: 2 NPN transistor switching outputs, antivalent (NO + NC)
BB	Special equipment: n/a: no special equipment 5F: food version 5: housing material V2A (1.4305, AISI 303)
ccc	Measurement range / type of installation: 1E0: typ. range limit 1.0 mm / embedded installation 2E0: typ. range limit 1.5 mm / embedded installation 3E0: typ. range limit 2.0 mm / embedded installation 3E0: typ. range limit 3.0 mm / embedded installation 5E0: typ. range limit 5.0 mm / embedded installation 6E0: typ. range limit 5.0 mm / embedded installation 6E0: typ. range limit 6.0 mm / embedded installation 6E0: typ. range limit 10.0 mm / embedded installation 10E: typ. range limit 12.0 mm / embedded installation 12E: typ. range limit 12.0 mm / embedded installation 12E: typ. range limit 12.0 mm / embedded installation 12E: typ. range limit 2.0 mm / embedded installation 22E: typ. range limit 2.0 mm / embedded installation 22E: typ. range limit 2.0 mm / embedded installation 22E: typ. range limit 2.0 mm / embedded installation 22E: typ. range limit 2.0 mm / embedded installation 24E: typ. range limit 2.0 mm / non-embedded installation 24D: typ. range limit 2.0 mm / non-embedded installation 24D: typ. range limit 1.0 mm / non-embedded installation 24D: typ. range limit 1.0 mm / non-embedded installation 10N: typ. range limit 1.0 mm / non-embedded installation 12N: typ. range limit 1.0 mm / non-embedded installation <
DDD	Electrical connection: n/a: cable, standard length 2000 mm S12: M12 connector, 4-pin, axial 200-S12: cable, length 200 mm with M12 connector, 4-pin, axial 200-S8.3: cable, length 200 mm with M8 connector, 3-pin, axial S8.3: M8 connector, 3-pin, axial 005-S8.3: cable, length 500 mm with M8 connector, 3-pin, axial 050: cable, standard length 5000 mm, 3-wire

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Note

A list with all available device types can be found on the Leuze electronic website at www.leuze.com.

Notes

Observe intended use!

- This product is not a safety sensor and is not intended as personnel protection.
- The product may only be put into operation by competent persons.
- Only use the product in accordance with its intended use.

For UL applications:

• For UL applications, use is only permitted in Class 2 circuits in accordance with the NEC (National Electric Code).

Accessories

Mounting technology - Other

	Part no.	Designation	Article	Description
ANT IN	50132728	AC D12M-CS	Clamp	Contains: 2x M16 mounting nut Diameter, inner: 12 mm Design of mounting device: Mounting clamp Fastening, at system: Screw type, Through-hole mounting Mounting bracket, at device: insertable, Clampable with limit stop Type of mounting device: Clampable, With limit stop Material: Metal
	50111499	MC 012K	Clamp	Diameter, inner: 12 mm Design of mounting device: Mounting clamp Fastening, at system: Through-hole mounting Mounting bracket, at device: Clampable Type of mounting device: Rigid Material: Plastic

Note
A list with all available accessories can be found on the Leuze electronic website in the Download tab of the article detailed page.