

## Technical data sheet

### Inductive switch

Part no.: 50143803

IS 232FM/4NO-7E0-2-S8.3

#### Contents

- Technical data
- Dimensioned drawings
- Electrical connection
- Diagrams
- Operation and display
- Notes
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Figure can vary



## Technical data

### Basic data

Series	232
Typ. operating range limit $S_n$	7 mm
Operating range $S_a$	0 ... 5.67 mm

### Special version

Special version	Reduction factor 1
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### Electrical data

Protective circuit	Inductive protection
	Polarity reversal protection
	Short circuit protected

### Performance data

Supply voltage $U_B$	10 ... 30 V, DC
Residual ripple	0 ... 10 %, From $U_B$
Open-circuit current	0 ... 10 mA
Temperature drift, max. (in % of $S_r$ )	10 %, Over the entire operating temperature range
Repeatability, max. (in % of $S_r$ )	5 %, For $U_B = 20 \dots 30$ VDC, ambient temperature $T_a = 23^\circ\text{C} \pm 5^\circ\text{C}$
Switching hysteresis	15 %

### Outputs

Number of digital switching outputs	1 Piece(s)
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### Switching outputs

Voltage type	DC
Switching current, max.	200 mA
Switching voltage	high: $\geq(U_B - 2\text{V})$ low: $\leq 2$ V
Residual current, max.	0.1 mA
Voltage drop	2 V

### Switching output 1

Switching element	Transistor, PNP
Switching principle	NO (normally open)

### Time behavior

Switching frequency	180 Hz
Readiness delay	25 ms

### Connection

Number of connections	1 Piece(s)
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### Connection 1

Function	Signal OUT
	Voltage supply
Type of connection	Cable with connector
Cable length	200 mm
Sheathing material	PVC
Cable color	Gray
Number of conductors	3 -wire
Thread size	M8
Type	Male
Material	Metal
No. of pins	3 -pin
Encoding	A-coded
Version	Axial

### Mechanical data

Design	Cubic
Dimension (W x H x L)	20 mm x 8 mm x 32 mm
Type of installation	Embedded
Housing material	Stainless steel
Stainless steel housing	V4A
Sensing face material	Stainless steel, AISI 316
Net weight	47 g
Housing color	Silver
Type of fastening	Through-hole mounting
Standard measuring plate	21 x 21 mm <sup>2</sup> , Fe360

### Operation and display

Type of display	LED
Number of LEDs	1 Piece(s)

### Environmental data

Ambient temperature, operation	-25 ... 85 °C
Ambient temperature, storage	-25 ... 85 °C

### Certifications

Degree of protection	IP 68
	IP 69K
Certifications	c UL US
Test procedure for EMC in accordance with standard	IEC 61000-4-2
	IEC 61000-4-3
	IEC 61000-4-4
Standards applied	IEC 60947-5-2

### Correction factors

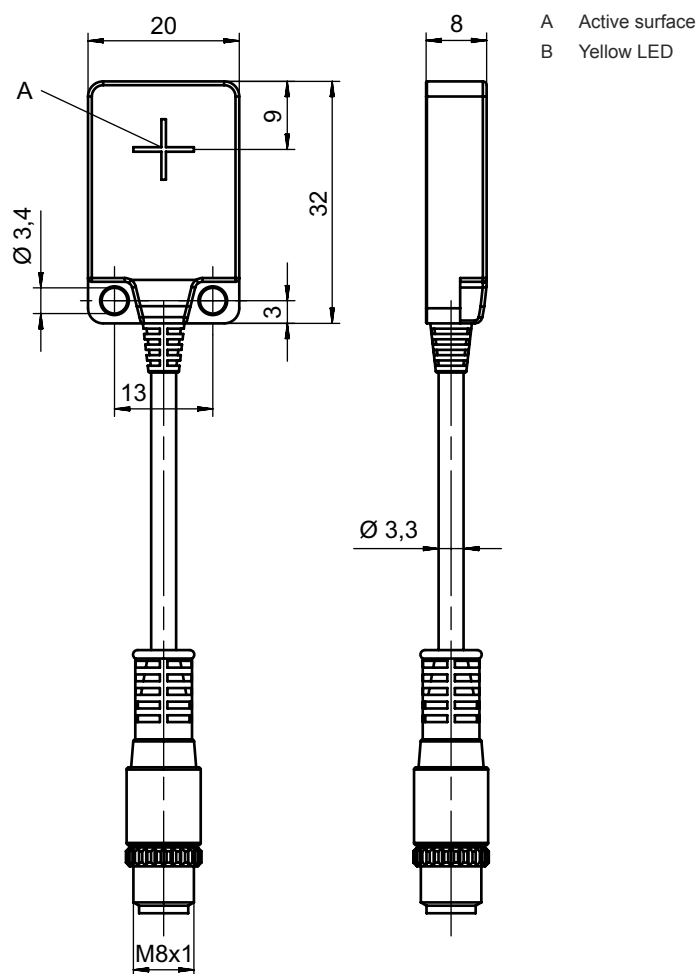
Aluminum	1
Stainless steel	0.85
Copper	0.8
Brass	1.2
Fe360 steel	1

### Classification

Customs tariff number	85365019
ECLASS 5.1.4	27270101
ECLASS 8.0	27270101
ECLASS 9.0	27270101
ECLASS 10.0	27270101
ECLASS 11.0	27270101
ECLASS 12.0	27274001
ECLASS 13.0	27274001
ETIM 5.0	EC002714
ETIM 6.0	EC002714
ETIM 7.0	EC002714
ETIM 8.0	EC002714

## Dimensioned drawings

All dimensions in millimeters



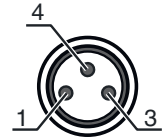
## Electrical connection

### Connection 1

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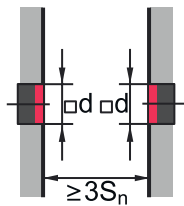
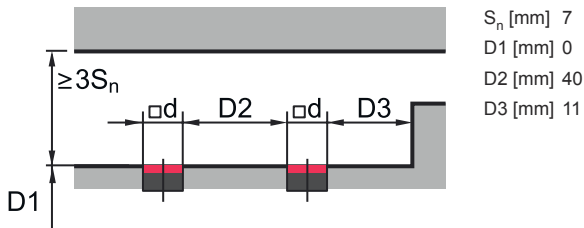
## Electrical connection

Pin	Pin assignment
1	V+
3	GND
4	OUT 1



## Diagrams

### Embedded installation



## Operation and display

LED	Display	Meaning
1	Yellow, flashing	No function reserve
	Yellow, continuous light	Switching output/switching state

## 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

### Connection technology - Connection cables

	Part no.	Designation	Article	Description
  	50130842	KD U-M8-3A-P1-020	Connection cable	Connection 1: Connector, M8, Axial, Female, 3 -pin Connector, LED: No Connection 2: Open end Shielded: No Cable length: 2.000 mm Sheathing material: PUR
  	50130844	KD U-M8-3A-P1-050	Connection cable	Connection 1: Connector, M8, Axial, Female, 3 -pin Connector, LED: No Connection 2: Open end Shielded: No Cable length: 5.000 mm Sheathing material: PUR
  	50130837	KD U-M8-3A-V1-020	Connection cable	Connection 1: Connector, M8, Axial, Female, 3 -pin Connector, LED: No Connection 2: Open end Shielded: No Cable length: 2.000 mm Sheathing material: PVC
  	50130860	KD U-M8-3W-V1-020	Connection cable	Connection 1: Connector, M8, Angled, Female, 3 -pin Connector, LED: No Connection 2: Open end Shielded: No Cable length: 2.000 mm Sheathing material: PVC

#### Note



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