

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
- Accessories



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 design

Special design	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 $U_B = 20 ... 30$ 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: $\leq 2\text{V}$
Residual current, max.	0.1 mA
Voltage drop	2 V

Switching output 1

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

Timing

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
Design	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, 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 ² , 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
eCl@ss 8.0	27270101
eCl@ss 9.0	27270101
ETIM 5.0	EC002714
ETIM 6.0	EC002714

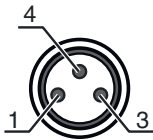
All dimensions in millimeters



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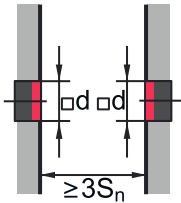
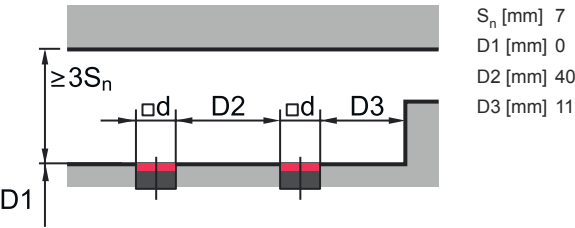
Electrical connection

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 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 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 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 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.