BERNSTEIN

Coded Magnetic Switch
Series MAK-50

Description **MAK-5046-C-0.25-M12**	Article number **6490650369**

Wiring diagram

Dimension drawing

n. c.

active surface

Actuating direction / Operating distance

0 mm S_{ao} S_{ar}
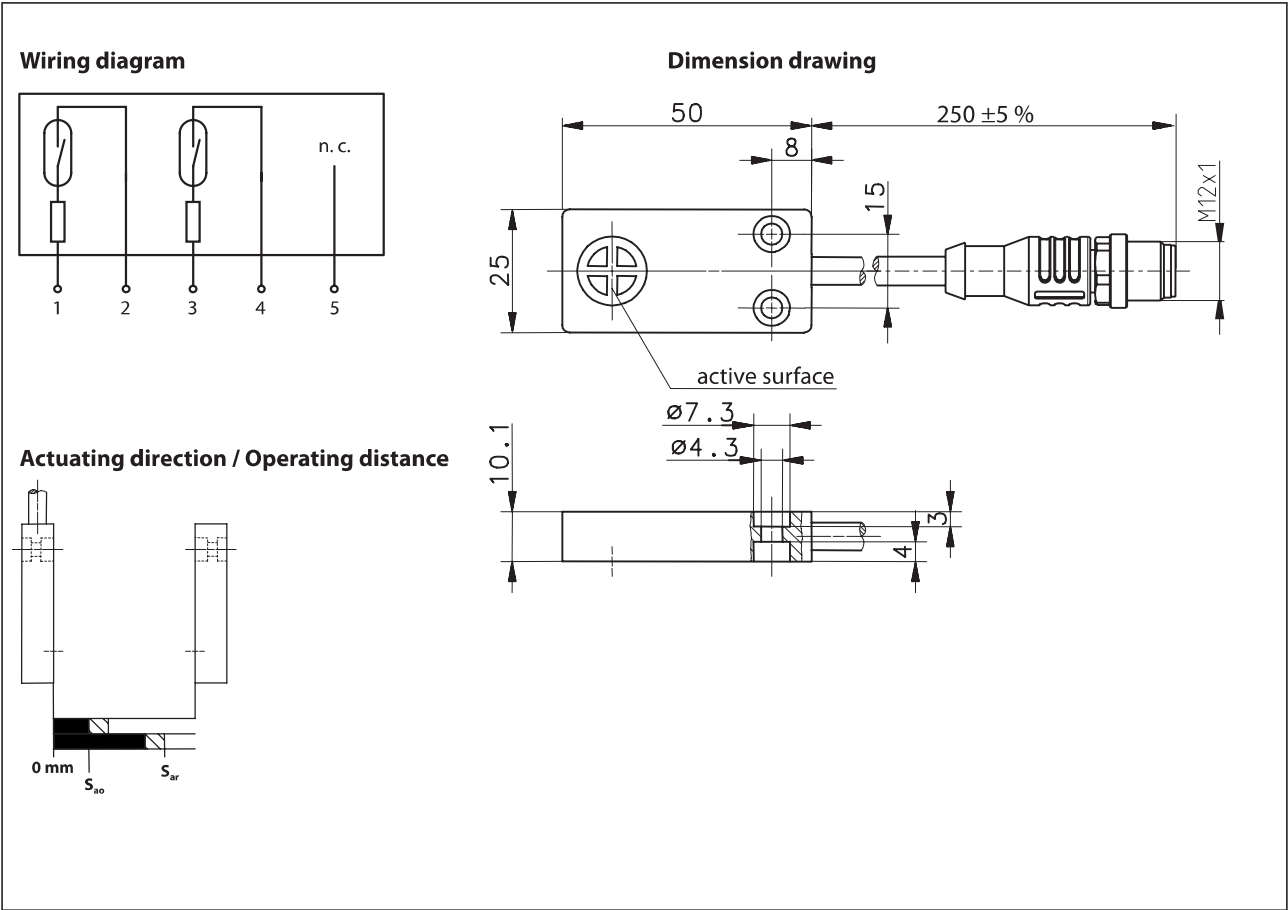
Technical data		
Switching function		2 x NO
Reference magnet		TK-50-CD/2 (6402050086)
Assured operating distance - ON	S_{ao}	≥ 6 mm
Assured operating distance - OFF	S_{ar}	≤ 22 mm
Repeat accuracy	R	± 0,1 mm, under same geometrical conditions at the same temperature
Utilization category		DC-12
Frequency of operating cycles	f	1 Hz

Technical modifications and errors excepted.
The technical datasheet corresponds to the technical state as of 2024-08-12 and will not be removed in case of changes.

Electrical data

Max. voltage	30 V DC
Max. switching current	0,08 A
Max. switching capacity	0,25 W
Internal series resistor	27 Ω, per channel
Protection class acc. to EN IEC 61558	III (safety extra-low voltage)
Note	Combinations of switching voltage and switching current must not exceed the maximum switching capacity.

Mechanical data

Enclosure	PBT, black; encapsulated reed contact
Mounting	2 holes Ø 4,3 (for M4 screws)
Temperature range	- 5 °C ... + 70 °C (cable not fixed mounted) - 25 °C ... + 70 °C (cable fixed mounted)
Mechanical life	3×10^8 operating cycles
Vibration	10 G (10 - 1200 Hz)
Shock	100 G (11 ms, ½ Sinewave)
Protection type	IP 67 acc. to EN 60529 (only in fully locked position with it's plugs)
Pollution degree	3 acc. to EN 60947-1
Termination type	Cable 5 x 0,34 mm², PUR-Outer jacket with plug connector M12 male, 5-pole, A coded
Assembly position	optional (assembly on ferromagnetic material means reduction of switch distance)

ID for safety engineering

B10d	20×10^6 cycles (20 % load) $0,4 \times 10^6$ cycles (nominal load)
Mission time	20 years

Standards

	DIN EN ISO 13849-1
	EN 60947-5-3
Note	The EN 60947-5-3 standard is only fulfilled by a complete system that consists of a coded magnetic switch with related actuator and suitable safety controller.

EG Conformity

acc. to directive 2006/42/EC (Safety-of-Machinery-Directive)

Approvals

UL Listed, Ind. Cont. Eq. / Class 2 Power source

Notes

Contact protection must be provided for inductive and capacitive loads.