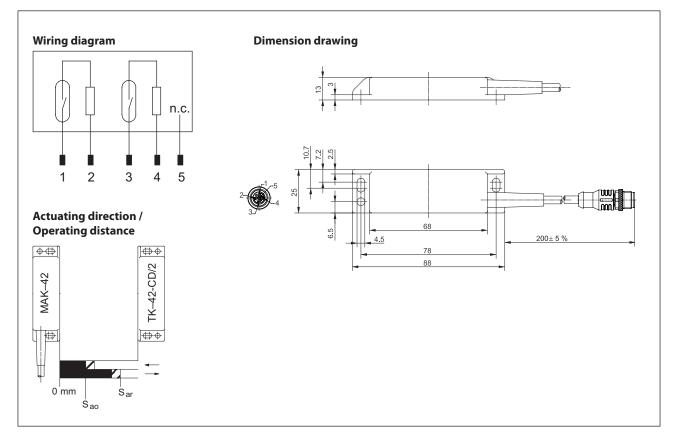


## **Coded Magnet Switch**

Series MAK-42

## Description MAK-4236-CD-0.2-M12

Article number 6490642350



| Technical data                   |                |   |                             |
|----------------------------------|----------------|---|-----------------------------|
| Switching function               |                | 2 x N.O.  |                             |
| Reference magnet                 |                | TK-42-CD/2 (6402042068)   | TK-42-CD/2-SN8 (6402042082) |
| Assured operating distance - ON  | S <sub>a</sub> | ≥ 4 mm  | ≥ 8 mm                      |
| Assured operating distance - OFF | $S_{ar}$       | ≤ 17 mm   | ≤ 17 mm                     |
| Repeat accuracy                  | R              | $\pm$ 0,1 mm, under same geometrical conditions at the same temperature |                             |
| Utilization category             |                | DC-12   |                             |
| Frequency of operating cycles    | f              | 1 Hz  |                             |

| Electrical data                       |   |
|---------------------------------------|---|
| Max. voltage                          | 30 V DC   |
| Max. switching current                | 0,08 A  |
| Max. switching capacity               | 0,25 W  |
| Internal series resistors             | 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. |

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Technical modifications and errors excepted.

The technical datasheet corresponds to the technical state as of 2021-05-28 and will not be removed in case of changes.

## **Technical Data**



| Mechanical data                           |   |
|---|---|
| Enclosure                                 | DA6 black (anconculated road contact)   |
|   | PA6, black (encapsulated reed contact)  |
| Tightening torque of fastening screws     | $1,25 \text{ Nm} \pm 0,25 \text{ Nm}$   |
| Temperature range                         | - 5 ℃ + 70 ℃ (cable not fixed mounted)<br>- 25 ℃ + 70 ℃ (cable fixed mounted)   |
| Mechanical life                           | 3 x 10 <sup>8</sup> operating cycles  |
| Vibration                                 | 10 G (10 - 2000 Hz)   |
| Shock                                     | 10 G (11 ms, ½ Sinewave)  |
| Protection type                           | IP 67 acc. to EN 60529 (only in fully locked position with it's plugs)  |
| Degree of pollution                       | 3 acc. to 60947-1   |
| Termination type                          | Cable 5 x 0,34 mm <sup>2</sup> ; PUR -outer jacket black; connector M12, male, 5-pole   |
| Assembly position                         | optional<br>(assembly on ferromagnetic material means reduction of switch distance)   |
| ID for safety engineering                 |   |
| ib for safety engineering                 |   |
| B10d                                      | 20 x 10 <sup>6</sup> cycles (20 % load)<br>0,4 x 10 <sup>6</sup> 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 consisting of a coded magnetic switch with associated actuator and a suitable safety evaluation. |
| EU 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 i |   |

Contact protection must be provided for inductive and capacitive loads.

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