## Coded Magnet Switch

Series MAK-42

Wiring diagram


Actuating direction / Operating distance


Dimension drawing


| Technical data |  |  |
| :--- | :--- | :--- |
| Switching function |  | N.O., N.C. combined |
| Reference magnet |  | TK-42-CD (6402042310) |
| Assured operating distance - ON | $\mathrm{S}_{\mathrm{a}}$ | $\geq 5 \mathrm{~mm}$ |
| Assured operating distance - OFF | $\mathrm{S}_{\mathrm{ar}}$ | $\leq 14 \mathrm{~mm}$ |
| Repeat accuracy | R | $\pm 0,1 \mathrm{~mm}$, under same geometrical conditions at the same temperature |
| Utilization category |  | $\mathrm{DC}-12$ |
| Frequency of operating cycles | f | 1 Hz |


| Electrical data |  |
| :--- | :--- |
| Max. voltage | 30 V DC |
| Max. switching current | $0,08 \mathrm{~A}$ |
| Max. switching capacity | $0,25 \mathrm{~W}$ |
| Internal series resistors | $27 \Omega$, 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 <br> maximum switching capacity. |

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Technical Data

| Mechanical data |  |
| :--- | :--- |
| Enclosure | PA6, black (encapsulated reed contact) |
| Tightening torque of fastening screws | $1,25 \mathrm{Nm} \pm 0,25 \mathrm{Nm}$ |
| Temperature range | $-5^{\circ} \mathrm{C} \ldots+70^{\circ} \mathrm{C}$ (cable not fixed mounted) |
| Mechanical life | $-25^{\circ} \mathrm{C} . . .+70^{\circ} \mathrm{C}$ (cable fixed mounted) |
| Vibration | $3 \times 10^{8}$ operating cycles |
| Shock | $30 \mathrm{G}(50-2000 \mathrm{~Hz})$ |
| Protection type | $50 \mathrm{G} \mathrm{(11} \mathrm{ms,1/2} \mathrm{Sinewave)}$ |
| Degree of pollution | IP 67 acc. to EN 60529 |
| Termination type | 3 acc. to $60947-1$ |
| Assembly position | Cable $4 \times 0,25 \mathrm{~mm}{ }^{2}$; PVC -outer jacket black |


| ID for safety engineering |  |
| :--- | :--- |
| B10d | $20 \times 10^{6}$ 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 <br> a coded magnetic switch with related actuator and suitable safety controller. |


| EU Conformity | acc. to directive 2006/42/EC (Safety-of-Machinery-Directive) |
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| Approvals |
| :--- | :--- |
| TÜV Nord |

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[^0]:    Notes
    Contact protection must be provided for inductive and capacitive loads.

