## Coded Magnetic Switch

Series MAK-53

## Wiring diagram



Actuating direction / Operating distance


Dimension drawing


| Technical data |  |  |
| :--- | :--- | :--- |
| Switching function |  | N.O., N.C. combined |
| Reference magnet |  | TK-43-CD (6402043023) |
| Assured operating distance - ON | $\mathrm{S}_{\mathrm{a}}$ | $\geq 3 \mathrm{~mm}$ |
| 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. |

Technical Data

| Mechanical data |  |
| :--- | :--- |
| Enclosure | PA 6, red |
| Temperature range | $-5^{\circ} \mathrm{C} \ldots+70^{\circ} \mathrm{C}$ (cable not fixed mounted) |
| Mechanical life | $-25^{\circ} \mathrm{C} \ldots+70^{\circ} \mathrm{C}$ (cable fixed mounted) |
| Vibration | $3 \times 10^{8}$ operating cycles |
| Shock | $30 \mathrm{G}(50-2000 \mathrm{~Hz})$ |
| Protection type | $50 \mathrm{G} \mathrm{(11} \mathrm{ms,1/2} \mathrm{Sinewave)}$ |
| Pollution degree | IP 67 acc. to EN 60529 |
| Termination type | 3 acc. to EN $60947-1$ |
| Assembly position | Cable $4 \times 0,25 \mathrm{~mm}^{2} \times 9 \mathrm{~m} \pm 5 \%$; PVC - Outer jacket, black |


| ID for safety engineering |  |
| :--- | :--- |
| Mission time 20 years |  |


| Standards |  |
| :--- | :--- |
|  | EN 60947-5-3 |
| Note | The EN 60947-5-3 standard is fulfilled by the complete system of coded <br>  <br>  <br>  <br>  <br> BERNSTEIN magnetic switches with associated actuator and suitable <br> evaluation device. |

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

## Notes

Contact protection must be provided for inductive and capacitive loads.

