

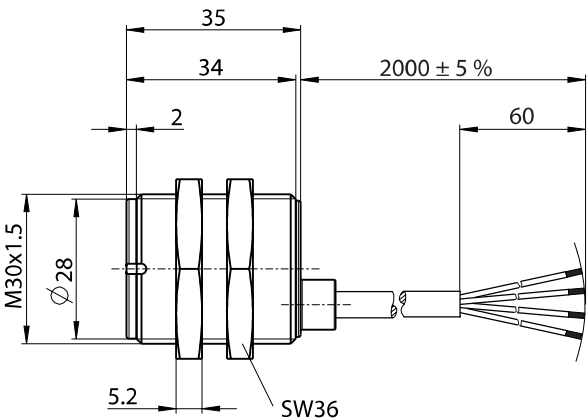
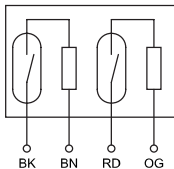
# Coded Magnetic Switch

## Series MAK-53

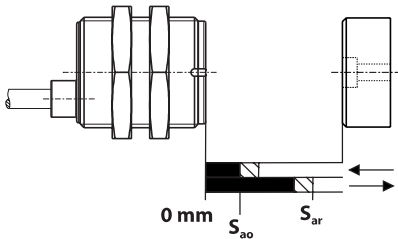
Description **MAK-5326-C-2**

Article number **6490653379**

### Wiring diagram



### Actuating direction / Operating distance



### Technical data

|                                  |                                                                                    |
|----------------------------------|------------------------------------------------------------------------------------|
| Switching function               | 2 x N.O.                                                                           |
| Reference magnet                 | TK-53-CD/2 (6402053088)                                                            |
| Assured operating distance - ON  | $S_{ao} \geq 5 \text{ mm}$                                                         |
| Assured operating distance - OFF | $S_{ar} \leq 14 \text{ mm}$                                                        |
| Repeat accuracy                  | R $\pm 0,1 \text{ mm}$ , 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 $\Omega$ , 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 maximum switching capacity. |

| Mechanical data     |                                                                                           |
|---------------------|-------------------------------------------------------------------------------------------|
| Enclosure           | PBT, black (encapsulated reed contact)                                                    |
| For attachment      | 2x hexagon nut (PA 6.6, black)                                                            |
| Temperature range   | - 5 °C ... + 70 °C (cable not fixed mounted)<br>- 25 °C ... + 70 °C (cable fixed mounted) |
| Mechanical life     | 3 x 10 <sup>8</sup> operating cycles                                                      |
| Vibration           | 10 G (10 - 2000 Hz)                                                                       |
| Shock               | 100 G (11 ms, ½ Sinewave)                                                                 |
| Protection type     | IP 67 acc. to EN 60529                                                                    |
| Degree of pollution | 3 acc. to 60947-1                                                                         |
| Termination type    | Cable 4 x AWG26; PVC - Outer jacket, black                                                |
| Assembly position   | optional<br>(assembly on ferromagnetic material means reduction of switch distance)       |

| ID for safety engineering |                                                                                        |
|---------------------------|----------------------------------------------------------------------------------------|
| B10d                      | 20 x 10 <sup>6</sup> Zyklen (20 % load)<br>0,4 x 10 <sup>6</sup> Zyklen (nominal load) |
| Mission time              | 20 years                                                                               |

| Standards |                                                                                                                                                                                   |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|           | DIN EN ISO 13849-1                                                                                                                                                                |
|           | EN 60947-5-3                                                                                                                                                                      |
| Note      | The standard EN 60947-5-3 is only complied with by a complete system consisting of coded magnetic switch with associated actuator and a suitable safety safety evaluation system. |

| 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 inductive and capacitive loads. |  |