



## BNS 36-02Z-ST-R

- Connector M8, 4-pole, Latching interlocking
- Thermoplastic enclosure
- Long life
- no mechanical wear
- 88 mm x 25 mm x 13 mm
- Concealed mounting possible
- Insensitive to transverse misalignment
- Insensitive to soiling

## Data

### Ordering data

|                               |                 |
|-------------------------------|-----------------|
| Product type description      | BNS 36-02Z-ST-R |
| Article number (order number) | 101189905       |
| EAN (European Article Number) | 4030661359984   |
| eCl@ss number, version 12.0   | 27-27-44-01     |
| eCl@ss number, version 11.0   | 27-27-24-02     |
| eCl@ss number, version 9.0    | 27-27-24-02     |
| ETIM number, version 7.0      | EC002544        |
| ETIM number, version 6.0      | EC002544        |

### Approvals - Standards

|              |       |
|--------------|-------|
| Certificates | cULus |
|--------------|-------|

## General data

|  |                                       |
|--|---------------------------------------|
| Standards                              | BG-GS-ET-14<br>EN IEC 60947-5-3       |
| Coding level according to EN ISO 14119 | Low                                   |
| Working principle                      | Magnetic drive                        |
| Installation conditions (mechanical)   | quasi-flush                           |
| Housing material                       | Glass-fibre, reinforced thermoplastic |
| Gross weight                           | 30 g                                  |

## General data - Features

|                                |     |
|--------------------------------|-----|
| Coding                         | Yes |
| Number of normally closed (NC) | 2   |
| Number of safety contacts      | 2   |

## Safety classification

|              |                |
|--------------|----------------|
| Standards    | EN ISO 13849-1 |
| Mission time | 20 Year(s)     |

## Safety classification - Safety outputs

|   |                       |
|---|-----------------------|
| B <sub>10D</sub> Normally-closed contact (NC) | 25,000,000 Operations |
|---|-----------------------|

## Mechanical data

|                     |                               |
|---------------------|-------------------------------|
| Actuating element   | Magnet                        |
| Door hinge          | Right                         |
| Direction of motion | Head-on to the active surface |

## Mechanical data - Switching distances

|   |  |
|---|--|
| Note (Switching distance $S_n$ )          | Axial misalignment, a horizontal and vertical misalignment of the safety sensor and the actuator are tolerated. The possible misalignment depends on the distance of the active surfaces of the sensor and the actuator. The sensor remains active within the tolerance range. |
| Assured switching distance "ON" $S_{ao}$  | 7 mm   |
| Assured switching distance "OFF" $S_{ar}$ | 17 mm  |
| Note (switching distance)                 | All switching distances in accordance EN IEC 60947-5-3   |

## Mechanical data - Connection technique

|             |  |
|-------------|--|
| Termination | Connector M8, 4-pole, screw terminal or snap fitting |
|-------------|--|

## Mechanical data - Dimensions

|                  |       |
|------------------|-------|
| Length of sensor | 13 mm |
| Width of sensor  | 88 mm |
| Height of sensor | 25 mm |

## Ambient conditions

|                                   |                              |
|-----------------------------------|------------------------------|
| Degree of protection              | IP67                         |
| Ambient temperature               | -25 ... +70 °C               |
| Storage and transport temperature | -25 ... +70 °C               |
| Resistance to vibrations          | 10 ... 55 Hz, amplitude 1 mm |
| Resistance to shock               | 30 g / 11 ms                 |

## Electrical data

|                            |        |
|----------------------------|--------|
| Switching voltage, maximum | 75 VDC |
|----------------------------|--------|

|                              |              |
|------------------------------|--------------|
| Switching current, maximum   | 0.4 A        |
| Switching capacity, maximum  | 10 W         |
| Switching element            | 2 NC contact |
| Switching frequency, maximum | 5 Hz         |

## Scope of delivery

|                   |                                      |
|-------------------|--------------------------------------|
| Scope of delivery | Actuator must be ordered separately. |
|-------------------|--------------------------------------|

## Accessory

|                               |                            |
|-------------------------------|----------------------------|
| Recommendation (actuator)     | BPS 36-2<br>BPS 36-1       |
| Recommended safety switchgear | SRB-E-301ST<br>SRB-E-201LC |

## Note

|                |  |
|----------------|--|
| Note (General) | The number in brackets indicate the PIN number of the connector. |
|----------------|--|

## Ordering code

Product type description:  
BNS 36-(1)(2)Z(3)-(4)-(5)

(1)

|           |                           |
|-----------|---------------------------|
| <b>11</b> | 1 NO contact/1 NC contact |
| <b>02</b> | 2 NC contact              |

(2)

|                |                        |
|----------------|------------------------|
| <b>without</b> | with diagnostic output |
| <b>/01</b>     | 1 NC contact           |
| <b>10</b>      | 1 NO contact           |



(3) BK S11 → S12 BU (4)  
(1) WH S21 → S22 BN (2)

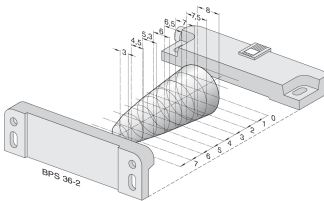
ID: kbns2k25  
| 56.8 kB | .jpg | 352.778 x 70.203 mm - 1000 x 199 px - 72 dpi  
| 2.6 kB | .png | 74.083 x 14.817 mm - 210 x 42 px - 72 dpi

## Characteristic curve



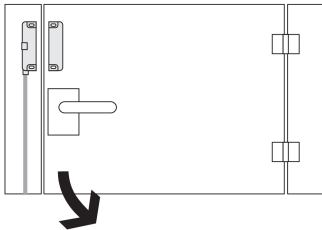
ID: kbns3a29  
| 165.7 kB | .jpg | 352.778 x 215.9 mm - 1000 x 612 px - 72 dpi  
| 110.2 kB | .png | 50.038 x 30.649 mm - 591 x 362 px - 300 dpi  
| 165.7 kB | .jpg | 352.778 x 215.9 mm - 1000 x 612 px - 72 dpi

## Characteristic curve



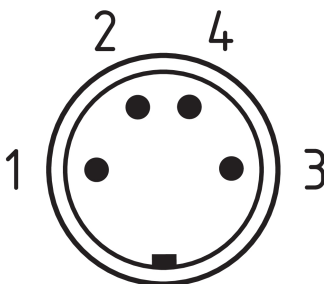
ID: kbns3a30  
| 16.9 kB | .png | 74.083 x 45.156 mm - 210 x 128 px - 72 dpi  
| 164.2 kB | .jpg | 352.778 x 215.547 mm - 1000 x 611 px - 72 dpi

## Operating principle



ID: kbn36c01  
| 20.2 kB | .cdr |  
| 52.3 kB | .jpg | 352.778 x 250.825 mm - 1000 x 711 px - 72 dpi  
| 1.8 kB | .png | 74.083 x 52.564 mm - 210 x 149 px - 72 dpi

## Contact arrangement



ID: km8--k4b  
| 17.0 kB | .cdr |  
| 4.3 kB | .png | 74.083 x 73.025 mm - 210 x 207 px - 72 dpi  
| 110.6 kB | .jpg | 352.778 x 347.133 mm - 1000 x 984 px - 72 dpi

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The details and data referred to have been carefully checked. Images may diverge from original. Further technical data can be found in the manual. Technical amendments and errors possible.

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