



## BNS 33-12Z-2187 10,0M

- Thermoplastic enclosure
- Concealed mounting possible
- Insensitive to transverse misalignment
- 88 mm x 25 mm x 13 mm
- Long life
- no mechanical wear
- Insensitive to soiling

## Data

### Ordering data

|                               |                       |
|-------------------------------|-----------------------|
| Product type description      | BNS 33-12Z-2187 10,0M |
| Article number (order number) | 101137886             |
| EAN (European Article Number) | 4030661026848         |
| 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) | not flush                             |
| Housing material                     | Glass-fibre, reinforced thermoplastic |
| Gross weight                         | 420 g                                 |

### General data - Features

|                                |     |
|--------------------------------|-----|
| Coding                         | Yes |
| Prerequisite evaluation unit   | Yes |
| Number of normally closed (NC) | 2   |
| Number of normally open (NO)   | 1   |

### Safety classification

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

### Safety classification - Safety outputs

|   |                       |
|---|-----------------------|
| $B_{10D}$ - Value Normally-closed contact/Normally open contact (NC/NO) | 25,000,000 Operations |
|---|-----------------------|

### Mechanical data

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

### Mechanical data - Switching distances

|   |  |
|---|--|
| Assured switching distance "ON" $S_{ao}$  | 5 mm<br>8 mm   |
| Assured switching distance "OFF" $S_{ar}$ | 15 mm<br>18 mm   |
| Note (switching distance)                 | All switching distances in accordance EN IEC 60947-5-3 |
| Note (Repeat accuracy R)                  | Repeat accuracy $R \leq 0,1 \times S_{ao}$             |

## Mechanical data - Connection technique

|                              |                      |
|------------------------------|----------------------|
| Length of cable              | 10 m                 |
| Termination                  | cable                |
| Wire cross-section           | 0.25 mm <sup>2</sup> |
| Wire cross-section           | 23 AWG               |
| Material of the Cable mantle | PVC                  |

## 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 |
| Restistance to shock              | 30 g / 11 ms                 |

## Electrical data

|                              |                                      |
|------------------------------|--------------------------------------|
| Switching voltage, maximum   | 100 VAC                              |
| Switching voltage, maximum   | 100 VDC                              |
| Switching current, maximum   | 0.25 A                               |
| Switching capacity, maximum  | 3 W                                  |
| Switching element            | 1 NO contact, 2 NC contacts          |
| Switching principle          | Reed contacts, Non-contact principle |
| Switching frequency, maximum | 5 Hz                                 |

## Scope of delivery

Scope of delivery Actuator must be ordered separately.

## Accessory

|                               |                            |
|-------------------------------|----------------------------|
| Recommendation (actuator)     | BPS 33-2326<br>BPS 33      |
| Recommended safety switchgear | SRB-E-301ST<br>SRB-E-201LC |

## Note

Note (General) Contact symbols shown for the closed condition of the guard device.  
The contact configuration for versions with or without LED is identical.

## Ordering code

Product type description:  
BNS 33-(1)Z(2)-(3)-(4)

(1)

|           |                            |
|-----------|----------------------------|
| <b>02</b> | 2 NC contact               |
| <b>11</b> | 1 NO contact/1 NC contact  |
| <b>12</b> | 1 NO contact/2 NC contacts |

(2)

|                |  |
|----------------|--|
| <b>without</b> | without LED switching conditions display |
| <b>G</b>       | with LED switching conditions display    |

(3)

|                |                                     |
|----------------|-------------------------------------|
| <b>without</b> | with cable                          |
| <b>ST</b>      | with connector M8                   |
| <b>LST</b>     | Connecting cable with connector M12 |

(4)

2187

Individual contact outlet

2187-10

Individual contact outlet with LED

2237

Actuation from cable direction

## Pictures

### Product picture (catalogue individual photo)



ID: kbns3f22

| 102.6 kB | .jpg | 352.778 x 79.022 mm - 1000 x 224 px - 72 dpi

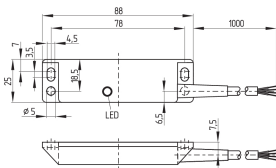
| 13.2 kB | .png | 74.083 x 16.581 mm - 210 x 47 px - 72 dpi

| 13.2 kB | .png | 74.083 x 74.083 mm - 210 x 210 px - 72 dpi

| 847.9 kB | .png | 166.557 x 37.309 mm - 2000 x 448 px - 305 dpi

| 15.1 kB | .jpg | 123.472 x 27.517 mm - 350 x 78 px - 72 dpi

### Dimensional drawing basic component



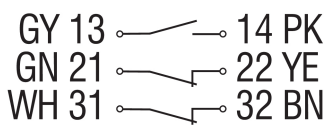
ID: 1bns3g03

| 37.7 kB | .cdr |

| 7.4 kB | .png | 74.083 x 52.211 mm - 210 x 148 px - 72 dpi

| 88.2 kB | .jpg | 352.778 x 248.003 mm - 1000 x 703 px - 72 dpi

### Diagram



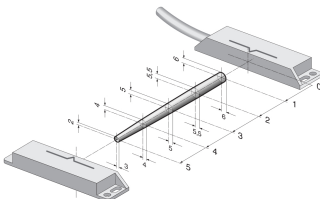
ID: k2o1sk07

| 26.0 kB | .cdr |

| 82.8 kB | .jpg | 352.778 x 125.589 mm - 1000 x 356 px - 72 dpi

| 3.5 kB | .png | 74.083 x 26.458 mm - 210 x 75 px - 72 dpi

### Characteristic curve



ID: kbns3a01

| 13.1 kB | .png | 74.083 x 45.508 mm - 210 x 129 px - 72 dpi

| 124.5 kB | .jpg | 352.778 x 216.253 mm - 1000 x 613 px - 72 dpi

K.A. Schmersal GmbH & Co. KG, Möddinghofe 30, 42279 Wuppertal

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.

Generated on: 27/02/2026, 14:43