



BNS 333-01YV-M20

- 1 Cable entry M 20 x 1.5
- Thermoplastic enclosure
- Long life
- Suitable for food processing industry only in combination with BPS 303
- no mechanical wear
- 40 mm x 112 mm x 40 mm
- Insensitive to transverse misalignment
- Insensitive to soiling
- Wiring compartment
- With integral evaluation

Data

Ordering data

| | |
|-------------------------------|------------------|
| Product type description | BNS 333-01YV-M20 |
| Article number (order number) | 101169803 |
| EAN (European Article Number) | 4030661296487 |
| 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 | EAC |
|--------------|-----|

General data

| | |
|-----------|---------------------------------|
| Standards | BG-GS-ET-14 EN IEC 60947-5-3 |
|-----------|---------------------------------|

| | |
|--|---------------------------------------|
| Coding level according to EN ISO 14119 | Low |
| Working principle | Magnetic drive |
| Installation conditions (mechanical) | quasi-flush |
| Enclosure material | Glass-fibre, reinforced thermoplastic |
| Gross weight | 145 g |
| Time to readiness, maximum | 50 ms |
| Duration of risk, maximum | 50 ms |

General data - Features

| | |
|-------------------------------------|-----|
| Integral system diagnostics, status | Yes |
| Safety monitoring module integrated | Yes |
| Number of normally closed (NC) | 1 |
| Number of safety contacts | 1 |

Safety classification

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

Safety classification - Safety outputs

| | |
|---|-----------------------|
| B _{10D} Normally-closed contact (NC) | 20,000,000 Operations |
|---|-----------------------|

Mechanical data

| | |
|---------------------|-------------------------------|
| Active area | front side |
| Actuating element | Magnet |
| Direction of motion | Head-on to the active surface |

Mechanical data - Switching distances according EN IEC 60947-5-3

| | |
|--|-------|
| Assured switching distance "ON" S _{ao} | 4 mm |
| Assured switching distance "OFF" S _{ar} | 14 mm |

Mechanical data - Connection technique

| | |
|------------------------|---|
| Termination | Screw terminals M20 x 1.5 |
| Cable section, minimum | 2 x 0.75 mm ² |
| Cable section, maximum | 2 x 1.5 mm ² |
| Note (Cable section) | All indications including the conductor ferrules. |
| Wire cross-section | 15 AWG |

Mechanical data - Dimensions

| | |
|------------------|-------|
| Length of sensor | 39 mm |
| Width of sensor | 52 mm |
| Height of sensor | 90 mm |

Ambient conditions

| | |
|--|------------------------------|
| Degree of protection | IP65 |
| Ambient temperature, minimum | -25 °C |
| Ambient temperature, maximum | +55 °C |
| Storage and transport temperature, minimum | -25 °C |
| Storage and transport temperature, maximum | +70 °C |
| Resistance to vibrations | 10 ... 55 Hz, amplitude 1 mm |
| Resistance to shock | 30 g / 11 ms |

Electrical data

| | |
|------------------------------|---|
| Voltage type | AC (alternating current) DC (direct current) |
| Switching voltage, maximum | 250 VAC |
| Switching current, maximum | 5 A |
| Switching capacity, maximum | 1,250 W |
| Switching frequency, maximum | 5 Hz |

Status indication

Note (Integral System Diagnostics, status) The LED is illuminated when the guard is closed.

Scope of delivery

Scope of delivery Actuators must be ordered separately.

Accessory

| | |
|-------------------------------|----------------------------------|
| Recommendation (actuator) | BPS 300 BPS 303 BPS 303 SS |
| Recommended safety switchgear | SRB-E-301ST SRB-E-201LC |

Note

Note (General) Contact symbols shown for the closed condition of the guard device.

Ordering code

Product type description:
BNS 333-01Y(1)-M20

(1)

| | |
|----------|----------------------------------|
| V | Actuating planes front side |
| R | Actuating planes right-hand side |
| L | Actuating planes left-hand side |
| D | Actuating planes cover-side |
| U | Actuating planes bottom |

Pictures

Product picture (catalogue individual photo)



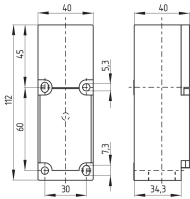
ID: kbns3f02

| 514.2 kB | .jpg | 150.636 x 346.428 mm - 427 x 982 px - 72 dpi

| 159.5 kB | .png | 74.083 x 170.039 mm - 210 x 482 px - 72 dpi

| 5.2 kB | .jpg | 35.631 x 81.844 mm - 101 x 232 px - 72 dpi

Dimensional drawing basic component



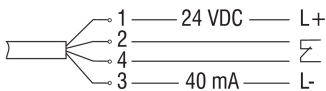
ID: 1bns3g04

| 31.4 kB | .cdr |

| 3.2 kB | .png | 74.083 x 51.506 mm - 210 x 146 px - 72 dpi

| 73.1 kB | .jpg | 352.778 x 245.886 mm - 1000 x 697 px - 72 dpi

Diagram



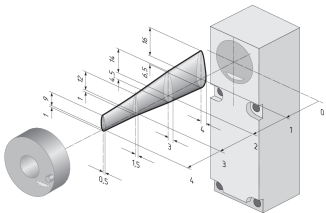
ID: kbns3k15

| 20.6 kB | .cdr |

| 41.2 kB | .jpg | 352.778 x 89.958 mm - 1000 x 255 px - 72 dpi

| 2.4 kB | .png | 74.083 x 18.697 mm - 210 x 53 px - 72 dpi

Characteristic curve

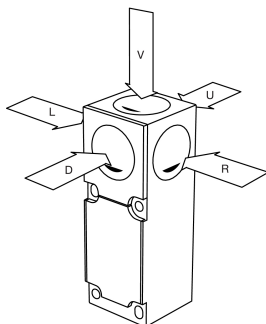


ID: kbns3a04

| 16.3 kB | .png | 74.083 x 47.978 mm - 210 x 136 px - 72 dpi

| 148.3 kB | .jpg | 352.778 x 227.894 mm - 1000 x 646 px - 72 dpi

Operating principle



ID: kbns3e02

| 134.9 kB | .jpg | 352.778 x 432.153 mm - 1000 x 1225 px - 72 dpi

| 4.9 kB | .png | 74.083 x 90.664 mm - 210 x 257 px - 72 dpi

Schmersal Ltd., Sparrowhawk Close, WR14 1GL Malvern

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: 28/11/2022, 07:53