



## BNS 333-01YR-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 333-01YR-M20
Article number (order number)	101169804
EAN (European Article Number)	4030661296494
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

### 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
Housing material	Glass-fibre, reinforced thermoplastic
Duration of risk, maximum	50 ms
Gross weight	145 g

### General data - Features

Coding	Yes
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 <sub>10D</sub> Normally-closed contact (NC)	20,000,000 Operations
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### Mechanical data

Active area	right-hand 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 <sub>ao</sub>	4 mm
Assured switching distance "OFF" S <sub>ar</sub>	14 mm

## Mechanical data - Connection technique

Termination	Screw terminals M20 x 1.5
Cable section, minimum	2 x 0.75 mm <sup>2</sup>
Cable section, maximum	2 x 1.5 mm <sup>2</sup>
Note	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	-25 ... +55 °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	250 VAC
Switching current, maximum	5 A
Switching capacity, maximum	1,250 W
Switching element	1 NC contact
Time to readiness, maximum	50 ms
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 Actuator 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)

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<b>V</b>	Actuating planes front side
<b>R</b>	Actuating planes right-hand side
<b>L</b>	Actuating planes left-hand side
<b>D</b>	Actuating planes cover-side
<b>U</b>	Actuating planes bottom

## Pictures

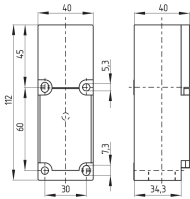
**Product picture (catalogue individual photo)**



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  
 | 49.0 kB | .jpg | 53.622 x 123.472 mm - 152 x 350 px - 72 dpi

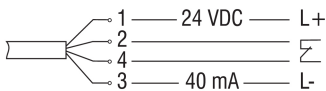
## Dimensional drawing basic component



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

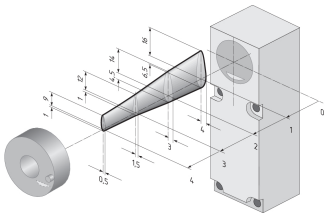
## Diagram



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

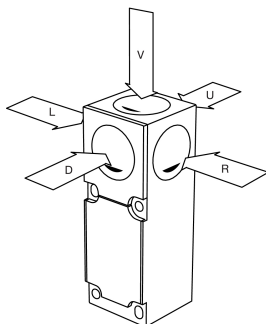
## Characteristic curve



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

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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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