# **DATASHEET**





# **EX-BNS 120-02Z-3G/D**



- Explosion protection for ATEX Zones 2 and 22
- Thermoplastic enclosure
- Ø M12
- Particularly large switching distance
- Insensitive to transverse misalignment
- Suitable for food processing industry only in combination with BP 15 SS
- no mechanical wear

## **Data**

## **Ordering data**

EAN (European Article Number) 4030661392097

eCl@ss number, Version 9.0 27-27-24-02

## **Explosion protection**

Explosion protection: regulations EN 60079-0

EN 60079-31

Explosion protection zones 22

2

Explosion protection category 3D

3G

Explosion protection designation 🚳 II 3G Ex nC IIC T6 Gc X

Manufacturer declaration ATEX Zone 2 and 22

#### **General data**

Standards IEC 60947-5-3

Housing construction form Cylinder, thread

Installation conditions (mechanical) quasi-flush

Enclosure material Glass-fibre, reinforced thermoplastic

Gross weight 75 g

#### **General data - Features**

Short circuit detection Yes

Short-circuit recognition Yes

Number of openers 2

Number of safety contacts 2

# Safety appraisal

Standards EN ISO 13849-1

Mission Time 20 Year(s)

# Safety appraisal - Safety outputs

B10d Normally-closed contact (NC) 25,000,000 Operations

#### **Mechanical data**

Active area front side

Actuating element Magnet

Actuator switch distance Actuating magnet BP 8, Sao: 10 mm

Actuating magnet BP 15 SS, Sao: 20 mm
Actuating magnet BP 10, Sao: 20 mm
Actuating magnet BP 6, Sao: 10 mm
Actuating magnet BP 8, Sar: 22 mm
Actuating magnet BP 15 SS, Sar: 32 mm
Actuating magnet BP 10, Sar: 32 mm

Impact energy, maximum 2 J

Direction of motion Head-on to the active surface

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

Ensured switch distance "ON" Sao 10 mm

20 mm

Ensured switch distance "OFF" Sar 22 mm

32 mm

# **Mechanical data - Connection technique**

**Terminal Connector** Cable

1 m Length of cable

 $0.25 \text{ mm}^2$ Wire cross-section

23 AWG Wire cross-section

Material of the Cable mantle PVC

## **Mechanical data - Dimensions**

ISO thread of the sensor M12

38.5 mm Length of sensor

#### **Ambient conditions**

Degree of protection IP67

Ambient temperature, minimum -25 °C

Ambient temperature, maximum +70 °C

Storage and transport temperature,

minimum

-25 °C

Storage and transport temperature,

maximum

+70 °C

Resistance to vibrations to EN 60068- 10 ... 55 Hz, amplitude 1 mm

2-6

Restistance to shock 30 g / 11 ms

#### **Electrical data**

Voltage type AC (alternating current)

DC (direct current)

Switching voltage, maximum 100 VAC

Switching voltage, maximum 100 VDC

Switching current, maximum 0.25 A

Switching capacity, maximum 3 W

Switching frequency, maximum 5 Hz

# Scope of delivery

Included in delivery Actuators must be ordered separately.

#### Accessory

Recommendation (actuator) BP 10

BP 8 BP 6 BP 15 SS

Recommended safety switchgear SRB-E-301ST

SRB-E-201LC

#### **Notes**

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

The safety sensor must be mounted in such a way that actuation with

another magnet is impossible (concealed mounting according to ISO 14119)

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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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