



## Ex safety sensor

Ex HS Si 4 1Ö/1S - 2m

Material no.: 1189003 (material no. old: 20463201)

### Product features

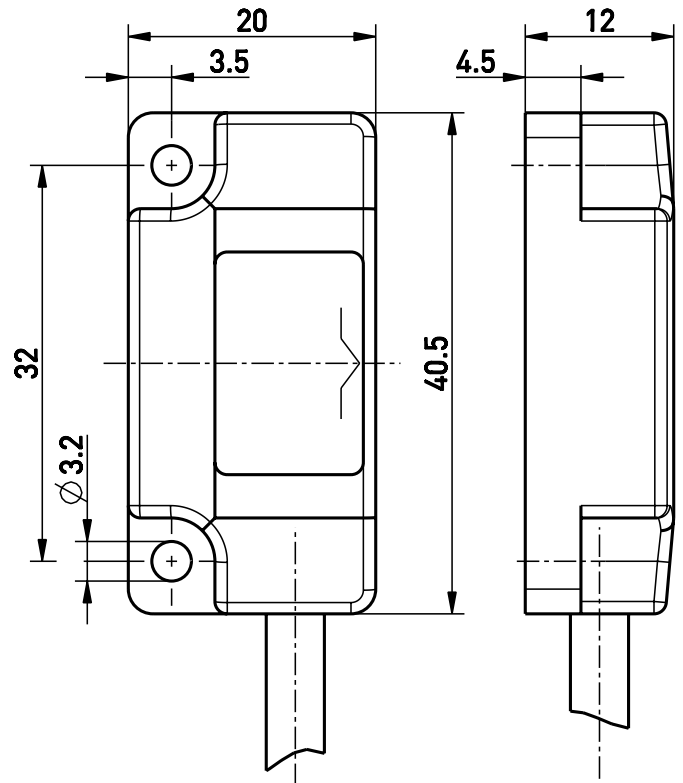


- Ex zone 1 and 21
- Thermoplastic enclosure
- Hall elements, coded
- Actuation from front
- Switching distance up to 7 mm
- With pre-wired cable
- Attention: Please state required international approvals with your order!

### Notes

- The actuator is not included in the delivery of the switches

### Dimensions



### General technical data

#### Applied standards

EN IEC 60079-0, EN 60079-18, EN 60947-5-2, EN 60947-5-3, EN ISO 14119, EN ISO 13849-1, EN 62061

#### Enclosure

thermoplastic, glass-fibre reinforced, shockproof, self-extinguishing UL 94 V-0

#### Sensor type

type 4 interlocking device

#### Coding level

low coding

#### Degree of protection

IP66, IP67, IP69 (IEC/EN 60529) / IP69K (ISO 20653)

#### Switching system

Hall sensor, 2 galvanically separated channels, semiconductor

#### Switching elements

1 NC/1 NO contact

#### Connection

cable 6 x AWG 26

#### Cable length

2 m

#### Rated operating voltage $U_e$

24 VDC

#### Rated operating voltage range $U_B$

10 ... 30 VDC

#### Rated operating current $I_e$

max. 40 mA per channel

#### Utilisation category

DC-12

#### No-load supply current $I_0$

max. 6 mA per channel

#### Voltage drop at $I_e$

max. 2.5 V

#### Switch-on/switch-off time

< 1 ms

#### Short-circuit protection

< 50 mA internal reversible fuse

#### Switching frequency

max. 100 Hz

Errors and omissions excepted.



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### General technical data (contd.)

**Safety class**  
II

**Degree of pollution**  
3

**Ambient temperature**  
-20 °C ... +60 °C

**Mechanical life**  
> 10 million operations

**Rated switching distance  $s_n$**   
7 mm

**Assured switching distance »ON«  $s_{ao}$**   
6 mm

**Assured switching distance »OFF«  $s_{ar}$**   
20 mm

**Repeatability**  
≤ 5 %

**Impact energy**  
max. 7 J

**Ex marking**  
⊕ II 2G Ex mb IIC T6 Gb,  
⊕ II 2D Ex mb IIIC T80°C Db  
IECEX Ex mb IIC T6 Gb  
Ex mb IIIC T80°C Db

**Approvals**  
BVS 08 ATEX E 150 X  
IECEX BVS 08.0054X



**Weight**  
74 g

### Safety-relevant data

**EN ISO 13849-1**  
Performance Level PL e

**Category**  
4

**$T_M$**   
max. 20 years

**MTTF<sub>d</sub>**  
> 100 years

**DC/DC<sub>avg</sub>**  
> 99 %

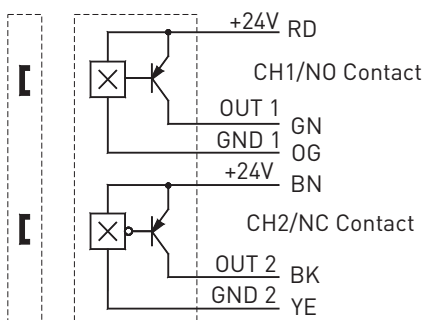
**EN 62061**  
SIL CL 3

**PFH<sub>d</sub>**  
≥ 2.47 x 10<sup>-8</sup> 1/h

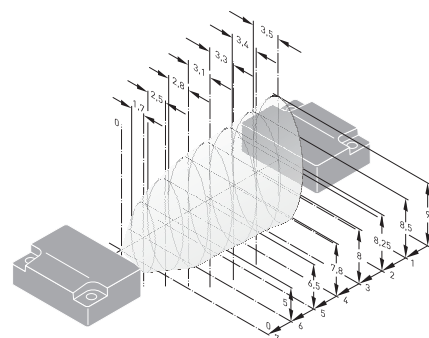
**Note**

The safety-related data are only valid in combination with a safety module, e.g. SRM 21 RT2 (mat. no. 1179203).

### Contact diagram



### Axial misalignment



Errors and omissions excepted.