



Magnetic safety sensor BNS 260-02Z-ST-L-2750

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1.2



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1.3 | | | | | | | | |--|--|--|--|--|--|--| | | | | | | | | |--|--|--|--|--|--|--|

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1.4

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1.5 | | | | | | | | |--|--|--|--|--|--|--| | | | | | | | | |--|--|--|--|--|--|--|

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products.schmersal.com

1.6

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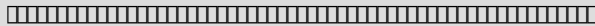
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2

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2.1

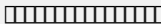


2.4

Approvals - Standards

Certificates	cULus
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General data

Standards	BG-GS-ET-14 EN IEC 60947-5-3
Coding level according to EN ISO 14119	Low
Working principle	
Installation conditions (mechanical)	
Housing material	
Gross weight	43 g

General data - Features

Coding	Yes
Number of normally closed (NC)	2
Number of safety contacts	2

Safety classification

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

Safety classification - Safety outputs

B _{10D} Normally-closed contact (NC)	25,000,000 Operations
B _{10D} - Value Normally-closed contact/Normally open contact (NC/NO)	25,000,000 Operations

Mechanical data

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

Mechanical data - Switching distances

Note (Switching distance S_n)	Axial misalignment, a horizontal and vertical misalignment of the safety sensor and the actuator are tolerated. The possible misalignment depends on the distance of the active surfaces of the sensor and the actuator. The sensor remains active within the tolerance range.
Assured switching distance "ON" S_{ao}	8 mm
Assured switching distance "OFF" S_{ar}	18 mm
Note (switching distance)	All switching distances in accordance EN IEC 60947-5-3

Mechanical data - Connection technique

Termination	M8□□□□, 4□, A□□□
Tightening torque of electrical connection	0.3 Nm

Mechanical data - Dimensions

Length of sensor	13 mm
Width of sensor	26 mm
Height of sensor	36 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, □□ 1 mm
Resistance to shock	30 g / 11 ms

Ambient conditions - Insulation values

Rated insulation voltage U_i	75 VDC
Rated impulse withstand voltage U_{imp}	0.8 kV

Electrical data

Required rated short-circuit current	100 A
Switching current, maximum	0.4 A
Switching capacity, maximum	10 VA
Switching element	2 NC□□
Switching frequency, maximum	5 Hz

Wiring example

Note (Wiring diagram)

The contacts S11-S12 and S21-S22 must be integrated in the safety circuit.

2 Cat. 4 / PL e

$$MTTF_D = \frac{B_{10D}}{0,1 \times n_{op}}$$

$$n_{op} = \frac{d_{op} \times h_{op} \times 3600 \text{ s/h}}{t_{cycle}}$$

h1op2d3op4and t5cycle678

UL



NFPA 79 [] []

3

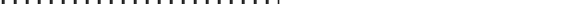
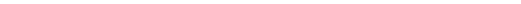
3.1 | | | | | | | | | | |--|--|--|--|--|--|--|--|--| | | | | | | | | | | |--|--|--|--|--|--|--|--|--|



EN ISO 14119

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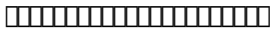
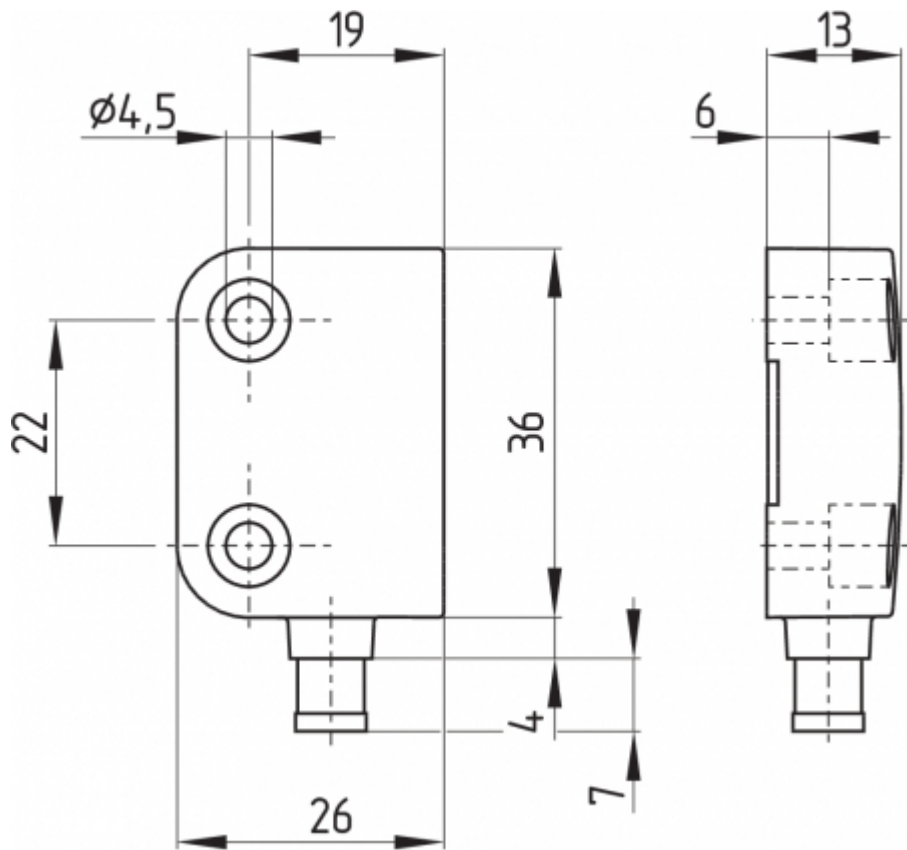
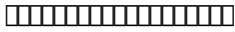
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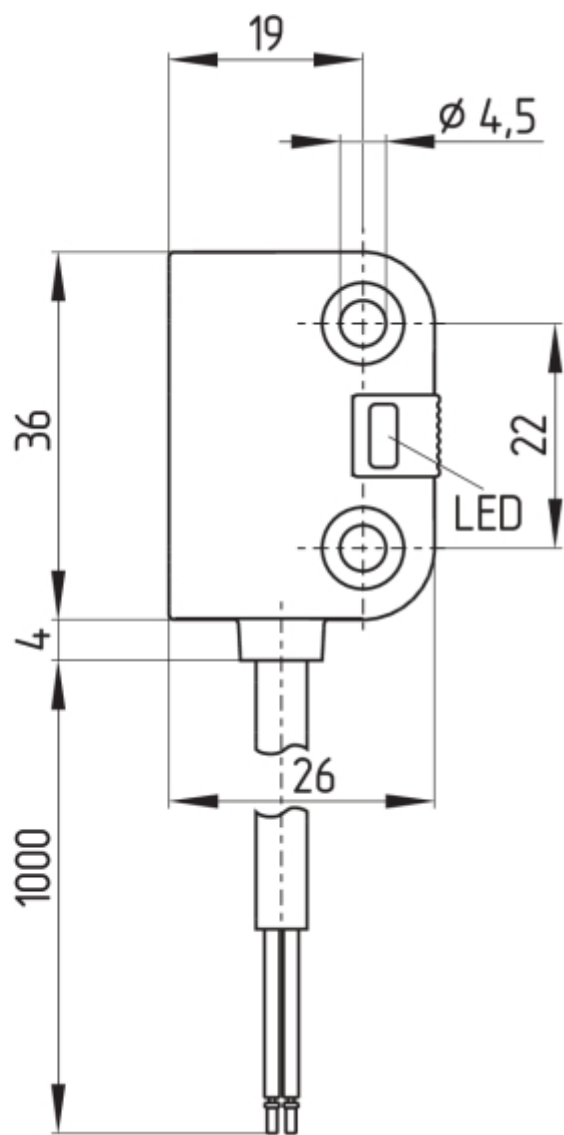
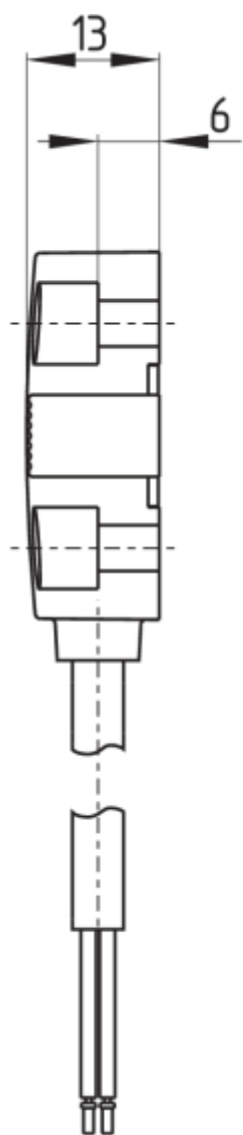
-  100 mm
-  100 mm
-  5 mm  100 mm
-  100 mm
- 2  50 mm  100 mm

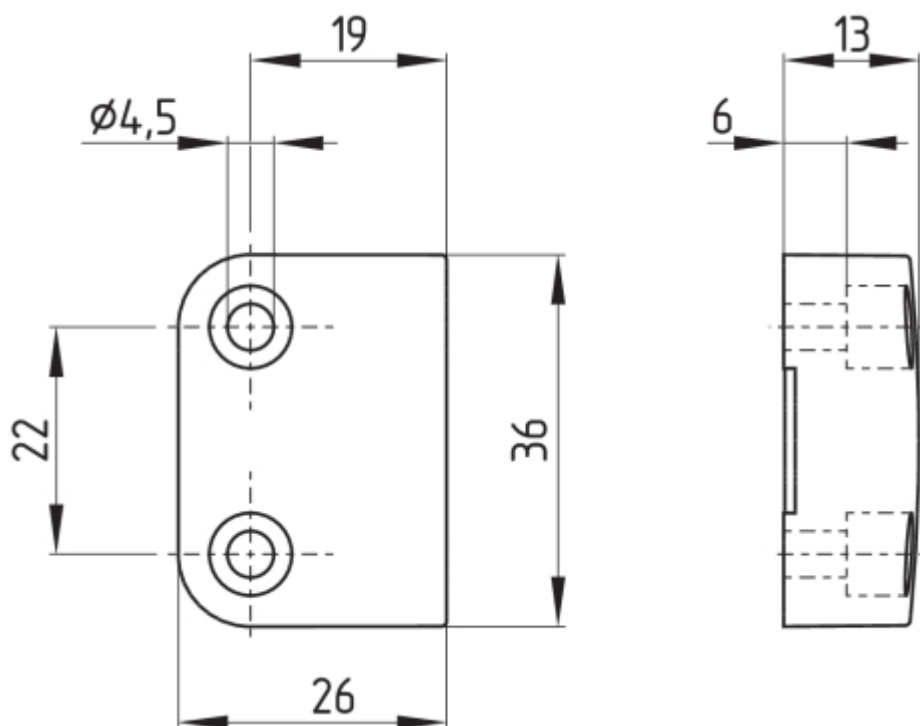
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3.2

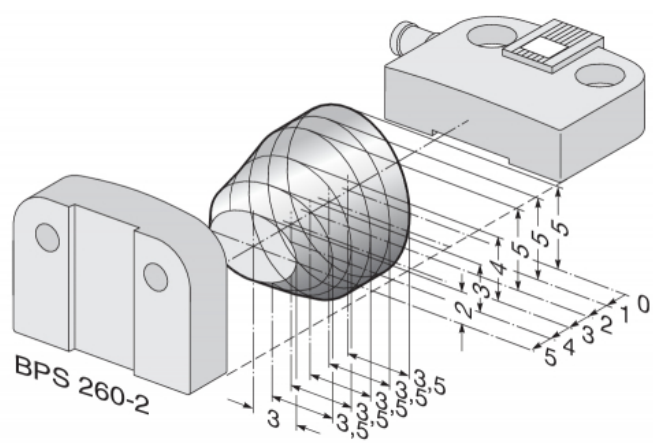
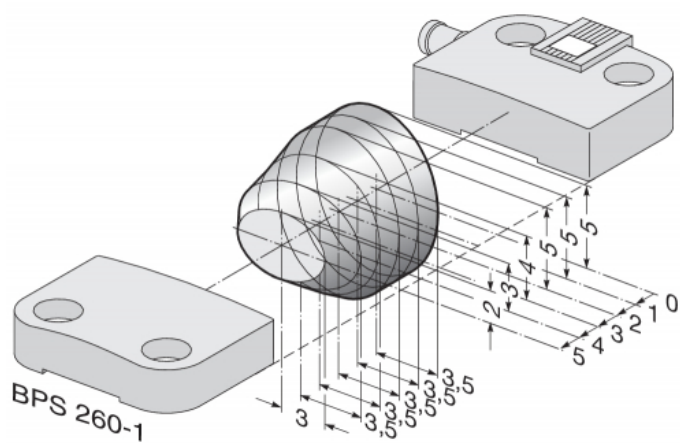








3.3 | | | | | | | | | |--|--|--|--|--|--|--|--| | | | | | | | | | |--|--|--|--|--|--|--|--|



□□□□□:	s_{ao}	=	5 mm 8 mm (□□□□ -2750)
□□□□□:	s_{ar}	=	15 mm 18 mm (□□□□ -2750)

3.4



0.5 x s

LED

4

4.1



1 SRB (NO NC Protect-IE

LED PROTECT-IE PROTECT-PE LED



Schmersal (products.schmersal.com)

4.2

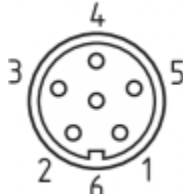
LED LED LED

:	S21-S22 S11-S12 S13-S14
:	S31-S32

BNS 260-02Z(G)	BNS 260-11Z(G)
(3) BK S11 S12 BU (4) (1) WH S21 S22 BN (2)	(3) BK S13 S14 BU (4) (1) WH S21 S22 BN (2)
BNS 260-02/01Z(G)	BNS 260-11/01Z(G)
(3) GY S11 S12 PK (4) (1) GN S21 S22 YE (2) (5) WH S31 S32 BN (6)	(3) GY S13 S14 PK (4) (1) GN S21 S22 YE (2) (5) WH S31 S32 BN (6)

4.3

[illegible]

8 mm, 6, 				2 m	5 m	10 m	
	1			101206010	101206011	101206012	
	2				101206013	101206014	101206015
	3						
	4						
	5						
	6						

□□□□: Y□□□ **BNS-Y-11**

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- 2. []
- 3. []([]) []



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6.2 []



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