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Magnetic safety sensor BNS 260-02Z-L

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1.3 [illegible]

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1.4 [illegible]

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[illegible]products.schmersal.com[illegible]

1.6 [illegible]

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1.7 [illegible]

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2 [illegible]

2.1 [illegible]

[illegible]:
BNS 260-(1)(2)Z(3)-(4)-(5)

(1)	
11	1 NO [illegible] / 1 NC [illegible]
02	2 NC[illegible]

(2)	
[illegible]	[illegible]
/01	1 NC[illegible]

(3)	
[illegible]	[illegible]LED[illegible]
G	[illegible]LED[illegible]

(4)	
[illegible]	[illegible]
ST	[illegible]

(5)	
L	[illegible]
R	[illegible]

2.2 [illegible]

[illegible]

2.3 [illegible]

[illegible]BNS 260[illegible]EN ISO 14119 [illegible]EN 60947-5-3[illegible]BPS 260-1[illegible]BPS

[illegible]

[illegible]EN ISO 14119[illegible]4[illegible]

[illegible](BNS 260)[illegible](BPS 260-1,260-2)[illegible](SRB)[illegible]EN 60947-5-3[illegible]

[illegible]

[illegible]

2.4 [illegible]

Approvals - Standards

Certificates	cULus

General data

Standards	BG-GS-ET-14 EN IEC 60947-5-3
Coding level according to EN ISO 14119	Low
Working principle	[illegible]
Installation conditions (mechanical)	[illegible]
Housing material	[illegible]
Gross weight	55 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	[illegible]
Door hinge	Left

Direction of motion	Head-on to the active surface

Mechanical data - Switching distances

Note (Switching distance Sn)	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}	5 mm
Assured switching distance "OFF" S_{ar}	15 mm
Note (switching distance)	All switching distances in accordance EN IEC 60947-5-3

Mechanical data - Connection technique

Length of cable	1 m
Termination	□□□□
Number of cable wires	4
Wire cross-section	0.25 mm^2
Wire cross-section	23 AWG
Material of the Cable mantle	PVC

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
Restistance to shock	30 g / 11 ms

Ambient conditions - Insulation values

Rated insulation voltage U_i	50 VAC
Rated impulse withstand voltage U_{imp}	0.8 kV

Electrical data

Required rated short-circuit current	100 A
Switching voltage, maximum	75 VDC
Switching current, maximum	0.4 A
Switching capacity, maximum	10 VA
Switching element	2 NC[illegible]
Switching frequency, maximum	5 Hz

Wiring example

Note (Wiring diagram)	The contacts S11-S12 and S21-S22 must be integrated in the safety circuit.

[illegible]

[illegible]2[illegible]Cat. 4 / PL e[illegible]

$$MTTF_D = \frac{B_{10D}}{0,1 \times n_{op}} \qquad n_{op} = \frac{d_{op} \times h_{op} \times 3600\ s/h}{t_{cycle}}$$

[illegible]h1op2d3op4and t5cycle6[illegible]78[illegible]E

UL [illegible]

NFPA 79[illegible]

3 [illegible]

3.1 [illegible]

[illegible]EN ISO 14119[illegible]

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- [illegible]
- [illegible]

[illegible]
- [illegible]
- [illegible]
- [illegible]5 mm[illegible]
- [illegible]
- 2[illegible]50 mm[illegible]

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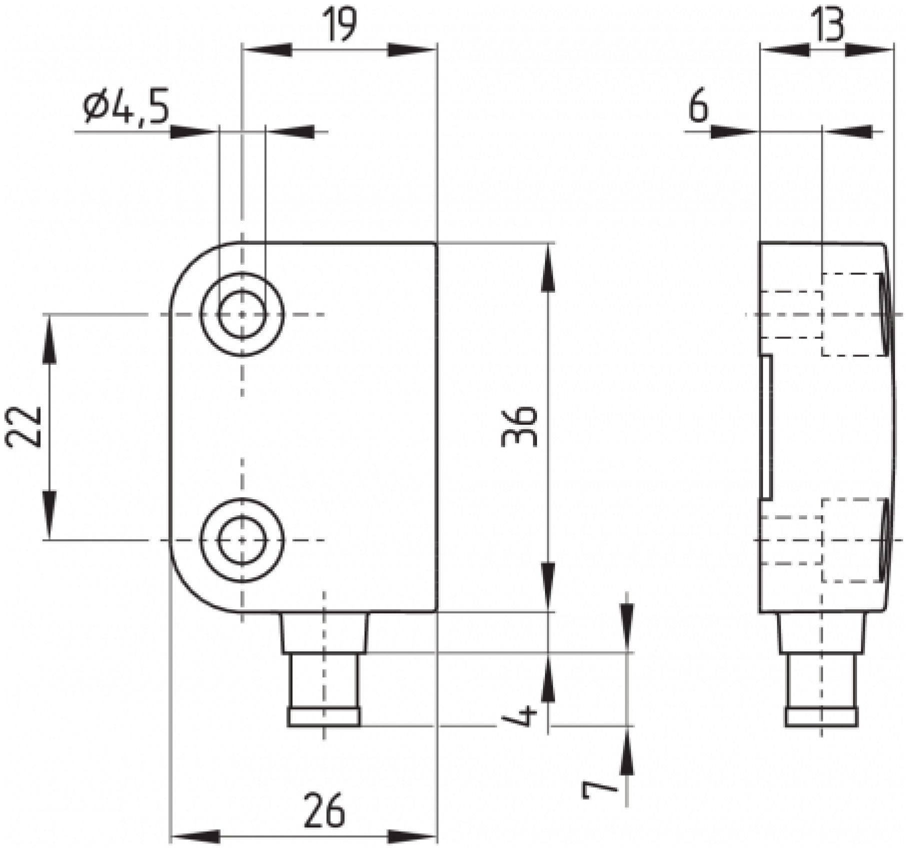
3.2 [illegible]

[illegible] mm

[illegible]



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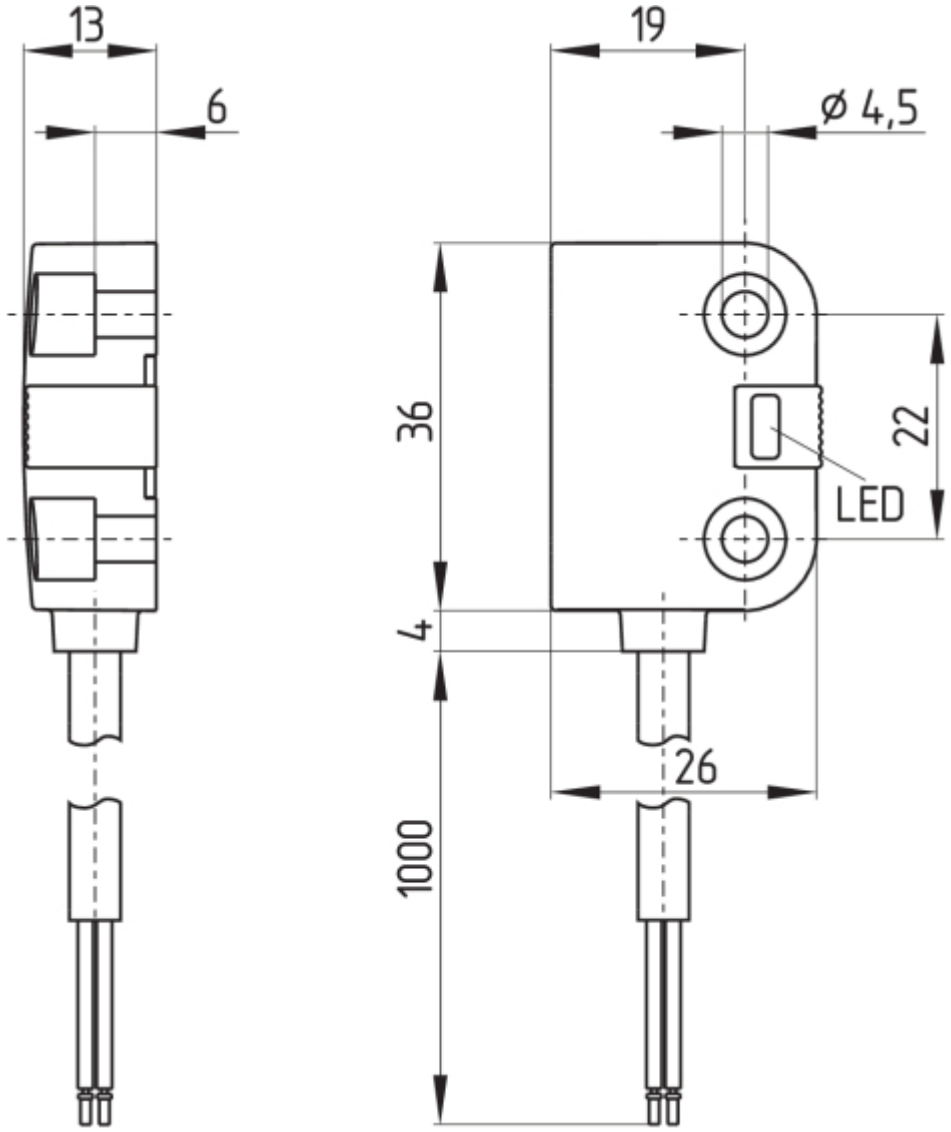
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6
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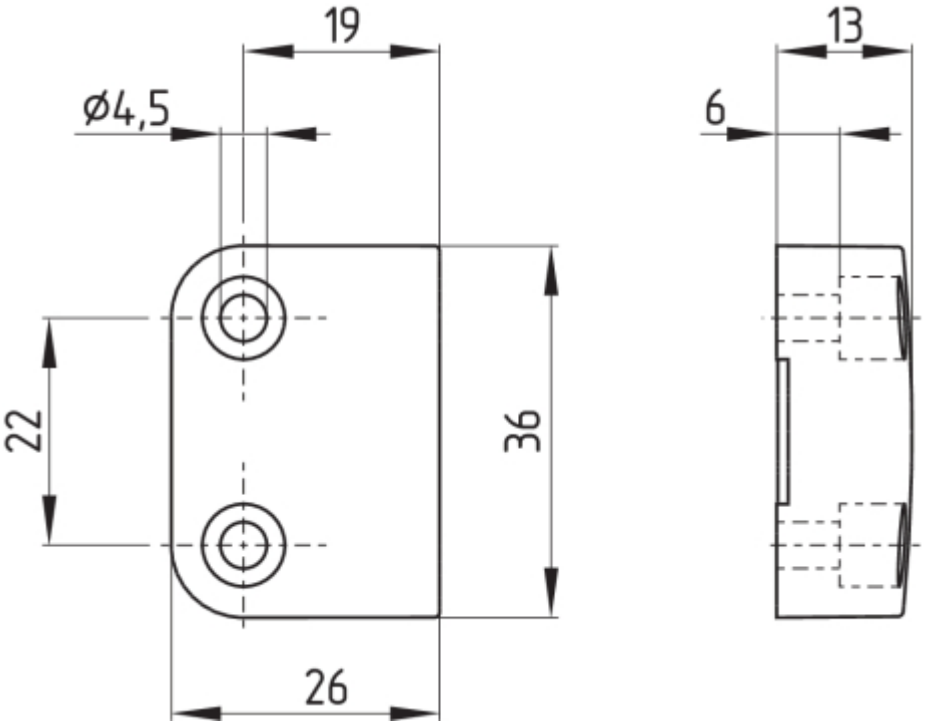
ø 4,5
36
22
LED
4
26
1000



3.3 □□□□□□□□

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[illegible] 0.5 x s_{ao}

[illegible]LED[illegible]

4 [illegible]

4.1 [illegible]

[illegible]

[illegible]1[illegible]SRB[illegible]([illegible]!)[illegible]NO[illegible]NC[illegible]Protect-IE

LED[illegible]PROTECT-IE[illegible]PROTECT-PE[illegible]LED[illegible]

[illegible]Schmersal[illegible] (products.schmersal.com) [illegible]

4.2 [illegible]

[illegible]

[illegible]LED[illegible]LED[illegible]LED[illegible]

[illegible]:	S21-S22 [illegible] S11-S12 [illegible] S13-S14
[illegible]:	S31-S32

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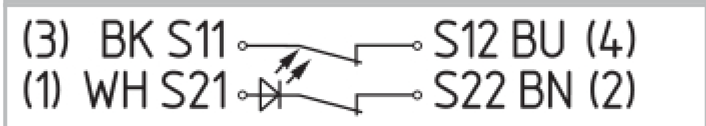
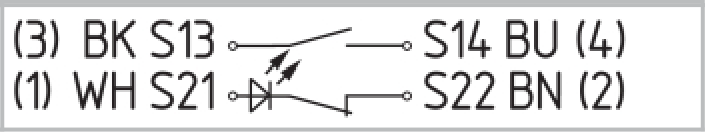
BNS 260-02Z(G)	BNS 260-11Z(G)
	

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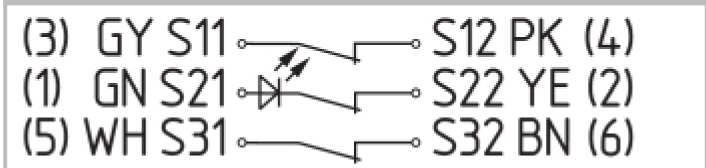	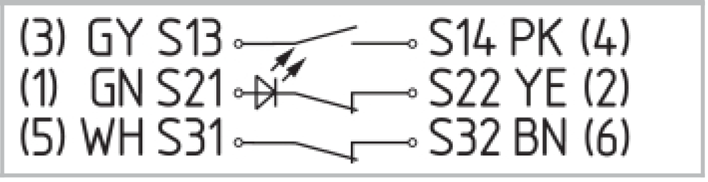

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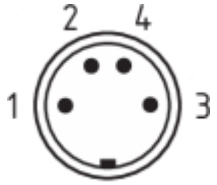	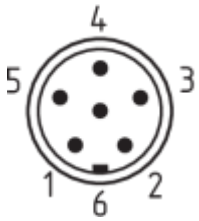	
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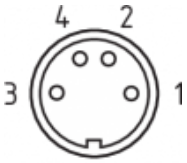
M8, 4□, □□□□□□				2 m	5 m	10 m
	1	□	□□□□□	103011340	103007356	-
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	3	□	□□□□	101210557	101210559	-
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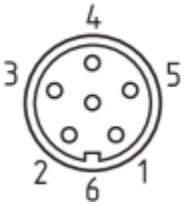
8 mm, 6□, □□□□□□□□□				2 m	5 m	10 m
	1	□	□□□□□	101206010	101206011	101206012
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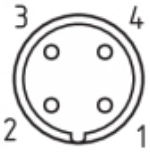	1	□	□□□□□	103010891	103010892	103010893
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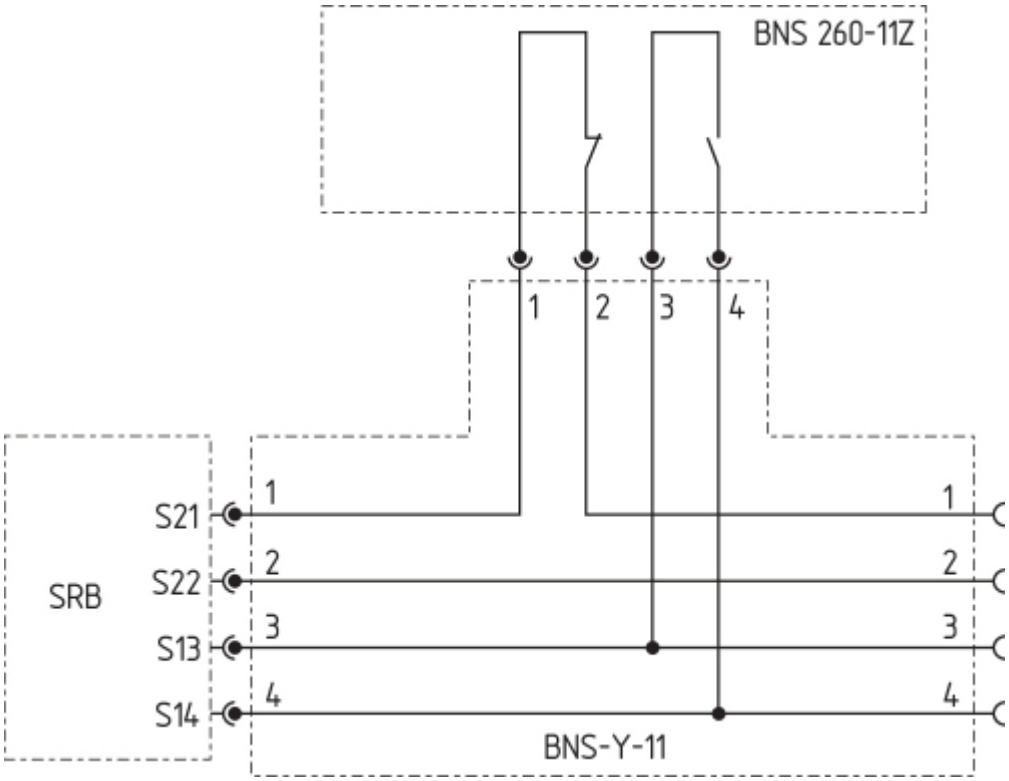
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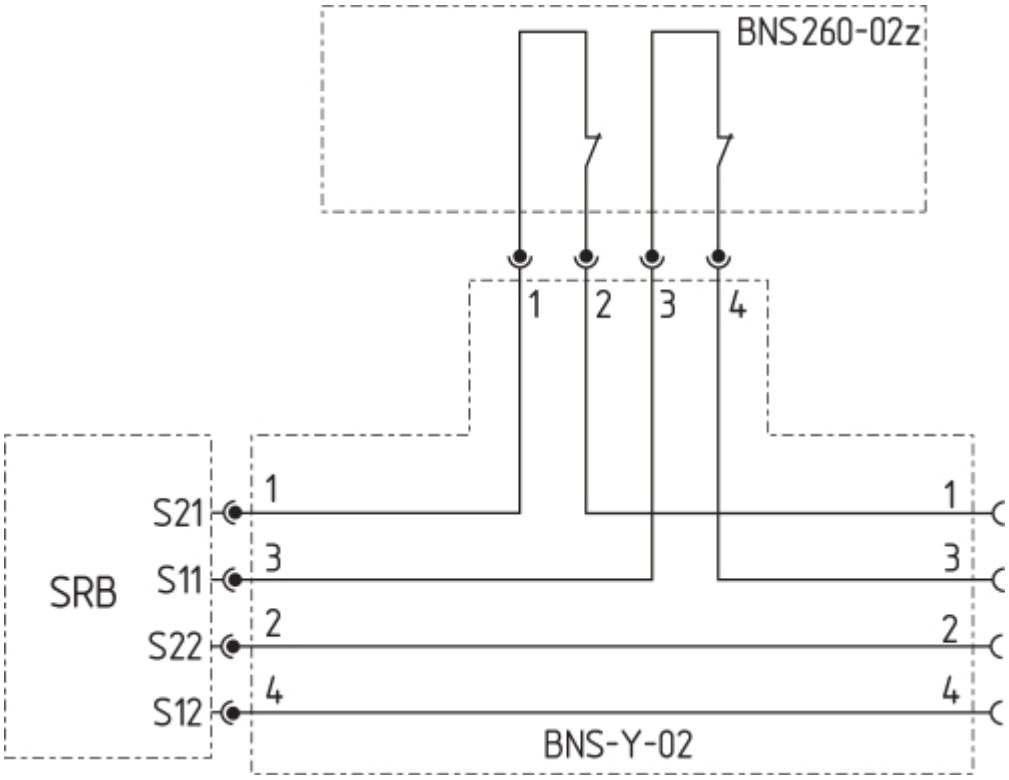
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6.2 [illegible]

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