



Solenoid interlock AZM201B-I2-CC-T-1P2PW

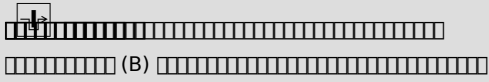
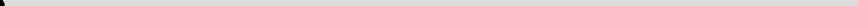
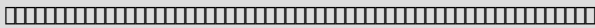
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1

1.1




[illegible]

A warning icon (a triangle with an exclamation mark) is positioned on the left. To its right is a long, thin progress bar consisting of many small, empty rectangular segments, indicating a long or ongoing process.

[illegible]

Approvals - Standards

Certificates	TÜV cULus FCC IC UKCA ANATEL
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General data

4-22

Coding level according to EN ISO 14119	High
Working principle	RFID
Frequency band RFID	125 kHz
Transmitter output RFID, maximum	-6 dB/m
Housing material	□□□□□□□□□□
Duration of risk, maximum	200 ms
Reaction time, switching off safety outputs via actuator, maximum	100 ms
Reaction time, switching off safety outputs via safety inputs, maximum	1.5 ms
Gross weight	577 g

General data - Features

Power to unlock	Yes
Actuator monitored	Yes
Manual release	Yes
Short circuit detection	Yes
Cross-circuit detection	Yes
Series-wiring	Yes
Safety functions	Yes
Integral system diagnostics, status	Yes
Number of safety contacts	2

Safety classification

Vorschriften	EN ISO 13849-1 EN IEC 61508
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Safety classification - Interlocking function

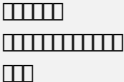
Performance Level, up to	e
Category	4
PFH value	1.90×10^{-9} /h
PFD value	1.60×10^{-4}
Safety Integrity Level (SIL), suitable for applications in	3
Mission time	20 Year(s)

Mechanical data

Mechanical life, minimum	1,000,000 Operations
Holding force F_{Zh} in accordance with EN ISO 14119	2,000 N

Note (clamping force F_{Zh})	□□□□□AZ/AZM201-B30□□□□1000 N□□□□□□□□
Holding force F_{max} , maximum	2,600 N
Note (clamping force F_{max})	□□□□□AZ/AZM201-B30□□□□1300 N□□□□□□□□
Latching force	30 N
Actuating speed, maximum	0.2 m/s
Type of the fixing screws	2x M6
Tightening torque of the fixing screws, maximum	8 Nm
Tightening torque of the fastening screws for the housing cover, minimum	0.7 Nm
Tightening torque of the fastening screws for the housing cover, maximum	1 Nm
Note	Torx T10

Mechanical data - Connection technique

Length of sensor chain, maximum	200 m
Note (length of the sensor chain)	
Note (series-wiring)	
Cable entry	1 x M20
Termination	
Cable section, minimum	0.25 mm²
Cable section, maximum	1.5 mm²
Note	All indications including the conductor ferrules.
Wire cross-section, minimum	23 AWG
Wire cross-section, maximum	15 AWG
Allowed type of cable	

Mechanical data - Dimensions

Length of sensor	50 mm
Width of sensor	40 mm
Height of sensor	220 mm

Ambient conditions

Degree of protection	IP66 IP67
Ambient temperature	-25 ... +60 °C
Storage and transport temperature	-25 ... +85 °C
Relative humidity, maximum	93 %

Note (Relative humidity)	non-condensing non-icing
Resistance to vibrations	10 ~ 150 Hz□□□ 0.35 mm
Resistance to shock	30 g / 11 ms
Protection class	III
Permissible installation altitude above sea level, maximum	2,000 m

Ambient conditions - Insulation values

Rated insulation voltage U_i	32 VDC
Rated impulse withstand voltage U_{imp}	0.8 kV
Overvoltage category	III
Degree of pollution	3

Electrical data

Operating voltage	24 VDC -15 % / +10 % (PELV□□□□□□)
No-load supply current I_0 , typical	50 mA
Current consumption with magnet ON, average	200 mA
Current consumption with magnet ON, peak	700 mA / 100 ms
Rated operating voltage	24 VDC
Operating current	1,200 mA
Required rated short-circuit current	100 A
External wire and device fuse rating	4A gG
Time to readiness, maximum	4,000 ms
Switching frequency, maximum	1 Hz

Electrical data - Magnet control

Designation, Magnet control	IN
Switching thresholds	-3 V ... 5 V (Low) 15 V ... 30 V (High)
Current consumption at 24 V	10 mA
Magnet switch-on time	100 %
Test pulse duration, maximum	5 ms
Test pulse interval, minimum	40 ms
Classification ZVEI CB24I, Sink	C0
Classification ZVEI CB24I, Source	C1 C2 C3

Electrical data - Safety digital inputs

Designation, Safety inputs	X1 and X2
Switching thresholds	–3 V ... 5 V (Low) 15 V ... 30 V (High)
Current consumption at 24 V	5 mA
Test pulse duration, maximum	1 ms
Test pulse interval, minimum	100 ms
Classification ZVEI CB24I, Sink	C1
Classification ZVEI CB24I, Source	C1 C2 C3

Electrical data - Safety digital outputs

Designation, Safety outputs	Y1 and Y2
Rated operating current (safety outputs)	250 mA
Design of control elements	short-circuit proof, p-type
Voltage drop U_d , maximum	2 V
Leakage current I_p , maximum	0.5 mA
Voltage, Utilisation category DC-13	24 VDC
Current, Utilisation category DC-13	0.25 A
Test pulse interval, typical	1000 ms
Test pulse duration, maximum	0.5 ms
Classification ZVEI CB24I, Source	C2
Classification ZVEI CB24I, Sink	C1 C2

Electrical data - Diagnostic outputs

Designation, Diagnostic outputs	OUT
Operating current	50 mA
Design of control elements	short-circuit proof, p-type
Voltage drop U_d , maximum	4 V
Voltage, Utilisation category DC-13	24 VDC
Current, Utilisation category DC-13	0.05 A

Status indication

Note (LED switching conditions display)	Operating condition: LED green Error / functional defect: LED red Supply voltage UB: LED green
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.....AZM201Z-...-1P2PW-... ..(.....) "SD2P"SD...../.....



.....



.....AZM.....

Y1/Y2 OFF2.....



.....OSSD.....

UL

.....NFPA 79

FCC/IC -

.....FCC.....15.....RSS...../.....
2.....

(1)

(2).....

.....100mm.....SED SPR-002.....K.A.

..... SED.....

(1)

(2)

.....100mm.....SED CNR-102.....

Schmersal GmbH & Co. KG



20941-22-14519

Este equipamento nao tem direito àprotecao contra interferência prejudicial e nao pode causar interferencia em sistemas devidamente autorizados.

Para maiores informacoes consultar: www.gov.br/anatel

3

3.1

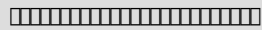


.....ISO 12100.....ISO 14119.....ISO 14120.....

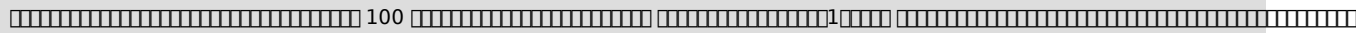
..... M62.....(.....2.....).....

2.....

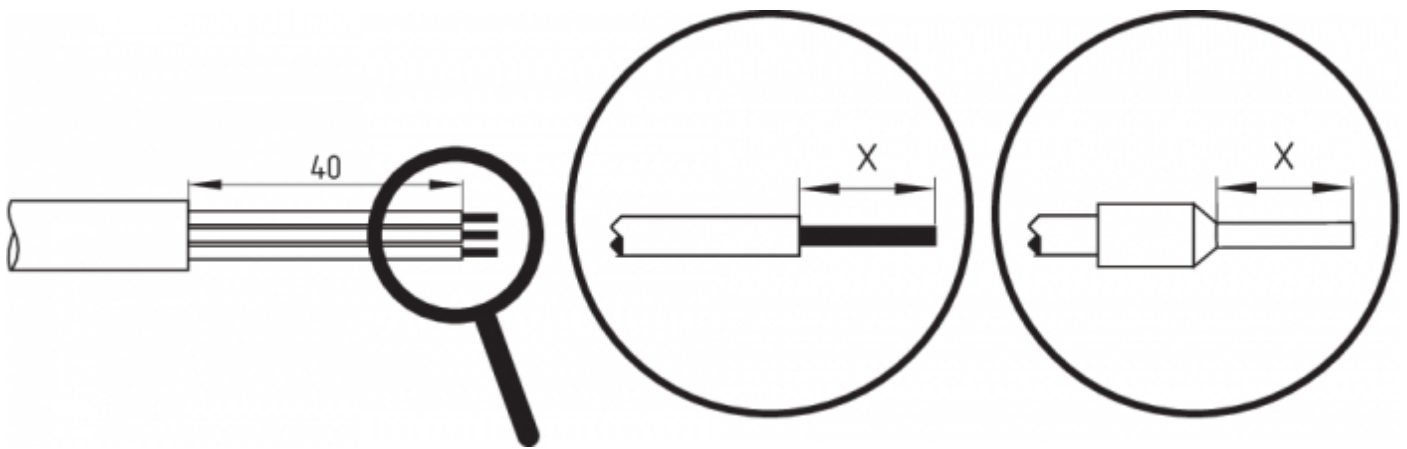
.....(125kHz).....: 100 mm



2 PNP



- (SK): 8 mm
- 7.5 mm



4.3 -SD





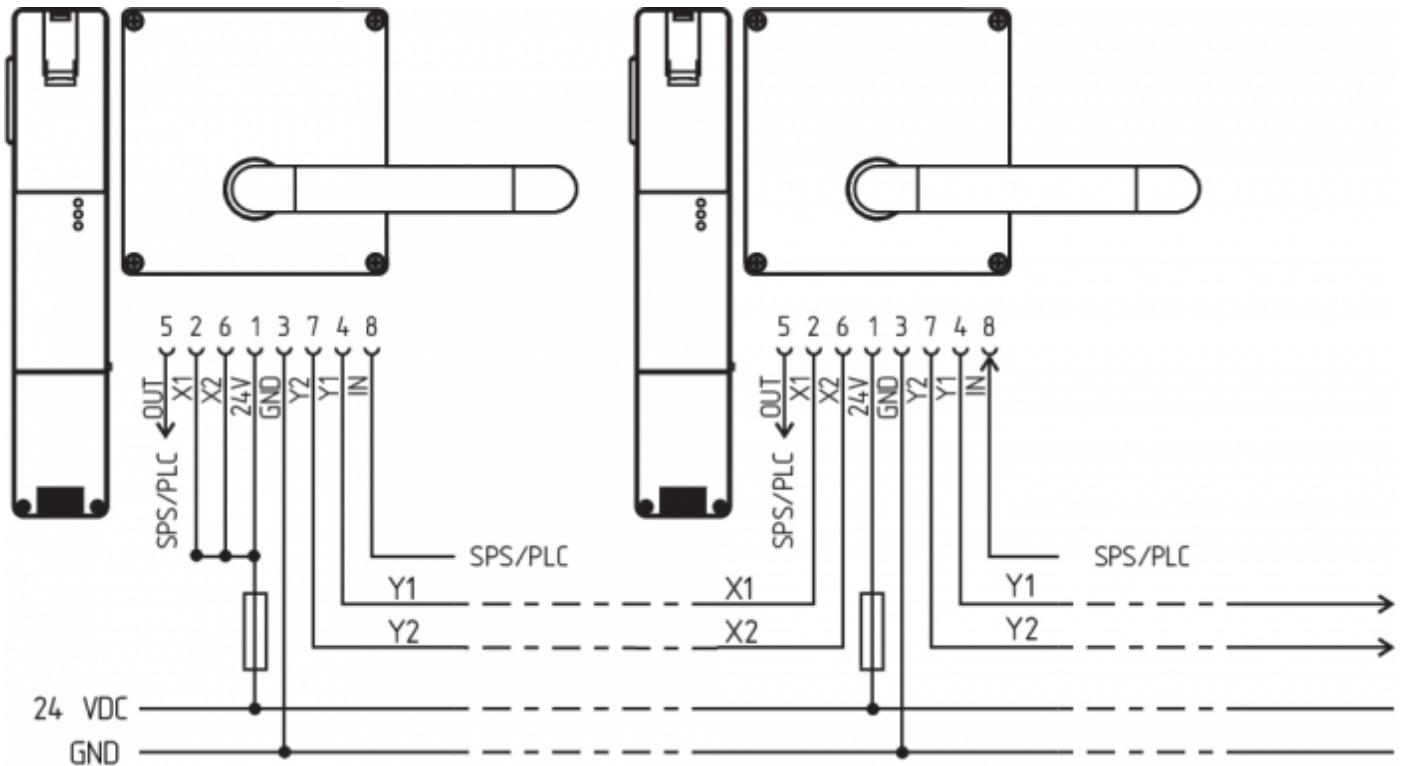
SD

PFB-SD-4M12-SD () PDM-SD-4CC-SD () (products.schmersal.co

4.4

1 AZM201

24V-X1-X2



Y1 Y2 = →

2 AZM201 31

(-SD) SD

IP67 / IP69M128 - 8 x 0.25 mm²DIN 47100

2,5 m

103011415

5,0 m

103007358

10,0 m

103007359

15,0 m

103011414

5 /

- 1.
- 2. LEDOFFON(1 Hz)
- 3. 10LED(3 Hz)55
- 4. (2

suffix -l1

-l210

6

6.1

AZM201IN(= 24V)AZM201IN(= 24 V)

6.2

AZM201.AZM201

B AZM201B,

6.3 LED

3LED

	ON
	(2: / LED)

6.4

PLC

()

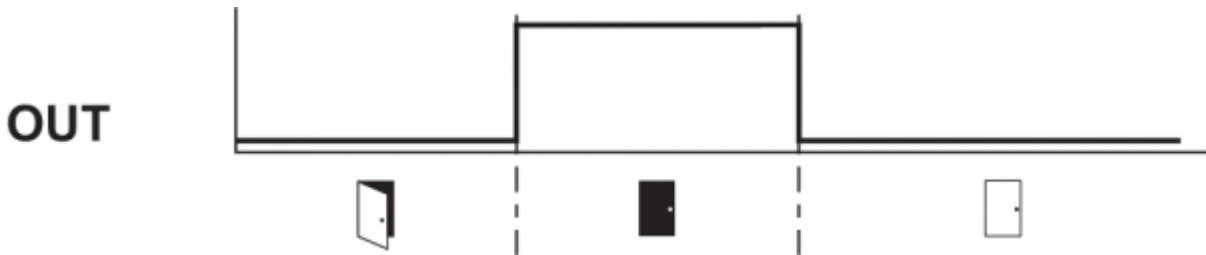
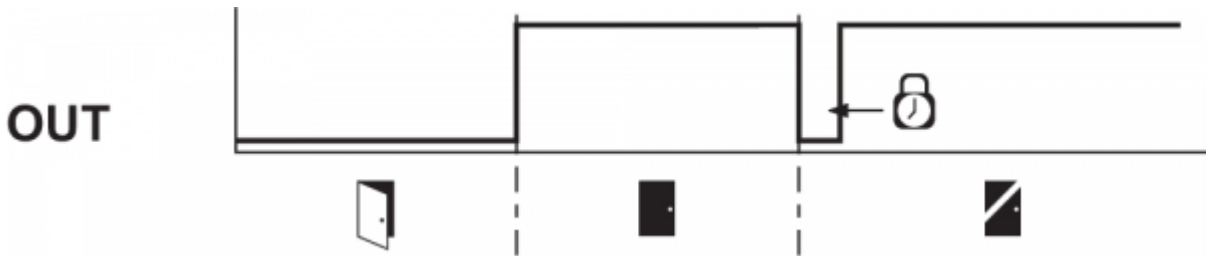
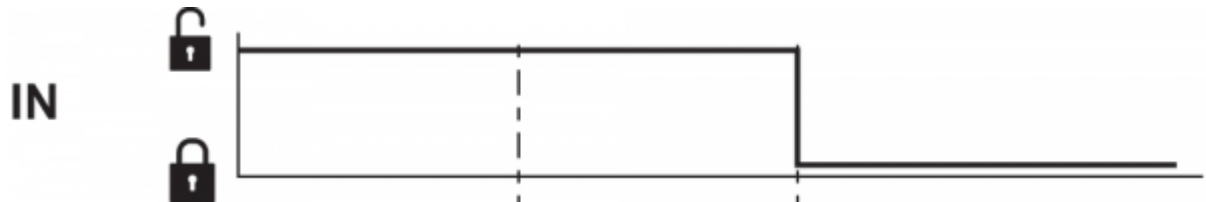


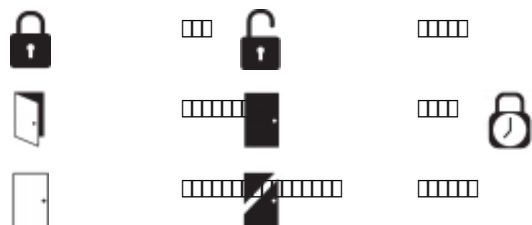
Y1Y2

2

(...-1P2PW)

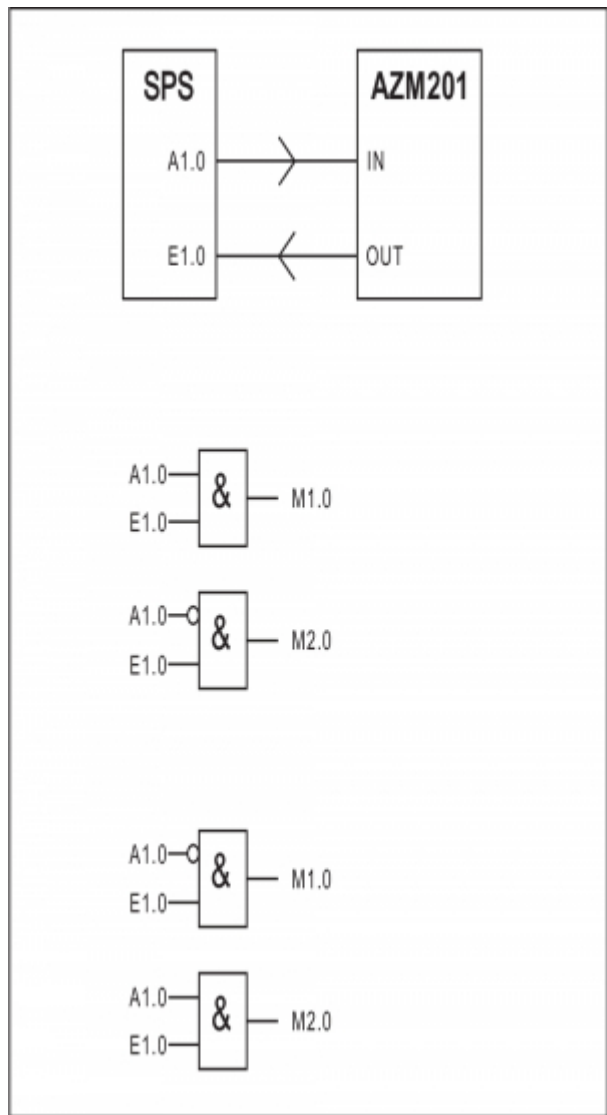
(:)





150 ... 250 ms, 200 ms

(...-1P2PW)



1:								
	IN		LED			Y1, Y2		OUT
						AZM201Z	AZM201B	-1P2PW
	24 V (0 V)	0 V (24 V)	On	Off	Off	0 V	0 V	0 V
	24 V	0 V	On	Off	Off	0 V	0 V	0 V
	24 V	0 V	On	Off		0 V	24 V	24 V
	0 V	24 V	On	Off		0 V	24 V	0 V
	0 V	24 V	On	Off	On	24 V	24 V	24 V
	0 V	24 V	On		On	24 V ¹⁾	24 V ¹⁾	0 V
	0 V (24 V)	24 V (0 V)	On	²⁾ Off ¹⁾	Off	0 V	0 V	0 V
I1/I2:								
			Off	On		0 V	0 V	0 V
I2:	()			Off	Off	0 V	0 V	0 V
1) 30 2)								

2: / LED			
()		OFF	
1	Y1	30	Y1
2	Y2	30	Y2
3		30	Y1/Y2
4		30	
5		0	
6		0	()
	/	0	/

6.5 SD

31 PROFIBUS SD-I-DP-V0-2 SD-I-U-... products.schmersal.com PLC PLC SD

()



Y1 Y2

()

30 (LED)

3: I/O
(Bit = 1)

0:		IN	Y1	Y1
1:	---		Y2	Y2
2:	---			
3:	---	---		
4:	---	X1 X2	---	
5:	---			
6:	---	1) 2)		---
7:		OFF		---

1) 30 ->

7

- 1.
- 2.
- 3.
- 4.
- 5.

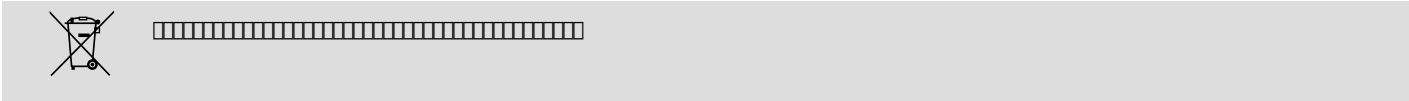


8

8.1

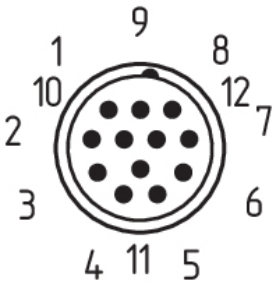
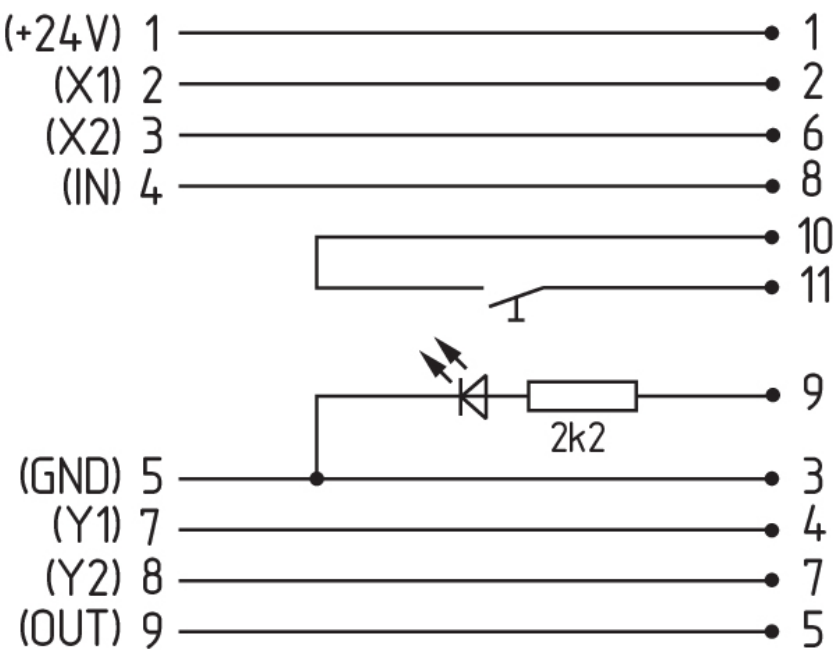


8.2



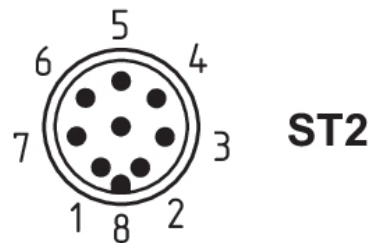
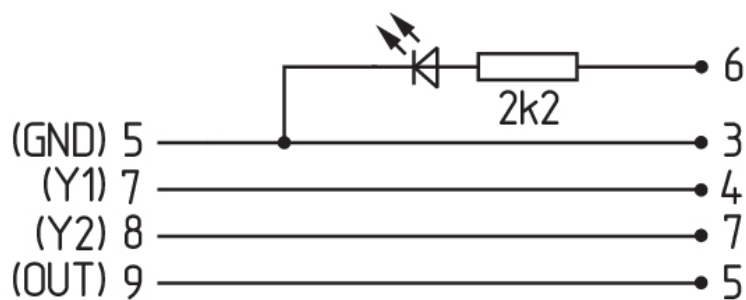
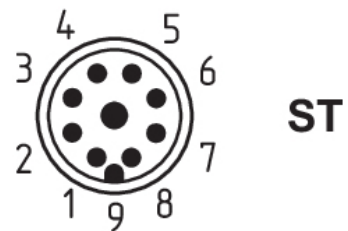
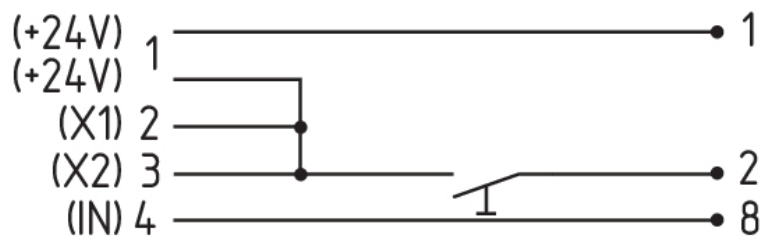
9 -

 -2965-1



 () IP67, M23, 12 - 12 x 0.75 mm ²	
	
5.0 m	101208520
10.0 m	103007354
20.0 m	101214418

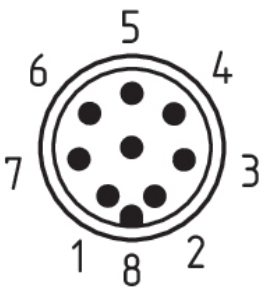
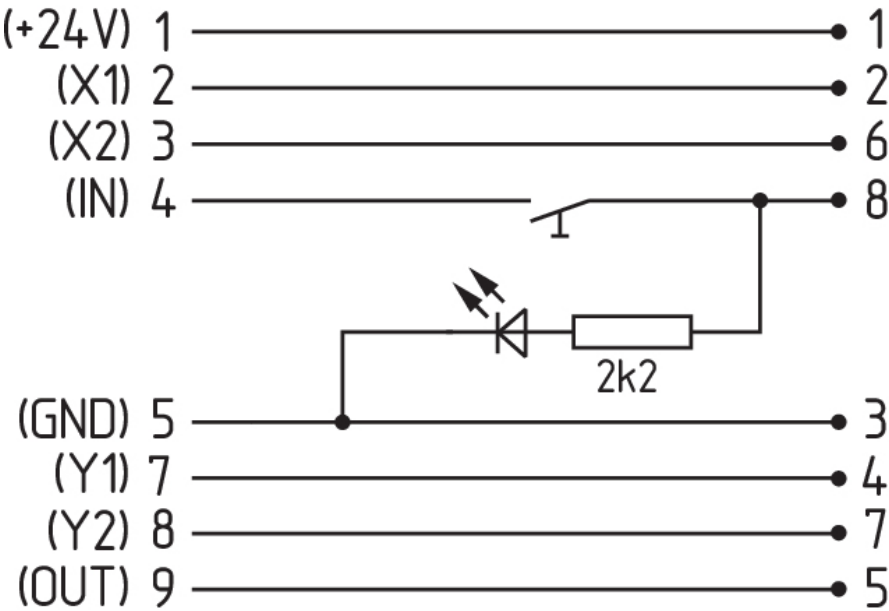
 -2965-2



IP67, M23, 8+1 - 9 x 0.75 mm ²	
5.0 m	101209959
10.0 m	101209958
15.0 m	103001384

IP67, M12, 8 - 8 x 0.25 mm ²	
2.5 m	103011415
5.0 m	103007358
10.0 m	103007359

-2965-3



IP67, M12, 8 - 8 x 0.25 mm ²	
2.5 m	103011415
5.0 m	103007358
10.0 m	103007359