





Safety System Products

SAFIX W3-A-P

RFID Safety Sensor, high coded, EDM, autom. reset, Pigtail

Your advantages

- PLe according to EN ISO 13849-1
- IP 67 and ECOLAB
- Series connection of up to 30 sensors without reduction in safety
- No special analysis system required
- LED diagnosis
- Single information signal for diagnosis
- Highly coded according to EN ISO 14119 (version I3 and W3)
- Small compact design
- Fastest sensor available (risk time)



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The new SAFIX 3 RFID safety sensor impresses due to its compact design and a hole distance of 22 mm. It can be actuated from the front and both sides and is available in 3 different versions with a choice of low level or high level coding according to EN ISO 14119. The sensor has protection class IP69K, holds an ECOLAB approval and can either be purchased with an M12, 8-pin pigtail cable or a fixed cable length of 5 or 10 metres.

Thanks to its OSSD output signals, the sensor can be connected to all standard control and safety relays. A total of up to 30 sensors can be switched in series. An information signal and a three colour LED display on the sensor are provided for diagnosis purposes.

General data	
Type designation	SAFIX W3-A-P
Item number	1019320
Item number (old)	SP-E-76-000-05
Functional type	RFID safety sensor
Service life TM (EN ISO 13849-1)	20 Years
Coding levels	Individually coded, learnable

Safety data	
Category (EN ISO 13849-1:2015)	cat. 4
SIL (acc. IEC 62061)	SIL3, SILCL3
PFHd (EN ISO 13849)	2,24 x 10□⁹
Approvals	TÜV_SÜD, CE

Environmental conditions	
Max. storage temperature	−25 ... +70 °C
Max. operating temperature	−25 ... +70 °C
Contamination level	2

Electrical data	
Overvoltage category	II
Rated impulse withstand voltage Uimp	1 kV

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Electrical service life (nominal load)	20 Years
Design / Connections	Pigtail 19.5 cm cable, M12 8-pin male connector
Contact type	OSSD
Supply voltage	DC +/- 10% 24 V
Rated insulation voltage Ui	50 V
Power consumption in ambient conditions	23,75 W
No-load current I0	(not activated) 10 mA / (activated) 30 mA
Max. voltage (VDC)	1 A
Switching frequency	3
LED lighting	3 colors
Utilisation category	D-12/DC-13
Risk time	75 ms
pin assignment with SSP accessories cable	
WH	UB
BN	safety input 1
GN	GND
YE	safety output 1
GY	diagnostic output
PK	safety input 2
BU	safety output 2
RD	EDM
Pin assignment according DIN 47100	
BN	UB
WH	safety input 1
BU	GND
BK	safety output 1
GY	diagnostic output
PK	safety input 2
VT	safety output 2
OG	EDM/ Start- Input

Mechanical data

Dimensions

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Length	13 mm
Width	36 mm
Height	26 mm
Torque (mounting nut)	0,7 Nm
Mounting	Screw connection with M4 screws (sunk)
Housing material	PBT
Shock resistance	30 g/11 ms
Vibration resistance	Amplitude 1 mm, 10 ... 55 Hz
Switching distance Sn	12 mm
Assured switching distance ON S(ao)	8 mm
Assured switching distance OFF S(ar)	18 mm
Hysteresis	2 mm
Repeat accuracy R	< 0,5 mm

LED diagnostics

Advanced LED diagnosis

Extended LED-Diagnosis

Green	Red	Yellow	Remark
off	off	on	Sensor not actuated, voltage applied
on	off	off	Sensor actuated, all inputs set correctly
flashes	off	off	Sensor actuated, safety inputs not set (low level)
flashes	off	off	Safety inputs set (high level), waiting for start pulse
off	off	flashes	Actuator at the reception limit
off	off	flashes	Teach in process

Green	Red	Yellow	Remark
off	flashes 1x	off	Error safety outputs
off	flashes 2x	off	Error safety inputs
off	flashes 3x	off	Error safety inputs. EDM automatic: Safety relay fault. EDM manual: Faulty start impulse
off	flashes 4x	off	Overvoltage and undervoltage fault
off	flashes 5x	off	Temperature outside the permitted range
off	flashes 6x	off	Wrong actuator
off	on	off	Permanent light Internal device error

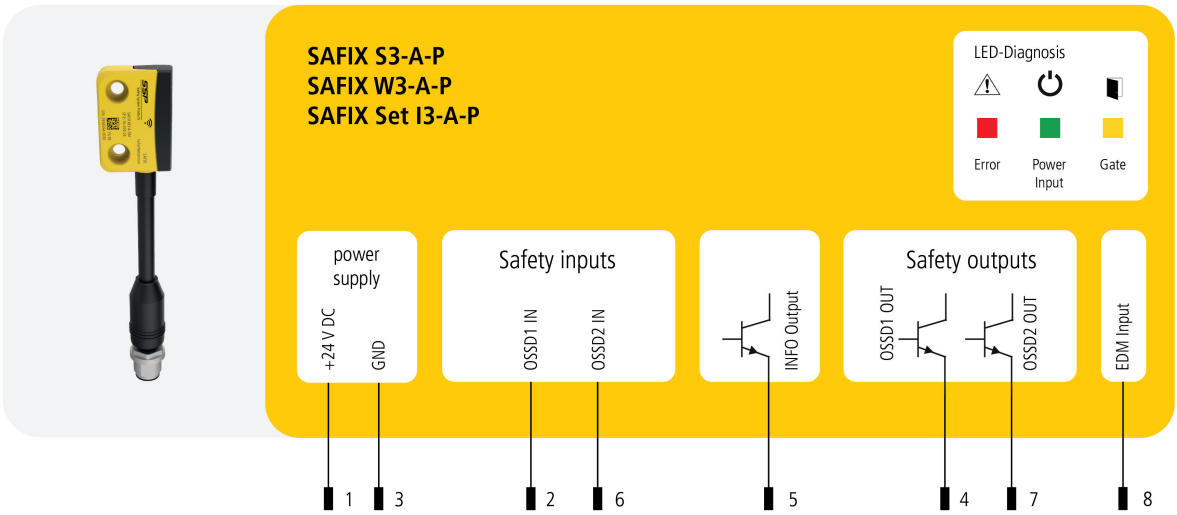
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Electrical drawings

Connection drawing

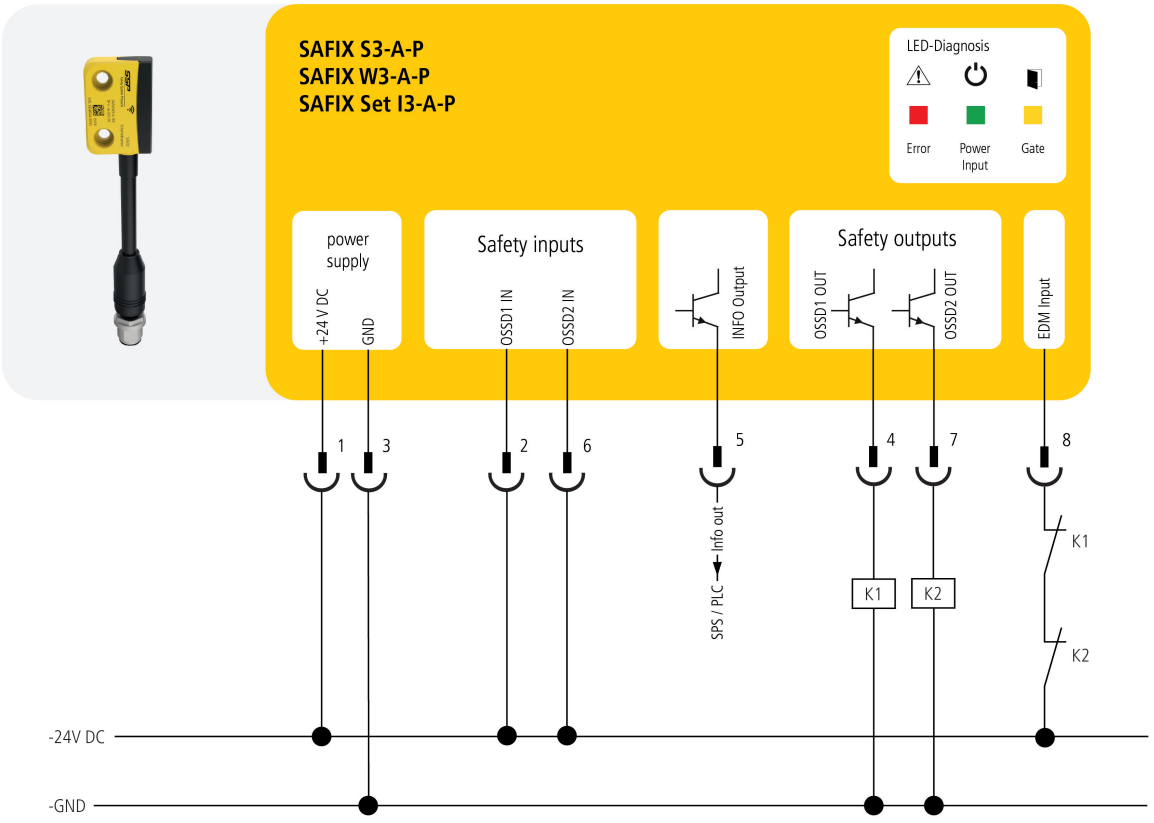


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Connection example 1

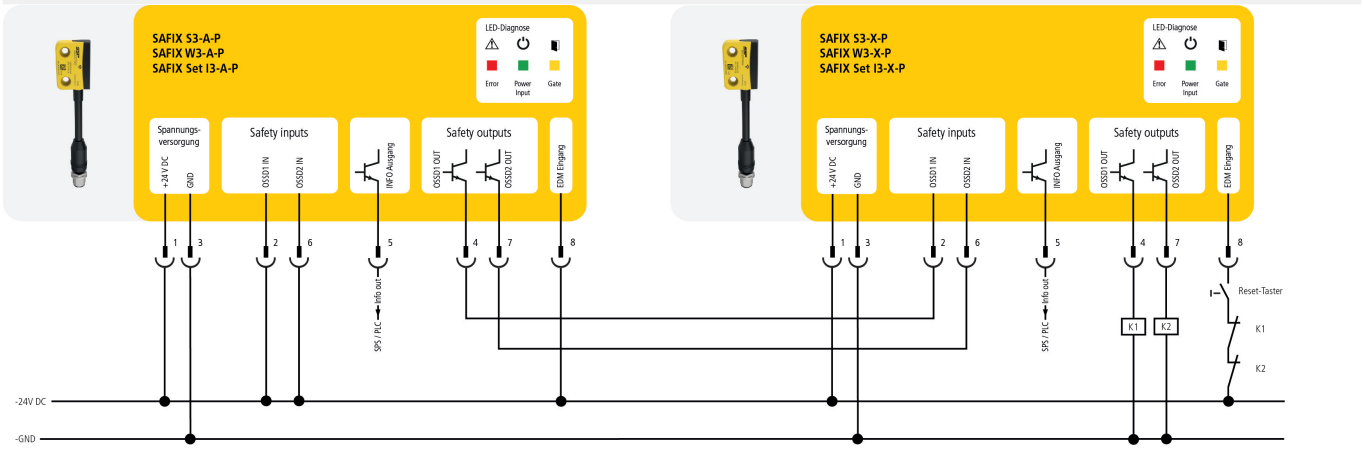


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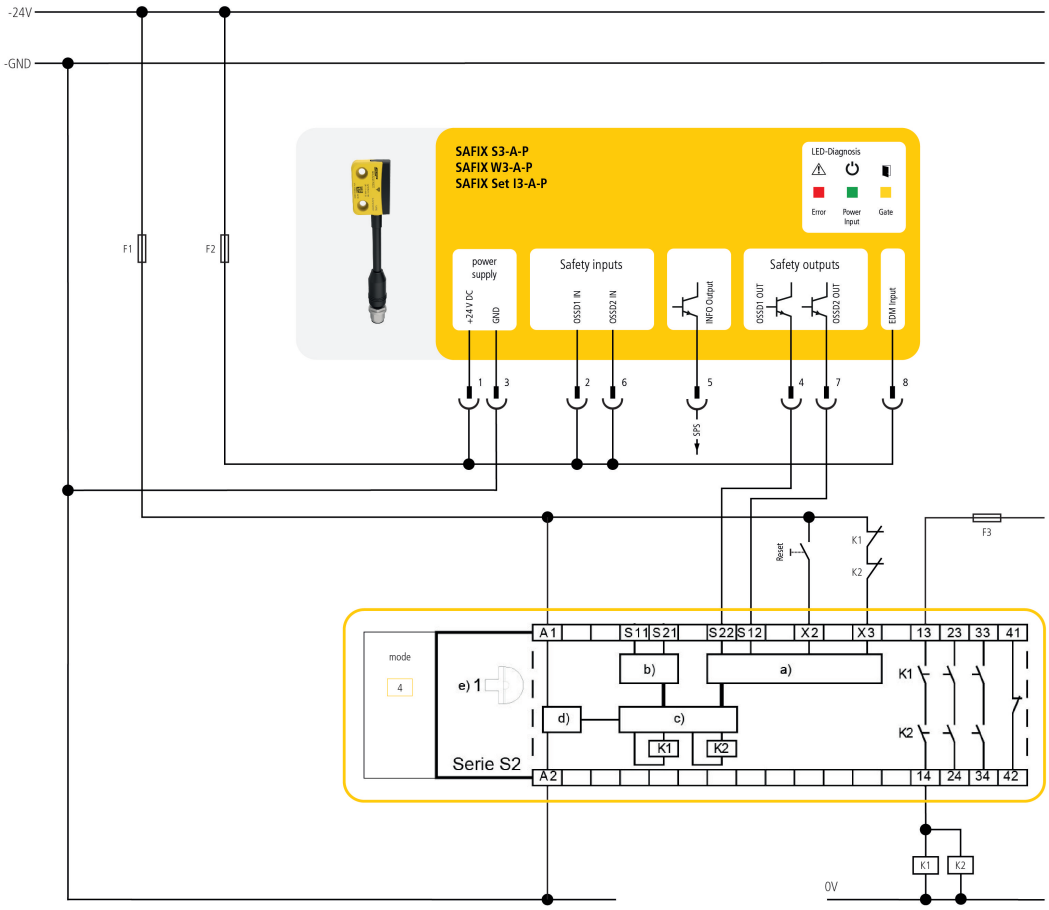
Connection example 2



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Connection example 3

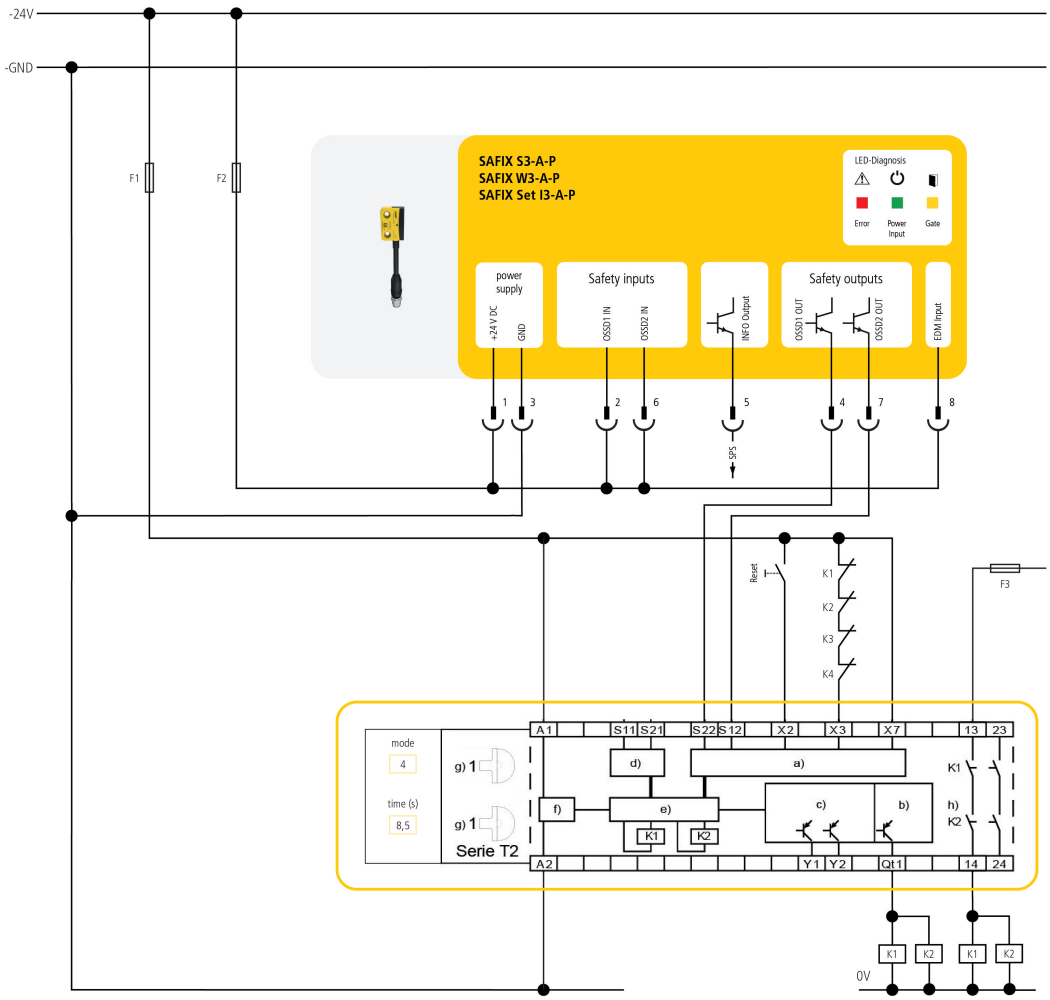


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Connection example 4

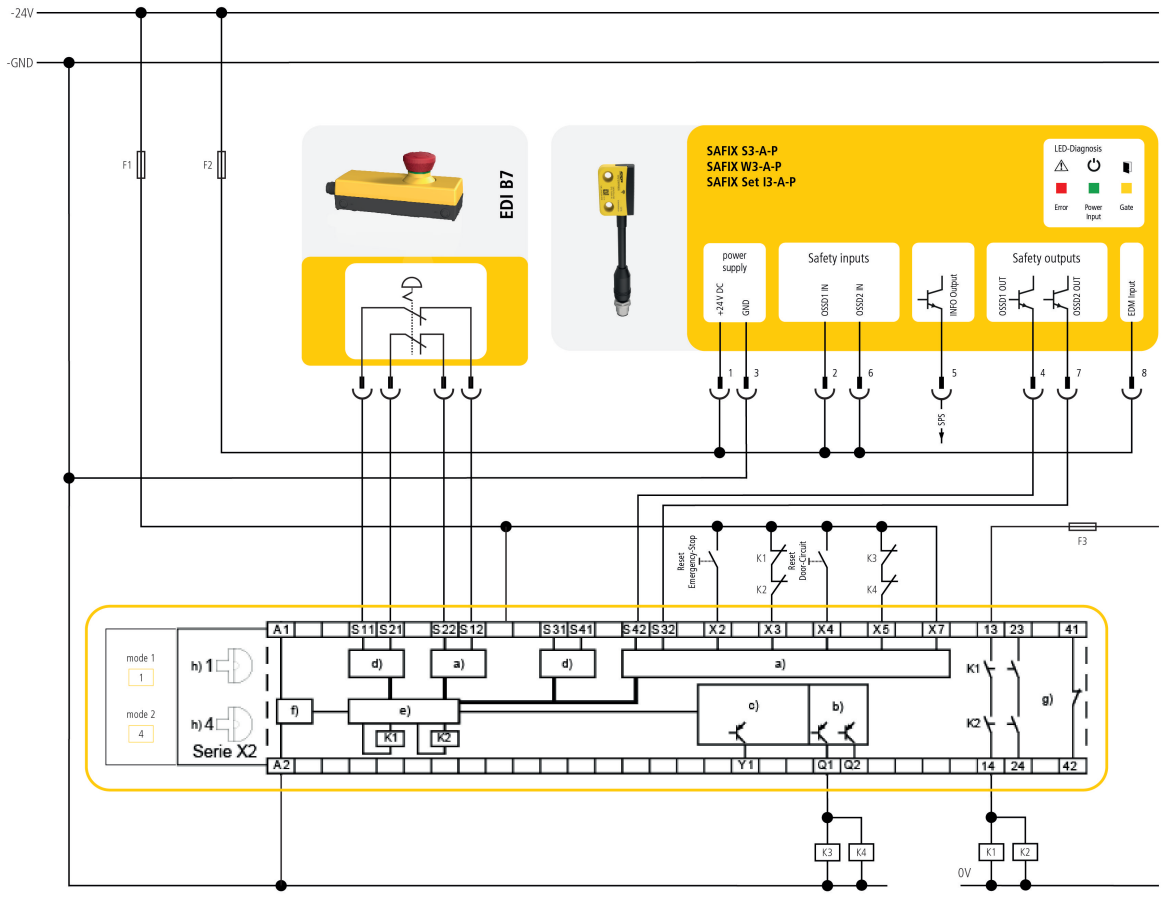


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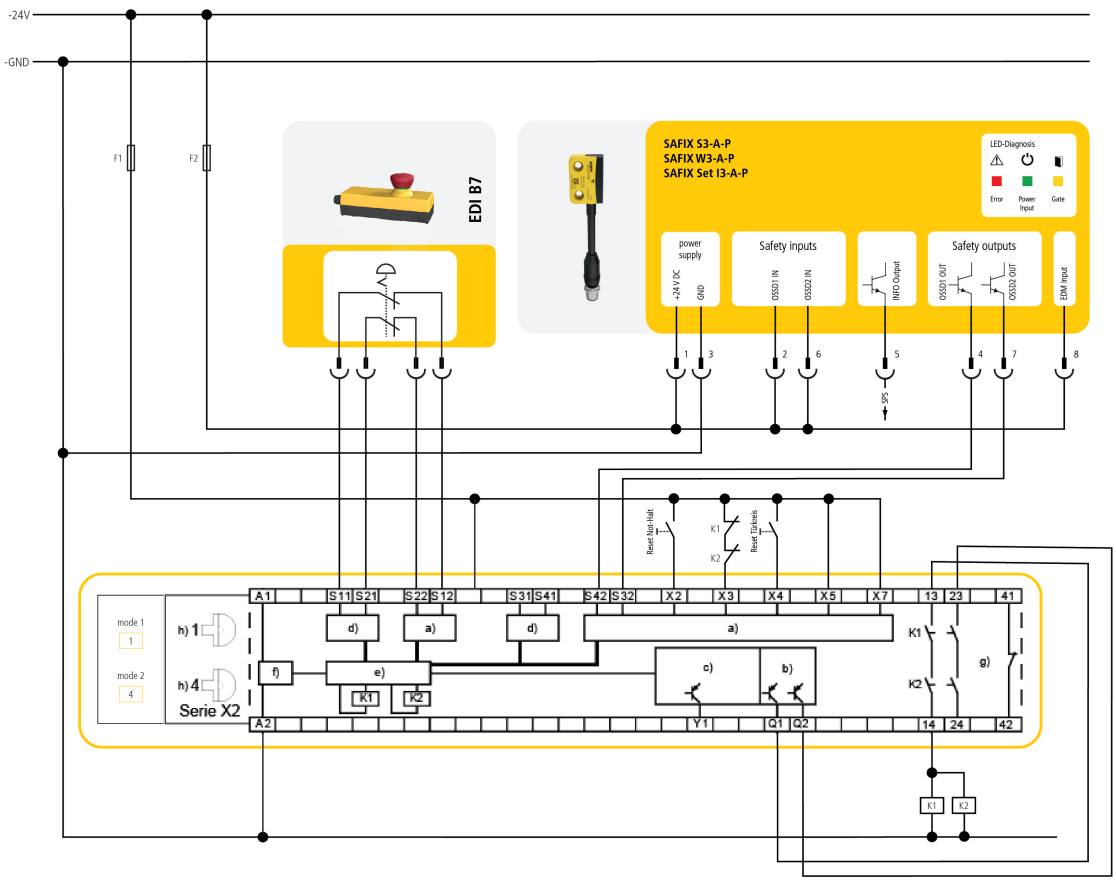
Connection example 5



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Connection example 6



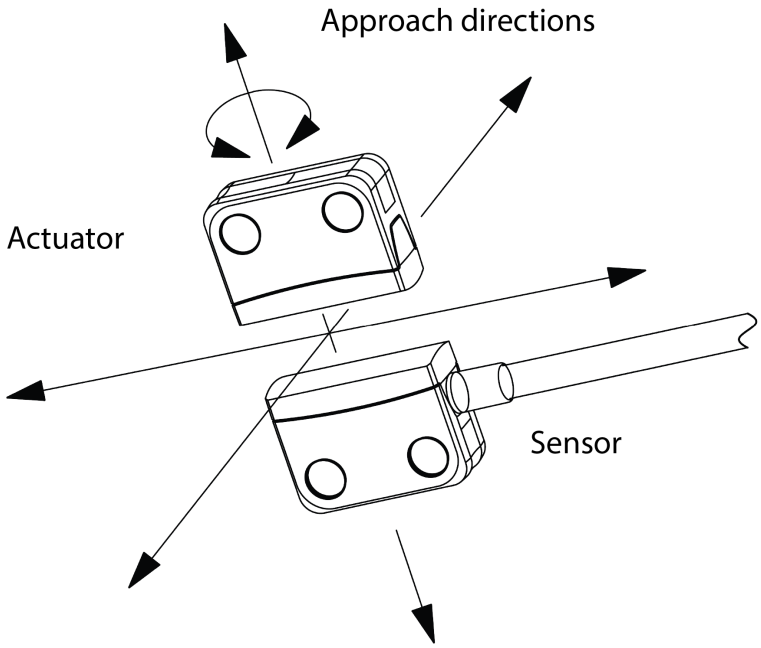
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Drawings

Assembly



Equipment

Accessories

M12-female connector, 8 pin, 10 m	C8D10	1021397	
M12-female connector, 8 pin, 15 m	C8D15	1021398	

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M12-female connector, 8 pin, 25 m	C8D25	1021390	
M12-female connector, 8 pin, 40 m	C8D40	1021389	
M12-female connector, 8 pin, 5 m	C8D5	1021396	
M12-connecting cable, 8 pin, 10 m	M12-M12-C8103-G	1022352	
M12-connecting cable, 8 pin, 1 m	M12-M12-C813-G	1022368	
M12-connecting cable, 8 pin, 5 m	M12-M12-C853-G	SP-X-33-000-08	
Contact expansion	E series	1022285	
Passive distributor	XCONN P6-M12-5m	1027824	

Safe control technology

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	MOSAIC M1	1019811	
Standard safety relay 1 safety function	S2 series	1019455	
Time delay safety relay 1 safety function	T2 series	1019456	
Multi-function safety relay 2 safety functions	X2 series	1019457	
Wireless Safety			
Safety Simplifier | for SAFIX	S14LDRB-H08-E2-I1-Q1A0-Q2A0-Q3C0-Q4I0-W38	1030122	
Safety Simplifier | for SAFIX	S14LDRB-H09-E2-I1-I1-Q1A0-Q2A0-Q3C0-Q4I0-W39	1030123	
Safety Simplifier | for SAFIX	S14LDRB-H0A-E2-I1-I1-I1-Q1A0-Q2A0-Q3C0-Q4I0-W40	1030124	

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Safety Simplifier | for SAFIX	S14LDRB-H0A-E2-I1-I1-K4-Q1 A0-Q2A0-Q3C0-Q4I0-W41	1030125	
Safety switches			
RFID Safety Sensor, high coded, EDM, autom. reset, Pigtail	SAFIX Set I3-A-P	SP-E-76-000-33	
Standard-Actuator for SAFIX 3	SAFIX T5	1019317	
Flat actuator for SAFIX 3	SAFIX T6	1019331	
Mounting	SAFIX Z B5	SP-K-71-000-08	
Passive distributor	XCONN P6-M12-10m	1027828	
Passive distributor	XCONN P6-M12-M23	1027825	
Y distributor	XCONN Y2-M12	1022403	

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Downloads

- Operating manual
- CAD Data
- SISTEMA - Data V 4.1
- Certificate
- Product line
- Catalog
- Catalog packaging systems
- Certificate
- EPLAN-Data