



# SSP

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)



To the downloads ►

we simplify safety

## SAFIX W3-A-P

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.

Connection type	Pigtail
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### General data

Type designation	SAFIX W3-A-P
Item number	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)	$2,24 \times 10^{-9}$
Approvals	TÜV_SÜD, CE

### Environmental conditions

Max. storage temperature	-25 ... +70 °C
Max. operating temperature	-25 ... +70 °C
Protection class	IP67, IP6K9K (not valid for plug connector)
Contamination level	2

### Electrical data

Overvoltage category	II
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## Safety System Products

### SAFIX W3-A-P

Electrical service life (nominal load)	20 Years
Rated impulse withstand voltage Uimp	1 kV
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
<b>pin assignment with SSP accessories cable</b>	
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
<b>Pin assignment according DIN 47100</b>	
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









































### SAFIX W3-A-P

Length	13 mm
Width	36 mm
Height	26 mm
Weight	45 g
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 S <sub>n</sub>	12 mm
Assured switching distance ON S <sub>(ao)</sub>	8 mm
Assured switching distance OFF S <sub>(ar)</sub>	18 mm
Hysteresis	2 mm
Repeat accuracy R	< 0,5 mm

#### LED diagnostics

Advanced LED diagnosis

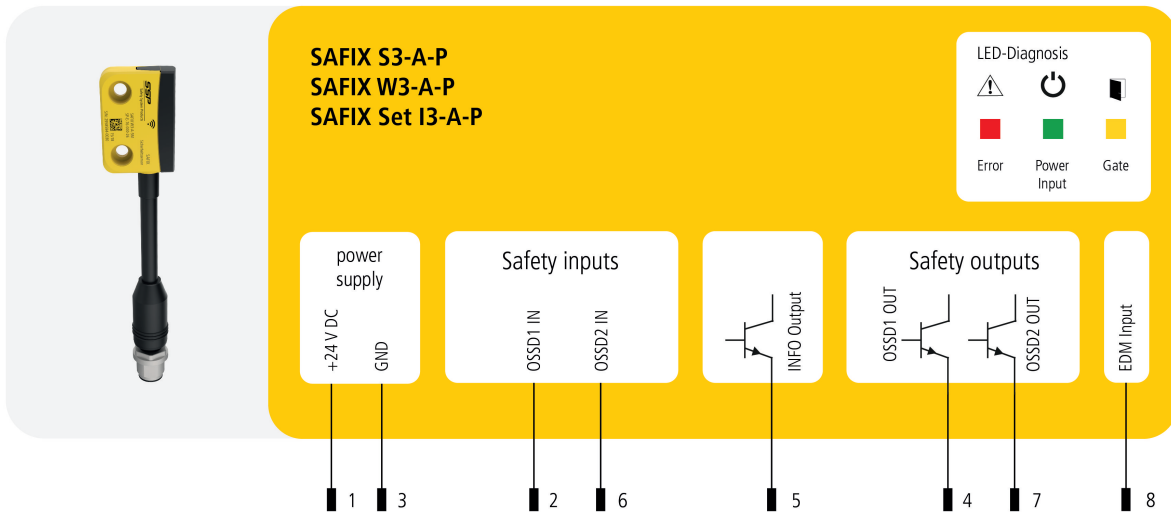
#### Extended LED-Diagnosis

Green	Red	Yellow	Remark	Green	Red	Yellow	Remark
off 	off 	on 	Sensor not actuated, voltage applied	off 	flashes 	off 	Error safety outputs
on 	off 	off 	Sensor actuated, all inputs set correctly	off 	flashes 	off 	Error safety inputs
flashes 	off 	off 	Sensor actuated, safety inputs not set (low level)	off 	flashes 	off 	Error safety inputs. EDM automatic: Safety relay fault. EDM manual: Faulty start impulse
flashes 	off 	off 	Safety inputs set (high level), waiting for start pulse	off 	flashes 	off 	Overvoltage and undervoltage fault
off 	off 	flashes 	Actuator at the reception limit	off 	flashes 	off 	Temperature outside the permitted range
off 	off 	flashes 	Teach in process	off 	flashes 	off 	Wrong actuator
	off 	on 		off 	Permanent light	off 	Internal device error

## SAFIX W3-A-P

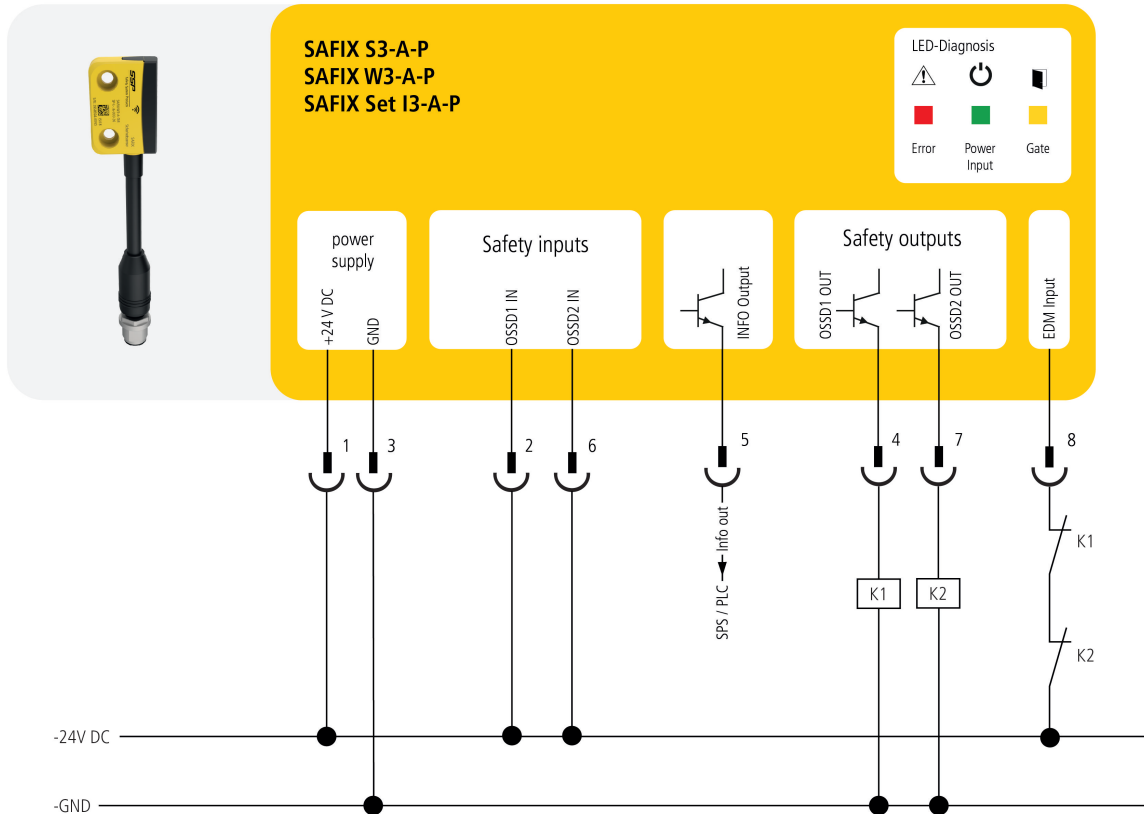
### Electrical drawings

#### Connection drawing



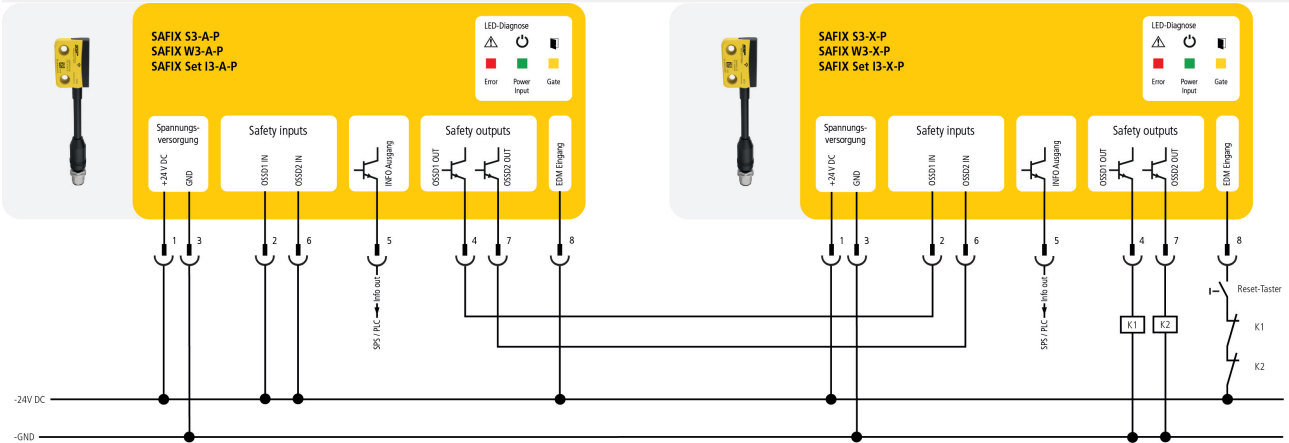
## SAFIX W3-A-P

Connection example 1



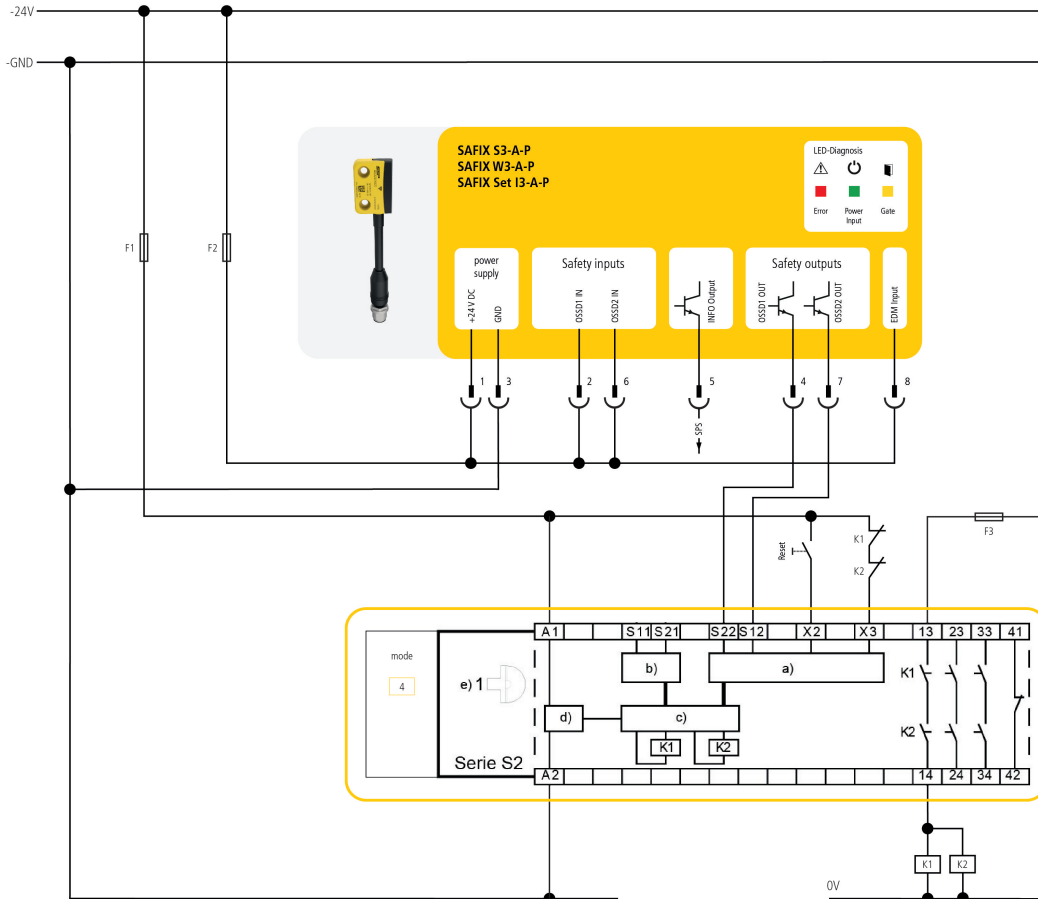
## SAFIX W3-A-P

### Connection example 2



## SAFIX W3-A-P

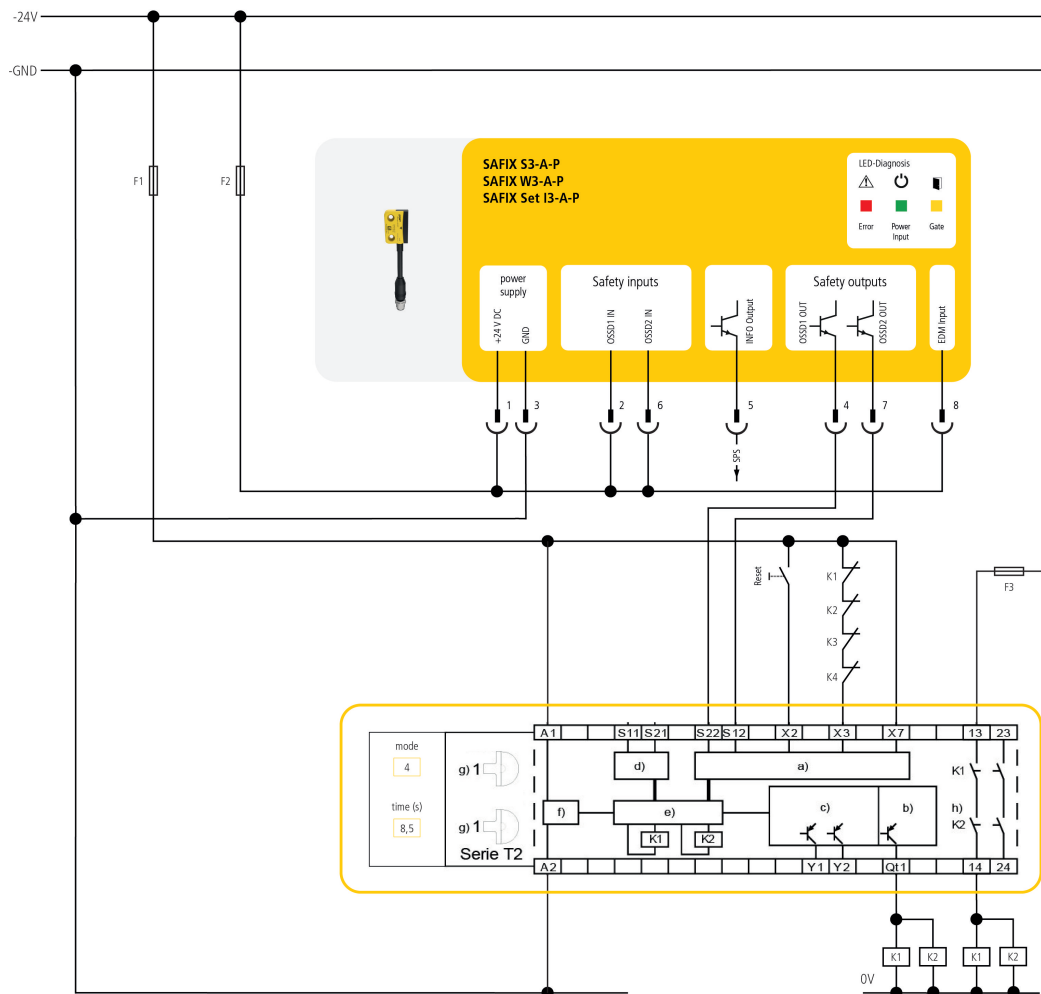
Connection example 3





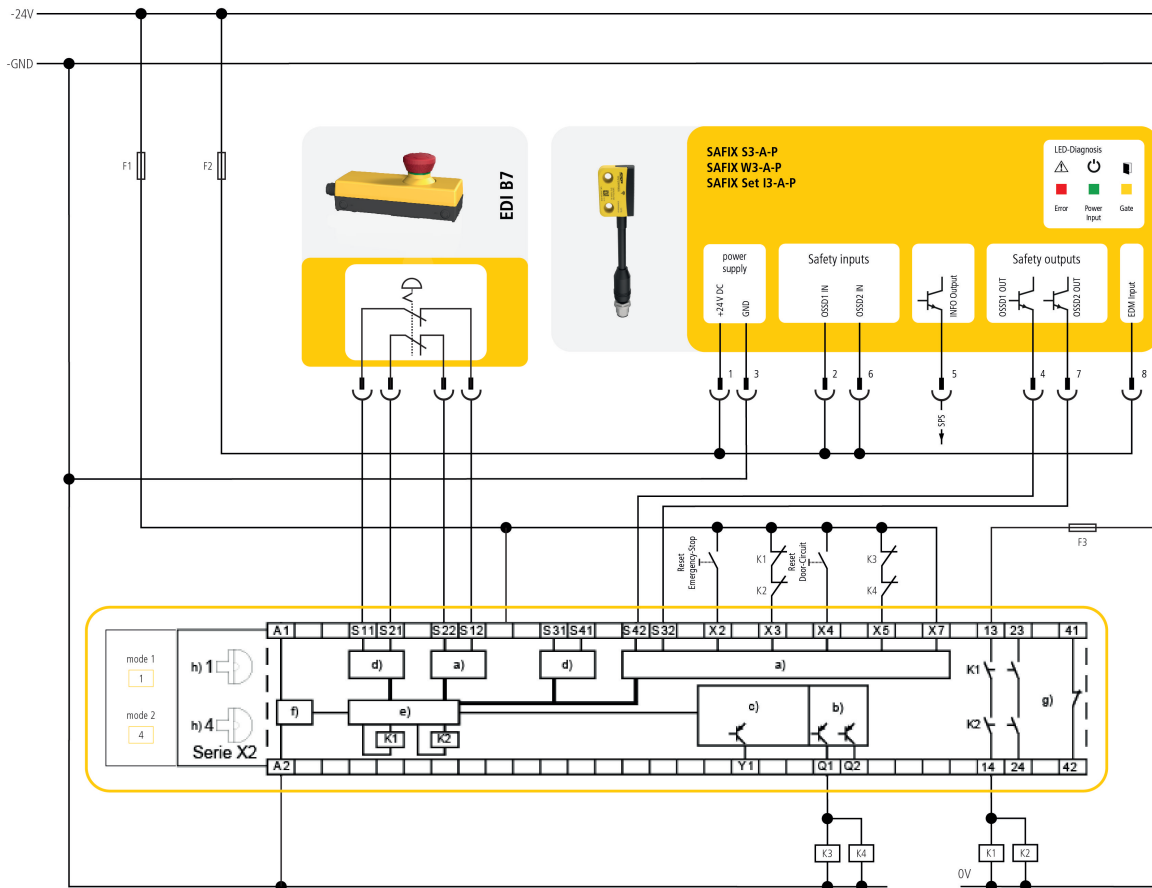
## SAFIX W3-A-P

### Connection example 4



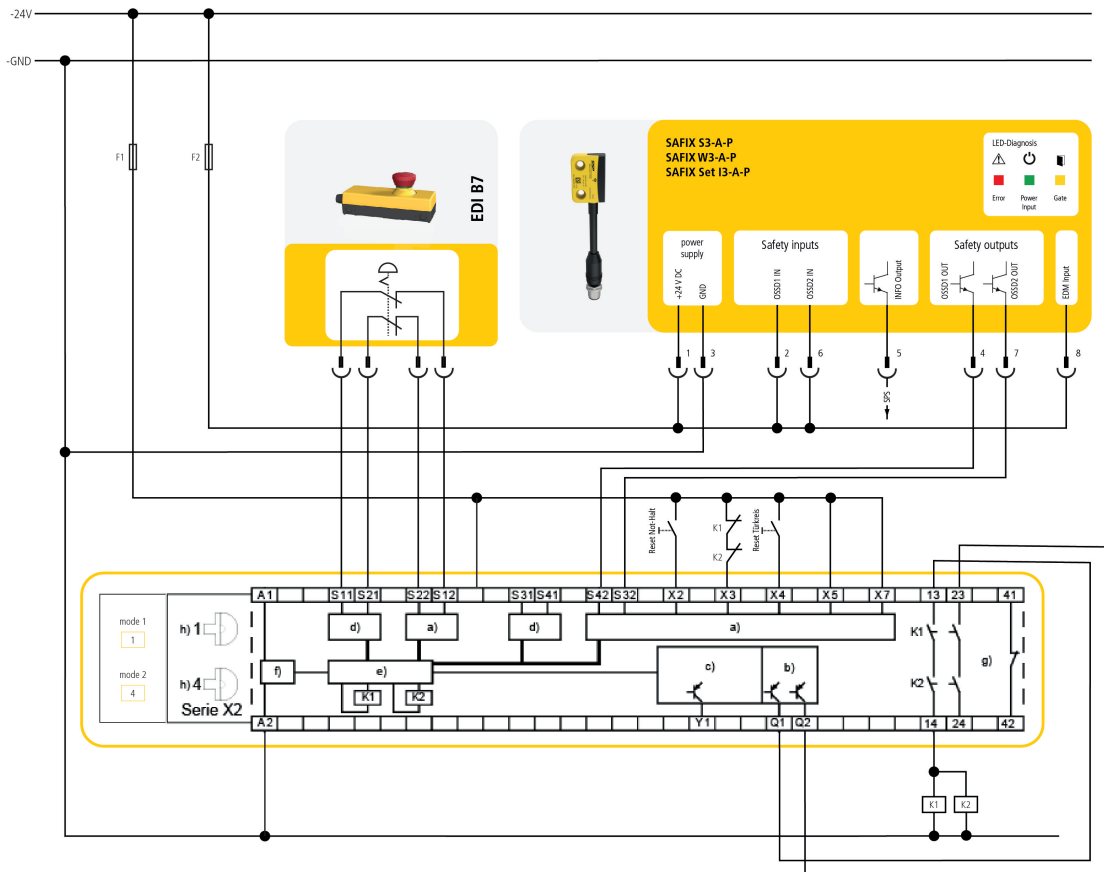
### SAFIX W3-A-P

Connection example 5



### SAFIX W3-A-P

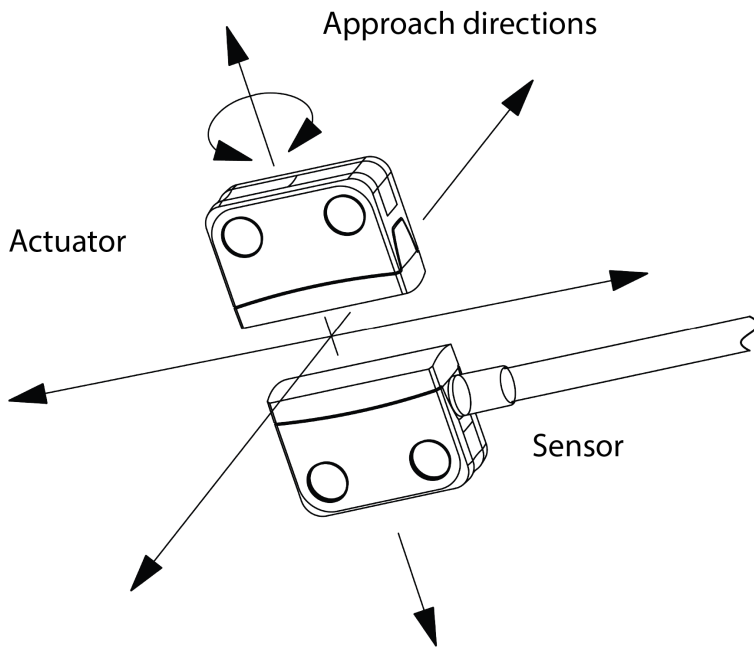
#### Connection example 6



## SAFIX W3-A-P


### Drawings

#### Assembly



### Equipment

#### Accessories

M12-female connector, 8 pin, 10 m	C8D10	SP-R-13-309-81	
M12-female connector, 8 pin, 15 m	C8D15	SP-R-13-309-82	

## SAFIX W3-A-P

M12-female connector, 8 pin, 25 m

C8D25

SP-R-13-309-67



M12-female connector, 8 pin, 40 m

C8D40

SP-R-13-309-66



M12-female connector, 8 pin, 5 m

C8D5

SP-R-13-309-80



M12-connecting cable, 8 pin, 10 m

M12-M12-C8103-G

SP-X-33-000-09



M12-connecting cable, 8 pin, 1 m

M12-M12-C813-G

SP-X-33-000-25



M12-connecting cable, 8 pin, 5 m

M12-M12-C853-G

SP-X-33-000-08



Contact expansion








E series

SP-S-00-003-01











**Safe control technology**

## SAFIX W3-A-P

	MOSAIC M1	SP-R-11-000-00	
Standard safety relay 1 safety function	S2 series	SP-K-70-001-00	
Time delay safety relay 1 safety function	T2 series	SP-K-70-001-02	
Multi-function safety relay 2 safety functions	X2 series	SP-K-70-001-03	
<b>Wireless Safety</b>			
Safety Simplifier   for SAFIX	S14LDRB-H08-E2-I1-Q1A0-Q 2A0-Q3C0-Q4I0-W38	SP-X-89-100-07	
Safety Simplifier   for SAFIX	S14LDRB-H09-E2-I1-I1-Q1A0- Q2A0-Q3C0-Q4I0-W39	SP-X-89-100-08	
Safety Simplifier   for SAFIX	S14LDRB-H0A-E2-I1-I1-Q1 A0-Q2A0-Q3C0-Q4I0-W40	SP-X-89-100-09	

## SAFIX W3-A-P

Safety Simplifier   for SAFIX	S14LDRB-H0A-E2-I1-I1-K4-Q1 A0-Q2A0-Q3C0-Q4I0-W41	SP-X-89-100-10	
<b>Safety switches</b>			
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	SP-E-76-000-00	
Flat actuator for SAFIX 3	SAFIX T6	SP-E-76-000-61	
Mounting	SAFIX Z B5	SP-K-71-000-08	
Passive distributor	XCONN P6-M12-10m	SP-X-71-000-04	
Passive distributor	XCONN P6-M12-5m	SP-X-71-000-00	
Passive distributor	XCONN P6-M12-M23	SP-X-71-000-01	

## SAFIX W3-A-P

Y distributor

XCONN Y2-M12

SP-X-33-000-71



### Downloads

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