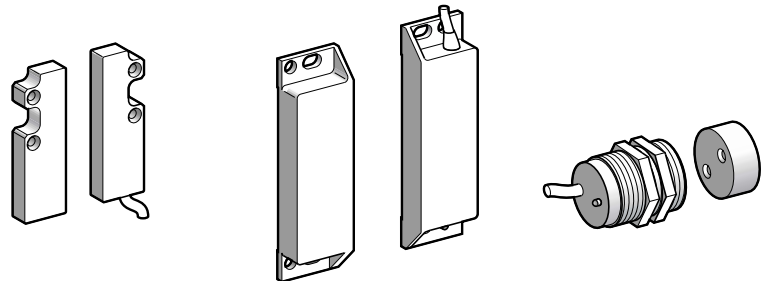


Type	Rectangular		Cylindrical
	Compact 51 x 16 x 7	Standard 88 x 25 x 13	Diameter 30 Length 40.5



References of switches (1) ▲ must be used in conjunction with safety modules XPS, see pages 32942/4 and 32942/5

Contact states shown are with the magnet positioned in front of the switch

2-pole N/C + N/O (N/C staggered)		XCS DMC5902	XCS DMP5902	XCS DMR5902
2-pole N/O + N/O (2) (1 N/O staggered)		XCS DMC7902	XCS DMP7902	XCS DMR7902
3-pole N/C + N/C + N/O (1 N/C staggered)		—	XCS DMP5002	—
3-pole N/C + N/O + N/O (2) (1 N/O staggered)		—	XCS DMP7002	—
2-pole N/C + N/O (N/C staggered)		XCS DMC5912	XCS DMP5912	XCS DMR5912
2-pole N/O + N/O (2) (1 N/O staggered)		XCS DMC7912	XCS DMP7912	XCS DMR7912
3-pole N/C + N/C + N/O (1 N/C staggered)		—	XCS DMP5012	—
3-pole N/C + N/O + N/O (2) (1 N/O staggered)		—	XCS DMP7012	—
Weight (kg)		0.101	0.180	0.146

(1) Magnetic switch + coded magnet (XCS ZC●●●●).

Switch pre-cabled with 2 m long cable. For other cable lengths, replace the last number of the reference (2) by 5 for a 5 m long cable or by 10 for a 10 m long cable.

Example: rectangular, compact switch with N/C + N/O contacts and 10 m cable becomes **XCS DMC59010**.

(2) Only to be wired in conjunction with an XPS AF module (see page 32942/5).

Complementary characteristics not shown under General characteristics (page 32941/3)

Operating zone	Sao: 5 mm Sar: 15 mm	Sao: 8 mm Sar: 20 mm	Sao: 8 mm Sar: 20 mm
Approach directions	6 directions	6 directions	2 directions

Accessories (page 32942/4)

Type	Rectangular		Cylindrical
	Compact 51 x 16 x 7	Standard 88 x 25 x 13	Diameter 30 Length 40.5
	M8 connector	M12 connector	M12 connector

References of switches (1) ▲ must be used in conjunction with safety modules XPS, see pages 32942/4 and 32942/5

Contact states shown are with the magnet positioned in front of the switch

2-pole N/C + N/O (N/C staggered)		XCS DMC590L01M8	XCS DMP590L01M12	XCS DMR590L01M12
2-pole N/O + N/O (2) (1 N/O staggered)		XCS DMC790L01M8	XCS DMP790L01M12	XCS DMR790L01M12
3-pole N/C + N/C + N/O (1 N/C staggered)		—	XCS DMP500L01M12	—
3-pole N/C + N/O + N/O (2) (1 N/O staggered)		—	XCS DMP700L01M12	—
2-pole N/C + N/O (N/C staggered)		XCS DMC591L01M8	XCS DMP591L01M12	XCS DMR591L01M12
2-pole N/O + N/O (2) (1 N/O staggered)		XCS DMC791L01M8	XCS DMP791L01M12	XCS DMR791L01M12
3-pole N/C + N/C + N/O (1 N/C staggered)		—	XCS DMP501L01M12	—
3-pole N/C + N/O + N/O (2) (1 N/O staggered)		—	XCS DMP701L01M12	—
Weight (kg)		0.101	0.180	0.146

(1) Magnetic switch + coded magnet (XCS ZC●●●●).

(2) Only to be wired in conjunction with an XPS AF module (see page 32942/5).

Complementary characteristics not shown under General characteristics (page 32941/3)

Operating zone	Sao: 5 mm Sar: 15 mm	Sao: 8 mm Sar: 20 mm	Sao: 8 mm Sar: 20 mm
Approach directions	6 directions	6 directions	2 directions

Accessories (page 32942/4)

Accessories

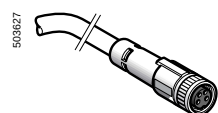
Accessories for coded magnetic switches	XCS DMC●●●2 XCS DMC●●●L	XCS DMP●●●2 XCS DMP●●●L	XCS DMR●●●2 XCS DMR●●●L
Fixing clamp	—		XSZ B130
Weight (kg)	—		0.080
Additional coded magnet	XCS ZC1	XCS ZP1	XCS ZR1
Weight (kg)	0.009	0.050	0.018
Non-magnetic shims	XCS ZCC (lot of 2)	XCS ZCP (lot of 2)	XCS ZCR
Weight (kg)	0.008	0.012	0.002

Pre-wired female connectors for connector version switches

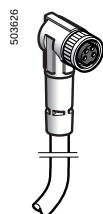
Pre-wired connector characteristics

Pre-wired connector type		XZ CP0941L●, XZ CP1041L●	XZ CP1141L●, XZ CP1241L●	XZ CP29J2L●
Type of connection		Screw threaded (metal clamping ring)	Screw threaded (metal clamping ring)	Screw threaded (metal clamping ring)
Number of contacts		4	4	6
Degree of protection		IP 67 (with clamping ring correctly tightened)		
Ambient air temperature	Static	- 35...+ 90 °C	- 35...+ 90 °C	- 40...+ 85 °C
	Dynamic	- 5...+ 90 °C	- 5...+ 90 °C	- 25...+ 85 °C
Cabling		Ø 5.2 mm cable, wire c.s.a.: 4 x 0.34 mm ²	Ø 5.2 mm cable, wire c.s.a.: 4 x 0.34 mm ²	Ø 5.5 mm cable, wire c.s.a.: 6 x 0.25 mm ²
LED signalling		—	—	—
Nominal voltage		~ 60 V, --- 75 V	~ 250 V, --- 300 V	~ 250 V, --- 300 V
Nominal current		4 A	4 A	4 A
Insulation resistance		> 10 ⁹ Ω	> 10 ⁹ Ω	> 10 ⁹ Ω
Contact resistance		≤ 5 mΩ	≤ 5 mΩ	≤ 5 mΩ

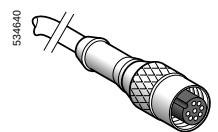
References of pre-wired connectors



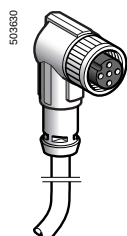
XZ CP0941L●



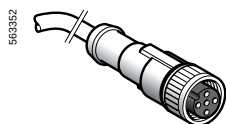
XZ CP1041L●



XZ CP29J2L●



XZ CP1241L●

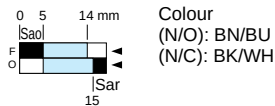


XZ CP1141L●

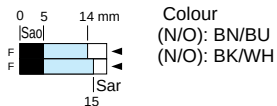
Type of connector	No. of contacts	For use with	Type	Cable length m	Reference	Weight kg
Female, M8	4	XCS DMC●●●L	Straight	2	XZ CP0941L2	0.080
				5	XZ CP0941L5	0.180
				10	XZ CP0941L10	0.360
			Elbowed	2	XZ CP1041L2	0.080
				5	XZ CP1041L5	0.180
				10	XZ CP1041L10	0.360
Female, M12	6	XCS DMP●●●L	Straight	2	XZ CP29J2L2	0.100
				5	XZ CP29J2L5	0.290
				10	XZ CP29J2L10	0.470
Female, M12	4	XCS DMR●●●L	Straight	2	XZ CP1141L2	0.090
				5	XZ CP1141L5	0.190
				10	XZ CP1141L10	0.370
			Elbowed	2	XZ CP1241L2	0.090
				5	XZ CP1241L5	0.190
				10	XZ CP1241L10	0.370

Function diagrams with magnet present (pre-cabled version)

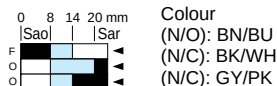
XCS DMC59●●



XCS DMC79●●



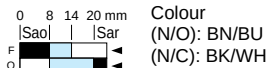
XCS DMP50●●



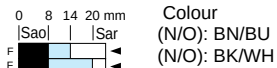
XCS DMP70●●



XCS DMR59●●

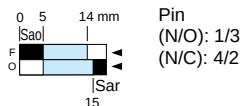


XCS DMR79●●

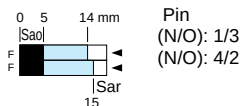


Function diagrams with magnet present (connector on flying lead version)

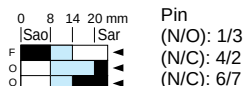
XCS DMC59●●



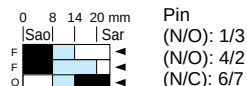
XCS DMC79●●



XCS DMP50●●



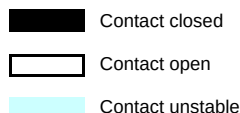
XCS DMP70●●



XCS DMR59●●



XCS DMR79●●

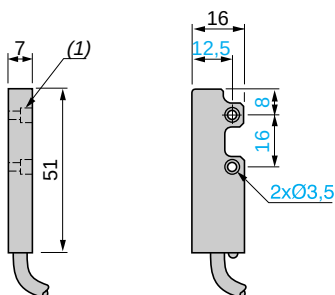


Sao: assured operating distance.
Sar: assured tripping distance.
 Conforming to EN 60947-5-3.

Coded magnetic switches

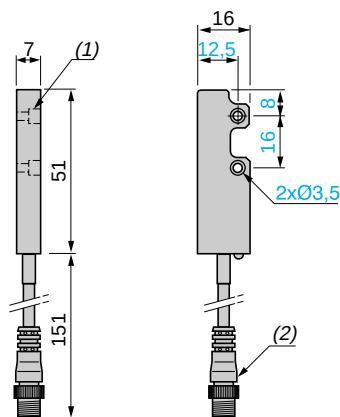
XCS DMC

Pre-cabled connection



(1) Counterbored: $\varnothing 6 \times 3.5$ mm.

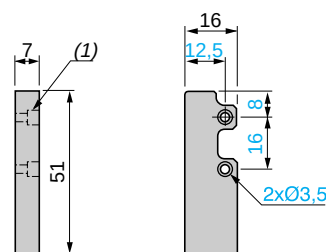
Connector on flying lead connection



(1) Counterbored: $\varnothing 6 \times 3.5$ mm.
(2) M8 4-pin connector.

Coded magnet for XCS DMC

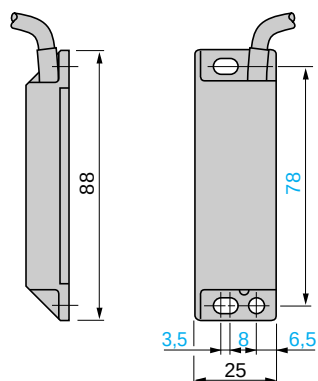
XCS ZC1



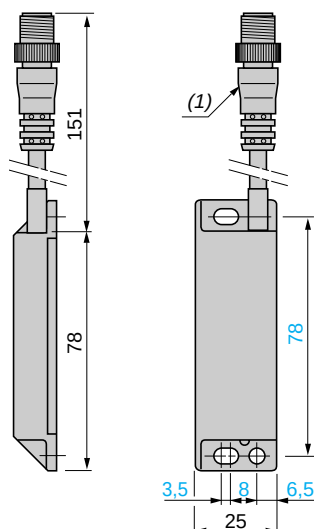
(1) Counterbored: $\varnothing 6 \times 3.5$ mm.

XCS DMP

Pre-cabled connection



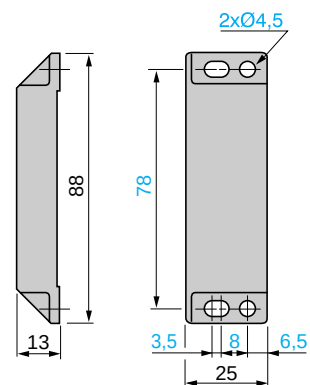
Connector on flying lead connection



(1) M12 6-pin connector.

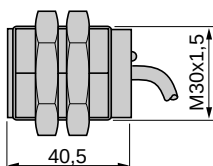
Coded magnet for XCS DMP

XCS ZP1

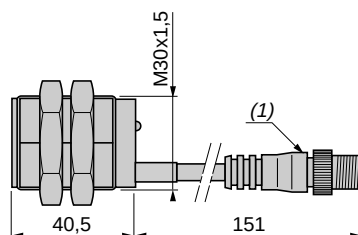


XCS DMR

Pre-cabled connection



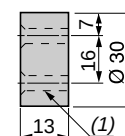
Connector on flying lead connection



(1) M12 4-pin connector.

Coded magnet for XCS DMR

XCS ZR1

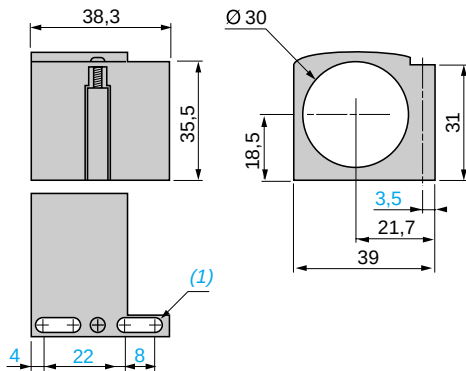


(1) 2 x $\varnothing 4.3$, countersunk: $\varnothing 7.5$ at 45° .

Accessories

Fixing clamp

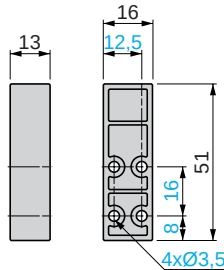
XSZ B130



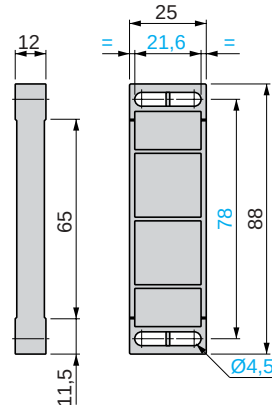
(1) 2 elongated holes Ø4 x 8.

Non-magnetic shims

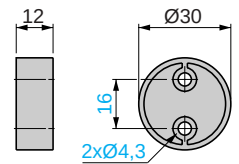
XCS ZCC



XCS ZCP

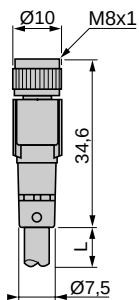


XCS ZCR

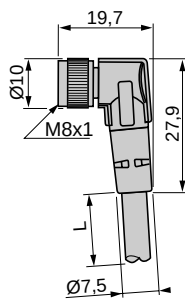


Pre-wired female connectors

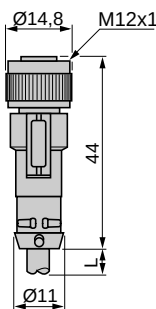
XZ CP0941L●



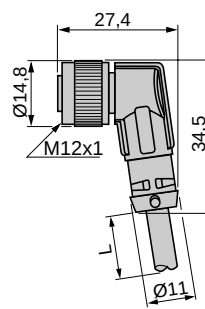
XZ CP1041L●



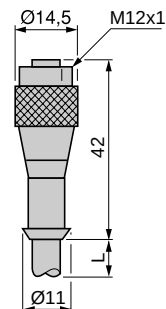
XZ CP1141L●



XZ CP1241L●



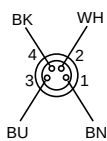
XZ CP29J2L●



Schemes

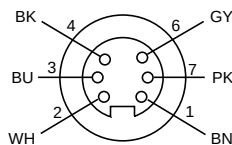
M8 pre-wired female connector

XCS DMC

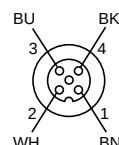


M12 pre-wired female connector

XCS DMP

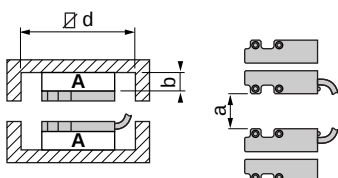


XCS DMR

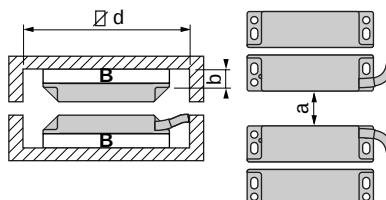


Mounting

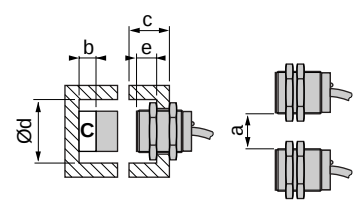
XCS DMC



XCS DMP



XCS DMR



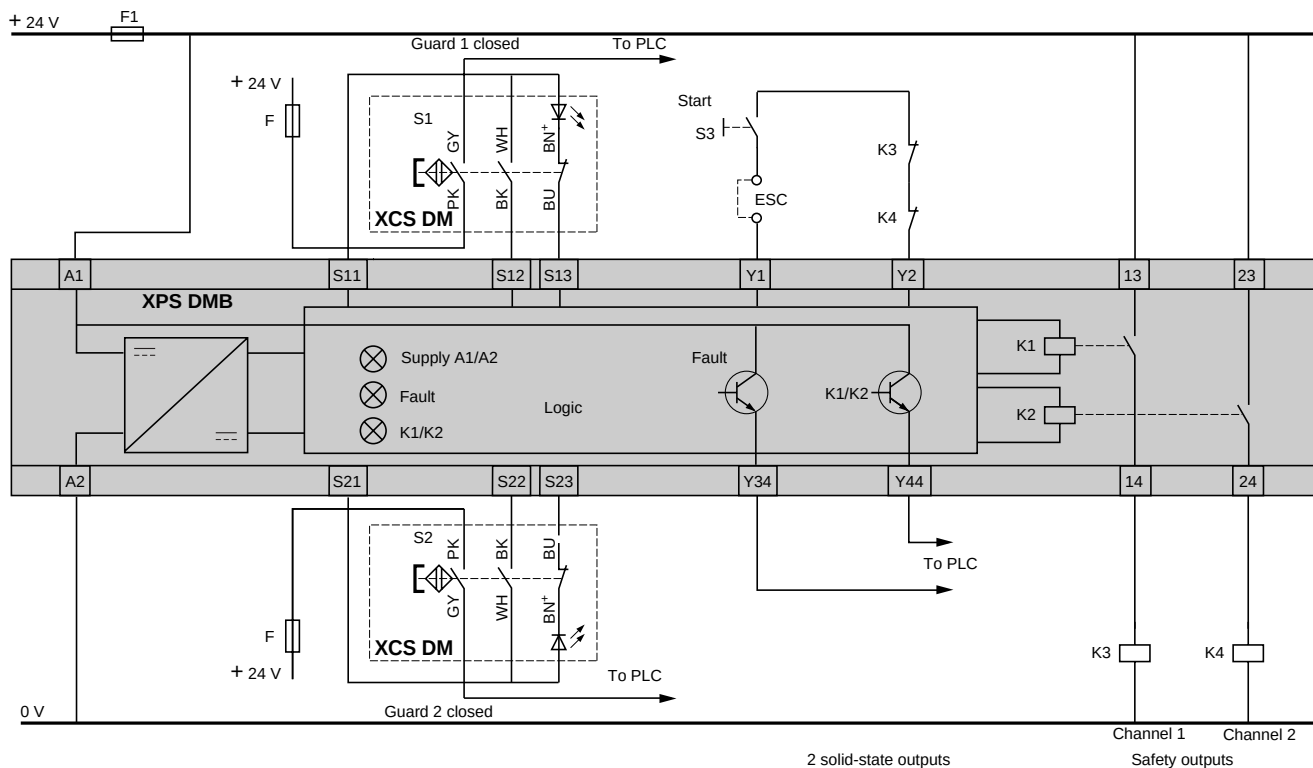
XCS	a	b	c	d	e
DMC	40	13 min.	—	81 x 55	—
DMP	100	10 min.	—	118 x 55	—
DMR	40	12 min.	> 10	Ø 45	20
			> 10	Ø 45	13
		12 min.	< 10	—	20
			< 10	—	17

Non-magnetic shims

A	XCS ZCC
B	XCS ZCP
C	XCS ZCR

XCS DMP5... with XPS DMB

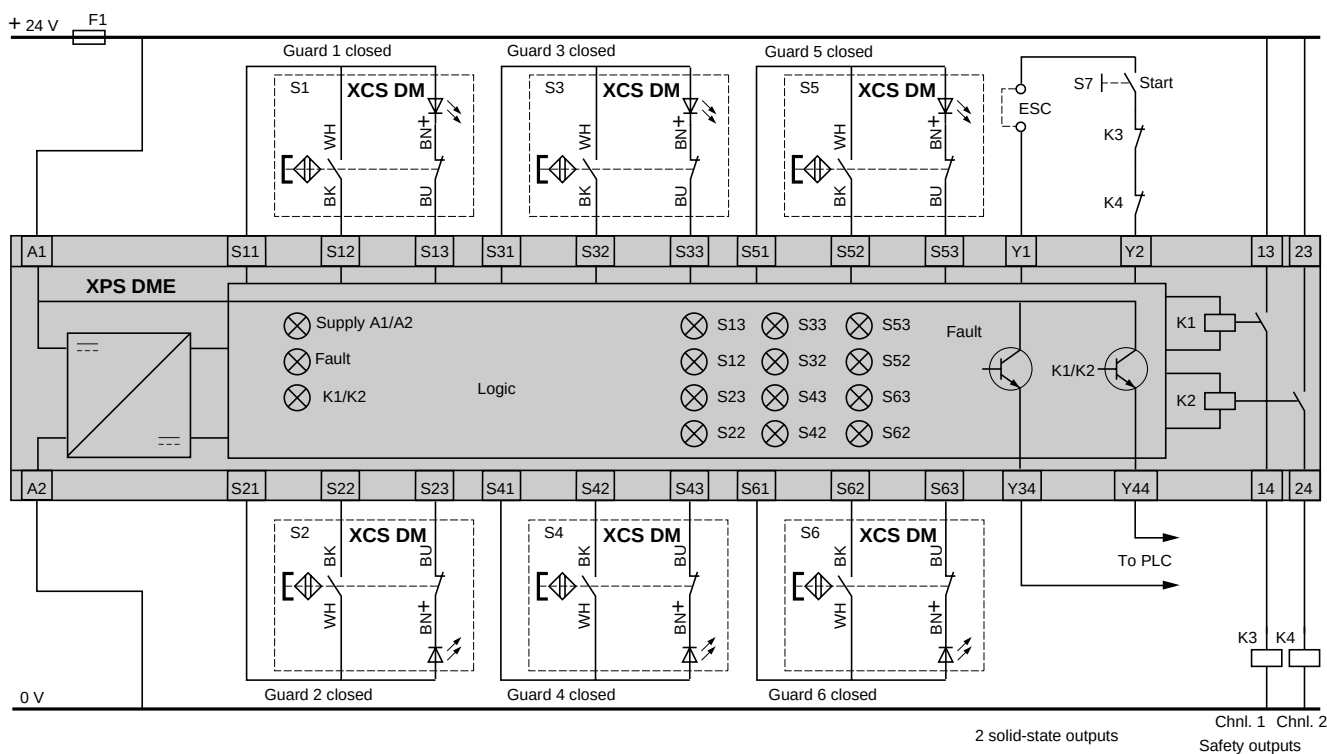
Wiring to category 4 conforming to EN 954-1. Example with 3-pole N/C + N/C + N/O (1 N/C staggered) contact.



ESC: External start conditions.

XCS DMC5..., XCS DMP5..., XCS DMR5... with XPS DME

Wiring to category 4 conforming to EN 954-1. Example with 2-pole N/C + N/O (N/C staggered) contact.



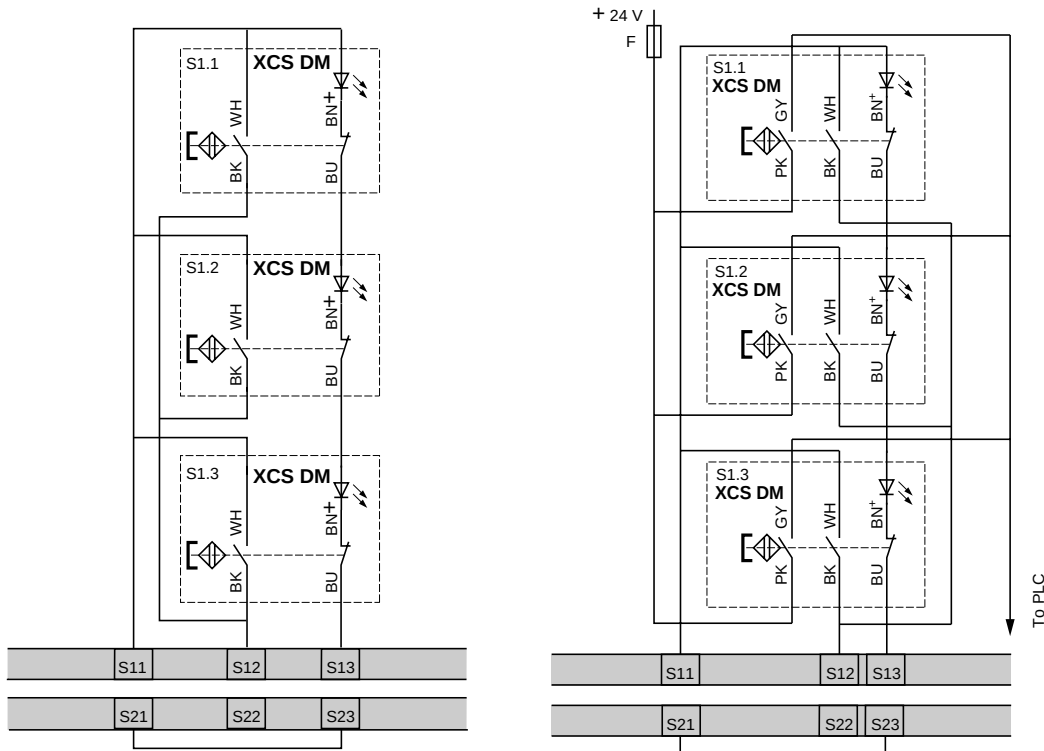
ESC: External start conditions.

Connection of up to 3 magnetic switches, with an LED on one input, with XPS DM● (1)

Wiring to category 3 conforming to EN 954-1

Example with 2-pole N/C + N/O contact

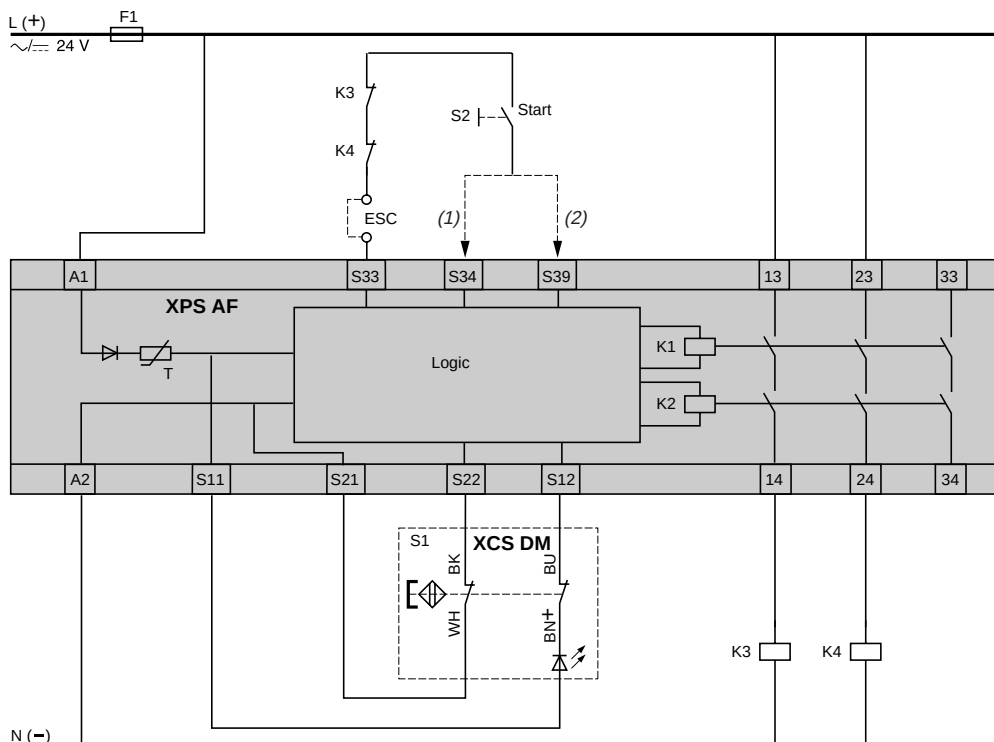
Example with 3-pole N/C + N/C + N/O contact



(1) Input: S11, S12, S13 or S21, S22, S23.

XCS DM●7●●● with XPS AF

Wiring to category 4 conforming to EN 954-1. Example with 2-pole N/C + N/C contact (not conforming to standard EN 1088)



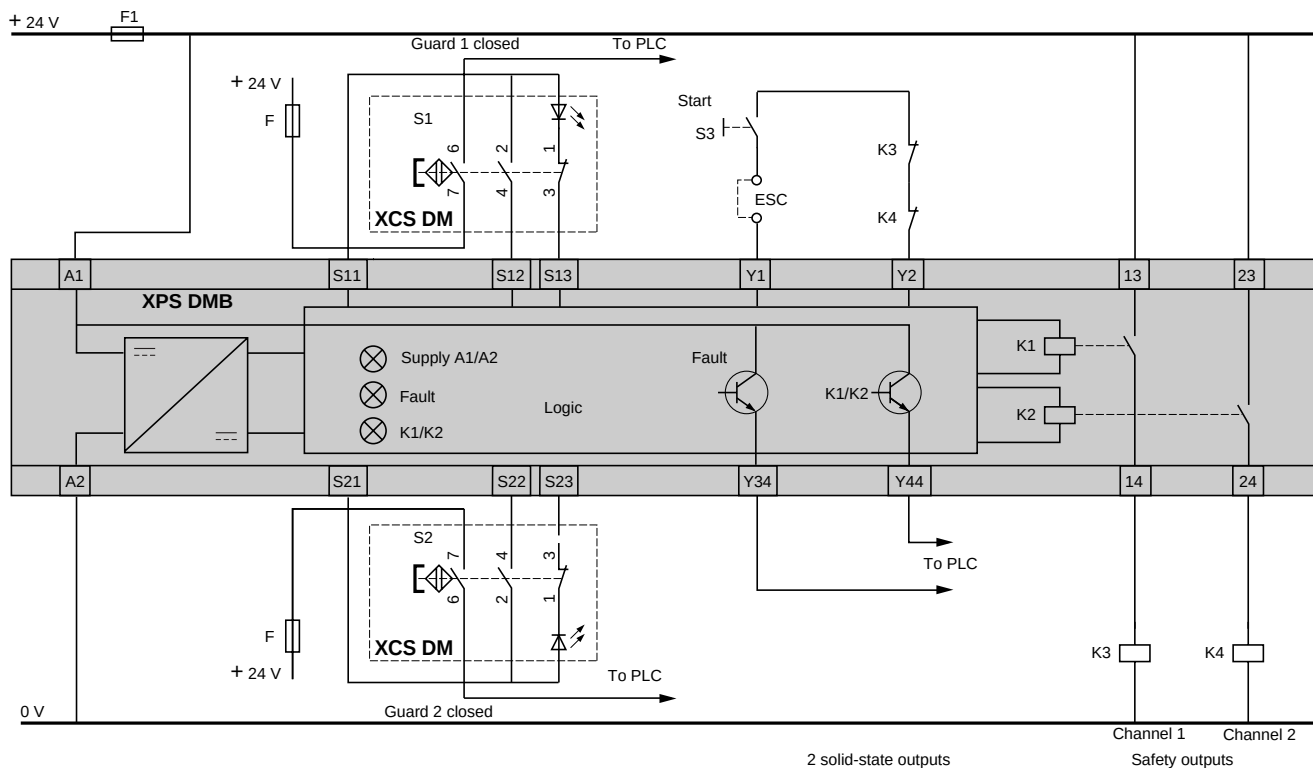
(1) With start button monitoring.

(2) Without start button monitoring.

ESC: External start conditions.

XCS DMP5... with XPS DMB

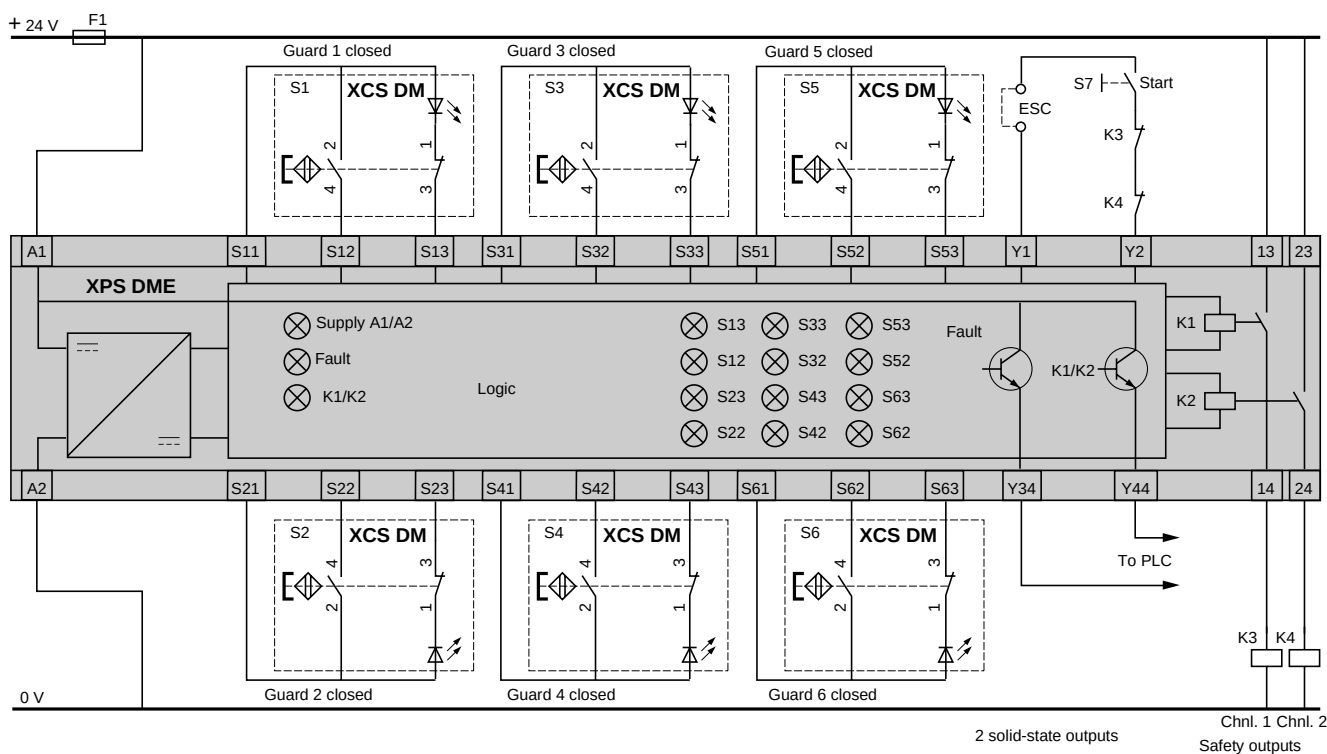
Wiring to category 4 conforming to EN 954-1. Example with 3-pole N/C + N/C + N/O (1 N/C staggered) contact.



ESC: External start conditions.

XCS DMC5..., XCS DMP5..., XCS DMR5... with XPS DME

Wiring to category 4 conforming to EN 954-1. Example with 2-pole N/C + N/O (N/C staggered) contact.



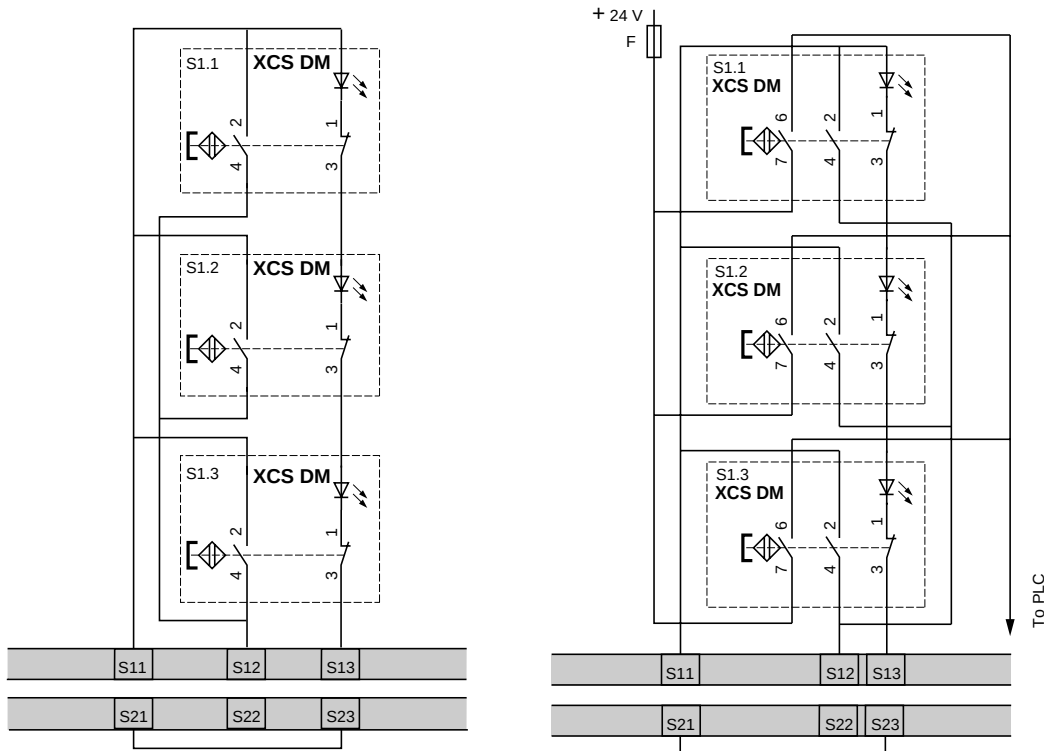
ESC: External start conditions.

Connection of up to 3 magnetic switches, with an LED on one input, with XPS DM● (1)

Wiring to category 3 conforming to EN 954-1

Example with 2-pole N/C + N/O contact

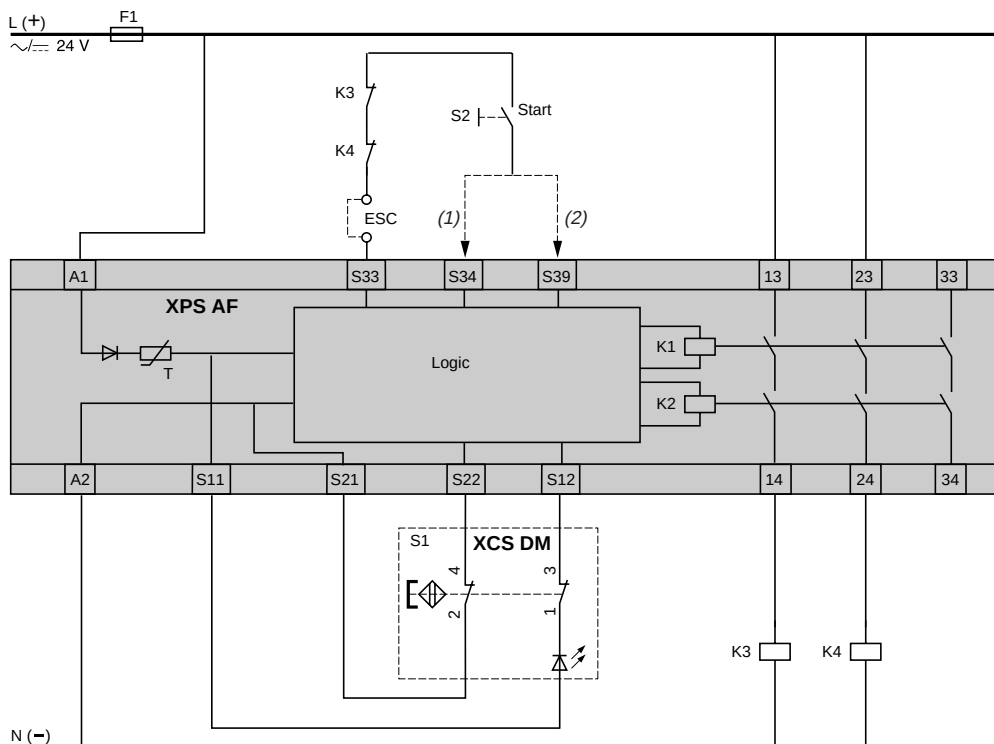
Example with 3-pole N/C + N/C + N/O contact



(1) Input: S11, S12, S13 or S21, S22, S23.

XCS DM●7●●● with XPS AF

Wiring to category 4 conforming to EN 954-1. Example with 2-pole N/C + N/C contact (not conforming to standard EN 1088)



(1) With start button monitoring.

(2) Without start button monitoring.

ESC: External start conditions.