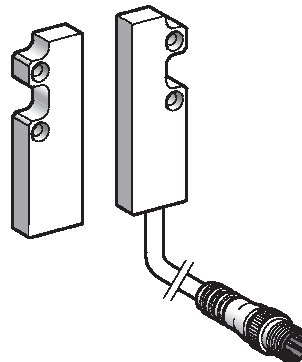
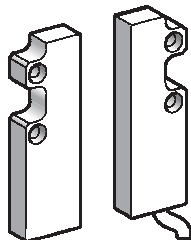


XCSDMC

Rectangular, compact: 2.01 x 0.63 x 0.28 in. (51 x 16 x 7 mm)

Precabled connection

Connector on pigtail connection



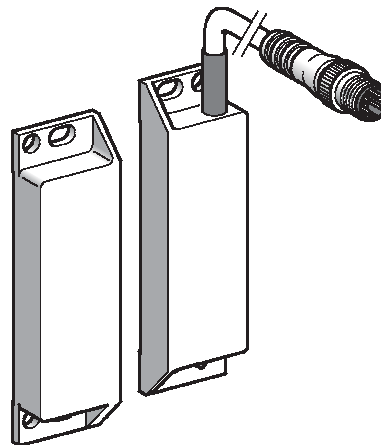
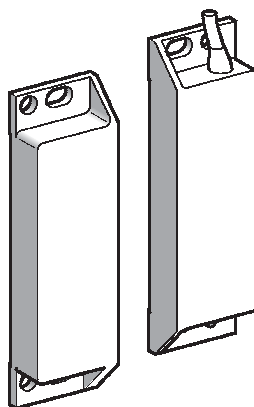
Page 4/86

XCSDMP

Rectangular, standard: 3.46 x 0.98 x 0.51 in. (88 x 25 x 13 mm)

Precabled connection

Connector on pigtail connection



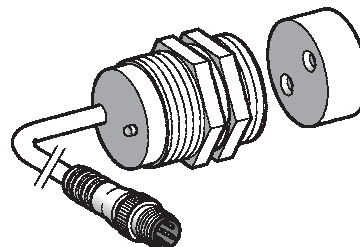
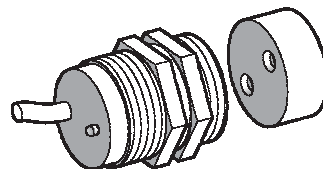
Page 4/86

XCSDMR

Cylindrical, diameter: 1.18 in. (30 mm), length: 1.51 in. (38.5 mm)

Precabled connection

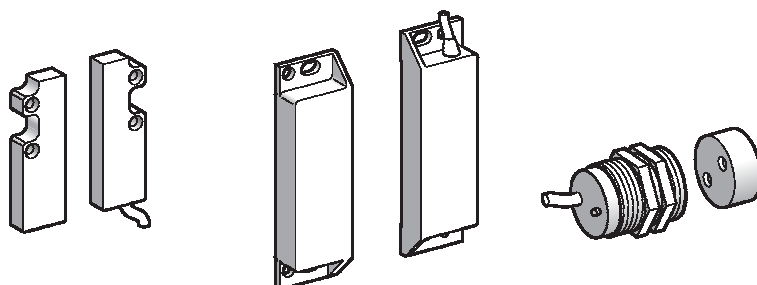
Connector on pigtail connection



Page 4/86

Environment			
Conformity to standards	Products		EN/IEC 60204-1, EN/ISO 14119
	Machine assemblies		IEC/EN 60204-1, EN/ISO 12100, EN 1088/ISO 14119 (XCSDM●5●● only)
Product certifications			UL-CSA, BG
Maximum safety level <i>Using an appropriate and correctly connected control system.</i>			PL=e, category 4 conforming to EN/ISO 13849-1 and SIL 3 conforming to EN/IEC 61508
Reliability data B _{10d}			50,000,000 (value given for a service life of 20 years, limited by mechanical or contact wear)
Protective treatment			Standard version: TH
Ambient air temperature	For operation	°F (°C)	−13 to +185 (−25 to +85)
	For storage	°F (°C)	−40 to +185 (−40 to +85)
Vibration resistance			10 gn (10–150 Hz) conforming to IEC 60068-2-6
Shock resistance			30 gn (11 ms) conforming to IEC 60068-2-7
Sensitivity to magnetic fields		mT	≥ 0.3
Electric shock protection			Class II conforming to IEC 60536
Degree of protection	Conforming to IEC 60529		IP66 and IP67 for coded magnetic switches with precabled connection IP67 for coded magnetic switches with connector on pigtail connection
Materials			Thermoplastic case (PBT) PVC cable (ROHS)
Contact block specifications			
Rated operational specifications			Ue: ∩ 24 V, Ie: 100 mA max.
Rated insulation voltage (Ui)			Ui: ∩ 100 V
Rated impulse withstand voltage (Uimp)		kV	2.5 conforming to EN/IEC 60947-5-1
Resistance across terminals	Contact with LED	Ω	57
	Contact without LED	Ω	10
Protection (not using safety module)			External cartridge fuse: 500 mA gG (gl)
Connection	XCSDMC		Precabled, 4 x 22 AWG, length: 2, 5 or 10 m depending on model or M8 connector on 5.95 in. (0.15 m) pigtail
	XCSDMP 2 contact model		Precabled, 4 x 22 AWG, length: 2, 5 or 10 m depending on model or M12 connector on 5.95 in. (0.15 m) pigtail
			Precabled, 6 x 22 AWG, length: 2, 5 or 10 m depending on model or M12 connector on 5.95 in. (0.15 m) pigtail
	XCSDMR		Precabled, 4 x 22 AWG, length: 2, 5 or 10 m depending on model or M12 connector on 5.95 in. (0.15 m) pigtail
Contact material			Rhodium
Electrical life			1.2 million operating cycles
Maximum switching voltage		V	∩ 100
Switching capacity	Contact with LED	mA	5–100
	Contact without LED	mA	0.1–100
Insulation resistance		MW	1000
Maximum breaking capacity	Contact with LED	VA	3
	Contact without LED	VA	10
Maximum switching frequency		Hz	150

Type	Rectangular		Cylindrical
	Compact 2.01 x 0.63 x 0.28 in (51 x 16 x 7 mm)	Standard 3.46 x 0.98 x 0.51 in (88 x 25 x 13 mm)	Diameter: 1.18 in. (30 mm) Length: 1.51 in. (38.5 mm)



References of switches (1) must be used in conjunction with XPS safety relay modules, safety controllers, or safety PLCs

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

2-pole N.O. + N.C. (N.C. break before make)		XCSDMC5902	XCSDMP5902	XCSDMR5902
2-pole N.C. + N.C. (2) (1 N.O. break before make)		XCSDMC7902	XCSDMP7902	XCSDMR7902
3-pole N.O. + N.O. + N.C. (1 N.C. break before make)		—	XCSDMP5002	—
3-pole N.O. + N.C. + N.C. (2) (1 N.O. break before make)		—	XCSDMP7002	—
2-pole N.O. + N.C. (3) (N.C. break before make) With LED		XCSDMC5912	XCSDMP5912	XCSDMR5912
2-pole N.C. + N.C. (2) (3) (1 N.O. break before make) With LED		XCSDMC7912	XCSDMP7912	XCSDMR7912
3-pole N.O. + N.O. + N.C. (3) (1 N.C. break before make) With LED		—	XCSDMP5012	—
3-pole N.O. + N.C. + N.C. (2) (3) (1 N.O. break before make) With LED		—	XCSDMP7012	—
Weight lb (kg)		0.22 (0.101)	0.40 (0.180)	0.32 (0.146)

(1) Magnetic switch + coded magnet (XCSCZ●●●●).

Switch precabled with 6.6 ft (2 m) cable. For other cable lengths, replace the last number of the reference (2) with 5 for a 16.4 ft (5 m) cable or with 10 for a 32.8 ft (10 m) cable. Example: XCSDMC5902 rectangular, compact switch with N.C. + N.O. contacts and 10 m cable becomes **XCSDMC59010**.

(2) For wiring in conjunction with an XPSAF safety relay module, refer to pages 4/93 and 4/95.

(3) The green LED is lit when the coded magnet is positioned in front of the switch (guard closed).

·N.O. contact PK-GY is to be used as an indicator of the device state, typically to a PLC. It is not to be used for the safety function.

Additional specifications not shown under General Specifications (page 4/85)

Operating zone	Sao: 0.20 in. (5 mm) Sar: 0.59 in. (15 mm)	Sao: 0.31 in. (8 mm) Sar: 0.79 in. (20 mm)	Sao: 0.31 in. (8 mm) 0.79 in. (20 mm)
Approach directions	3 directions	3 directions	1 direction

Accessories (page 4/88)

Safety interlock and limit switches

Coded magnetic switches

Plastic, connector on 5.9 in. (151 mm) pigtail

Type	Rectangular		Cylindrical
	Compact 2.01 x 0.63 x 0.28 in (51 x 16 x 7 mm)	Standard 3.46 x 0.98 x 0.51 in (88 x 25 x 13 mm)	Diameter: 1.18 in. (30 mm) Length: 1.51 in. (38.5 mm)
	M8 connector	M12 connector	M12 connector

References of switches (1) must be used in conjunction with XPS safety relay modules, safety controllers, or safety PLCs

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

2-pole N.O. + N.C. (N.C. break before make)		XCSDMC590L01M8	XCSDMP590L01M12	XCSDMR590L01M12
2-pole N.C. + N.C. (2) (1 N.C. break before make)		XCSDMC790L01M8	XCSDMP790L01M12	XCSDMR790L01M12
3-pole N.O. + N.O. + N.C. (1 N.C. break before make)		—	XCSDMP500L01M12	—
3-pole N.O. + N.C. + N.C. (2) (1 N.O. break before make)		—	XCSDMP700L01M12	—
2-pole N.O. + N.C. (3) (N.C. break before make) With LED		XCSDMC591L01M8	XCSDMP591L01M12	XCSDMR591L01M12
2-pole N.C. + N.C. (2) (3) (1 N.O. break before make) With LED		XCSDMC791L01M8	XCSDMP791L01M12	XCSDMR791L01M12
3-pole N.O. + N.O. + N.C. (3) (1 N.C. break before make) With LED		—	XCSDMP501L01M12	—
3-pole N.O. + N.C. + N.C. (2) (3) (1 N.O. break before make) With LED		—	XCSDMP701L01M12	—
Weight lb (kg)		0.22 (0.101)	0.40 (0.180)	0.32 (0.146)

(1) Magnetic switch + coded magnet (XCSCZC●●●●).

(2) For wiring in conjunction with an XPSAF safety relay module, refer to pages 4/93 and 4/95.

(3) The green LED is lit when the coded magnet is positioned in front of the switch (guard closed).

N.O. contact PK-GY (6-7) is to be used as an indicator of the device state, typically to a PLC. It is not to be used for the safety function.

Additional specifications not shown under Specifications (page 4/85)

Operating zone	Sao: 0.20 in. (5 mm) Sar: 0.59 in. (15 mm)	Sao: 0.31 in. (8 mm) Sar: 0.79 in. (20 mm)	Sao: 0.31 in. (8 mm) Sar: 0.79 in. (20 mm)
Approach directions	3 directions	3 directions	1 direction

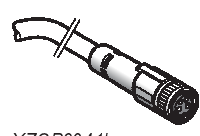
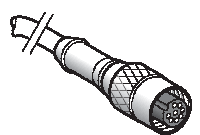
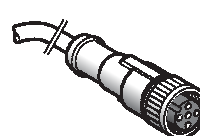
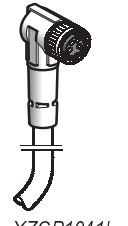
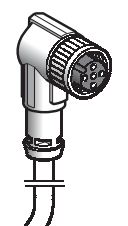
Accessories			
Accessories for coded magnetic safety interlock switches	XCSDMC●●●2 XCSDMC●●●L	XCSDMP●●●2 XCSDMP●●●L	XCSDMR●●●2 XCSDMR●●●L
Mounting clamp	—		XSZB130
Weight lb (kg)	—		0.18 (0.080)
Additional coded magnet	XCSZC1	XCSZP1	XCSZR1
Weight lb (kg)	0.02 (0.009)	0.11 (0.050)	0.04 (0.018)
Nonmagnetic shims	XCSZCC (lot of 2)	XCSZCP (lot of 2)	XCSZCR
Weight lb (kg)	0.02 (0.008)	0.03 (0.012)	0.004 (0.002)

Pre-wired female connectors for connector version switches

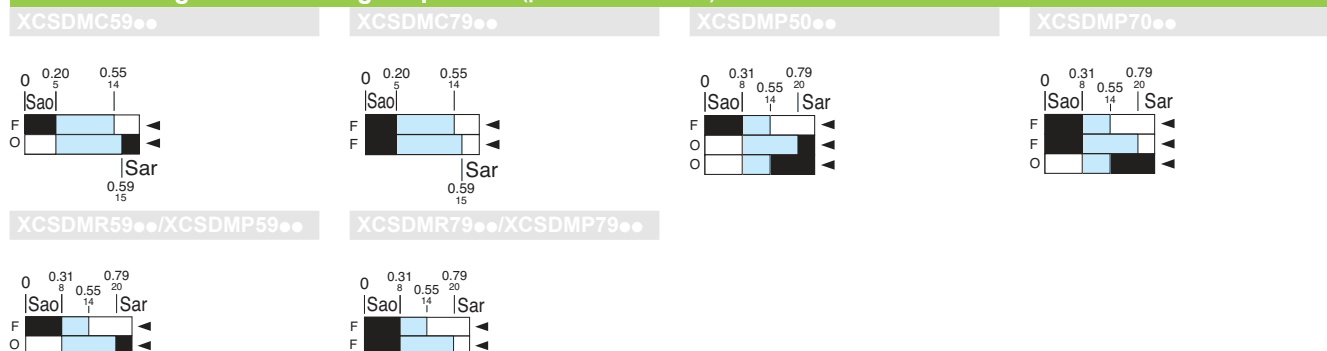
Pre-wired connector specifications

Pre-wired connector type	XZCP0941L●, XZCP1041L●	XZCP29P11L●	XZCP1141L●, XZCP1241L●
Type of connection	Screw threaded (metal clamping ring)	Screw threaded (metal clamping ring)	Screw threaded (metal clamping ring)
Number of conductors/pins	4	8	4
Degree of protection	IP67 (with clamping ring correctly tightened)		
Ambient air temperature	Static	−31 to +194 °F (−35 to +90 °C)	−31 to +194 °F (−35 to +90 °C)
	Dynamic	+23 to +194 °F (−5 to +90 °C)	+23 to +194 °F (−5 to +90 °C)
Cabling	Ø0.205" (5.2 mm) cable, wire c.s.a.: 4 x 22 AWG (0.34 mm²)	Ø0.205" (5.2 mm) cable, wire c.s.a.: 8 x 24 AWG (0.25 mm²)	Ø0.205" (5.2 mm) cable, wire c.s.a.: 4 x 22 AWG (0.34 mm²)
LED signaling	—	—	—
Nominal voltage	~ 60 V, --- 75 V	~ 250 V, --- 300 V	~ 250 V, --- 300 V
Nominal current	4 A	2 A	4 A
Insulation resistance	> 10 ⁹ Ω	> 10 ⁹ Ω	> 10 ⁹ Ω
Contact resistance	≤ 5 mΩ	≤ 5 mΩ	≤ 5 mΩ

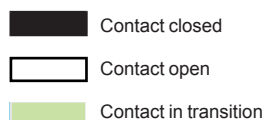
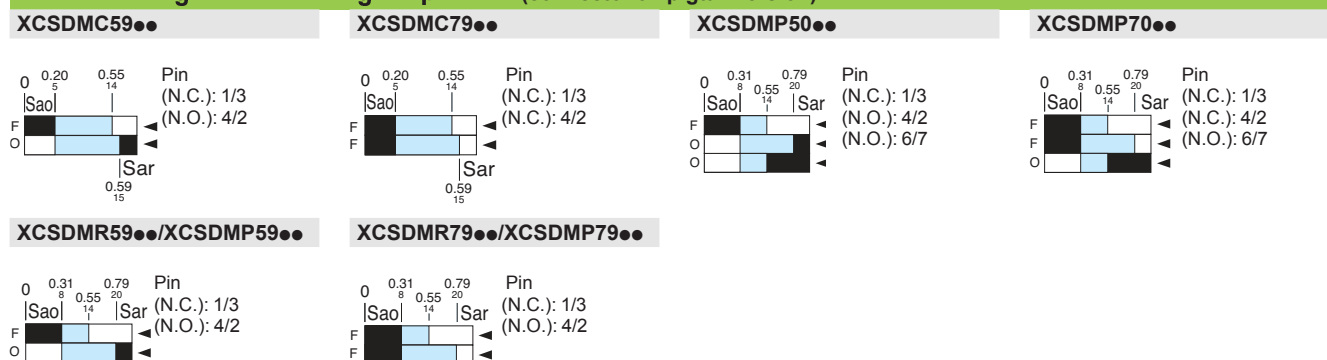
References of pre-wired connectors

	Type of connector	Number of pins	For use with	Type	Cable length ft (m)	Reference	Weight lb (kg)
 XZCP0941L●	Female, M8	4	XCSDMC●●●L	Straight	6.56 (2)	XZCP0941L2	0.18 (0.080)
					16.40 (5)	XZCP0941L5	0.40 (0.180)
					32.81 (10)	XZCP0941L10	0.79 (0.360)
				Elbowed	6.56 (2)	XZCP1041L2	0.18 (0.080)
					16.40 (5)	XZCP1041L5	0.40 (0.180)
					32.81 (10)	XZCP1041L10	0.79 (0.360)
 XZCP29P11L●	Female, M12	8	XCSDMP●●●L	Straight	6.56 (2)	XZCP29P11L2	0.22 (0.100)
					16.40 (5)	XZCP29P11L5	0.64 (0.290)
					32.81 (10)	XZCP29P11L10	1.04 (0.470)
 XZCP1141L●	Female, M12	4	XCSDMR●●●L/ XCSDMP●●●L	Straight	6.56 (2)	XZCP1141L2	0.20 (0.090)
					16.40 (5)	XZCP1141L5	0.42 (0.190)
					32.81 (10)	XZCP1141L10	0.82 (0.370)
				Elbowed	6.56 (2)	XZCP1241L2	0.20 (0.090)
					16.40 (5)	XZCP1241L5	0.42 (0.190)
					32.81 (10)	XZCP1241L10	0.82 (0.370)
 XZCP1041L●							
 XZCP1241L●							

Function diagrams with magnet present (precabled version)



Function diagrams with magnet present (connector on pigtail version)

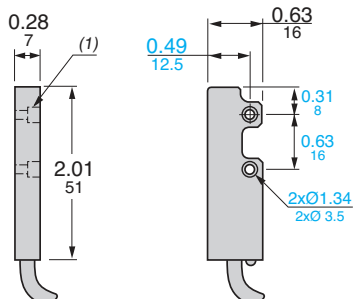


Sao: specified operating distance.
Sar: specified tripping distance.
 Conforming to EN/IEC 60947-5-3.

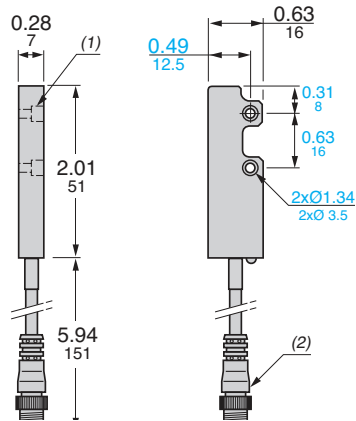
Coded magnetic switches

XCSDMC

Precabled connection

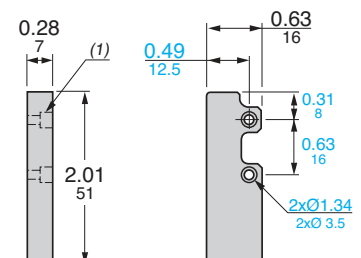


Connector on pigtail connection



Coded magnet for XCSDMC

XCSCZC1



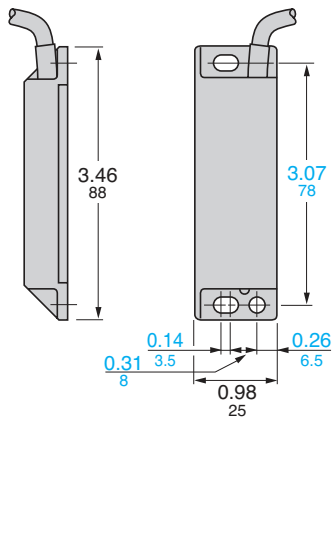
(1) Counterbored: 0.24 x 0.14 in. (Ø6 x 3.5 mm)

(1) Counterbored: 0.24 x 0.14 in. (Ø6 x 3.5 mm)
(2) M8 4-pin connector.

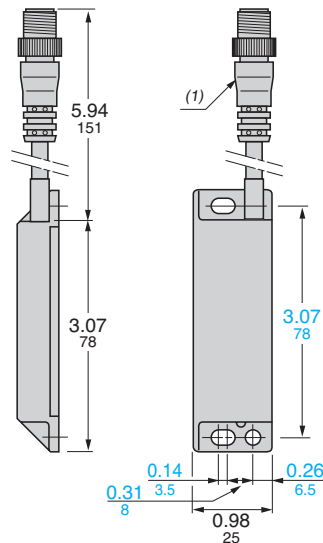
(1) Counterbored: 0.24 x 0.14 in. (Ø6 x 3.5 mm)

XCSDMP

Precabled connection

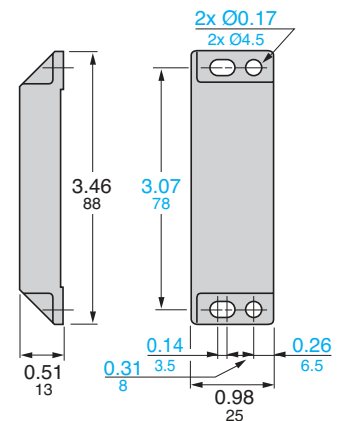


Connector on pigtail connection



Coded magnet for XCSDMP

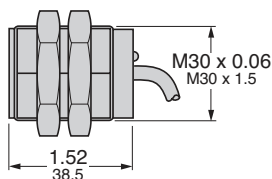
XCSPZP1



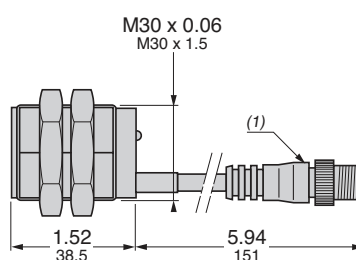
(1) 4 or 6-pin M12 connector.

XCSDMR

Precabled connection

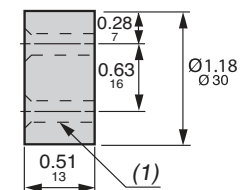


Connector on pigtail connection



Coded magnet for XCSDMR

XCZR1



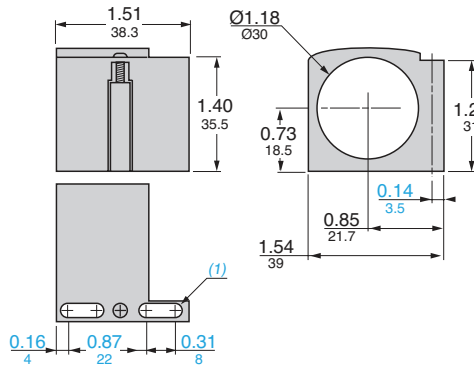
(1) M12 4-pin connector.

(1) 2 x Ø0.17 (2 x Ø4.3), countersunk: Ø7.5 at 45°.

Accessories

Mounting clamp

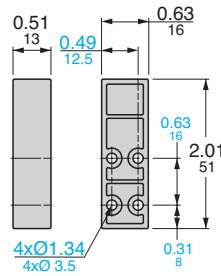
XSZB130



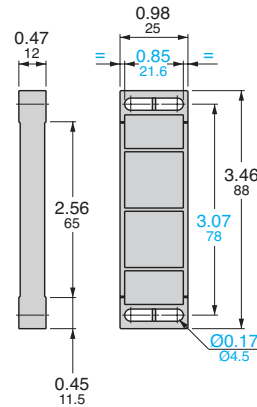
(1) 2 elongated holes Ø0.16 x 0.31 in. (4 x 8 mm).

Nonmagnetic shims

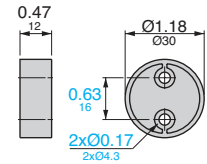
XCSZCC



XCSZCP

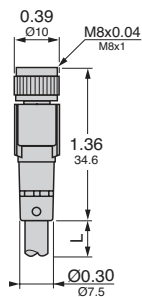


XCSZCR

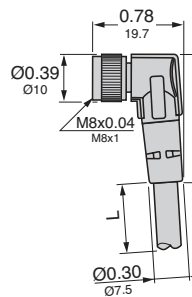


Pre-wired female connectors

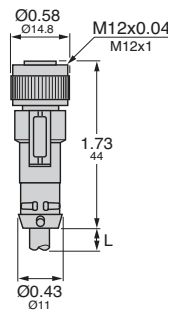
XZCP0941L



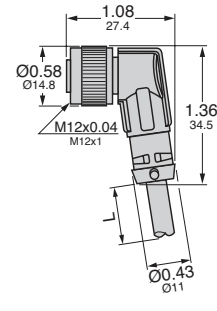
XZCP1041L



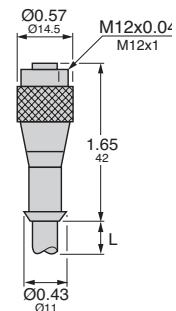
XZCP1141L



XZCP1241L

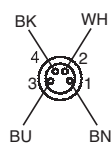


XZCP29P11L

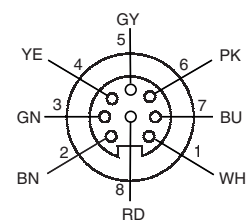
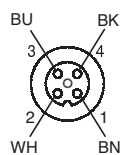


Wiring diagrams

M8 pre-wired female connector

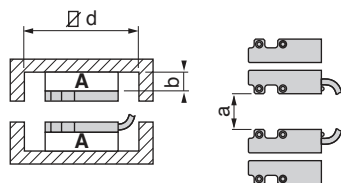


M12 pre-wired female connector

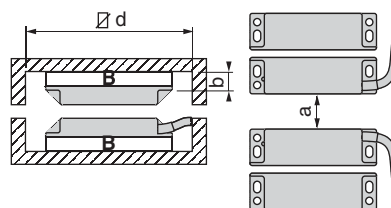


Mounting

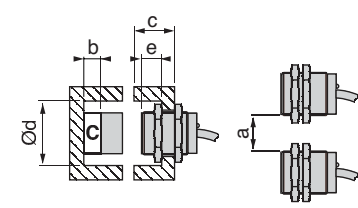
XCSDMC



XCSDMP



XCSDMR



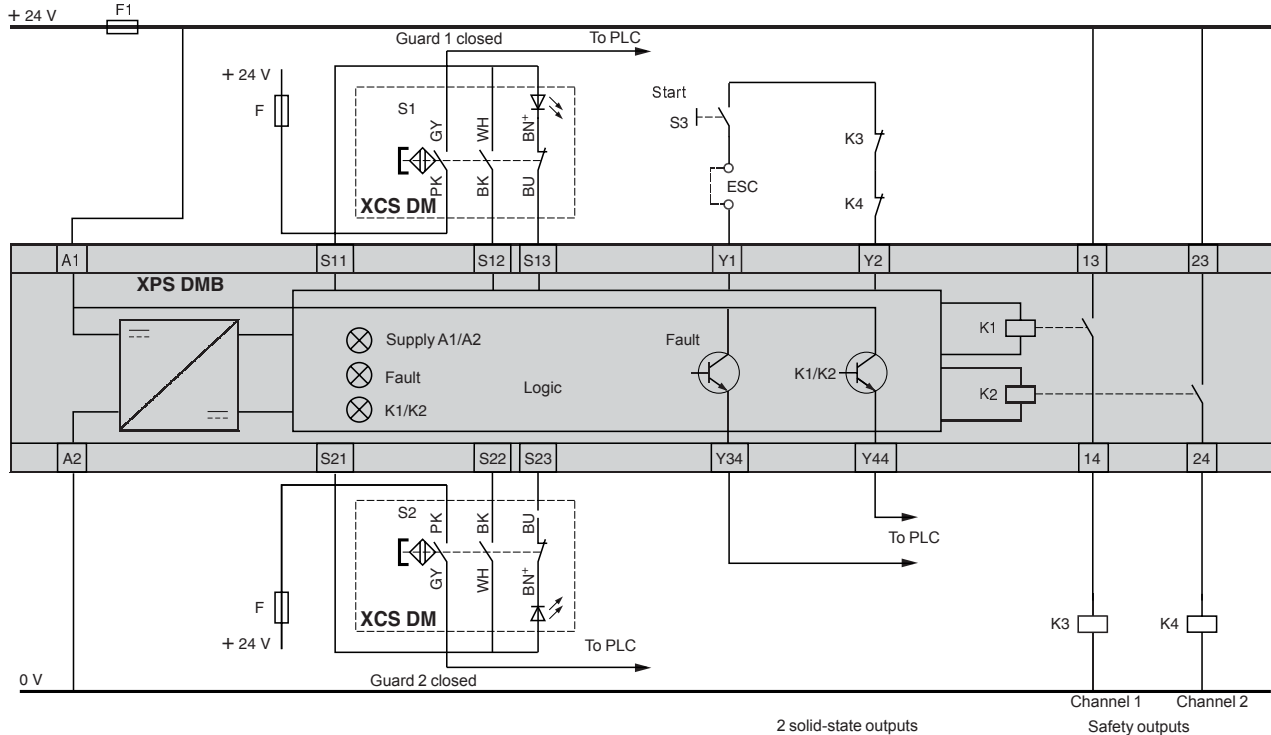
XCS	a	b	c	d	e
DMC	1.57 (40)	0.51 (13) min.	—	3.19 x 2.17 (81 x 55)	—
DMP	3.94 (100)	0.39 (10) min.	—	4.65 x 2.17 (118 x 55)	—
DMR	1.57 (40)	0.47 (12) min.	> 0.39 (10)	Ø1.77 (45)	0.79 (20)
		—	> 0.39 (10)	Ø1.77 (45)	0.51 (13)
		0.47 (12) min.	< 0.39 (10)	—	0.79 (20)
		—	< 0.39 (10)	—	0.67 (17)

Nonmagnetic shims

A	XCSZCC
B	XCSZCP
C	XCSZCR

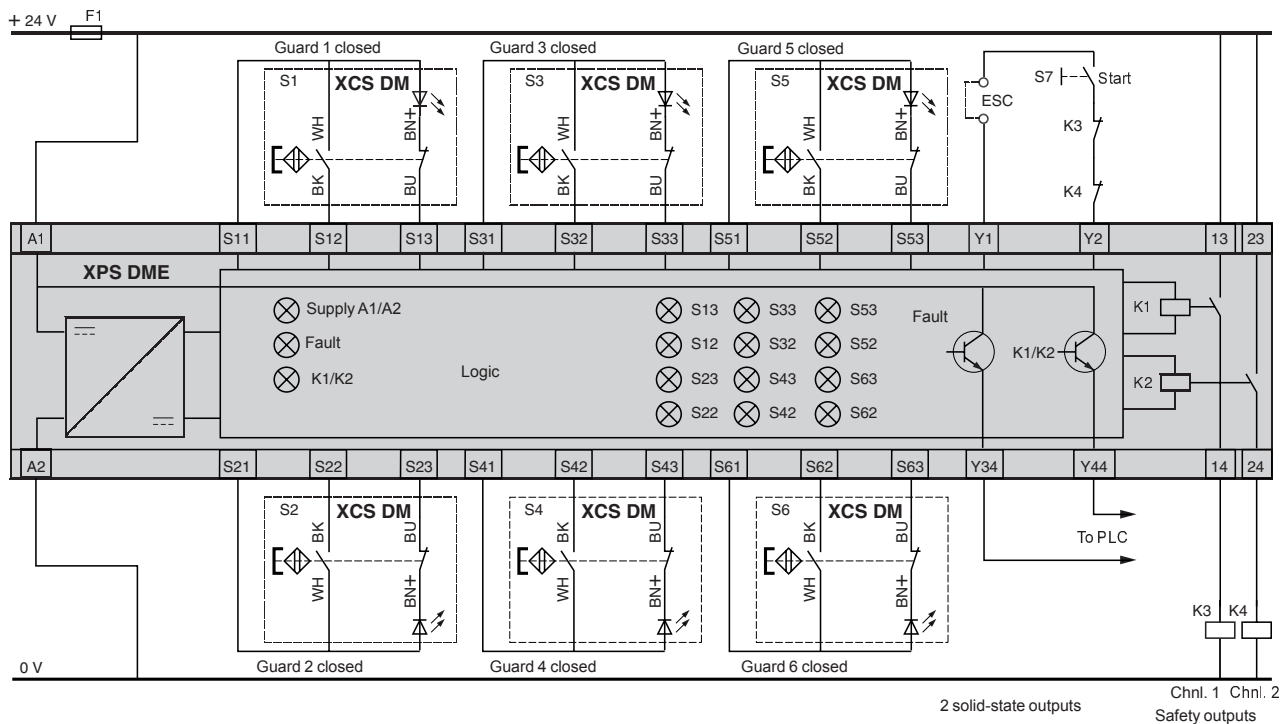
XCSDMP5... with XPSDMB

Wiring to PL=e, category 4 conforming to EN/ISO 13849-1 and SIL 3 conforming to EN/IEC 61508.
Example with 3-pole N.O. + N.O. + N.C. (1 N.O. break before make) contact.



XCSDMC5..., XCSDMP5..., XCSDMR5... with XPSDME

Wiring to PL=e, category 4 conforming to EN/ISO 13849-1 and SIL 3 conforming to EN/IEC 61508. Example with 2-pole N.O. + N.C. (N.O. break before make) contact.



ESC: External start conditions.

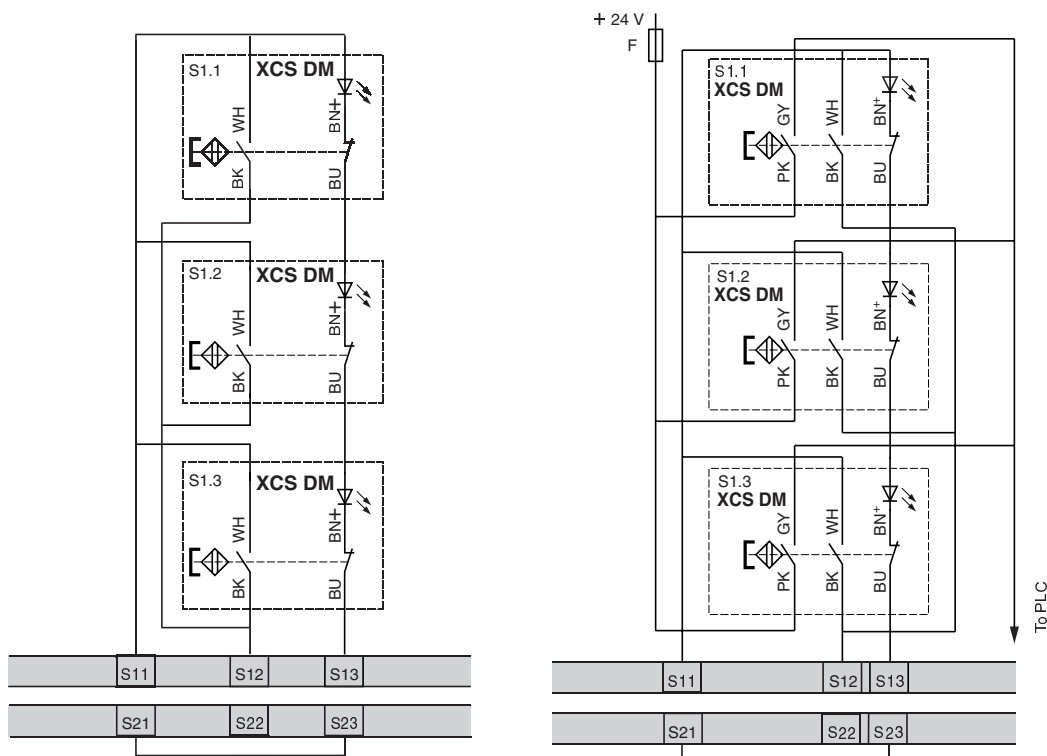
- Inputs: S_1, S_2, S_3
- Unused inputs must be jumpered from S_1 to S_3. For example if input S61, S62, S63 is not used, then terminals S61 and S63 must be jumpered.
- The order in which the inputs are wired or jumpered will not affect device operation.

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

Wiring to PL=d, category 3 conforming to EN/ISO 13849-1 and SIL 2 conforming to EN/IEC 61508

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

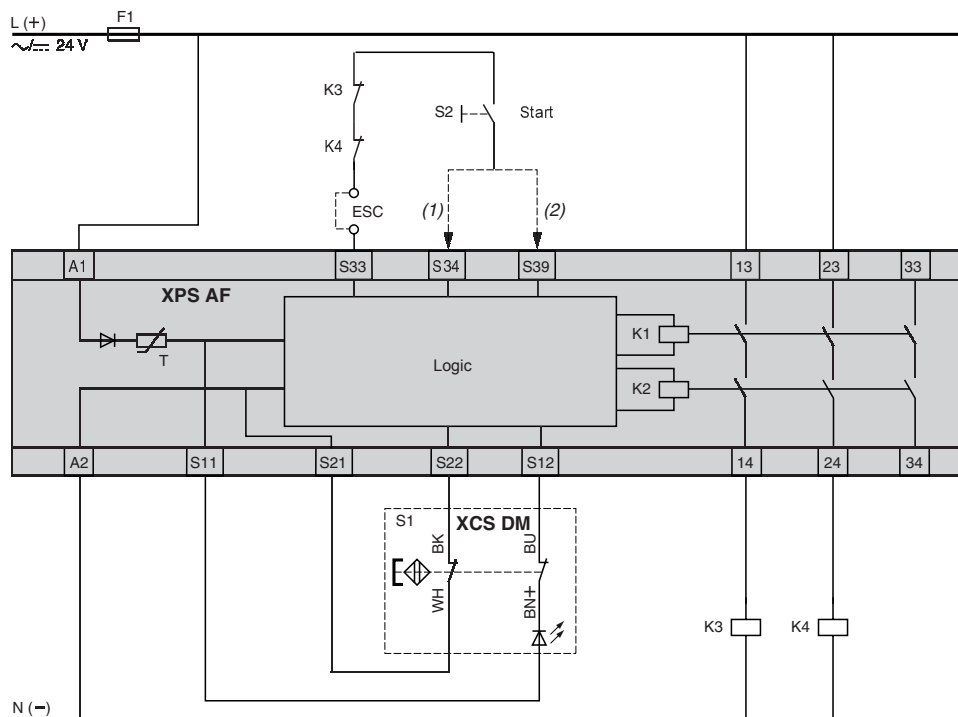
Example with 3-pole N.O. + N.O. + N.C. contact



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

XCSDM●7●●● with XPSAF

Wiring to PL=e, category 4 conforming to EN/ISO 13849-1 and SIL 3 conforming to EN/IEC 61508. Example with 2-pole N.C. + N.C. contact



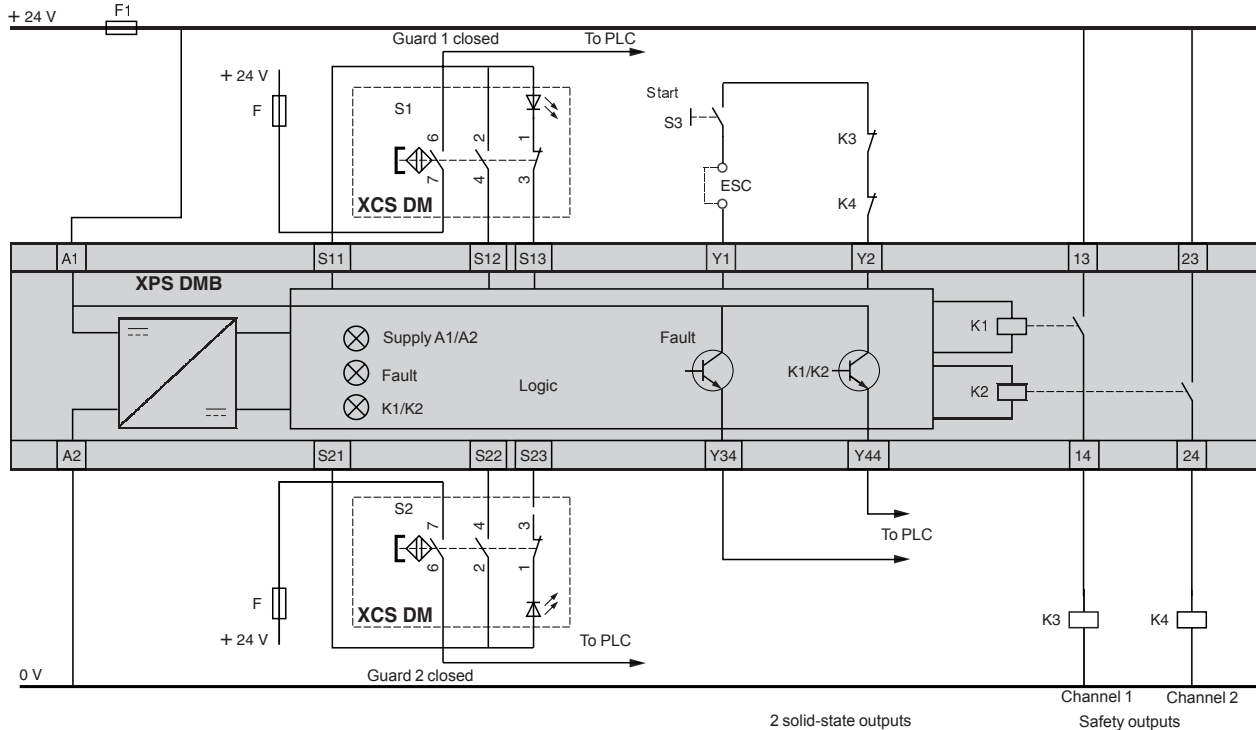
(1) With start button monitoring.

(2) Without start button monitoring.

ESC: External start conditions.

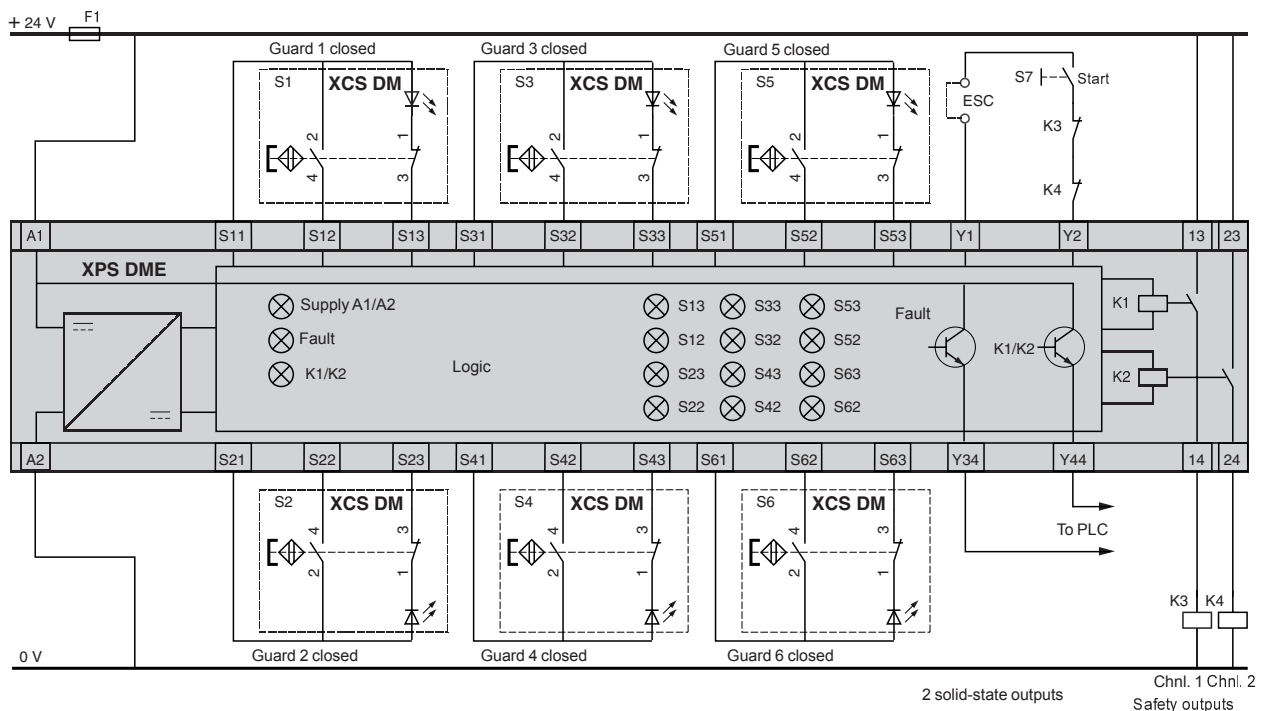
XCSDMP5... with XPSDMB

Wiring to PL=e, category 4 conforming to EN/ISO 13849-1 and SIL 3 conforming to EN/IEC 61508.
Example with 3-pole N.O. + N.O. + N.C. (1 N.O. break before make) contact.



XCSDMC5..., XCSDMP5..., XCSDMR5... with XPSDME

Wiring to PL=e, category 4 conforming to EN/ISO 13849-1 and SIL 3 conforming to EN/IEC 61508. Example with 2-pole N.O. + N.C. (N.O. break before make) contact.



ESC: External start conditions.

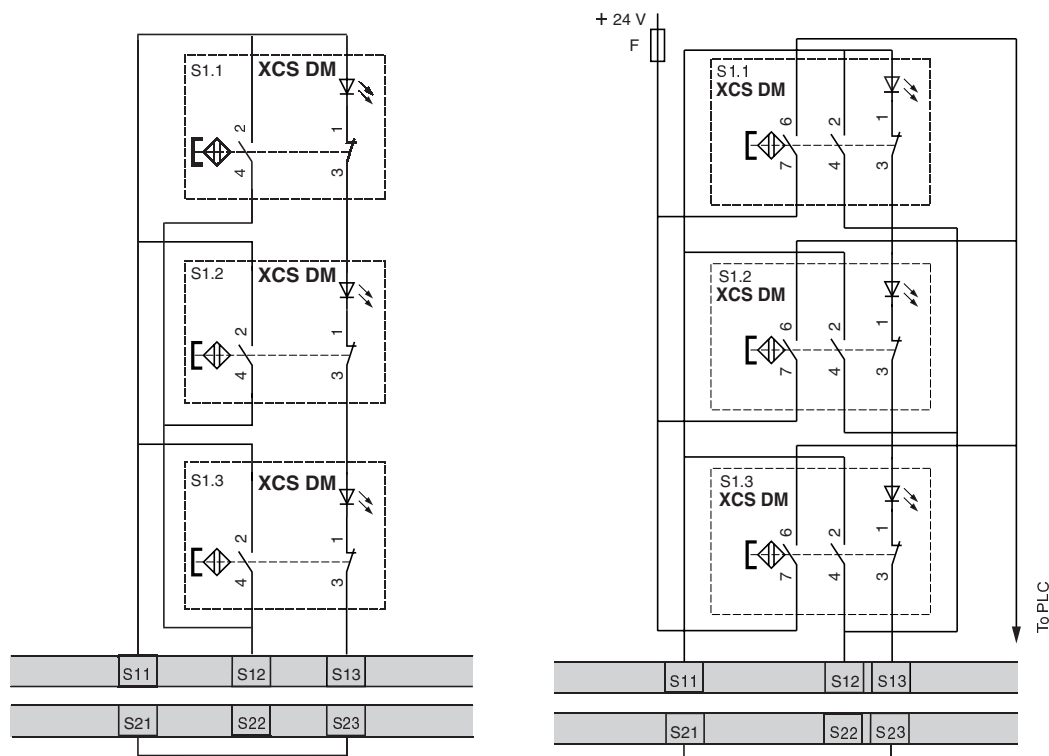
- Inputs: S_1, S_2, S_3
- Unused inputs must be jumpered from S_1 to S_3. For example, if input S61, S62, S63 is not used, then terminals S61 and S63 must be jumpered.
- The order in which the inputs are wired or jumpered will not affect device operation.

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

Wiring to PL=d, category 3 conforming to EN/ISO 13849-1 and SIL 2 conforming to EN/IEC 61508

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

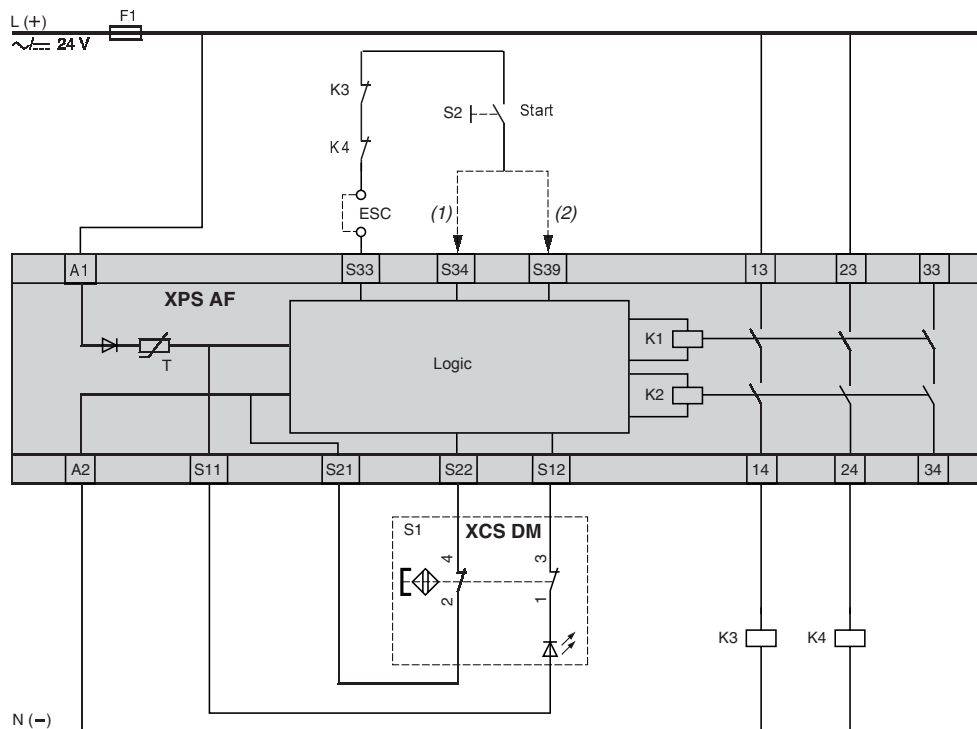
Example with 3-pole N.O. + N.O. + N.C. contact



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

XCSDM●7●●● with XPSAF

Wiring to PL=e, category 4 conforming to EN/ISO 13849-1 and SIL 3 conforming to EN/IEC 61508. Example with 2-pole N.C. + N.C. contact



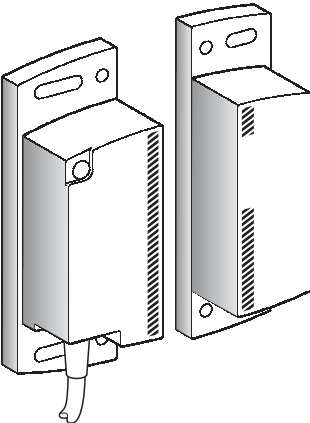
(1) With start button monitoring.

(2) Without start button monitoring.

ESC: External start conditions.

Coded magnetic system
Precabled connection

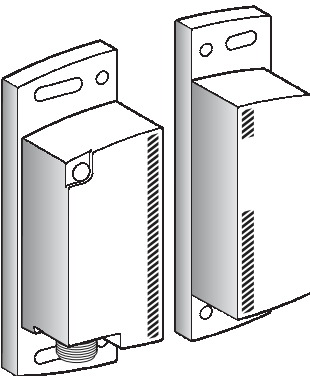
SIL 2/PL=d, category 3 and SIL 3/PL=e, category 4
XCSDM3791●●/XCSDM4801●●



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Coded magnetic system
M12 connector connection

SIL 2/PL=d, category 3 and SIL 3/PL=e, category 4
XCSDM3791M12/ XCSDM4801M12



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Coded magnetic type		SIL 2/PL= d, category 3 XCSDM3		SIL 3/PL=e, category 4 XCSDM4	
Environment					
Conformity to standards			EN/IEC 60947-5-1; EN/IEC 60947-5-2; EN/IEC 60947-5-3, EN/ISO 14119		
Product certifications			CE, UL, CSA, TÜV		
Maximum safety level <i>Using an appropriate and correctly connected control system.</i>			SIL 2 conforming to EN/IEC 61508,PL=d, category 3 conforming to EN/ISO 13849-1		SIL 3 conforming to EN/IEC 61508, PL=e, category 4 conforming to EN/ISO 13849-1
Reliability data B _{10d}			MTTFd = 182 years PFH = 3.94E ⁻⁹ / PFD = 1.15E ⁻⁵ SFF = 92.5% / HFT = 1		
Ambient air temperature	For operation	°F (°C)	−13 to +158 (−25 to +70)		
	For storage	°F (°C)	+40 to +185 (−40 to +85)		
Vibration resistance	Conforming to IEC 60068-2-6		10 gn (10–500 Hz)		
Shock resistance	Conforming to IEC 60068-2-7		30 gn, 11 ms		
Sensitivity to magnetic fields		mT	≤ 0,5		
Electric shock protection	Conforming to IEC 61140		Class III		
Degree of protection	Conforming to IEC 60529		Precabled version: IP66, IP67 Connector version: IP67		
	Conforming to DIN 40050		Precabled version: IP69K		
Materials			Thermoplastic case (PBT); PVC cable		
Specifications					
Rated operational specifications			Ub : ≍ 24 V +10% −20%		
Rated insulation voltage (Ui)			Ui : ≍ 36V		
Rated impulse withstand voltage (Uimp)	Conforming to EN 60947-5-1	kV	2.5		
Integrated output protection			Overload and short-circuit protection		
Connection	Conforming to IEC 60947-5-2-A3 and IEC 61076		Precabled, 6 x 22 AWG (0.25 mm²), length: 6.6, 16.4 or 32.8 ft (2, 5, or 10 m) depending on model or M12 connector (A coding)		Precabled, 8 x 22 AWG (0.25 mm²), length: 6.6, 16.4 or 32.8 ft (2, 5, or 10 m) depending on model or M12 connector (A coding)
Cable diameter		in. (mm)	0.24 (6.1 +/- 0.3)		
Cable resistance		mΩ/m	90		
Safety outputs (OSSD) (Output Signal Switching Devices)			2 PNP type (N.O.) solid-state outputs, 1.5 A (2 A up to 140 °F (60°C)), ≍ 24 V (short-circuit protected)		
Alarm output			–		1 solid-state output, 0.5 A, ≍ 24 V, PNP
Signaling			LED (green/red/orange)		
Maximum switching frequency		Hz	3		
Activation delay		ms	100		
Discordance time		s	2		
HFT (Hardware Fault Tolerance)			1		
			Test interval: 12 months		
Tightening torque		lb-ft (N•m)	1.327 (1.8) maximum		
Maximum series mounting			32 maximum with 6.6 ft (2 m) cable		–
Functions					
Functions			- LED status signaling		- Auto/Manual start via Start input - Monitoring of external switching devices (EDM: External Devices Monitoring) - Display of operating modes (LED) - Monitoring of the function (open or closed) as well as the response time of the power components.

Safety interlock and limit switches

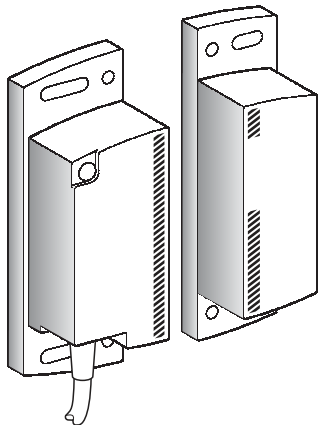
Coded magnetic system

Plastic, solid-state PNP type output

Type

Coded magnetic system with dedicated transmitter

Precabled connection



References

Description	Type of connection	SIL 2/PL=d, category 3	SIL 3/PL=e, category 4	Weight lb (kg)
Magnetic system with dedicated transmitter (1)	Precabled, 6.6 ft (2 m)	XCSDM379102	XCSDM480102	0.71 (0.320)
	Precabled, 16.4 ft (5 m)	—	XCSDM480105	1.06 (0.480)
	Precabled, 32.8 ft (10 m)	XCSDM379110	XCSDM480110	1.64 (0.745)

(1) Self-contained system does not require the use of safety module or nonmagnetic shim.

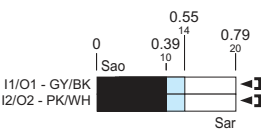
Detection specifications

Assured operating distance	Sao : 0.39 in. (10 mm)
Assured tripping distance	Sar : 0.79 in. (20 mm)
Approach directions	9
Approach speed	0.03 ft/s (0.01 ms) mini

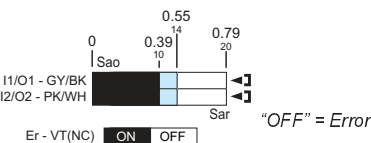
Output status (precabled connection)

Output states shown are with the dedicated transmitter positioned in front of the receiver.

XCSDM3791●●

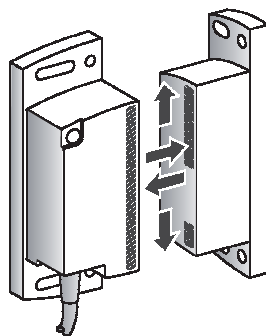
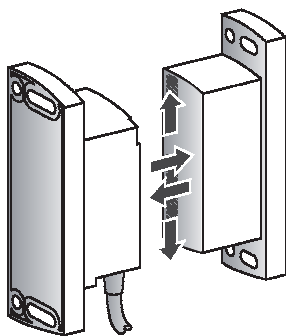
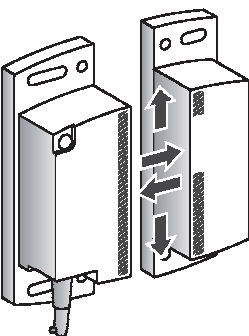


XCSDM4801●●

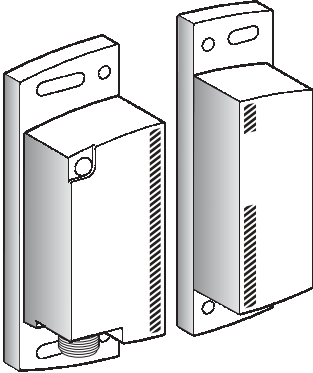


- Output closed
- Output open
- Transitional state

Sao : Specified operating distance.
Sar : Specified tripping distance.
Conforming to EN/IEC 60947-5-3



Type	Coded magnetic system with dedicated transmitter
	M12 connector connection



References				
Description	Type of connection	SIL 2/PL=d, category 3	SIL 3/PL=e, category 4	Weight lb (kg)
Coded magnetic system with dedicated transmitter (1)	M12 connector	XCSDM3791M12	XCSDM4801M12	0.47 (0.215)

1) Self-contained system does not require the use of safety module or nonmagnetic shim.

Detection specifications	
Assured operating distance	Sao : 0.39 in. (10 mm)
Assured tripping distance	Sar : 0.79 in. (20 mm)
Approach directions	9
Approach speed	0.03 ft/s (0.01 ms) mini

Output status (precabled connection)

Output states shown are with the dedicated transmitter positioned in front of the receiver.

XCSDM3791M12	XCSDM4801M12
Output closed Output open Transitional state	Sao : Specified operating distance. Sar : Specified tripping distance. Conforming to EN/IEC 60947-5-3

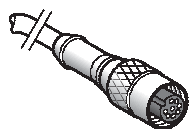
Accessories			
Description	For use with	Reference	Weight lb (kg)
Replacement dedicated transmitter	XCSDM3/4●●●02/05/10 XCSDM3/4●●●M12	XCSDMT	0.22 (0.100)
Arc suppressor (pair)	XCSDM3/4●●●02/05/10 XCSDM3/4●●●M12	XUSLZ500	0.04 (0.020)

Pre-wired female connectors for connector version coded magnetic system

Pre-wired connector specifications

Pre-wired connector type		XZ CP29P12L●	
Type of connection		Screw threaded (metal clamping ring)	
Number of contacts		8	
Degree of protection		IP67 (with clamping ring correctly tightened)	
Ambient air temperature	Operation	°F (°C)	–13 to +158 (–25 to +70)
	Storage	°F (°C)	–40 to +185 (–40 to +85)
Cabling	Conforming to EN/IEC 60947-5-2		Ø6.1 mm PUR cable, wire c.s.a.: 8 x 22 AWG (0.25 mm²)
LED signaling			–
Nominal current	A		2
Insulation resistance	Ω		> 10 ⁹
Contact resistance	mΩ		≤ 5

References of pre-wired connectors

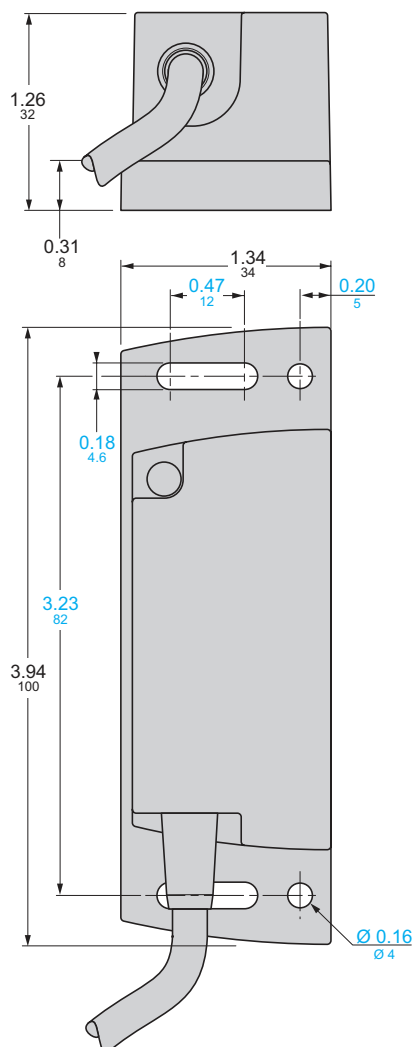


XZCP29P12L●

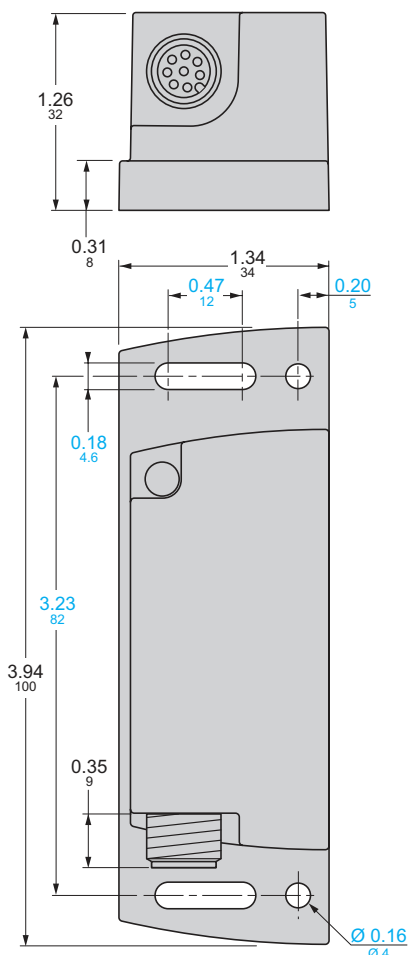
Type of connector	No. of contacts	For use with	Type	Cable length ft (m)	Reference	Weight lb (kg)
Female, M12 (Coding A)	8	XCSDM3/4●●●02	Straight	6.6 (2)	XZCP29P12L2	0.22 (0.100)
		XCSDM3/4●●●05		16.4 (5)	XZCP29P12L5	0.64 (0.290)
		XCSDM3/4●●●10		32.8 (10)	XZCP29P12L10	1.04 (0.470)

Coded magnetic system

Precabled connection

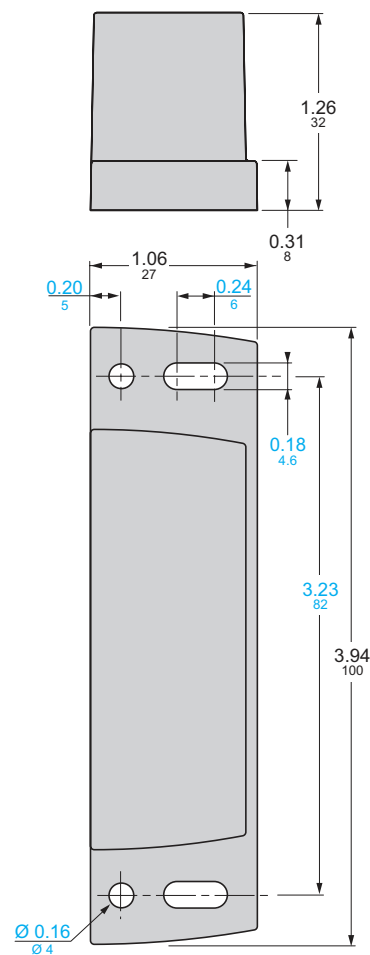


M12 connector (Coding A) connection

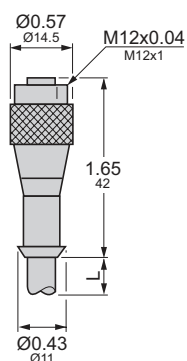


Accessory

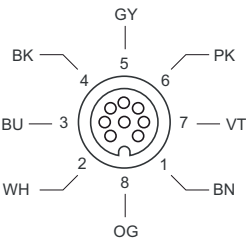
Replacement dedicated transmitter



Pre-wired female connectors

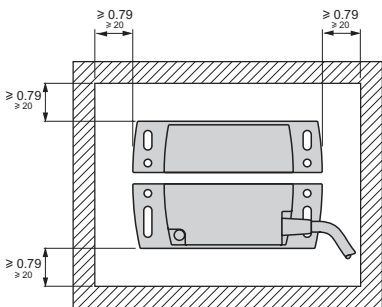
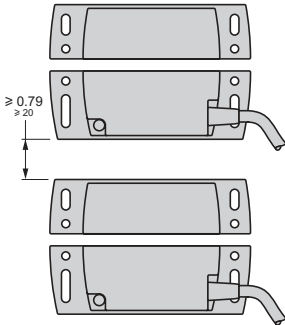
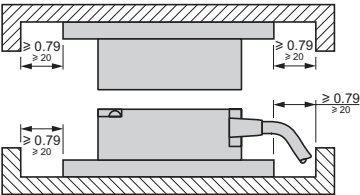


Wiring diagram
M12 pre-wired female connector



Mounting

4

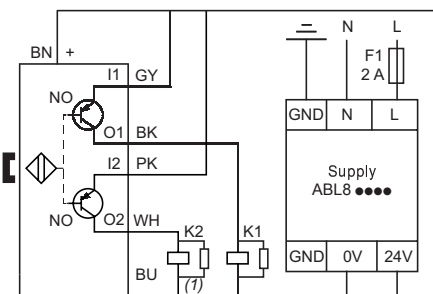


Wiring diagrams

Category 3 (this wiring diagram can achieve SIL 2/PL=d, category 3)

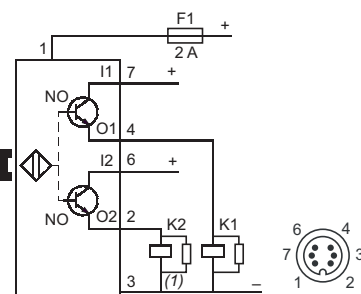
Precabled connection

XCSDM3791●●



M12 connector (A coding) connection

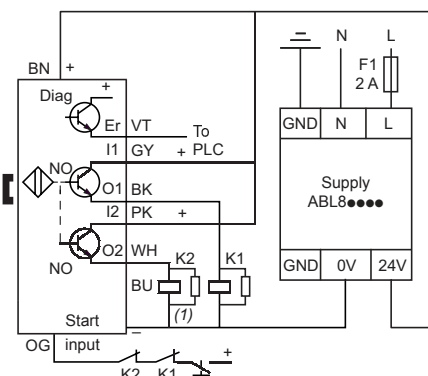
XCSDM3791M12



SIL 3/PL=e, category 4

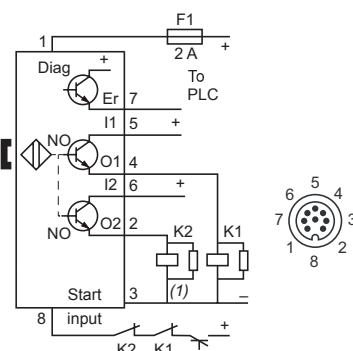
Precabled connection

XCSDM4801●●



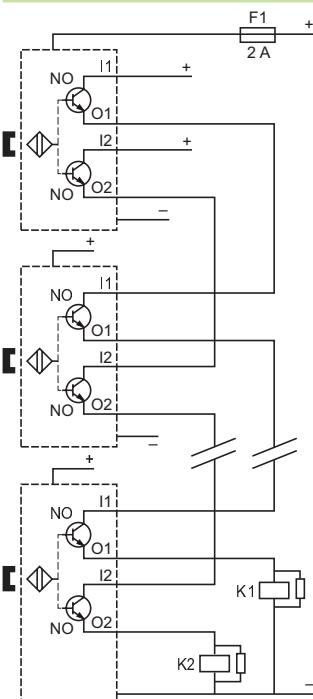
M12 connector (A coding) connection

XCSDM4801M12



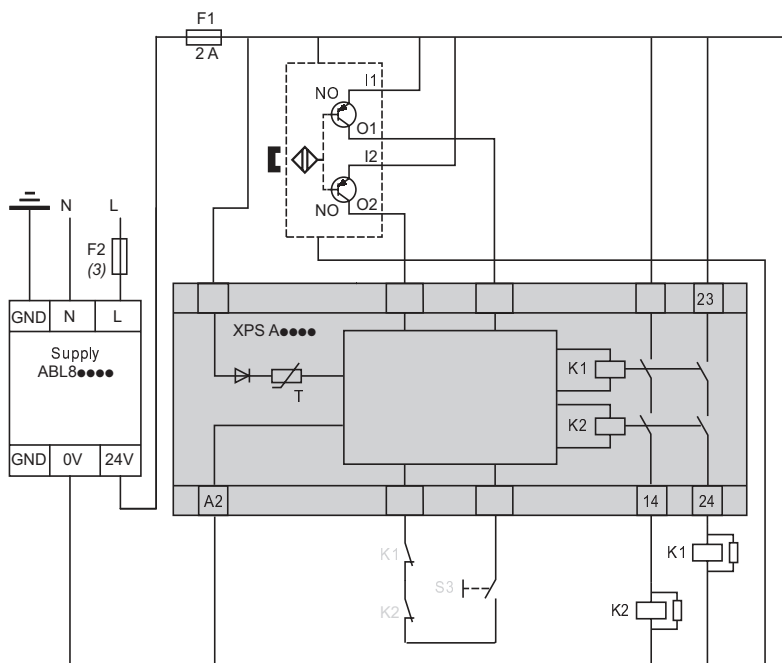
Series mounting non-contact safety interlock switches (2)

XCSDM3791●●



Wiring to SIL 3/PL=e, category 4 with Preventa safety relay module

Example: XCSDM3●●●●● + XPSAFL5130



(1) Mechanically linked contacts

(2) Maximum series mounting: 32 maximum with 6.6 ft (2 m) cable.

(3) 2A maximum