# OsiSense XZ Cabling Accessories

# Catalog









# Sensors with connectors offer a quick, high performance solution

If you need to replace a sensor on a machine, you can do so quickly using products with connectors. Telemecanique Sensors™ brand offers **OsiSense XZ**, a complete range of machine cabling accessories featuring 3 types of cable to suit your environment.

> PVC cable for general use

The most economical and competitive offer

> PUR cable for severe industrial environments

The highest performance offer, whatever the conditions

Reinforced PVC cable for food and beverage processing environments

The highest degree of protection and most resistant offer

# **Contents**

Customer benefits
Selection guide
Introduction and general specifications
Pre-wired connectors and jumper cables, PVC cable
Pre-wired connectors and jumper cables, PUR cable
Pre-wired connectors and jumper cables, Application series, PVC cable
Connectors, connector adapters, and splitter boxes



# > PVC cable for general use

The OsiSense XZ range of PVC pre-wired connectors and jumper cables for general use is recommended for machines in non-demanding environments and subject to only moderate mechanical stress. These products are particularly suited to assembly, material handling, and packaging machines.

Economy & competitiveness

# The sheath color distinguishes the two versions available:

- A gray sheath for versions with metric connectors (M8 and M12)
- A yellow sheath for versions with imperial connectors (1/2" and 7/8").



# The + of the PVC range

#### **Good resistance**

- · to moderate mechanical stress
- · to chemical products
- · to humid environments

Easy cable stripping **UL** certified



# > PUR cable for severe industrial environments

The OsiSense XZ range of very high performance PUR (polyurethane) pre-cabled connectors and jumper cables is designed for the most demanding industrial requirements. This offer is ideal for machines using lubricants, cooling oils, and grease, and where cables are subject to severe mechanical stress from flexing and friction. These cables are ideal for the automotive, machine tool, and hydraulic machine sectors. Their excellent flexibility permits intensive use for alternating movements such as those associated with cable carriers, robotics, turntables, and the like. The cables are halogen free, UL certified and have high degrees of protection (IP67 and IP69K).

# halogen free

4 million alternating flexing operations



# The + of the PUR range

#### **Good resistance**

- · to severe mechanical stress (friction, abrasion, torsion)
- · to hot and cold oils, greases and lubricants

Halogen free **UL** certified



# > Reinforced PVC cable for

# food and beverage processing

# environments

The OsiSense XZ range of reinforced PVC pre-cabled connectors and jumper cables is specifically designed for the food and beverage processing industry. Featuring hygienically designed 316L stainless steel connectors with smooth clamping ring, these products are designed to withstand high pressure washing and disinfection using aggressive detergents.

IP69K

**316L** stainless steel

for corrosion resistance



# the + of the PVC food and beverage range

#### **Good resistance**

- to high pressure cleaning (IP69K and smooth stainless-steel clamping ring)
- · to disinfection using aggressive detergents







# Accessories

The OsiSense XZ range also includes a complete range of connectors and splitter boxes compatible with the pre-wired connectors and jumper cables.







Available in more than 100 countries worldwide

# **Machine cabling accessories** OsiSense XZ

#### Description **Pre-wired connectors** Jumper cables (female-male) 1/2"-20UNF Type М8 M12 7/8"-M8-M8 M8-M12 M12-M8 M12-M12 DIN-M12 16UN Ø8 Female • (M8) • (M12) • (DIN) (1) 4 or 5 pins Male • (M12) • (M12) • (M8) • (M8) • 4 or 5 pins Clip Connection Screw threaded Model Straight Elbowed • (2) Number 3 5 5 3 5 5 3 3 4 of pins Without LED Signaling With LED == 10...30 V (with LED) voltage ~ 30, == 36 ∨ ~ 60, == 75 V • $\sim$ 125, == 150 V ~ 250, == 300 V $\sim$ 250 V Current (A) 3 or 4 6 4 or 6 4 Cable • (3) length (1.6 ft)• (3) -(3.3 ft) • 2 m (6.6 ft) • • (2) 5 m (16.4 ft) 10 m (32.8) • (2)

Reference

**XZCP** 

**Pages** 

page 14 (PVC cable) page 20 (PUR cable)

(1) EN 175301-803-A (ex-DIN 43650). (2) For female pre-wired connectors. (3) For male pre-wired connectors.

page 18 (PVC cable) page 26 (PUR cable)

- Available.
- Not available.



# **Machine cabling accessories** OsiSense XZ

# Pre-wired connectors: Application series

PVC cable, stainless steel clamping ring, and IP69K degree of protection

Jumper cables (female-male): Application series











M8		M12		1/2"-20UNF	M8-M12	M12-M12		
•		•		•	● (M8)	● (M12)		
-		_		-	• (M12)	• (M12)		
_					-			
(hand-tighte)	ning recommend	led)			• (hand-tightening recommended)			
•	9	,			•	,		
_		•		•	-			
3	4	4	5	3	4	3 4 5		
•					•			
_					-			
-					-			
-					-			
•		_			•	-		
-					-			
-		•			-	•		
-					-			
4					4			
_					-			
_		_			-			
-		•		_	•			
					•			
•					-			

# **XZCPA**

XZCRA

Available.

page 34

Not available.

page 36

# **Machine cabling accessories** OsiSense XZ

# Description Connectors

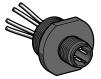
Туре		M8		M12		1/2"-20UNF	M18	<b>EN 175301-803-A</b> (ex-DIN 43650)	M23
	Female	•							
	Male	•					_		•
Connection	Clip	-							
	Screw threaded	•							
Model	Straight	•						-	•
	Elbowed	•							
Number of pins		3	4		5	3	4		19
Signaling	Without LED	•							
	With LED	-		•	-				
Nominal voltage	1030 V	_		•	_				
	(with LED)								
	~ 30, == 36 V	-			•	-			
	~60, <del></del> 75 V	•		-					•
	~ 125, == 150 V	-		•	-				
	~250, == 300 V	-							-
	~ 250 V	-				•			-
Current (A)		4		3		4	16		7.5
Cable length	0.5 m (1.6 ft)	-							
	1 m (3.3 ft)	-							
	2 m (6.6 ft)	-							
	5 m (16.4 ft)	-							
	10 m (32.8)	-							
Reference		Va	00						
Kelelelice		XZ							

page 38

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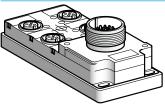
Pages

# Connector adapters





# Passive splitter boxes (1)



M12		7/8"-16UN	4 or 8 channel
-			• (M12)
•			-
			-
-			-
•			•
•			
-			-
4	5		19
•			•
-			•
_			24 V
_	•	-	-
_			_
_			-
•	-	•	_
_			-
4		6	4 per channel
Length of wires: 0.10 m	(3 Q in )		-
Lenguror wires. 0. 10 mm	(3.9 111.)		_
			-
			•
			•
XZCE			ABE9
40			

page 50 page 48

- (1) For other splitter boxes, refer to the website, www.schneider-electric.com.
   Available.
   Not available.

Other versions

Consult the Customer Care Center.

PVC cables: OsiSense XZCPV and XZCRV

PVC cables with reinforced connector: OsiSense XZCPA and XZCRA

PUR cables: OsiSense XZCP and XZCR

# OsiSense™ XZ Machine cabling accessories

Cabling systems

#### Introduction

To meet the requirements of different application sectors, Telemecanique™ Sensors offer a full range of connection accessories.

In particular, the pre-wired connectors and jumper cables have been adapted for use with the OsiSense sensors. These accessories must withstand the same electrical and mechanical stresses and, above all, the same environmental conditions.

The accessories can be divided into three broad categories:

#### PVC cables: OsiSense XZCPV and XZCRV

- Areas of application:
- □ Regular use in packaging and conveying
- ☐ Assembly lines in the paper and card industry
- □ Small machines
- □ Moderate mechanical stress
- Main specifications:
- □ Very good value for money
- ☐ Good water resistance
- □ Good frictional resistance
- ☐ Permanent contact with oil and grease must be avoided



- Areas of application:
- □ Specially developed for the food and beverage sector
- Main specifications:
- □ Enhanced protection: IP68/IP69K
- □ Very good water resistance
- $\hfill \square$  Impervious to detergents, disinfectants, and chemicals
- ☐ Tolerant of moderate mechanical stress



# PUR cables: OsiSense XZCP and XZCR

- Recommended for all industrial applications:
- □ Automotive
- □ Machine tools
- □ Handling
- □ Cable carrier
- □ Robotics sectors
- Main specifications:
- ☐ High mechanical and chemical performance
- ☐ Good resistance to oil, grease, and coolants
- ☐ Good bending strength and abrasion resistance
- ☐ Good UV resistance



OsiSense XZCC connectors



OsiSense XZCE

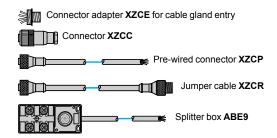
For cabling kits, Telemecanique sensors offer:

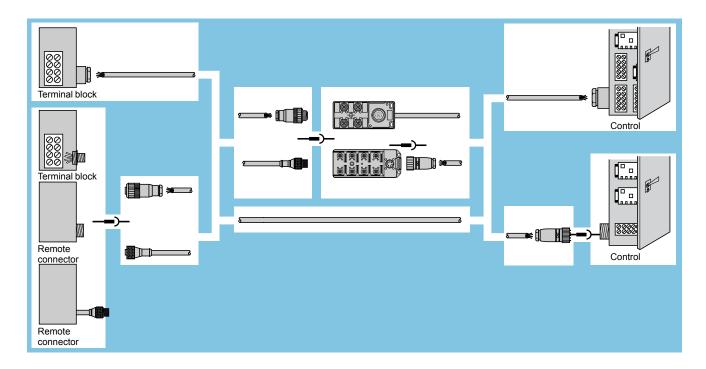
- OsiSense XZCC connectors (screwed, insulation displacement, or soldered)
- OsiSense XZCE connector receptacles, for control panels (for enclosures, junction boxes, etc.)



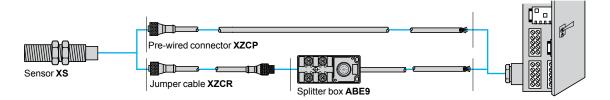
# OsiSense™ XZ Machine cabling accessories Cabling accessories selection

# **Cabling accessories**





# **Connection example**



# OsiSense™ XZ Machine cabling accessories Cabling systems

Type of cabl	e		High-performance cables	General use cables
Type of out	•		XZCP and XZCR See pages 13 to 33	XZCPV and XZCRV See pages 13 to 19
Ambient air t	emperature			
	For operation	°C (°F)	-35 to +90 (-31 to +194)	-25 to +80 (-13 to +176)
	For storage	°C (°F)	-55 to +100 (-67 to +212)	-55 to +80 (-67 to +176)
Color			Matte black	Gray
Material	Sheath		PUR/PVC	PVC
	Conductor insulation		PVC	PVC
Manufacturing method			Without silicone and without demolding agent	Without silicone and without demolding agent
Nominal volt	age	V	320, conforming to DIN VDE 0110 (III/3)	~ 250 V, 300 V
Insulation vo	ltage	kV	2.5	2.5
Flame resista	ance		C2 conforming to NF C 32-070	VW-1 conforming to UL758
Environment	tal resistance		Resistant to soluble, mineral, or synthetic oils at 194 °F (90 °C)	Conditions of use where not continuously immersed
Bending radi	ius		Dynamic: 15 x external diameter Static: 10 x external diameter	Static: 10 x external diameter
Tensile stren	gth	N/mm²	20 to 45	10
Hardness			80 ±5 Shore A	70 ±5 Shore A



# OsiSense™ XZ Machine cabling accessories Cabling systems

Application series cable with reinforced insulation XZCPA and XZCRA See pages 34 to 37	Bare cable XZCB4L0●● See page 49
-25 to +95 (-13 to +203)	-35 to +90 (-31 to +194)
-25 to +95 (-13 to +203)	-40 to +100 (-40 to +212)
Matte black	Matte black
PVC	PvR (PVC/NBR)
PVC	PVC
Without silicone and without demolding agent	Without silicone and without demolding agent
~ 250 V, 300 V	300
3	2, conforming to NFC 32-201-1
C2 conforming to NF C 32-070	C2 conforming to NF C 32-070
Resistant to solvents and detergents	Resistant to soluble, mineral, or synthetic oils at 194 °F (90 °C)
Static: 10 x external diameter	R min. = 3 x external diameter
11	10 to 35
80 ±5 Shore A	70 ±5 Shore A

# OsiSense™ XZ Machine cabling accessories Pre-wired connectors, M8 and M12

PVC cable

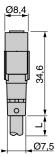


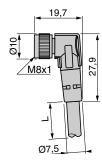


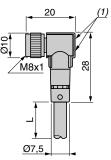




Connector type		Female, M8, straight	Female, M8, elbowed	Female, M8, elbowed with PNP LED	Female, M8, straight	
Number of pins		3	3	3	4	
Catalog number	S					
PVC cable	1 m (3.3 ft)	-	-	-	-	
	2 m (6.6 ft)	XZCPV0566L2	XZCPV0666L2	XZCPV0766L2	XZCPV0941L2	
	5 m (16.4 ft)	XZCPV0566L5	XZCPV0666L5	XZCPV0766L5	XZCPV0941L5	
	10 m (32.8 ft)	XZCPV0566L10	XZCPV0666L10	XZCPV0766L10	XZCPV0941L10	
Weight, kg (lb)	2 m (6.6 ft)	0.084 (0.19)	0.084 (0.19)	0.090 (0.20)	0.100 (0.22)	
0 , 0 , ,	5 m (16.4 ft)	0.153 (0.34)	0.153 (0.34)	0.180 (0.40)	0.200 (0.44)	
	10 m (32.8 ft)	0.316 (0.70)	0.316 (0.70)	0.360 (0.79)	0.380 (0.84)	
Specifications						
Certifications		cULus		cULus		
Connection type		Screw threaded (metal cl	lamping ring)	Screw threaded (metal clamping ring)		
Degree of protection		IP65		IP65		
Ambient temperature	Static	-25 to +80 °C (-13 to +176 °F)		-25 to +80 °C (-13 to +176 °F)		
Cabling		Ø4.6 mm cable conductor c.s.a.: 3 x 0.25	i mm²	Ø4.6 mm cable / conductor c.s.a.: 3 x 0.25 mm <sup>2</sup>	Ø4.6 mm cable / conductor c.s.a.:4 x 0.25 mm <sup>2</sup>	
LED indicators		_		2 PNP LEDs	-	
Nominal voltage		∼ 60 V, == 75 V		10 to 30 V	$\sim$ 60 V, $=$ 75 V	
Nominal current		3A		3A	3A	
Nominal tightening torq	ue	0.2 N•m (1.77 lb-in)		0.2 N•m (1.77 lb-in)	0.2 N•m (1.77 lb-in)	
Insulation resistance		> 10 <sup>9</sup> Ω		> 10 <sup>9</sup> Ω	> 10 <sup>9</sup> Ω	
Contact resistance		≤5 mΩ		≤5 mΩ	≤5 mΩ	
Dimensions						
XZCPV0566Le and XZC	:PV0941L●	XZCPV0666L●		XZCPV0766L●		
Ø8,4		<del>&lt; 19,7</del> <b>→</b>		20 (1)		







(1) 2 LEDs . Cable: 2, 5, or 10 m (6.6, 16.4, or 32.8 ft).

# **Connections LED** connection Connector XZCPV0766Le XZCPV0941Le XZCPV0e66Le











		$\checkmark$	$\checkmark$	
Female, M8, elbowed	Female, M12, straight	Female, M12, elbowed	Female, M12, elbowed with PNP LED	Male, M12, straight
4	4	4	3	4
-	-	-	-	XZCPV1541L1
XZCPV1041L2	XZCPV1141L2	XZCPV1241L2	XZCPV1340L2	XZCPV1541L2
XZCPV1041L5 XZCPV1141L5		XZCPV1241L5	XZCPV1340L5	XZCPV1541L5
XZCPV1041L10	XZCPV1141L10	XZCPV1241L10	XZCPV1340L10	-
0.100 (0.22)	0.110 (0.24)	0.110 (0.24)	0.110 (0.24)	0.5 m (1.6 ft) = 0.052 (0.11)
0.200 (0.44)	0.210 (0.46)	0.210 (0.46)	0.210 (0.46)	1 m (3.3 ft) = 0.090 (0.20)
0.380 (0.84)	0.390 (0.86)	0.390 (0.86)	0.390 (0.86)	2 m (6.6 ft) = 0.200 (0.44)

# cULus

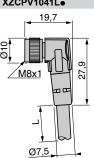
Screw threaded (metal clamping ring)

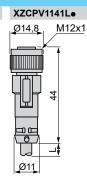
#### IP65

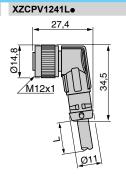
# -25 to +80 °C (-13 to +176 °F)

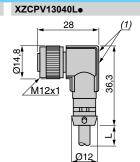
-25 to +80 °C (-13 to +176 °F)				
Ø4.6 mm cable				
conductor c.s.a.: 4 x 0.25 mm <sup>2</sup>	conductor c.s.a.: 4 x 0.25 mm <sup>2</sup>	conductor c.s.a.: 4 x 0.25 mm <sup>2</sup>	conductor c.s.a.: 3 x 0.25 mm <sup>2</sup>	conductor c.s.a.: 4 x 0.25 mm <sup>2</sup>
_	_	_	2 PNP LEDs	_
$\sim$ 60 V, $=$ 75 V	$\sim$ 250 V, $=$ 300 V	$\sim$ 250 V, $=$ 300 V	10 to 30 V	$\sim$ 250 V, $=$ 300 V
3 A	3 A	3 A	3A	3 A
0.2 N•m (1.77 lb-in)	0.4 N•m (3.54 lb-in)			
> 10 <sup>9</sup> Ω				
≤ 5 mΩ				

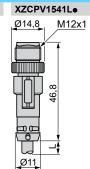
# XZCPV1041L●











(1) 2 LEDs . Cable: 2, 5, or 10 m (6.6, 16.4, or 32.8 ft).

1, 2, or 5 m (3.3, 6.6, or 16.4 ft).

LED composition	0			
LED connection	Connectors			
XZCPV1340L●	XZCPV1041L●	XZCPV1141Le and XZCPV1241Le	XZCPV13040L●	XZCPV1541L●
PNP 1) BN + Signal 4) BK	BK WH  4 2 3 2 3 1 BU BN	BU BK 3 4 4 0 2 WH BN	BU BK 3 4 4 BN	BK BU  4 3 1 2 BN WH



# OsiSense™ XZ Machine cabling accessories Pre-wired connectors, M8, M12, 1/2"-20UNF and 7/8"-16UN

PVC cable







Connector type		Female, M12, straight	Female, M12, elbowed	Male, M12, straight			
Number of pins		5	5	5			
<b>Catalog numbers</b>							
PVC cable	1 m (3.3 ft)	_	-	XZCPV1564L1			
	2 m (6.6 ft)	XZCPV1164L2	XZCPV1264L2	XZCPV1564L2			
	5 m (16.4 ft)	XZCPV1164L5	XZCPV1264L5	XZCPV1564L5			
	10 m (32.8 ft)	XZCPV1164L10	XZCPV1264L10	_			
Weight, kg (lb)	1 m (3.3 ft)	_	_	0.075 (0.17)			
	2 m (6.6 ft)	0.100 (0.22)	0.100 (0.22)	0.100 (0.22)			
	5 m (16.4 ft)	0.180 (0.40)	0.180 (0.40)	0.180 (0.40)			
	10 m (32.8 ft)	0.360 (0.79)	0.360 (0.79)	= ` '			
Specifications							
Certifications		UL					
Connection type		Screw threaded (metal clar	mping ring)				
Cable material		PVC, gray					
Degree of protection		IP65, IP67	IP65, IP67				
Ambient air temperature	Static cable	-25 to +80 °C (-13 to +176	-25 to +80 °C (-13 to +176 °F)				
Cabling		Ø5.2 mm cable, conductor c.s.a.: 5 x 0.25 n	Ø5.2 mm cable, conductor c.s.a.: 5 x 0.25 mm <sup>2</sup>				
Nominal voltage		~ 250 V, == 300 V					
Nominal current		3 A					
Nominal tightening torque		0.4 N•m (3.54 lb-in)					
Insulation resistance		> 10 <sup>9</sup> Ω					
Contact resistance		≤5 m Ω					
Dimensions							
XZCPV1164L●		XZCPV1264L●	XZCPV1	564L●			
Ø14,8 M12x1		27,4 M12x1	Ø14.8	M12x1			

Cable: 1, 2, 5, or 10 m (3.3, 6.6, 16.4, or 32.8 ft).

# **Connections**

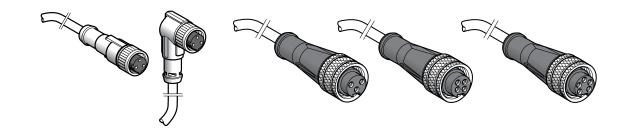
Connectors

XZCPV1164L • and XZCPV1264L •









	1/2"-20UNF, straight	1/2"-20UNF, elbowed	, ,	3	3
	3	3	3	4	5
mbers					
2 m (6.6 ft)	XZCPV1865L2	XZCPV1965L2	XZCPV1670L2	XZCPY4275L2 ▲	XZCPY1764L2 ▲
5 m (16.4 ft)	(16.4 ft) XZCPV1865L5	XZCPV1965L5 XZCPV	XZCPV1670L5	XZCPY4275L5 ▲	XZCPY1764L5 ▲
10 m (32.8 ft)	XZCPV1865L10	XZCPV1965L10	XZCPV1670L10	XZCPY4275L10 ▲	XZCPY1764L10 ▲
2 m (6.6 ft)	0.140 (0.31)	0.140 (0.31)	0.300 (0.66)	_	-
5 m (16.4 ft)	0.350 (0.77)	0.350 (0.77)	0.500 (1.10)	_	-
10 m (32.8 ft)	0.700 (1.54)	0.700 (1.54)	0.850 (1.87)	_	-
1.8 m (6 ft)	_	-	_	0.340 (0.75)	0.400 (0.88)
4.6 m (15 ft)	-	-	_	0.850 (1.87)	1.000 (2.20)
9.2 m (30 ft)	_	-	_	1.700 (3.75)	1.900 (4.19)
ons					
	UL		-		
	2 m (6.6 ft) 5 m (16.4 ft) 10 m (32.8 ft) 2 m (6.6 ft) 5 m (16.4 ft) 10 m (32.8 ft) 1.8 m (6 ft) 4.6 m (15 ft) 9.2 m (30 ft)	straight       3       mbers       2 m (6.6 ft)     XZCPV1865L2       5 m (16.4 ft)     XZCPV1865L5       10 m (32.8 ft)     XZCPV1865L10       2 m (6.6 ft)     0.140 (0.31)       5 m (16.4 ft)     0.350 (0.77)       10 m (32.8 ft)     0.700 (1.54)       1.8 m (6 ft)     -       4.6 m (15 ft)     -       9.2 m (30 ft)     -       DDIS	straight         elbowed           3         3           mbers           2 m (6.6 ft)         XZCPV1865L2         XZCPV1965L2           5 m (16.4 ft)         XZCPV1865L5         XZCPV1965L5           10 m (32.8 ft)         XZCPV1865L10         XZCPV1965L10           2 m (6.6 ft)         0.140 (0.31)         0.140 (0.31)           5 m (16.4 ft)         0.350 (0.77)         0.350 (0.77)           10 m (32.8 ft)         0.700 (1.54)         0.700 (1.54)           1.8 m (6 ft)         -         -           4.6 m (15 ft)         -         -           9.2 m (30 ft)         -         -	straight         elbowed           3         3           mbers           2 m (6.6 ft)         XZCPV1865L2         XZCPV1965L2         XZCPV1670L2           5 m (16.4 ft)         XZCPV1865L5         XZCPV1965L5         XZCPV1670L5           10 m (32.8 ft)         XZCPV1865L10         XZCPV1965L10         XZCPV1670L10           2 m (6.6 ft)         0.140 (0.31)         0.300 (0.66)         XZCPV1670L10           5 m (16.4 ft)         0.350 (0.77)         0.350 (0.77)         0.500 (1.10)           10 m (32.8 ft)         0.700 (1.54)         0.700 (1.54)         0.850 (1.87)           1.8 m (6 ft)         -         -         -           9.2 m (30 ft)         -         -         -           DDIS	straight     elbowed       3     3     3     4       mbers       2 m (6.6 ft)     XZCPV1865L2     XZCPV1965L2     XZCPV1670L2     XZCPY4275L2 ▲       5 m (16.4 ft)     XZCPV1865L5     XZCPV1965L5     XZCPV1670L5     XZCPY4275L5 ▲       10 m (32.8 ft)     XZCPV1865L10     XZCPV1965L10     XZCPV1670L10     XZCPY4275L10 ▲       2 m (6.6 ft)     0.140 (0.31)     0.140 (0.31)     0.300 (0.66)     -       5 m (16.4 ft)     0.350 (0.77)     0.350 (0.77)     0.500 (1.10)     -       10 m (32.8 ft)     0.700 (1.54)     0.700 (1.54)     0.850 (1.87)     -       1.8 m (6 ft)     -     -     0.340 (0.75)       4.6 m (15 ft)     -     -     0.850 (1.87)       9.2 m (30 ft)     -     -     1.700 (3.75)

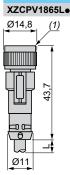
Specifications				
Certifications	UL	-		
Connection type	Screw threaded (metal clamping ring)	Screw threaded (metal clamping ring)		
Cable material	PVC, yellow	PVC, yellow, STOOW		
Degree of protection	IP65, IP67	IP67		
Ambient air Static cable temperature	–25 to +80 °C (–13 to +176 °F)	–25 to +80 °C (–13 to +176 °l	F)	
Cabling	Ø4.6 mm cable, conductor c.s.a.: 3 x 0.34 mm <sup>2</sup>	Ø5.2 mm cable, conductor c.s.a.: 3 x 0.75 mm <sup>2</sup>	Ø10.8 mm cable, conductor c.s.a.: 4 x 1.5 mm² (16 AWG)	Ø8.1 mm cable, conductor c.s.a.: 5 x 1.5 mm² (16 AWG)
Nominal voltage	$\sim$ 250 V, $=$ 300 V	$\sim$ 250 V, $=$ 300 V	/∼ 600 V	/∼ 600 V
Nominal current	4 A	7A	10 A	10 A
Nominal tightening torque	0.4 N•m (3.54 lb-in)	0.8 N•m (7.08 lb-in)	0.8 N•m (7.08 lb-in)	0.8 N•m (7.08 lb-in)
Insulation resistance	> 10 <sup>9</sup> Ω	> 10 <sup>9</sup> Ω	> 10 <sup>9</sup> Ω	> 10 <sup>9</sup> Ω
Contact resistance	≤5 m Ω	≤5 m Ω	≤5 m Ω	≤5 m Ω

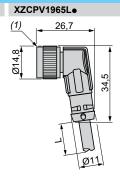
# **Dimensions**

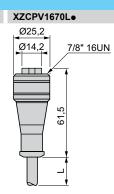
Connector type

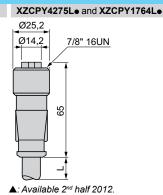
Female,

Female,





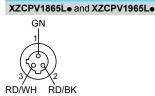


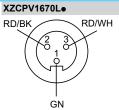


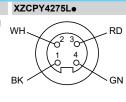
Female, 7/8"-16UN, straight Female, 7/8"-16UN, straight Female, 7/8"-16UN, straight

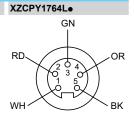
(1) 1/2"-20UNF. Cable: 2, 5, or 10 m (6.6, 16.4, or 32.8 ft).

# **Connections**



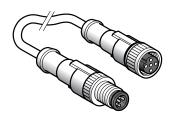


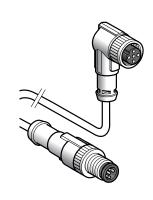




# OsiSense™ XZ Machine cabling accessories Pre-wired connectors, M12

PVC cable

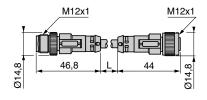




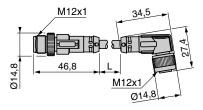
Male connector type M12, 3-pin, straight					
Female connector type		M12, 3-pin, straight	M12, 3-pin, elbowed		
Number of conductors		3	3		
Catalog numbers	5				
PVC cable	1 m (3.3 ft)	XZCRV1511040A1	XZCRV1512040A1		
	2 m (6.6 ft)	XZCRV1511040A2	XZCRV1512040A2		
Weight, kg (lb)	1 m (3.3 ft)	0.064 (0.14)	0.068 (0.15)		
	2 m (6.6 ft)	0.099 (0.22)	0.100 (0.22)		
Specifications					
Certifications		UL pending			
Connection type		Male and female: screw threaded	(metal clamping ring)		
Degree of protection		IP65			
Ambient temperature	Static	-25 to +80 °C (-13 to +176 °F)			
Cabling		Ø4.6 mm cable conductor c.s.a.: 3 x 0.25 mm <sup>2</sup>			
Nominal voltage		∼ 250 V, == 300 V			
Nominal current		3 A			
Nominal tightening torqu	ie e	0.4 N•m (3.54 lb-in)	0.4 N•m (3.54 lb-in)		
Insulation resistance		> 10 <sup>9</sup> Ω	>10° Ω		
Contact resistance		≤ 5 mΩ			

# **Dimensions**

# XZCRV1511040A•



# XZCRV1512040A•



Cable: 1 or 2 m (3.3 or 6.6 ft).

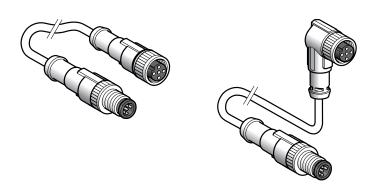
# **Connections**

XZCRV1511040A and XZCRV1512040A







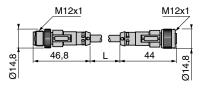


Male connector type		M12, 4-pin, straight	
Female connector type		M12, 4-pin, straight	M12, 4-pin, elbowed
Number of conductors		4	
<b>Catalog numbe</b>	rs		
PVC cable	1 m (3.3 ft)	XZCRV1511041C1	XZCRV1512041C1
	2 m (6.6 ft)	XZCRV1511041C2	XZCRV1512041C2
	5 m (16.4 ft)	XZCRV1511041C5	XZCRV1512041C5
Weight, kg (lb)	1 m (3.3 ft)	0.064 (0.14)	0.067 (0.15)
	2 m (6.6 ft)	0.109 (0.24)	0.106 (0.23)
	5 m (16.4 ft)	0.140 (0.31)	0.230 (0.51)

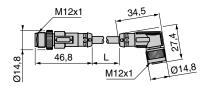
Specifications	
Certifications	UL pending
Connection type	Male and female: screw threaded (metal clamping ring)
Degree of protection	IP65
Ambient temperature Static	–25 to +80 °C (–13 to +176 °F)
Cabling	Ø4.6 mm cable conductor c.s.a.: 4 x 0.25 mm <sup>2</sup>
Nominal voltage	∼ 250 V, == 300 V
Nominal current	3A
Nominal tightening torque	0.4 N•m (3.54 lb-in)
Insulation resistance	> 10 <sup>9</sup> \Omega
Contact resistance	≤5 mΩ

# **Dimensions**

XZCRV1511041C•



# XZCRV1512041C●



Cable: 1 or 2 m (3.3 or 6.6 ft).

# Connections

XZCRV1511041C • and XZCRV1512041C •



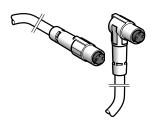






# OsiSense™ XZ Machine cabling accessories Pre-wired connectors, Ø8 mm and M8

PUR cable





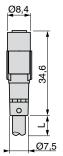


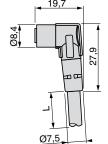
Connector type		straight	elbowed	elbowed with PNP LED	elbowed with NPN LED
Number of pins		3	•		
Catalog number	ers				
PUR cable (see page 12)	2 m (6.6 ft)	XZCP0166L2	XZCP0266L2	XZCP0366L2	XZCP0466L2
	5 m (16.4 ft)	XZCP0166L5	XZCP0266L5	XZCP0366L5	XZCP0466L5
	10 m (32.8 ft)	XZCP0166L10	XZCP0266L10	XZCP0366L10	XZCP0466L10
Weight	2 m (6.6 ft)	0.050 (0.11)			<u> </u>
	5 m (16.4 ft)	0.110 (0.24)			
	10 m (32.8 ft)	0.215 (0.47)	-		

	10 111 (02.0 11)	0.210 (0.41)		
Specifications				
Certifications		cULus		
Connection type		Clip (clip-together connectors, without clamping ring)	Clip (clip-together conne without clamping ring)	ectors,
Degree of protection		IP67 (when correctly clipped together)	IP65 (when correctly clip	oped together)
Ambient air temperature	Static cable	-35 to +90 °C (-31 to +194 °F)	-35 to +90 °C (-31 to +1	94 °F)
	Flexing cable	-5 to +90 °C (23 to +194 °F)	-5 to +90 °C (23 to +194	⊦°F)
Cabling		Ø5.2 mm cable, conductor c.s.a.: 3 x 0.34 mm <sup>2</sup>	Ø5.2 mm cable, conductor c.s.a.: 3 x 0.3	4 mm²
LED indicators		-	2 PNP LEDs	2 NPN LEDs
Nominal voltage		∼ 60 V, <del></del> 75 V	10 to 30 V	
Nominal current		4 A	4 A	
Insulation resistance		> 10 <sup>9</sup> Ω	> 10 <sup>9</sup> Ω	
Contact resistance		≤5 mΩ	≤5 mΩ	

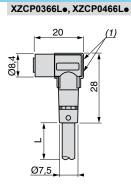
# **Dimensions**

XZCP0166L●





XZCP0266Le

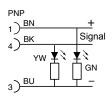


XZCP0e66Le

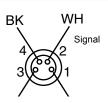
(1) 2 LEDs . Cable: 2, 5, or 10 m (6.6, 16.4, or 32.8 ft).

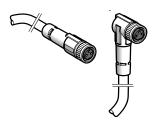
# **Connections**

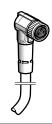
# **LED** connection XZCP0366Le

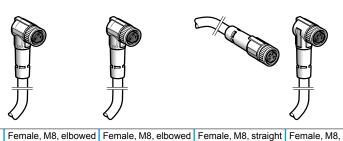


# XZCP0466Le







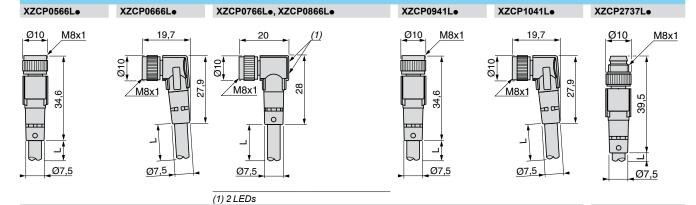






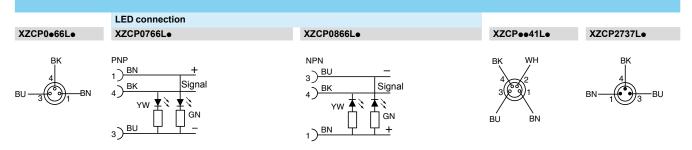
Female, M8, straight	Female, M8, elbowed	Female, M8, elbowed with PNP LED	Female, M8, elbowed with NPN LED	Female, M8, straight	Female, M8, elbowed	Male, M8, straight
3				4		3
XZCP0566L2	XZCP0666L2	XZCP0766L2	XZCP0866L2	XZCP0941L2	XZCP1041L2	XZCP2737L05
XZCP0566L5	XZCP0666L5	XZCP0766L5	XZCP0866L5	XZCP0941L5	XZCP1041L5	XZCP2737L1
XZCP0566L10	XZCP0666L10	XZCP0766L10	XZCP0866L10	XZCP0941L10	XZCP1041L10	XZCP2737L2
0.060 kg (0.13 lb)				0.080 kg (0.18 lb)		0.5 m (1.6 ft) = 0.030 (0.07),
0.120 kg (0.26 lb)				0.180 kg (0.40 lb)		1 m (3.3 ft) = $0.050$ (0.11),
0.225 kg (0.50 lb)				0.360 kg (0.79 lb)		2 m (6.6 ft) = 0.080 (0.18)

cULus				
Screw threaded (metal clamping ring)	Screw threaded (meta	I clamping ring)	Screw threaded (metal clamping ring)	Screw threaded and clip (metal clamping ring)
IP67 (with clamping ring correctly tightened)	IP67 (with clamping rir	ng correctly tightened)	IP67 (with clamping ring correctly tightened)	IP67 (with clamping ring correctly tightened)
-35 to +90 °C (-31 to +194 °F)	-35 to +90 °C (-31 to -	+194 °F)	-35 to +90 °C (-31 to +194 °F)	–35 to +90 °C (–31 to +194 °F)
-5 to +90 °C (23 to +194 °F)	-5 to +90 °C (23 to +19	94 °F)	–5 to +90 °C (23 to +194 °F)	–5 to +90 °C (23 to +194 °F)
Ø5.2 mm cable, conductor c.s.a.: 3 x 0.34 mm <sup>2</sup>	Ø5.2 mm cable, conductor c.s.a.: 3 x 0	.34 mm²	Ø5.2 mm cable, conductor c.s.a.: 4 x 0.34 mm <sup>2</sup>	Ø5.2 mm cable, conductor c.s.a.: 3 x 0.34 mm <sup>2</sup>
-	2 PNP LEDs	2 NPN LEDs	-	-
∼ 60 V, <del></del> 75 V	10 to 30 V		$\sim$ 60 V, <del></del> 75 V	$\sim$ 60 V, $=$ 75 V
4 A	4 A		4 A	4 A
> 10 <sup>9</sup> Ω	> 10 <sup>9</sup> Ω		> 10 <sup>9</sup> Ω	> 10 <sup>9</sup> Ω
≤ 5 mΩ	≤5 mΩ		≤5 mΩ	≤5 mΩ



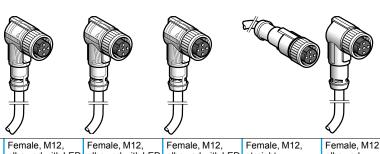
Cable: 2, 5, or 10 m (6.6, 16.4, or 32.8 ft).

Cable: 0.5, 1, or 2 m (1.6, 3.3, or 6.6 ft).



# OsiSense™ XZ Machine cabling accessories Pre-wired connectors, M12

PUR cable

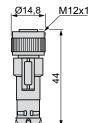


Connector type		Female, M12, elbowed with LED	Female, M12, elbowed with LED	Female, M12, elbowed with LED	Female, M12, straight	Female, M12, elbowed
Number of pins		3			4	•
Catalog number	ers					
PUR cable	0.5 m (1.6 ft)	_				
(see page 12)	1 m (3.3 ft)	-				
	2 m (6.6 ft)	XZCP2540L2	XZCP1340L2	XZCP1440L2	XZCP1141L2	XZCP1241L2
	5 m (16.4 ft)	XZCP2540L5	XZCP1340L5	XZCP1440L5	XZCP1141L5	XZCP1241L5
	10 m (32.8 ft)	XZCP2540L10	XZCP1340L10	XZCP1440L10	XZCP1141L10	XZCP1241L10
	15 m (49.2 ft)	-	_	_	XZCP1141L15	XZCP1241L15
	20 m (65.6 ft)	-	-	_	XZCP1141L20	XZCP1241L20
Weight, kg (lb)	2 m (6.6 ft)	0.080 (0.18)			0.090 kg (0.20 lb)	)
	5 m (16.4 ft)	0.180 (0.40)			0.190 kg (0.42 lb)	)
	10 m (32.8 ft)	0.350 (0.77)			0.370 kg (0.82 lb)	)
	15 m (49.2 ft)	-			0.500 kg (1.10 lb)	)
	20 m (65.6 ft)	-			0.750 kg (1.65 lb)	1
<b>Specifications</b>						

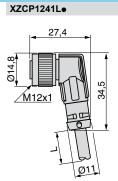
	20 m (65.6 ft)	-			0.750 kg (1.65 lb)
Specifications					
Certifications		cULus			
Connection type		Screw threaded (stainless steel clamping ring)	Screw threaded (metal clamping ri	ng)	Screw threaded (metal clamping ring)
Degree of protection		IP67 (with clampin	ig ring correctly tigh	tened)	IP67 (with clamping ring correctly tightened)
Ambient air temperature	Static cable	-35 to +90 °C (-31	1 to +194 °F)		-35 to +90 °C (-31 to +194 °F)
	Flexing cable	–5 to +90 °C (23 to	+194 °F)		-5 to +90 °C (23 to +194 °F)
Cabling		Ø5.2 mm cable, conductor c.s.a.: 3	3 x 0.34 mm <sup>2</sup>		Ø5.2 mm cable, conductor c.s.a.: 4 x 0.34 mm <sup>2</sup>
LED indicators		2 PNP LEDs	2 PNP LEDs	2 NPN LEDs	-
Nominal voltage		== 10 to 30 V			$\sim$ 250 V, $=$ 300 V
Nominal current		4 A			4 A
Insulation resistance		> 10 <sup>9</sup> Ω			> 10 <sup>9</sup> Ω
Contact resistance		≤5 mΩ			≤ 5 mΩ

# **Dimensions**

XZCP2540Le, XZCP1340Le, XZCP1440Le



XZCP1141Le



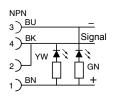
(1) 2 LEDs. Cable: 2, 5, or 10 m (6.6, 16.4, or 32.8 ft).

# **Connections**

XZCP2540Le, XZCP1e40Le XZCP2540L●, XZCP1340L●

PNP 1		<u>+</u>
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LED connection



XZCP1440Le

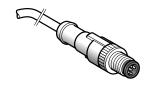


XZCP1e41Le











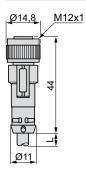
Female, M12, straight	Female, M12, straight	Female, M12, elbowed	Male, M12, straight	Male, M12, straight
4	5	5	4	5
-			XZCP1541L05	XZCP1564L05
-			XZCP1541L1	XZCP1564L1
XZCP1169L2	XZCP1164L2	XZCP1264L2	XZCP1541L2	XZCP1564L2
XZCP1169L5	XZCP1164L5	XZCP1264L5	-	
XZCP1169L10	XZCP1164L10	XZCP1264L10	-	
_	_	_	_	
_	_	_	_	
0.105 (0.23)	0.115 (0.25)		0.5 m (1.6 ft) = 0.030 (0.07)	0.5 m (1.6 ft) = 0.040 (0.09)
0.260 (0.57)	0.270 (0.60)		1 m (3.3 ft) = 0.050 (0.11) 2 m (6.6 ft) = 0.085 (0.19)	1 m (3.3 ft) = 0.065 (0.14)
0.500 (1.10)	0.520 (1.15)	0.520 (1.15)		2 m (6.6 ft) = 0.115 (0.25)
_	-			
_	_		7	

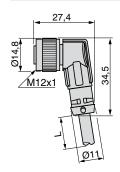
cULus		cULus	cULus		
Screw threaded (metal clamping ring)		Screw threaded (metal clamping i	Screw threaded (metal clamping ring)		
1007 ( )11 1 1 1 1		IDOT ( III I I I I I I I I I I I I I I I I			
IP67 (with clamping ring correctly	IP67 (with clamping ring correctly tightened)		IP67 (with clamping ring correctly tightened)		
-35 to +90 °C (-31 to +194 °F)		-35 to +90 °C (-31 to +194 °F)	-35 to +90 °C (-31 to +194 °F)		
-5 to +90 °C (23 to +194 °F)	,		-5 to +90 °C (23 to +194 °F)		
Ø5.7 mm cable,	Ø5.9 mm cable,	Ø5.2 mm cable,	Ø5.9 mm cable,conductor		
conductor c.s.a.: 4 x 0.34 mm <sup>2</sup>	conductor c.s.a.: 5 x 0.34 mm <sup>2</sup>	conductor c.s.a.: 4 x 0.34 mm <sup>2</sup> c.s.a.: 4 x 0.34 mm <sup>2</sup> + 1			
-	-	-	-		
$\sim$ 250 V, == 300 V $\sim$ 30 V, == 36 V		$\sim$ 250 V, $=$ 300 V	∼ 30 V, <del></del> 36 V		
4A 4A		4 A	4 A		
> 10 <sup>9</sup> Ω > 10 <sup>9</sup> Ω		> 10 <sup>9</sup> Ω	> 10 <sup>9</sup> Ω		
≤ 5 mΩ	≤5 mΩ	≤5 mΩ	≤5 mΩ		

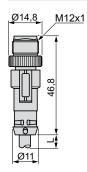
XZCP1169Le, XZCP1164Le

XZCP1264L●

# XZCP1541Le, XZCP1564Le



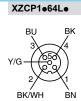




Cable: 2, 5, or 10 m (6.6, 16.4, or 32.8 ft).

Cable: 0.5, 1, or 2 m (1.6, 3.3, or 6.6 ft).









# OsiSense™ XZ Machine cabling accessories Pre-wired connectors, 1/2"-20UNF and 7/8"-16UN

PUR cable





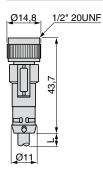
Connector type		Female, 1/2"-20UNF, straight	Female, 1/2"-20UNF, elbowed
Number of pins		3	
Catalog number	ers		
PUR cable (see page 12)	2 m (6.6 ft)	XZCP1865L2	XZCP1965L2
	5 m (16.4 ft)	XZCP1865L5	XZCP1965L5
	10 m (32.8 ft)	XZCP1865L10	XZCP1965L10
Weight, kg (lb)	2 m (6.6 ft)	0.080 (0.18)	
	5 m (16.4 ft)	0.180 (0.40)	
	10 m (32.8 ft)	0.350 (0.77)	
		the control of the co	

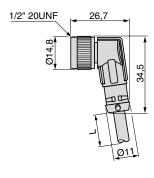
Specifications			
Certifications	cULus		
Connection type	Screw threaded (metal clamping ring)		
Degree of protection	IP67 (with clamping ring correctly tightened)		
Ambient air temperature	-35 to +80 °C (-31 to +176 °F)		
Cabling	Ø5.2 mm cable, conductor c.s.a.: 3 x 0.34 mm <sup>2</sup>		
LED indicators	-		
Nominal voltage	~ 250 V, 300 V		
Nominal current	4A		
Insulation resistance	> 10° Ω		
Contact resistance	≤5 mΩ		

# **Dimensions**

XZCP1865L●







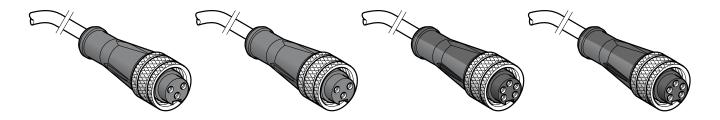
Cable: 2, 5, or 10 m (6.6, 16.4, or 32.8 ft).

# Connections

XZCP1e65Le



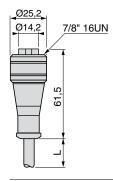




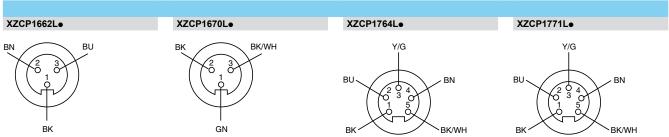
Female, 7/8"-16UN, straight	Female, 7/8"-16UN, straight	Female, 7/8"-16UN, straight
	5	
XZCP1670L2	XZCP1764L2	XZCP1771L2
XZCP1670L5	XZCP1764L5	XZCP1771L5
XZCP1670L10	XZCP1764L10	XZCP1771L10
0.180 kg (0.40 lb)	0.185 kg (0.41 lb)	0.190 kg (0.42 lb)
0.420 kg (0.93 lb)	0.460 kg (1.01 lb)	0.475 kg (1.04 lb)
0.820 kg (1.81 lb)	0.900 kg (1.98 lb)	0.950 kg (2.09 lb)
	·	
	XZCP1670L2  XZCP1670L5  XZCP1670L10  0.180 kg (0.40 lb)  0.420 kg (0.93 lb)	XZCP1670L2   XZCP1764L2     XZCP1670L5   XZCP1764L5     XZCP1670L10   XZCP1764L10     0.180 kg (0.40 lb)   0.185 kg (0.41 lb)     0.420 kg (0.93 lb)   0.460 kg (1.01 lb)

_					
Screw threaded (metal clamping ring)		Screw threaded (metal clamping ring)	rew threaded (metal clamping ring)		
IP67 (with clamping ring correctly tightened)		IP67 (with clamping ring correctly tightened)			
-35 to +80 °C (-31 to +176 °F)		-35 to +80 °C (-31 to +176 °F)	to +80 °C (–31 to +176 °F)		
Ø5 mm cable conductor c.s.a.: 3 x 0.5 mm <sup>2</sup>	Ø5 mm cable conductor c.s.a.: 3 x 0.5 mm <sup>2</sup>	Ø5.9 mm cable conductor c.s.a.: 5 x 0.34 mm <sup>2</sup> Ø6.7 mm cable conductor c.s.a.: 5 x 0.5 mm <sup>2</sup>			
_	_	_	_		
$\sim$ 250 V	$\sim$ 250 V	$\sim$ 250 V	∼ 250 V		
6 A	6A	4 A	6A		
> 10 <sup>9</sup> Ω > 10 <sup>9</sup> Ω		> 10 <sup>9</sup> Ω	> 10 <sup>9</sup> Ω		
≤ 5 mΩ	≤ 5 mΩ	≤5 mΩ	≤ 5 mΩ		

# XZCP1662Le, XZCP1670Le, XZCP1764Le, XZCP1771Le

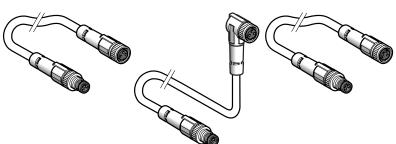


Cable: 2, 5, or 10 m (6.6, 16.4, or 32.8 ft).



# OsiSense™ XZ Machine cabling accessories Jumper cables, M8-M8 and M8-M12

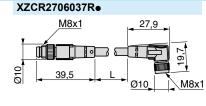
PUR cable

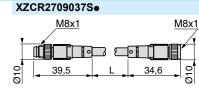


Male connector type		M8, 3-pin, straight	M8, 3-pin, straight				
Female connector type		M8, 3-pin, straight	M8, 3-pin, elbowed	M8, 4-pin, straight			
Number of conductors		3	3				
Catalog numbers							
PUR cable	1 m (3.3 ft)	XZCR2705037R1	XZCR2706037R1	XZCR2709037S1			
	2 m (6.6 ft)	XZCR2705037R2	XZCR2706037R2	XZCR2709037S2			
Weight, kg (lb)	1 m (3.3 ft)	0.060 (0.13)	0.060 (0.13)				
	2 m (6.6 ft)	0.090 (0.20)	0.090 (0.20)				
Specifications							
Certifications		cULus					
Connection type		Male: screw threaded an	d clip. Female: screw threaded. N	Metal clamping ring.			
Degree of protection		IP67	IP67				
Ambient air temperature	Static cable	-35 to +90 °C (-31 to +1	−35 to +90 °C (−31 to +194 °F)				
	Flexing cable	-5 to +90 °C (23 to +194	–5 to +90 °C (23 to +194 °F)				
Conductor c.s.a.		3 x 0.34 mm <sup>2</sup>					
Cable diameter		5.2 mm					
Nominal voltage		∼ 60 V, == 45 V					
Nominal current		4 A	4A				
Landa Carana de							

# Insulation resistance > 10<sup>9</sup> Ω Contact resistance $\leq$ 5 m $\Omega$ **Dimensions**

# XZCR2705037R●





Cable: 1 or 2 m (3.3 or 6.6 ft).

# **Connections**





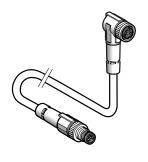


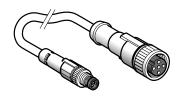


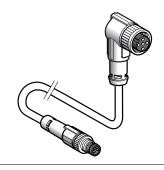












M8.	3-	pin.	stra	aight

M8, 4-pin, elbowed	M12, 5-pin, straight	M12, 5-pin, elbowed
3	3	3

XZCR2710037S1	XZCR2711037T1	XZCR2712037T1
XZCR2710037S2	XZCR2711037T2	XZCR2712037T2
0.060 (0.13)	0.065 (0.14)	0.065 (0.14)

# cULus

Male: screw threaded and clip. Female: screw threaded. Metal clamping ring.

IP67

-35 to +90 °C (-31 to +194 °F)

-5 to +90 °C (23 to +194 °F)

3 x 0.34 mm<sup>2</sup>

5.2 mm

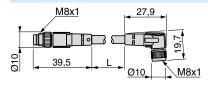
 $\sim$  60 V, == 45 V

4 A

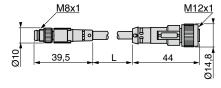
> 10<sup>9</sup> Ω

 $\leq$  5 m $\Omega$ 

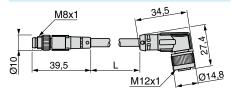
# XZCR2710037S●



# XZCR2711037T●



# XZCR2712037T●



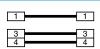
Cable: 1 or 2 m (3.3 or 6.6 ft).





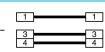








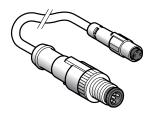






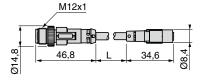
# OsiSense™ XZ Machine cabling accessories Jumper cables, Ø8 mm-M12 and M8-M12

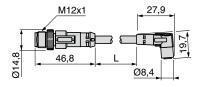
PUR cable





	Clin			
	Ø8 mm, 3-pin, straight	Ø8 mm, 3-pin, elbowed		
	3			
1 m (3.3 ft)	XZCR1501040G1	XZCR1502040G1		
2 m (6.6 ft)	XZCR1501040G2	XZCR1502040G2		
1 m (3.3 ft)	0.050 (0.11)	•		
2 m (6.6 ft)	0.080 kg (0.18 lb)	0.080 kg (0.18 lb)		
Certifications cULus				
	Male: screw threaded. Female: clip	(1).		
	IP67 (when correctly clipped together	IP67 (when correctly clipped together or with clamping ring correctly tightened)		
Static cable	-35 to +90 °C (-31 to +194 °F)	−35 to +90 °C (−31 to +194 °F)		
Flexing cable	-5 to +90 °C (+23 to +194 °F)			
	3 x 0.34 mm <sup>2</sup>			
	5.2 mm			
	$\sim$ 60 V, == 75 V			
Nominal current 4 A				
ation resistance $> 10^{9}  \Omega$				
Contact resistance ≤ 5 mΩ				
	XZCR1502040Ge			
	2 m (6.6 ft)  1 m (3.3 ft) 2 m (6.6 ft)  Static cable	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		





Cable: 1 or 2 m (3.3 or 6.6 ft).

#### **Connections**

XZCR1501040Ge, XZCR1502040Ge

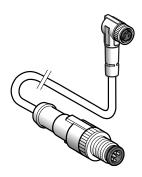




(1) Clip-together connector, without clamping ring.







M12, 3-pin, straight		M12, 4-pin, straight	
M8, 3-pin, straight	M8, 3-pin, elbowed	M8, 4-pin, straight	M8, 4-pin, elbowed
3	*	4	•
KZCR1509040H1	XZCR1510040H1	XZCR1509041J1	XZCR1510041J1
KZCR1509040H2	XZCR1510040H2	XZCR1509041J2	XZCR1510041J2
.050 (0.11)	•	0.055 (0.12)	*
· · · · · · · · · · · · · · · · · · ·		0.090 (0.20)	

#### cULus

Male and female: screw threaded

IP67 (with clamping ring correctly tightened)

-35 to +90 °C (-31 to +194 °F)

-5 to +90 °C (23 to +194 °F)

 $3 \times 0.34 \text{ mm}^2$   $4 \times 0.34 \text{ mm}^2$ 

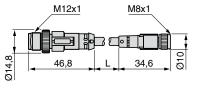
5.2 mm

 $\sim$  60 V, = 75 V

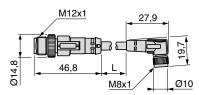
4 A

 $> 10^9 \Omega$  $\leq 5 \text{ m}\Omega$ 

# XZCR1509040He, XZCR1509041Je

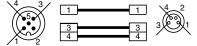


# XZCR1510040He, XZCR1510041Je



Cable: 1 or 2 m (3.3 or 6.6 ft).

# XZCR1509040He, XZCR1510040He



# XZCR1509041J., XZCR1510041J.

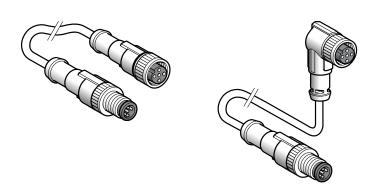






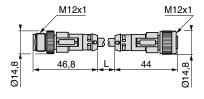
# OsiSense™ XZ Machine cabling accessories Jumper cables, M12-M12 and EN 175301-803-A-M12 (1)

PUR cable

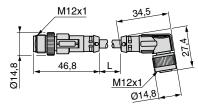


Male connector type		M12, 3-pin, straight	M12, 3-pin, straight				
Female connector type		M12, 3-pin, straight	M12, 3-pin, elbowed	M12, 3-pin, straight	M12, 3-pin, elbowed		
Number of conductors		3					
Catalog numbers							
PUR cable	1 m (3.3 ft)	XZCR1511040A1	XZCR1512040A1	XZCR1511040E1	XZCR1512040E1		
(see page 12)	2 m (6.6 ft)	XZCR1511040A2	XZCR1512040A2	XZCR1511040E2	XZCR1512040E2		
Weight	1 m (3.3 ft)	0.065 (0.14)	•				
	2 m (6.6 ft)	0.095 (0.21)					
Specifications							
Certifications	cULus						
Connection type		Male and female: scre	ew threaded				
Degree of protection		IP67 (with clamping ri	ng correctly tightened)				
Ambient air temperature	Static cable	-35 to +90 °C (-31 to	-35 to +90 °C (-31 to +194 °F)				
	Flexing cable	-5 to +90 °C (+23 to +	-5 to +90 °C (+23 to +194 °F)				
Conductor c.s.a.		3 x 0.34 mm <sup>2</sup>	3 x 0.34 mm <sup>2</sup>				
Cable diameter		5.2 mm	5.2 mm				
Nominal voltage		~ 250 V, == 300 V	~ 250 V, == 300 V				
Nominal current		4 A	4A				
Insulation resistance	> 10° Ω						
Contact resistance ≤ 5 mΩ							
Dimensions							

# XZCR1511040A., XZCR1511040E.



# XZCR1512040A●, XZCR1512040E●

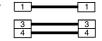


Cable: 1 or 2 m (3.3 or 6.6 ft).

#### **Connections**

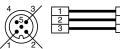
XZCR1511040A., XZCR1512040A.







XZCR1511040E., XZCR1512040E.

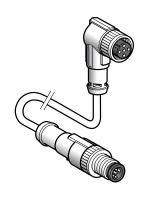


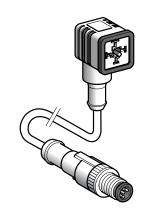


(1) EN 175301-803-A: ex-DIN 43650 A.



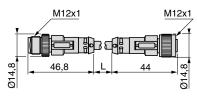




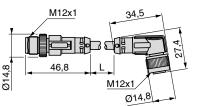


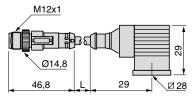
M12, 3-pin, straight				
M12, 3-pin, straight	M12, 3-pin, elbowed	M12, 3-pin, straight	M12, 3-pin, elbowed	EN 175301-803-A, elbowed <i>(1)</i>
3				
XZCR1511062B1	XZCR1512062B1	XZCR1511062F1	XZCR1512062F1	XZCR1523062K1
XZCR1511062B2	XZCR1512062B2	XZCR1511062F2	XZCR1512062F2	XZCR1523062K2
0.065 kg (0.14)				0.110 (0.24)
0.095 kg (0.21)				0.140 (0.31)
cULus				-
Male and female: screw t	hreaded			
IP67 (with clamping ring of	correctly tightened)			
-35 to +90 °C (-31 to +19	94 °F)			
-5 to +90 °C (+23 to +194	4 °F)			
3 x 0.5 mm <sup>2</sup>				3 x 0.50 mm <sup>2</sup>
5.2 mm				4.5 mm
$\sim$ 30 V, $=$ 36 V				
4 A				
> 10 <sup>9</sup> Ω				
≤5 mΩ	·	·	·	·

# XZCR1511062B•, XZCR1511062F•



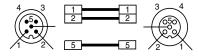
# XZCR1512062Be, XZCR1512062Fe



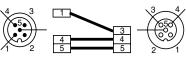


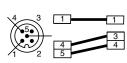
Cable: 1 or 2 m (3.3 or 6.6 ft).

# XZCR1511062Be, XZCR1512062Be



XZCR1511062F., XZCR1512062F.





XZCR1523062Ke

XZCR1523062K●

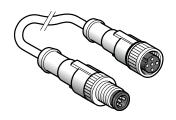


(1) EN 175301-803-A: ex-DIN 43650 A.

Catalog numbers, specifications, dimensions, connections (continued)

# OsiSense™ XZ **Machine cabling accessories** Jumper cables, M12-M12

PUR cable





Male connector type		M12, 4-pin, straight		
Female connector type		M12, 4-pin, straight	M12, 4-pin, elbowed	
Number of conductors		4		
<b>Catalog numbe</b>	rs			
PUR cable (see page 12)	1 m (3.3 ft)	XZCR1511041C1	XZCR1512041C1	
	2 m (6.6 ft)	XZCR1511041C2	XZCR1512041C2	
Weight, kg (lb)	1 m (3.3 ft)	0.065 (0.14)	·	
	2 m (6.6 ft)	0.095 (0.21)		
<b>Specifications</b>				

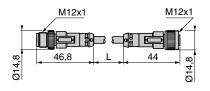
Specifications			
Certifications		cULus	
Connection type		Male and female: screw threaded	
Degree of protection IP67 (with clamping ring correctly tightened		IP67 (with clamping ring correctly tightened)	
Ambient air temperature	Static cable	-35 to +90 °C (-31 to +194 °F)	
	Flexing cable	–5 to +90 °C (+23 to +194 °F)	
Conductor c.s.a.		4 x 0.34 mm <sup>2</sup>	
Cable diameter		5.2 mm	
Nominal voltage		$\sim$ 250 V, $=$ 300 V	
Nominal current		4A	
Insulation resistance		> 10° Ω	
Contact resistance		$\leq 5 \mathrm{m}\Omega$	

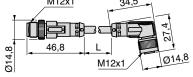
# **Dimensions**

XZCR1511041C•



XZCR1512041C•





Cable: 1 or 2 m (3.3 or 6.6 ft).

# **Connections**

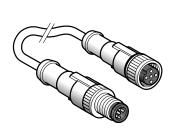
XZCR1511041Co, XZCR1512041Co

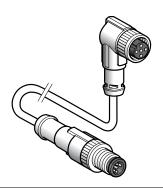












M12, 5-pin, straight

M12, 5-pin, straight M12, 5-pin, elbowed

5

 XZCR1511064D1
 XZCR1512064D1

 XZCR1511064D2
 XZCR1512064D2

0.080 (0.18)

0.130 (0.29)

# cULus

Male and female: screw threaded

IP67 (with clamping ring correctly tightened)

-35 to +90 °C (-31 to +194 °F)

-5 to +90 °C (23 to +194 °F)

4 x 0.34 mm<sup>2</sup> +1 x 0.5 mm<sup>2</sup>

5.9 mm

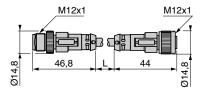
 $\sim$  30 V, == 36 V

4 A

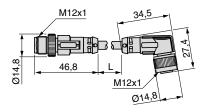
> 10<sup>9</sup> Ω

≤5 mΩ

# XZCR1511064De



# XZCR1512064D•



Cable:1 or 2 m (3.3 or 6.6 ft).

# XZCR1511064De, XZCR1512064De







# OsiSense™ XZ

Machine cabling accessories
Pre-wired connectors, Application series
M8, M12 and 1/2"-20UNF PVC cable



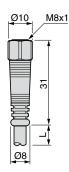




		1					
Connector type		Female, M8, straight	Female, M8, straight	Female, M12, straight	Female, M12, elbowed	Female, M12, elbowed	
Number of pins		3	4	4	4	5	
Catalog numbers							
PVC cable	2 m (6.6 ft)	-	-	XZCPA1141L2	XZCPA1241L2	XZCPA1164L2	
(see page 14)	5 m (16.4 ft)	XZCPA0566L5	XZCPA0941L5	XZCPA1141L5	XZCPA1241L5	XZCPA1164L5	
	10 m (32.8 ft)	XZCPA0566L10	XZCPA0941L10	XZCPA1141L10	XZCPA1241L10	XZCPA1164L10	
Weight, kg (lb)	2 m (6.6 ft)	_	_	0.090 (0.20)	0.090 (0.20)	0.110 (0.24)	
	5 m (16.4 ft)	0.175 (0.39)	0.200 (0.44)	0.210 (0.46)	0.210 (0.46)	0.250 (0.55)	
	10 m (32.8 ft)	0.340 (0.75)	0.400 (0.88)	0.410 (0.90)	0.410 (0.90)	0.485 (1.07)	
Specifications							
Connection type		Clamping ring: screw threaded, smooth, hexagonal, stainless steel 316L, hand-tightening recommended					
Clamping ring dimension		9 mm (0.35 in.)	9 mm (0.35 in.)		14 mm (0.55 in.)		
Degree of protection		IP68	IP68 IP69K				
Ambient air temperature	Static cable usage	−25 to +85 °C (−13	–25 to +85 °C (–13 to +185 °F)				
Cabling	Cable	Ø5.0 mm	Ø5.3 mm	Ø5.3 mm	Ø5.3 mm	Ø5.7 mm	
	Conductor c.s.a.	3 x 0.34 mm <sup>2</sup>	4 x 0.34 mm <sup>2</sup>	4 x 0.34 mm <sup>2</sup>		5 x 0.34 mm <sup>2</sup>	
Nominal voltage		∼ 60 V, == 75 V	∼ 60 V, == 75 V		$\sim$ 250 V, $=$ 300 V		
Nominal current		4 A	4 A		4A		
Insulation resistance		> 10 <sup>9</sup> Ω	> 10 <sup>9</sup> Ω		> 10 <sup>9</sup> Ω		
Contact resistance	·	$\leq$ 5 m $\Omega$		$\leq$ 5 m $\Omega$			

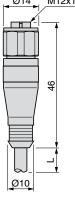
#### **Dimensions**

XZCPA0566L., XZCPA0941L.

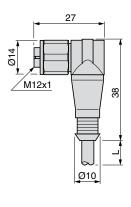




XZCPA1141Le



# XZCPA1241L●, XZCPA1164L●



Cable: 2, 5, or 10 m (6.6, 16.4, or 32.8 ft).

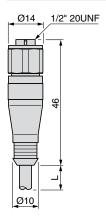
# **Connections** XZCPA0566Le XZCPA0941L● XZCPA1141L●, XZCPA1241L● XZCPA1164Le BK/WH



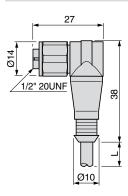


Female, 1/2"-20UNF,	Female, 1/2"-20UNF,
straight	elbowed
3	3
-	_
XZCPA1865L5	XZCPA1965L5
XZCPA1865L10	XZCPA1965L10
-	-
0.210 (0.46)	0.250 (0.55)
0.410 (0.90)	0.485 (1.07)
Clamping ring: screw threaded, smooth, hexagonal, stainless stee	el 316L, hand-tightening recommended
14 mm (0.55 in.)	
IP69K	
–25 to +85 °C (–13 to +185 °F)	
Ø5.0 mm	
3 x 0.34 mm <sup>2</sup>	3 x 0.34 mm <sup>2</sup>
$\sim$ 250 V, $=$ 300 V	~ 250 V, == 300 V
4 A	4A
> 10 <sup>9</sup> Ω	> 10 <sup>9</sup> Ω
$\leq$ 5 m $\Omega$	$\leq 5  \text{m}\Omega$

# XZCPA1865L●



# XZCPA1965L●



Cable: 5 or 10 m (16.4 or 32.8 ft).

# XZCPA1865L●, XZCPA1965L●



# OsiSense™ XZ Machine cabling accessories Jumper cables, Application series

Jumper cables, Application series M8-M12 and M12-M12 PVC cable

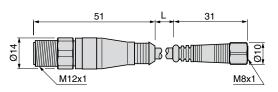




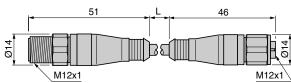
Male connector type		M12, 4-pin, straight	M12, 3-pin, straight		
Female connector type		M8, 4-pin, straight	M12, 3-pin, straight		
Number of conductors		4 3			
Catalog numbers					
PVC cable	2 m (6.6 ft)	XZCRA150941J2	XZCRA151140A2		
(see page 14)	5 m (16.4 ft)	XZCRA150941J5	XZCRA151140A5		
Weight, kg (lb)	2 m (6.6 ft)	0.100 (0.22)	0.095 (0.21)		
	5 m (16.4 ft)	0.210 (0.46)	0.200 (0.44)		
Specifications					
Certifications		Œ			
Connection type		Clamping ring: screw threaded, smooth, hexagonal, stainless steel 316L, hand-tightening recommended			
Clamping ring dimension		14/9 mm (0.55/0.35 in.)	14 mm (0.55 in.)		
Degree of protection		IP68	IP69K		
Ambient air temperature Static cable usage		–25 to +85 °C (–13 to +185 °F)			
Cabling	Cable	Ø5.3 mm	Ø5.0 mm		
	Conductor c.s.a.	4 x 0.34 mm <sup>2</sup>	3 x 0.34 mm <sup>2</sup>		
Nominal voltage		$\sim$ 60 V, $=$ 75 V	$\sim$ 250 V, $=$ 300 V		
Nominal current		4A			
Insulation resistance		> 10 <sup>9</sup> Ω			
Contact resistance		$\leq 5  \text{m}\Omega$	$\leq 5  \text{m}\Omega$		

# **Dimensions**

XZCRA150941J



# XZCRA151140A•



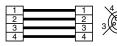
Cable: 2 or 5 m (6.6 or 16.4 ft).

# **Connections**

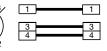
XZCRA150941Je

# XZCRA151140A•

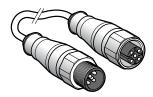


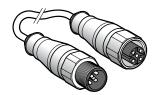






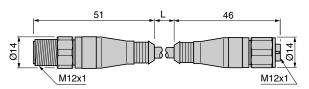




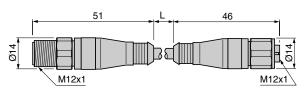


M12, 4-pin, straight	M12, 5-pin, straight	
M12, 4-pin, straight	M12, 5-pin, straight	
4	5	
XZCRA151141C2	XZCRA151164D2	
XZCRA151141C5	XZCRA151164D5	
0.105 (0.23)	0.120 (0.26)	
0.220 (0.49)	0.260 (0.57)	
Clamping ring: screw threaded, smooth, hexagon:	al, stainless steel 316L, hand-tightening recommended	
	al, stainless steel 316L, hand-tightening recommended	
14 mm (0.55 in.)	al, stainless steel 316L, hand-tightening recommended	
14 mm (0.55 in.) IP69K	al, stainless steel 316L, hand-tightening recommended	
14 mm (0.55 in.) IP69K –25 to +85 °C (–13 to +185 °F)		
14 mm (0.55 in.) IP69K -25 to +85 °C (-13 to +185 °F) Ø5.3 mm	Ø5.7 mm	
14 mm (0.55 in.) IP69K  -25 to +85 °C (-13 to +185 °F) Ø5.3 mm 4 x 0.34 mm <sup>2</sup>		
14 mm (0.55 in.) IP69K  -25 to +85 °C (-13 to +185 °F) Ø5.3 mm  4 x 0.34 mm <sup>2</sup> ~ 250 V, 300 V	Ø5.7 mm	
14 mm (0.55 in.) IP69K  -25 to +85 °C (-13 to +185 °F) Ø5.3 mm 4 x 0.34 mm <sup>2</sup>	Ø5.7 mm	

#### XZCRA151141C●

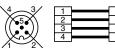


#### XZCRA151164D●



Cable:2 or 5 m (6.6 or 16.4 ft).

#### XZCRA151141C●





#### XZCRA151164D•







# OsiSense™ XZ Machine cabling accessories Connectors, M8









Connector type		Female, M8, straight	Female, M8, elbowed	Female, M8, straight	Female, M8, elbowed
Number of pins		3			
Cable connection		By axial IDC (insulation displacement Solder terminals connector)			
Catalog numbers					
Plastic body	Metal clamping ring	XZCC8FDM30V	XZCC8FCM30V	XZCC8FDM30S	XZCC8FCM30S
	Plastic clamping ring	_	*	•	
Weight, kg (lb)		0.010 (0.02)			
Specifications					
Connection type		Screw threaded (met	al clamping ring)	Screw threaded (meta	l clamping ring)
Degree of protection		IP67 (with clamping r	ing correctly tightened)	IP67 (with clamping rir	ng correctly tightened)
Ambient air temperature		–25 to +70 °C (–13 to	+158 °F)	-40 to +85 °C (-40 to	+185 °F)
Cabling		By IDC (insulation dis Conductor diameter: Cable gland: M9.5 x Maximum clamping of	1.	Solder terminals. Maximum conductor c Cable gland: M9.5 x 1. Maximum clamping ca	•
LED indicators		_		_	
Nominal voltage		∼ 60 V, <del></del> 75 V		∼ 60 V, <del></del> 75 V	
Nominal current		4A		4 A	
Insulation resistance		> 10 <sup>9</sup> Ω		> 10 <sup>9</sup> Ω	
Contact resistance		≤ 10 mΩ		≤5 mΩ	
Dimensions					
XZCC8FDM30V	XZCC8FCM30V	XZC	C8FDM30S	XZCC8FCM	130S
Ø12 M8x1	40 M8x1 (1)	Ø12	M8x1    (1)	24,5	28 M8x1

(1) Cable gland: M9.5 x 1.

#### Connections

XZCC8FDM30•, XZCC8FCM30•













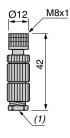


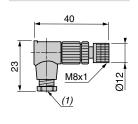
Female, M8, straight	Female, M8, elbowed	Female, M8, straight	Female, M8, elbowed	Male, M8, straight
4				3
By axial IDC (insulation dis	placement connector)	Solder terminals		By axial IDC (insulation displacement connector)
XZCC8FDM40V	XZCC8FCM40V	XZCC8FDM40S	XZCC8FCM40S	XZCC8MDM30V
-				
0.010 (0.02)				
Screw threaded (metal claim	mping ring)	Screw threaded (metal clar	mping ring)	Screw threaded (metal clamping ring)
IP67 (with clamping ring correctly tightened)		IP67 (with clamping ring correctly tightened)		IP67 (with clamping ring correctly tightened)
-25 to +70 °C (-13 to +158 °F)		-40 to +85 °C (-40 to +185 °F)		-40 to +85 °C (-40 to +185 °F)
By IDC		Solder terminals		By IDC

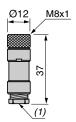
By IDC. Conductor diameter: 1 to 1.55 mm (0.04 to 0.06 in.). Cable gland: M9.5 x 1. Maximum clamping capacity: 5 mm. Maximum conductor c.s.a.: 0.25 mm².
Cable gland: M9.5 x 1.
Maximum clamping capacity: 5 mm. Maximum conductor c.s.a.: 0.25 mm². Cable gland: M9.5 x 1. Maximum clamping capacity: 5 mm.  $\frac{-}{\sim$  60 V,  $\rightleftharpoons$  75 V  $\sim$  60 V, = 75 V  $\sim$  60 V, = 75 V

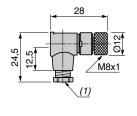
4 A 4 A 4 A > 10<sup>9</sup> Ω > 10<sup>9</sup> Ω > 10<sup>9</sup> Ω ≤ 10 mΩ ≤ 5 mΩ ≤5 mΩ

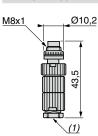
XZCC8FDM40V XZCC8FCM40V XZCC8FCM40S XZCC8FDM40S XZCC8MDM30V











(1) Cable gland: M9.5 x 1.

XZCC8FDM40●, XZCC8FCM40● XZCC8MDM30V







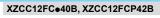
# OsiSense™ XZ Machine cabling accessories Connectors, M12 and 1/2"-20UNF

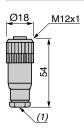


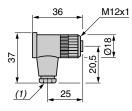
Connector type		Female, M12, straight	Female, M12, elbowed	Female, M12, elbowed		
Number of pins			4			
Cable connection		Screw terminals				
<b>Catalog numbers</b>						
Plastic body	Metal clamping ring	XZCC12FDM40B	XZCC12FCM40B	-		
	Plastic clamping ring	XZCC12FDP40B	XZCC12FCP40B	XZCC12FCP42B		
Weight, kg (lb)		0.020 (0.04)	*	•		
Specifications						
Connection type		Screw threaded (plastic or	metal clamping ring, depending o	n the model)		
Degree of protection		IP67 (with clamping ring co	IP67 (with clamping ring correctly tightened)			
Ambient air temperature		-40 to +85 °C (-40 to +185	-40 to +85 °C (-40 to +185 °F)			
Cabling		Cable gland: n° 7 plastic (P	Screw terminals.  Maximum conductor c.s.a.: 0.75 mm².  Cable gland: n° 7 plastic (Pg 7).  Clamping capacity: 3 to 6 mm.			
LED indicators		-	- 2 PNP LEDs			
Nominal voltage	voltage			10 to 30 V		
Nominal current 3A				3A		
Insulation resistance		$> 10^{12} \Omega$ $> 10^{12} \Omega$				
Contact resistance		≤8 mΩ		≤8 mΩ		

#### **Dimensions**

XZCC12FDe40B







(1) Cable gland: n° 7 plastic (Pg 7).

#### **Connections**

XZCC12FDe40B, XZCC12FCe40B, XZCC12FCP42B

LED connection for XZCC12FCP42B















Female, M12, straight, shielded	Female, M12, straight	Female, M12, elbowed	Female, 1/2"-20UNF, straig	ht Female, 1/2"-20UNF, elbowed	
5	5		3		
Spring terminals	Screw terminals				
XZCC12FDB50R	XZCC12FDM50B	XZCC12FCM50B	XZCC20FDM30B	XZCC20FCM30B	
_	_	•	•		
0.050 (0.11)	0.020 (0.04)				
Screw threaded (metal clamping	g ring)				
IP67 (with clamping ring correct	ly tightened)		IP67 (with clamping ring cor	rectly tightened)	
-40 to +85 °C (-40 to +185 °F)			-40 to +85 °C (-40 to +185	°F)	
Spring terminals.	Screw terminals.	752			
Maximum conductor c.s.a.: 0.5 mm <sup>2</sup> .	Maximum conductor c.s.a.: ( Cable gland: n° 7 plastic (Pg				
Clamping capacity: 4 to 8 mm.	Clamping capacity: 3 to 6 mr				
The Graph of the Control of the Cont	J , J ,				
-	-		-		
$\sim$ 30 V, $=$ 36 V	∼ 30 V, == 36 V		$\sim$ 250 V		
4 A	3A		4 A		
> 10 <sup>12</sup> Ω	> 10 <sup>12</sup> Ω		> 10 <sup>12</sup> Ω		
≤ 8 mΩ	≤ 8 mΩ		≤8 mΩ		
XZCC12FDB50R	XZCC12FDM50B	XZCC12FCM50B	XZCC20FDM30B	XZCC20FCM30B	
Ø19_	.Ø18	36 M12x1	Ø18 1/2" 20UNF	36 1/2" 20UNF	
M12		↑		<b>↑</b>	
_		20,000		37	
<b>1</b>	75	37	75	8 7 7 7 9	
		<b>↓</b>   ~ <b>↓</b>		<u> </u>	
		(1) 25		(1) / 25	
	(1)	1.7/	(1)	<u>→</u>	
	<u>(1)</u>		(1)		
<b></b>					

(1) Cable gland: n° 7 plastic (Pg 7).

XZCC12FDB50R, XZCC12F•M50B XZCC20F•M30B

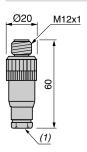


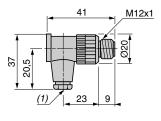


# OsiSense™ XZ Machine cabling accessories Connectors, M12 and 1/2"-20UNF



			_			
Connector type		Male, M12, straight	Male, M12, elbowed	Male, M12, elbowed		
Number of pins		4	4			
Cable connection		Screw terminals				
Catalog numbers						
Plastic body	Metal clamping ring	XZCC12MDM40B	XZCC12MCM40B	-		
	Plastic clamping ring	XZCC12MDP40B	XZCC12MCP40B	XZCC12MCP42B		
Weight, kg (lb)		0.025 (0.06)				
Specifications						
Connection type		Screw threaded (plastic or	Screw threaded (plastic or metal clamping ring, depending on the model)			
Degree of protection		IP67 (with clamping ring co	IP67 (with clamping ring correctly tightened)			
Ambient air temperature		-40 to +85 °C (-40 to +185	-40 to +85 °C (-40 to +185 °F)			
Cabling		Screw terminals.  Maximum conductor c.s.a.  Cable gland: n° 7 plastic (F Clamping capacity: 3 to 6 n	Pg 7).			
LED indicators		-		2 PNP LEDs		
Nominal voltage		~ 125 V, == 150 V		== 10 to 30 V		
Nominal current		3 A	3A 3A			
Insulation resistance		>10 <sup>12</sup> Ω >10 <sup>12</sup> Ω				
Contact resistance		≤ 8 mΩ		≤8 mΩ		
Dimensions						
XZCC12MDe40B		XZCC12MCe40B, XZCC1	2MCP42B			





(1) Cable gland: n° 7 plastic (Pg 7).

#### **Connections**

XZCC12MD•40B, XZCC12MC•40B, XZCC12MCP42B

LED connection for XZCC12MCP42B















Male, M12, straight, shielded	Male, M12, straight	Male, M12, elbowed	Male, 1/2"-20UNF, straight	Male, 1/2"-20UNF, elbowed
5	5		3	
Spring terminals	Screw terminals			
XZCC12MDB50R	XZCC12MDM50B	XZCC12MCM50B	XZCC20MDM30B	XZCC20MCM30B
_	-			
0.050 (0.11)	0.025 (0.06)			
Screw threaded (metal clampin	g ring)			
IP67 (with clamping ring correct	tly tightened)			
-40 to +85 °C (-40 to +185 °F)				
Spring terminals. Maximum conductor c.s.a.: 0.5 mm². Clamping capacity: 4 to 8 mm.	Screw terminals.  Maximum conductor c.s.a  Cable gland: n° 7 plastic ( Clamping capacity: 3 to 6	(Pg 7).		
-	-		-	
$\sim$ 30 V, $=$ 36 V	~ 30 V, == 36 V		$\sim$ 250 V	
4 A	3A		4 A	
> 10 <sup>12</sup> Ω	> 10 <sup>12</sup> Ω		> 10 <sup>12</sup> Ω	
≤8 mΩ	≤8 mΩ		≤8 mΩ	
XZCC12MDB50R	XZCC12MDM50B	XZCC12MCM50B	XZCC20MDM30B	XZCC20FCM30B
Ø19 M12	Ø20 M12x1	41 M12x	1/2" 20UNF	1/2" 20UNF 41

23 9

(1) Cable gland: n° 7 plastic (Pg 7).

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#### XZCC12MDB50R, XZCC12MeM50B





37 20,5



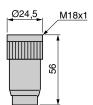
37

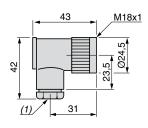
# OsiSense™ XZ Machine cabling accessories Connectors, M18 and EN 175301-803-A (ex. DIN 43650 A)





Connector type		Female, M18, straight	Female, M18, elbowed
Number of pins		4	•
Cable connection		Screw terminals	
<b>Catalog numbers</b>			
Plastic body	Metal clamping ring	-	
	Plastic clamping ring	XZCC18FDP40B	XZCC18FCP40B
Weight, kg (lb)		0.035 (0.08)	
Specifications			
Connection type		Screw threaded (plastic clamping rin	ng)
Degree of protection		IP65 (with clamping ring correctly tig	htened)
Ambient air temperature		-40 to +85 °C (-40 to +185 °F)	
Cabling		Screw terminals.  Maximum conductor c.s.a.: 1.5 mm <sup>2</sup> Cable gland: n° 9 plastic (Pg 9). Clamping capacity: 5 to 8 mm.	
LED indicators		-	
Nominal voltage		∼ 250 V	
Nominal current		16 A	
Insulation resistance		> 10 <sup>12</sup> Ω	
Contact resistance		≤ 10 mΩ	
Dimensions			
XZCC18FDP40B		XZCC18FCP40B	





(1) Cable gland: n° 9 plastic (Pg 9).

#### **Connections**

XZCC18FeP40B





Female, EN 175301-803-A (ex-DIN 43650 A), elbowed

Screw terminals

#### XZCC43FCP40B

0.035 (0.08)

With locking screw

IP65 (with connector correctly locked)

-40 to +125 °C (-40 to +257 °F)

Screw terminals.

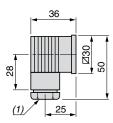
Maximum conductor c.s.a.: 1.5 mm². Cable gland: n° 11 plastic (Pg 11). Clamping capacity: 7 to 10 mm.

 $\sim$  250 V

16 A

 $> 10^8 \, \Omega$ ≤4 mΩ

#### XZCC43FCP40B

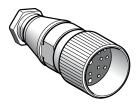


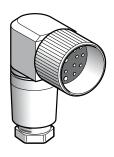
(1) Cable gland: n° 11 plastic (Pg 11).

#### XZCC43FCP40B



# OsiSense™ XZ Machine cabling accessories Connectors, M23

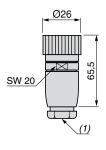


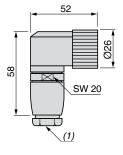


Connector type		Female, M23, straight	Female, M23, elbowed	
Number of pins		19		
Cable connection		Solder terminals		
Catalog numbers				
Metal body and metal clamping ring	Contacts numbered counter-clockwise	XZCC23FDM190S	XZCC23FCM190S	
Weight, kg (lb)		0.080 (0.18)	0.150 (0.33)	
Specifications				
Connection type		Screw threaded (metal clamping ring)		
Degree of protection		IP65 (with clamping ring correctly tightened)		
Ambient air temperature		–25 to +110 °C (–13 to +230 °F)		
Cabling		Solder terminals.  Maximum conductor c.s.a.: 1 mm².  Cable gland: n° 13 metal (Pg 13.5).  Clamping capacity: 9 to 12 mm.		
LED indicators		-		
Nominal voltage		$\sim$ 60 V, $=$ 75 V		
Nominal current		7.5 A		
Insulation resistance		> 10 <sup>16</sup> Ω		
Contact resistance		≤ 5 mΩ		
Dimensions				

XZCC23FDM190S



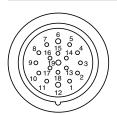




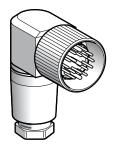
(1) Cable gland: n° 13 metal (Pg 13.5).

#### **Connections**

XZCC23FeM190S







Male, M23, straight Male, M23, elbowed (compatible with enclosure feed-throughs ABE 7ACC82)

19

Solder terminals

XZCC23MDM190S	XZCC23MCM190S
0.080 (0.18)	0.150 (0.33)

#### Screw threaded (metal clamping ring)

IP65 (with clamping ring correctly tightened)

-25 to +110 °C (-13 to +230 °F)

Solder terminals.

Maximum conductor c.s.a.: 1 mm². Cable gland: n° 13 metal (Pg 13.5). Clamping capacity: 9 to 12 mm.

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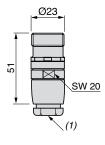
 $\sim$  60 V, = 75 V

7.5 A

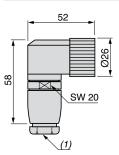
> 10<sup>16</sup> Ω

≤ 5 mΩ

#### XZCC23MDM190S

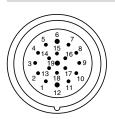


#### XZCC23MCM190S

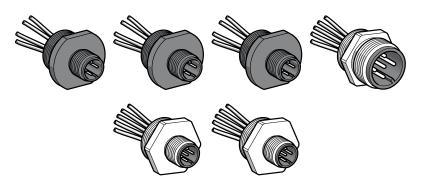


(1) Cable gland: n° 13 metal (Pg 13.5).

#### XZCC23MeM190S



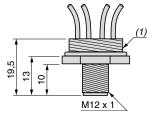
# OsiSense™ XZ Machine cabling accessories Connector adapters



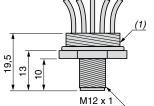
Type of 5-pin connector	M12, male	M12, male 7/8"-1			
Size of tapped hole	11 (Pg 11)	13 (Pg 13.5)	M20 x 1.5	13 (Pg 13.5)	
Catalog numbers	'		'	1	
4-wire connector adapters, plastic body	XZCE11P124M	XZCE13P124M	XZCE03P124M	-	
5-wire connector adapters, metal body	-	XZCE13M125M	XZCE03M125M	XZCE13M785M	
Weight, kg (lb)	0.020 (0.04)	0.020 (0.04)			
Specifications					
Connection type	Screw threaded	Screw threaded			
Degree of protection	IP67	IP67			
Ambient air temperature	-25 to +80 °C (-13 to	+176 °F)			
Cabling	Via 100 mm (3.94 in.)	) long wires			
Conductor c.s.a.	4 x 0.34 mm <sup>2</sup>	XZCE•3P124M: 4 x 0. XZCE•3M125M: 4 x 0	· · · · · · · · · · · · · · · · · · ·	5 x 1 mm <sup>2</sup>	
Nominal voltage	~ 250 V, == 300 V	XZCE $\bullet$ 3P124M: $\sim$ 25 XZCE $\bullet$ 3M125M: $\sim$ 3		∼ 250 V, <del></del> 300 V	
Nominal current	4A 6A			6 A	
Insulation resistance	> 10° Ω				
Contact resistance	≤ 5 mΩ	< 5 mΩ			

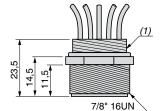
#### **Dimensions**

XZCE11P124M XZCEe3P124M



XZCE•3M125M





(1) Thread size 11.

5

(1) Thread size 13 or M20 x 1.5.

(1) Thread size 13 or M20 x 1.5.

(1) Thread size 13.

XZCE13M785M

XZCE13M785M

#### **Connections**

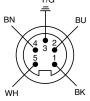
XZCE●●P124M



XZCE●●P125M

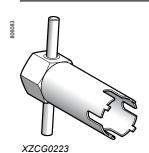




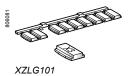


### Machine cabling accessories

#### Accessories













Accessories			
Description		Unit catalog number	Weight kg (lb)
Mounting tool for M23 connector		XZCG0223	0.120 (0.26)
Blanking plugs for M12 female connectors (Sold in lots of 10)		XZLG102	0.005 (0.01)
Markers for splitter boxes (Strips of 10 units)		XZLG101	0.010 (0.02)
PvR cables, 4 x 0.5 mm² (see specifications, page 13)	25 m (82.0 ft)	XZCB4L0025	1.115 (2.46)
	50 m (164.0 ft)	XZCB4L0050	2.220 (4.89)
	100 m (328.1 ft)	XZCB4L0100	4.490 (9.90)

Conduit adapters									
Description	Threaded outside sleeve	Tapped inside sleeve	Mounting nut?	Sold in lots of	Material	Catalog number	Weight kg (lb)		
Cable gland	Pg 13.5	Rubber grommet	Y	10	Plastic	DE9PEM20010	0.01 (0.02)		
Conduit adapter	CM10 (Pg 11)	1/2"-14 NPT	N	1	Zamak	DE9RA1012	0.11 (0.24)		
Conduit adapter	CM10 (Pg 11)	1/2"-14 NPT	Y	10	Zamak	DE9RA10121	0.11 (0.24)		
Conduit adapter	CM12 (Pg 13.5)	1/2"-14 NPT	N	10	Zamak	DE9RA1212	0.11 (0.24)		
Conduit adapter	CM12 (Pg 13.5)	1/2"-14 NPT	Y	10	Zamak	DE9RA12121	0.11 (0.24)		
Conduit adapter	CM20	1/2"-14 NPT	N	10	Zamak	DE9RA2012	0.11 (0.24)		

The **DE9RA** series of conduit adapters are made of Zamak and come with rubber grommet to provide a watertight seal. No tools are required to mount the adapter to a threaded hole, since the DE9 has a knurled round outer shape to allow for hand-tightening. An optional mounting nut is available so you can use the adapters with devices that have blank, unthreaded metric holes.

The **DE9PEM** style is a plastic cable gland used to fasten a cable to a device with an unthreaded hole. Rubber grommets create a watertight seal between the device and the cable.

#### Telefast™ ABE9 splitter boxes

#### Introduction

Passive ABE9 splitter boxes for M12 connectors make it possible to eliminate long and difficult cabling operations. Due their modularity and their dimensions, they are the ideal solution for a wide variety of customer applications.

Connection to the processing unit can be made either by connector or by multicore cable of different lengths.

IP67 protection allows these products to be used within processes or machines in harsh environments (splashing water, oil, dust, etc.).

The splitter boxes, available in 4 or 8 channel versions, allow connection of up to 16 signals maximum, depending on the version (2 per channel).

The specifications of ABE9 splitter boxes C12 are as follows:

- Connection of sensors and actuators using M12, 5-pin connectors.
- Modularity: 4 or 8 channels.
- Mounting system and connection to the processing unit conforming to market standards:
- □ mounting centers,
- ☐ M23, 19-pin connector, enabling the use of pre-formed cables in order to reduce installation time and the risk of error,
- □ multicore cable, 5 or 10 m. The splitter box, consisting of a connection cover fitted with plug-in terminals, provides considerable flexibility for:
- the replacement of damaged parts,
- modification of cable length.

Base units ABE9C12 •• L•• enable the use of 2 separate commons which, for example, can be used for the management of an emergency stop. This function is accessible beneath the terminal cover using 2 removable links. If both links are removed, the 2 supplies become independent.

The use of a Y-connector allows 2 signals to be connected to the same M12 channel on the splitter box.

Example: splitter box ABE9C1281 (8 channels) enables the connection of 16 signals to the processing unit.

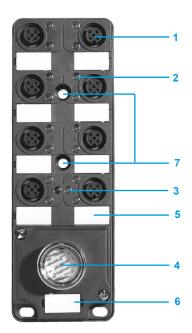
The Y-connector is available in 2 versions:

- M12-M12 for connection of two M12 connectors to a single M12 channel on the splitter box,
- M8-M12 for connection of two M8 connectors to a single M12 channel on the splitter box.

Complete catalog number	= Splitter box only	+ Connector with cable
ABE9C1240L05	= ABE9C1240M	+ ABE9XCA1405
ABE9C1240L10	= ABE9C1240M	+ ABE9XCA1410
ABE9C1241L05	= ABE9C1241M	+ ABE9XCA1405
ABE9C1241L10	= ABE9C1241M	+ ABE9XCA1410
ABE9C1280L05	= ABE9C1280M	+ ABE9XCA1805
ABE9C1280L10	= ABE9C1280M	+ ABE9XCA1810
ABE9C1281L05	= ABE9C1281M	+ ABE9XCA1805
ABE9C1281L10	= ABE9C1281M	+ ABE9XCA1810
Connector only		
ABE9CM12C		



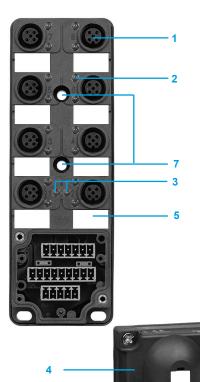
### Telefast™ ABE9 splitter boxes



#### **Description**

Passive ABE9 splitter boxes C12••C23 have the following on the front face:

- 1 4 or 8 M12 female connectors (depending on the model) for connection of sensors and actuators (2 channels per connector).
- 2 8 or 16 channel status indicator lights (depending on the model).
- 3 1 Power On indicator light on the splitter box (depending on the model).
- 4 1 M23, 19-pin male connector.
- 5 4 or 8 channel marker labels.
- 6 1 splitter box marker label.
- 7 Splitter box mounting holes.



Passive ABE9 splitter boxes C12••L•• have the following on the front face:

- 1 4 or 8 M12 female connectors (depending on the model) for connection of sensors and actuators (2 channels per connector).
- 2 8 or 16 channel status indicator lights (depending on the model).
- 3 2 Power On indicator lights on the splitter box (depending on the model).
- 4 1 removable connection cover fitted with plug-in terminals.
- 5 4 or 8 channel marker labels.
- 6 1 splitter box marker label.
- 7 Splitter box mounting holes.

# **IP67 passive splitter boxes**Telefast™ ABE9 splitter boxes

Splitter box type			ABE9C12e0C23	ABE9C12e1C23	ABE9C12e0Lee, ABE9C12e0M	ABE9C12e1Lee ABE9C12e1M	
<b>Environmental spe</b>	cifications						
Product certifications			cULus				
Temperature	Operation	°C (°F)	<b>F)</b> - 20 to +80 (- 4 to +176)				
	Storage	°C (°F)	F) - 40 to +85 (- 40 to +185)				
Degree of protection Conforming to IEC 529			IP67				
Vibration resistance	Conforming to IEC 68-2-6, test Fc	Hz	10–57 (constant amplitude = 1.5 mm) 57–150 (constant acceleration = 0.20 gn)				
Shock resistance Conforming to IEC/EN 68-2-2			30 gn, 11 ms				
Insulation group	sulation group VDE 0110		Category 3				
Mounting			All positions				
Mechanical mounting			M4 screw mounting				
Channel specificati	ons						
Number of channels			4 or 8 (depending on the model)				
Type of connection per channel			M12, 5-pin female connectors				
Nominal voltage			24				
Current per channel		Α	4 maximum				
Contact resistance		<b>m</b> Ω	5				
Power supply status indication			-	Green LED	-	Green LED	
Channel status indication			-	Yellow LED	-	Yellow LED	
<b>Connection specifi</b>	cations						
Type of connection			M23, 19-pin male connector		Multicore cable		
Total current in commons	1 mm <sup>2</sup> supply wire	Α	16				
	0.75 mm <sup>2</sup> supply wire	Α	12				
Separation of commons			Without		Without or with (by removing links BR1 and BR2)		

Substitution table	
Old range	New range
Splitter boxes with connec	tion by M23 connector
XZLC1241C3	ABE9C1241C23
XZLC1240C3	ABE9C1240C23
XZLC1281C3	ABE9C1281C23
XZLC1280C3	ABE9C1280C23
Splitter boxes with connec	tion by cable
XZLC1241L5	ABE9C1241L05
XZLC1240L5	ABE9C1240L05
XZLC1241L10	ABE9C1241L10
XZLC1240L10	ABE9C1240L10
XZLC1281L5	ABE9C1281L05
XZLC1280L5	ABE9C1280L05
XZLC1281L10	ABE9C1281L10
XZLC1280L10	ABE9C1280L10
Accessories	
XZLG102	FTXCM12B
XZLC1220C1	FTXCY1212



### Telefast™ ABE9 splitter boxes

Splitter boxes with connection by M23 connector

Splitter boxes with connection by cable

Connection

4 x M12 female connectors

8 x M12 female connectors

Connection by Length

10

4 x M12 female 5

connectors

LED

With

With

LED

With

With

indicator

Without

indicator

Catalog number

ABE9C1241C23

ABE9C1281C23

Catalog number

ABE9C1241L05

ABE9C1240L05

ABE9C1241L10

Without ABE9C1240C23

Without ABE9C1280C23

kg (lb)

0.080 (0.200)

0.080 (0.200)

0.140 (0.300)

0 140 (0.300)

Weight

kg (lb)

0.680 (1.500)

0.680 (1.500)

1.700

**Catalog Numbers** 

Number of channels

Number of channels







ABE9C128●C2











			10	VVITN	ABE9C1241L10	1.700	
						(3.700)	
				Without	ABE9C1240L10	1.700	
						(3.700)	
8		8 x M12 female	5	With	ABE9C1281L05	1.610	
		connectors				(3.500)	
				Without	ABE9C1280L05	1.610	
						(3.500)	
			10	With	ABE9C1281L10	3.060	
						(6.700)	
				Without	ABE9C1280L10	3.060	
						(6.700)	
Splitter box	es only. N	M12					
•	Number of channels For use with connector LED Catalog number						
Number of Cit	aillieis	terminal with cable		_indicator		Weight kg (lb)	
					A DE00404444	• , ,	
4		ABE9CM12C A	ABE9XCA14●●	vvitn	ABE9C1241M	0.060	
						(0.100)	
				Without	ABE9C1240M	0.060	
						(0.100)	
8		ABE9CM12C	ABE9XCA18●●	With	ABE9C1281M	0.100	
						(0.200)	
				Without	ABE9C1280M	0.100	
•						(0.200)	
Separate co	-	ts					
Type	No. of			Length	Catalog number	Weight	
	channels			m		kg (lb)	
Terminal	_	ABE9C124●M		_	ABE9CM12C	0.040	
block		ABE9C128●M				(0.088)	
connector (1)							
Connectors	4 ABE9C124●			5	ABE9XCA1405	1.060	
with cable				-		(2.300)	
				10	ABE9XCA1410	2.080	
	-					(4.600)	
	8	ABE9C128●M		5	ABE9XCA1805	1.510	
						(3.300)	
				10	ABE9XCA1810	2.240	
						(4.900)	
Accessor	ries						
Description		Composition			Catalog number	Weight	
Description		Composition			Outding Humber	kg (lb)	
Sealing plugs		For M8 connect	for (lot of 10)		FTX CM08B	0.100	
ocaning plays		i di Mid confilect	.01 (101 01 10)		I IX ONIOOD	(0.200)	
		For M12 conne	ctor (lot of 10)		FTX CM12B	0.100	
		I OI WITZ COILIE	cioi (lot oi 10)		I IA CIVITZD	(0.200)	
V connectors		Connection of 3	v MQ connecto	re to	FTX CY1208	0.020	
Y-connectors		Connection of 2 x M8 connectors to			F 1 A G 1 1200	(0.020	

M12 connector on splitter box

M12 connector on splitter box

Lot of 12

Connection of 2 x M12 connectors to

Marker labels

(0.044)

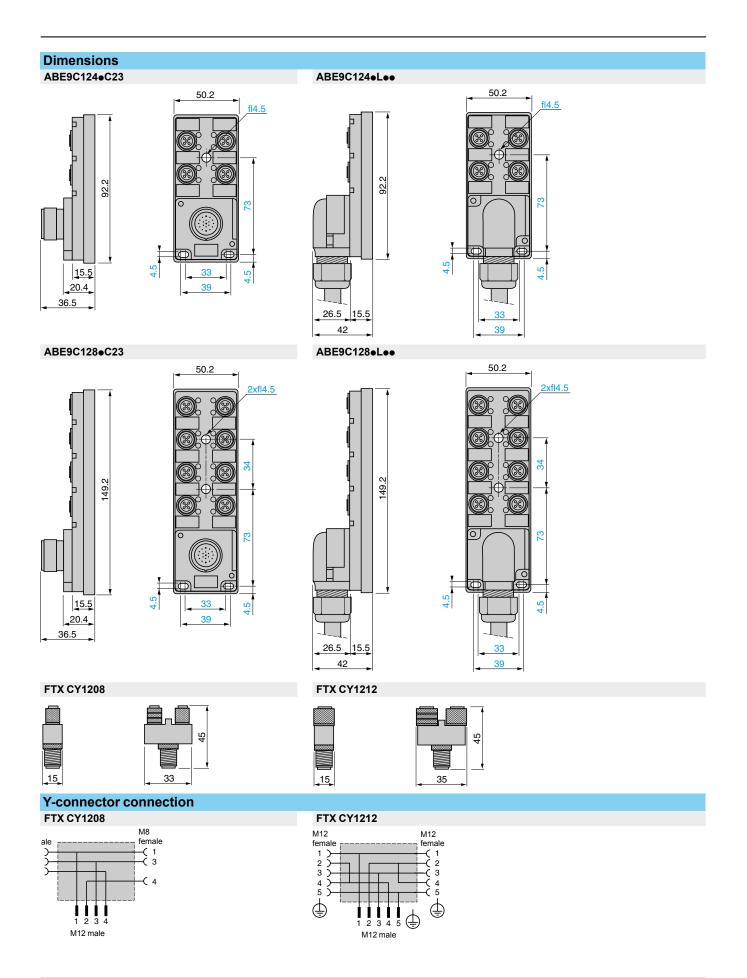
0.030 (0.066)

FTX CY1212

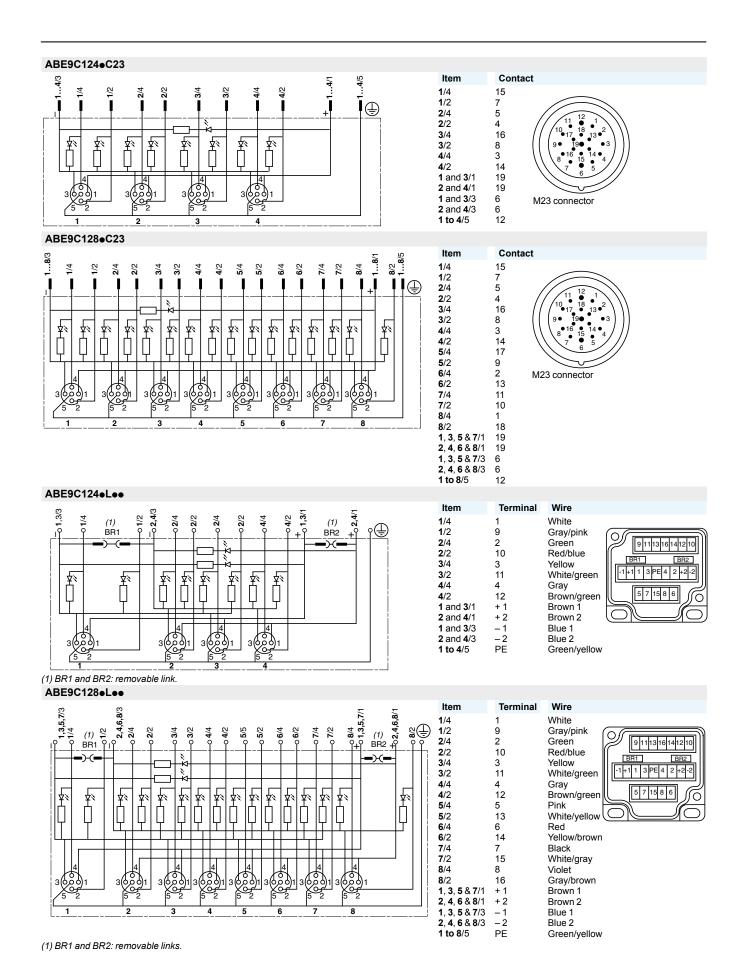
ABE9XLA10

<sup>(1)</sup> To be cabled by user.

Telefast™ ABE9 splitter boxes



Telefast™ ABE9 splitter boxes



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#### www.tesensors.com

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