

X90TB120.01-00

For more information about the following accessories, see www.molex.com.

1 Order data


Model number	Short description	Figure
	CMC connector	
X90TB120.01-00	X90 mobile 120, connector for CMC header, with connector contacts and dummy plugs	

Table 1: X90TB120.01-00 - Order data

2 Technical data

Model number	X90TB120.01-00
Short description	
Accessories	Set consists of: 1x mating connector X1, 1x wire cap for 48-pin mating connector, 10x female connector for 1.5 mm contacts, 50x female connector for 0.6 mm contacts, 20x blind plug for 0.6 mm contacts, 5x blind plug for 1.5 mm contacts
General information	
Certifications	
CE	Yes
Electrical properties	
Nominal voltage	12 / 24 VDC
Max. voltage	32 VDC
Nominal current ¹⁾	4 A for 0.6 mm connections / 10 A for 1.5 mm connections
Ambient conditions	
Temperature	
Operation	Corresponds to the X90 module used
Mechanical properties	
Weight	100 g
Vendor information	
Manufacturer	Molex
Manufacturer's product ID	Mating connector X1: 64320-1311 Wire cap for 48-pin mating connector: 64320-1301 Female connector for 1.5 mm contacts: 0643221039 Female connector for 0.6 mm contacts: 0643231039 Blind plug for 0.6 mm contacts: 0643251010 Blind plug for 1.5 mm contacts: 0643251023

Table 2: X90TB120.01-00 - Technical data

1) The respective limit data of the individual I/O channels must be taken into account!

3 Set contents



4 Mating connector


	Mating connector X1
Figure	
Manufacturer	Molex
Manufacturer's material number	64320-1311
Connections	40x 0.6 mm / 8x 1.5 mm
Color	Black

Table 3: Mating connector

5 Wire cap for mating connector


	Wire cap for 48-pin mating connector
Figure	
Manufacturer	Molex
Manufacturer's material number	64320-1301

Table 4: Wire cap for mating connector

6 Blind plug for contacts



	Blind plug for 0.6 mm contacts	Blind plug for 1.5 mm contacts
Figure		
Manufacturer	Molex	
Manufacturer's model number	0643251010	0643251023

Table 5: Blind plug for contacts

7 Installation tool

7.1 Extraction tool



	Extraction tool for 0.6 mm pins	Extraction tool for 1.5 mm pins
Figure		
Manufacturer	Molex	
Manufacturer's model number	63813-2400	63813-2300

Table 6: Extraction tool

7.2 Hand crimp tool


	Hand crimp tool			
Figure				
Manufacturer	Molex			
Cross section	22 AWG or 0.35 mm ²	20/18 AWG or 0.5 to 0.75 mm ²	18 AWG or 0.5 to 0.75 mm ²	16/14 AWG or 1 to 2 mm ²
Manufacturer's model number	63811-9100	63811-9200	63811-8900	63811-9000

Table 7: Hand crimp tool

7.3 Applicator


	Applicator			
Figure				
Cross section	22 AWG or 0.35 to 0.5 mm ²	20/18 AWG or 0.75 mm ²	18 AWG or 0.5 to 1 mm ²	16/14 AWG or 1.5 to 2 mm ²
Manufacturer	Molex			
Manufacturer's model number	63902-1900	63902-2000	63868-8000	63868-8100

Table 8: Applicator

8 Mating connector X1 - Accessory installation

Information:

The following characteristics, features and limit values are obtained from the manufacturer. For more information about the product, see the manufacturer's website at www.molex.com.

All unused contacts must first be fitted with the appropriate blind plugs. The orange blind plugs must be inserted into the 1.5 mm² contacts; the white blind plugs must be inserted into the 0.6 mm² contacts. The blind plugs must be pressed in towards the housing all the way to their "head".

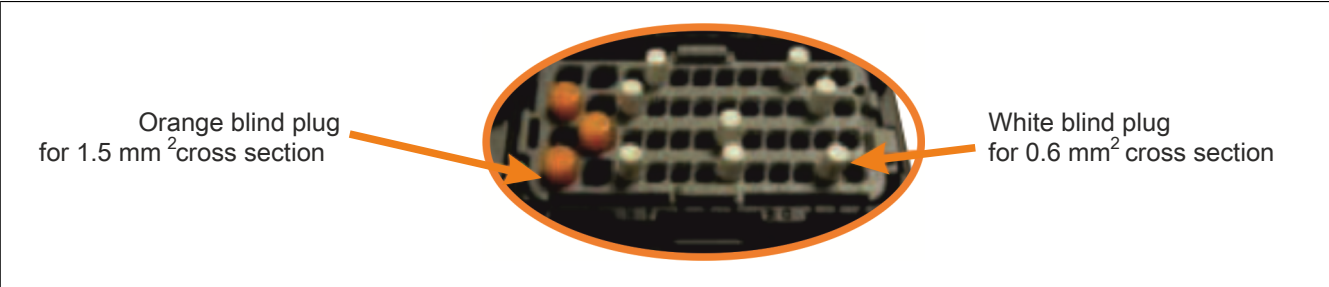


Figure 1: Unused pins - Blind plugs (image by Molex)

Notice!

Unused pins must be fitted with blind plugs; otherwise, the IP rating cannot be guaranteed.

Mating connector X1 is unlocked by pulling out the gray latch (with a screwdriver, for example).

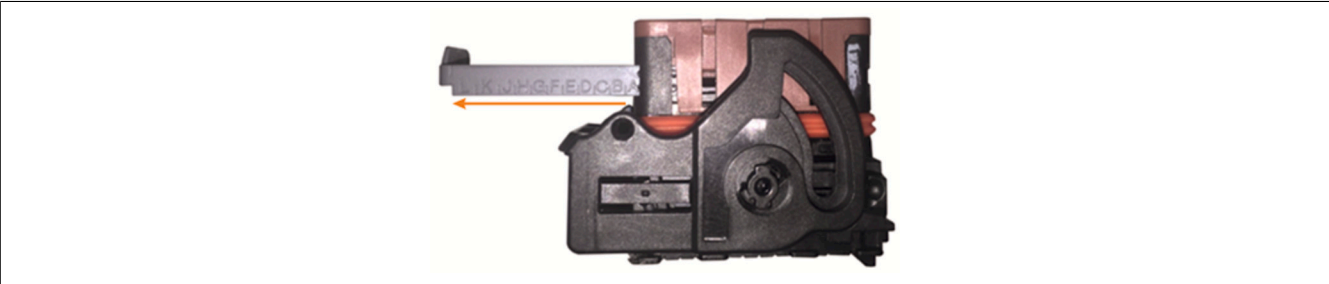


Figure 2: Unlocking mating connector X1

The appropriate female connector can be crimped to the cable using the crimping tool ¹⁾ or applicator²⁾ The following spacing is recommended for the cable length in mating connector X1:

Row	A	B	C	D	E	F	G	H	J	K	L	M
48-pin	49 mm	51 mm	53 mm	55 mm	57 mm	59 mm	61 mm	63 mm	65 mm	68 mm	75 mm	80 mm
32-pin	50 mm	52 mm	54 mm	56 mm	58 mm	60 mm	63 mm	65 mm				

Table 9: Recommended cable length in mating connector X1



Figure 3: Recommended cable length in mating connector (image by Molex)



Figure 4: Mating connector X1 - Row specifications

Push the cable into mating connector X1 with the "push-click-pull" method while taking the latch keying into account.

¹⁾ Recommended Molex accessories: 63811-9100, 63811-9200, 63811-8900, 63811-9000.
²⁾ Recommended Molex accessories: 63902-1900, 63902-2000, 63868-8000, 63868-8100.

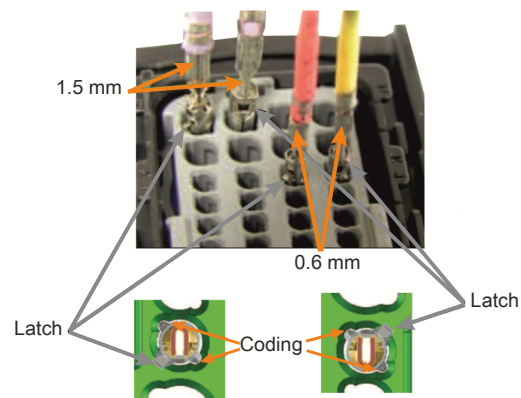


Figure 5: Inserting the cable (image by Molex)

Lock mating connector X1 again by pushing the gray latch back into mating connector X1.

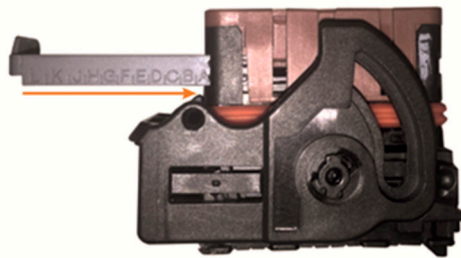


Figure 6: Locking mating connector X1

Information:

If the gray latch jams when trying to push it in, then a cable or blind plug is not inserted properly. The row in which this cable / blind plug is inserted can be identified from the gray latch.

Lock the wire cap to mating connector X1 (over the gray latch) and pull it over the connector until it locks into place.

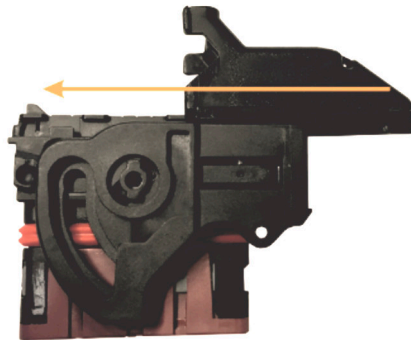


Figure 7: Installing the wire cap

Rotate the black latch up 90° until the latch locks onto the wire cap.

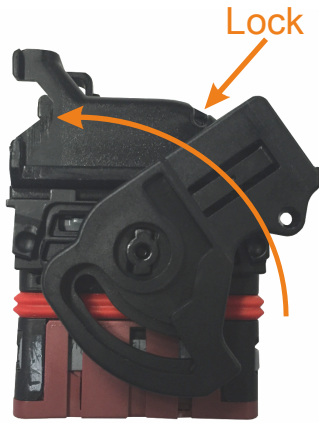


Figure 8: Rotating the latch



Figure 9: Locking the latch

The stranded wire must be protected against vibration using a cable tie through the clap on the wire cap.

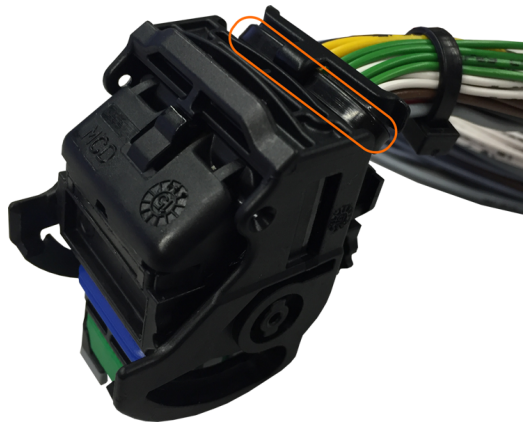


Figure 10: Cable tie clip

The cables for mating connector X1 must be fastened down with suitable cable clamps.

9 Mating connector X1 - Accessory removal

All cable ties / cable clamps must be removed first.

The wire cap is unlocked by pressing down on the fastening clip (with a screwdriver, for example) and then rotating the black latch down 90°.



Figure 11: Pressing on the fastening clip



Figure 12: Rotating the latch

To remove the wire cap from mating connector X1, the two locking points must be disengaged with a screwdriver. This is done by pressing the screwdriver into one of the two slots and simultaneously pressing the wire cap in the opposite direction. This procedure must then be repeated on the other side of the wire cap. The wire cap can now easily be removed.

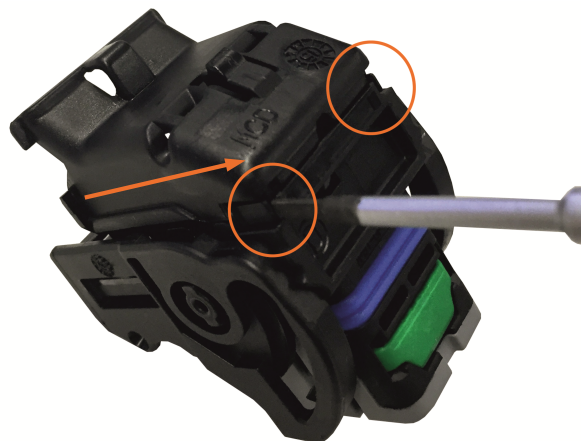


Figure 13: Removing the wire cap

To remove the cables, the gray latch must first be pulled out (with a screwdriver, for example).

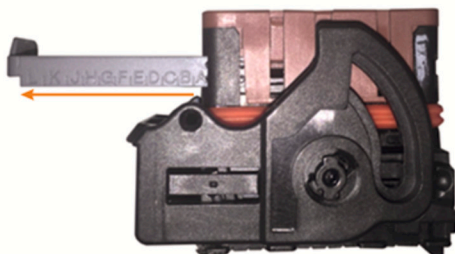


Figure 14: Unlocking mating connector X1

Press the cable into mating connector X1 (1). Insert the removal tool into the correct slots (2). Remove the cable (3).

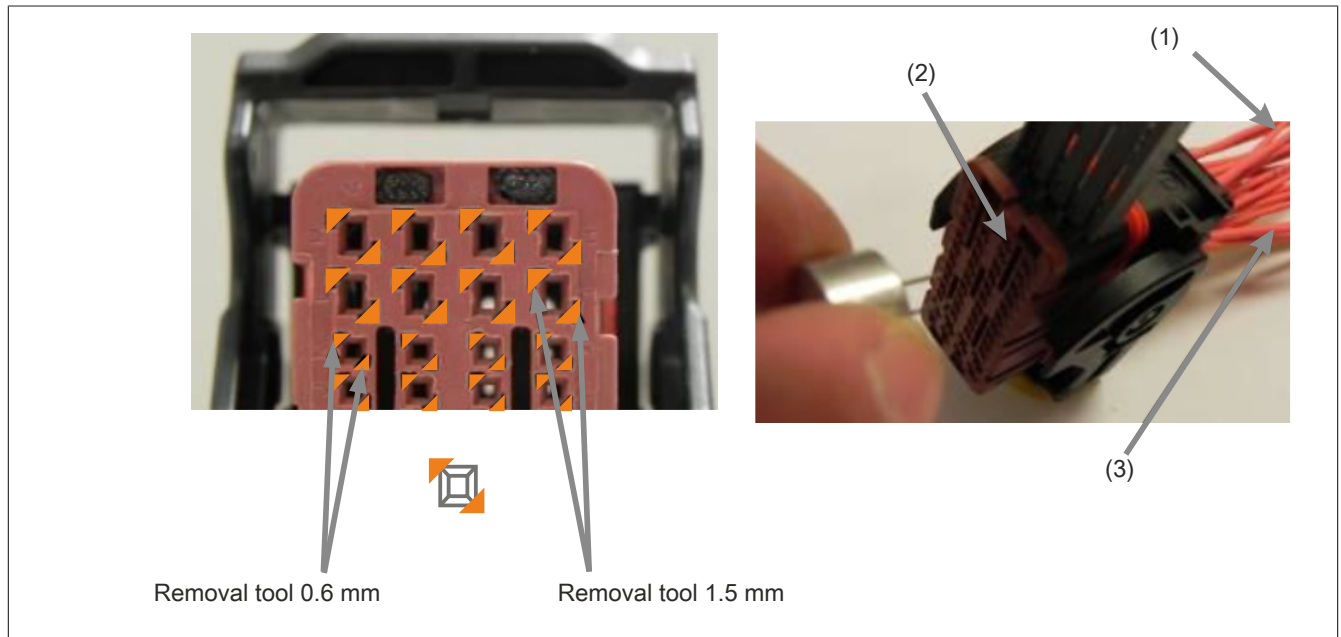


Figure 15: Removing the cable (image by Molex)