Assembly Instructions

M23 Elite Series 12,16,17 Position Plug Assembly Instructions

Step 1 - Slide the components over the cable

Step 2 - Remove the cable jacket 28mm

Step 3 - Cut the shield back 13mm

Step 4 - Fold the shield back over the cable jacket

Step 5 - Strip the wires 4.5mm

Step 6 - Crimp a contact onto each wire

Step 7 - Push the contacts into the insert as required
Assembly Instructions

M23 Elite Series 12,16,17 Position Plug Assembly Instructions (cont)

Step 8 - Pushed contacts

Step 9 - Push the Collar onto the insert

Step 10 - Position the shield as shown
Assembly Instructions

M23 Elite Series 12,16,17 Position Plug Assembly Instructions (cont)

Step 11 - Slide the cord grip up to the collar

Step 12 - Trim the shield

Step 13 - Grip the sub-assembly as shown

Step 14 - Push the sub-assembly into the shell
Assembly Instructions

M23 Elite Series 12,16,17 Position Plug Assembly Instructions (cont)

Step 15 - Thread the top nut onto the shell

Step 16 - Tighten to 5-7 N/M using 25mm wrench

Step 17 - Finished Assembly
Assembly Instructions

M23 Elite Series 6,8,9 Position Plug Assembly Instructions

Step 1 - Remove the cable jacket 30mm

Step 2 - Cut the shield back 19mm

Step 3 - Fold shield back over cable

Step 4 - Cut power & PE wires to 28mm

Step 5a - Strip power & PE wires 7mm

Step 5b - Strip signal wire 4.5mm

Step 6 - Crimp contacts

Step 7 - Open contact holder

PLEASE NOTE THAT THE INSERT IS FIXED IN PLACE AND MUST NOT BE REMOVED. DOING SO WILL PERNAMENTLY DAMAGE THE CONNECTOR.
Assembly Instructions

M23 Elite Series 6,8,9 Position Plug Assembly Instructions (con’t)

Step 8 - Insert contacts while the contact holder is open

Step 9 - Close the contact holder

Step 10 - Insert the rest of the contacts

Step 11 - Push the contact holder into the sleeve
Assembly Instructions

M23 Elite Series 6,8,9 Position Plug Assembly Instructions (con’t)

Step 12 - Position shield as shown back over the cable

Step 13 - Clip the cord grip as shown with the shield sticking out around it

Step 14 - Trim shield as shown

Step 15 - Push sub-assembly into shell
Assembly Instructions

M23 Elite Series 6,8,9 Position Plug Assembly Instructions (con’t)

Step 16 - Thread the top nut on

Step 17 - Tighten to 5-7 N/M using 25mm wrench

Step 18 - Finished Assembly
**Assembly Instructions**

M23 Elite Series 12, 16, 17 Position 90° Receptacle Assembly Instructions

**Step 1** - Strip wire 4.5mm

**Step 3** - Slide wires through shell

**Step 4** - Crimp contacts onto wire

**Step 4** - Push wire into insert

**Step 5** - Locate keys on sides of insert
Assembly Instructions

M23 Elite Series 12,16,17 Position 90° Receptacle Assembly Instructions (con’t)

Step 6 - Insert tabs into slots and align the key slots accordingly to their respective key position.

Step 7 - Assemble cover
Assembly Instructions
M23 Elite Series 12, 16, 17 Position 90° Receptacle Assembly Instructions (con’t)

Step 8 - Screw the cover down using 2.5mm Allen Wrench

Step 9 - Finished product
Assembly Instructions

M23 Elite Series 6,8,9 Position 90° Receptacle Assembly Instructions

Step 1A - Strip wire 7mm
(this uses 2.0mm contacts)

Step 1B - Strip wire 4.5mm
(this uses 1.0mm contacts)

Step 2 - Crimp wire to contact

Step 3 - Insert wires through shell

Step 4 - Open Contact holder
Assembly Instructions

M23 Elite Series 6,8,9 Position 90° Receptacle Assembly Instructions (con’t)

Step 5 - Insert wire into the contact holder while its open

Step 6 - Close and insert the rest of the wires into the contact holder
Assembly Instructions

M23 Elite Series 6,8,9 Position 90º Receptacle Assembly Instructions (con’t)

Step 7 - Push the contact holder into the sleeve

Step 8 - Align the key on the sleeve with the key on the shell

Step 9 - Place sub-assembly into shell
Assembly Instructions

M23 Elite Series 6,8,9 Position 90° Receptacle Assembly Instructions (con't)

Step 10 - Assemble cover

Step 11 - Tighten screw down using 2.5mm Allen Wrench

Step 12 - Finished Product
Assembly Instructions

M23 Standard Series Straight Receptacle Assembly Instructions

Step 1 - Strip wire 4.5mm

Step 2 - Crimp contact to wire

Step 3 - Push contact into place
Assembly Instructions

FlexGrip™ Backshell System

FlexGrip™ Backshells come in various sizes, ranging from 8.5mm - 18.5mm. FlexGrip™ Backshells must be potted to achieve IP67 ratings. Note: Industry standard strain relief/cord grip options, achieving IP67 ratings, are also available.

Two-Piece Clamping System/Compression Ribs
Ensures secure gripping of cable jacket material to connector housing. Simplified shielding process.

Potting Access Point
Allows access to the potting cavity which ensures additional mechanical strength, electrical insulation, and vibration/shock resistance.
Assembly Instructions

Standard Series Plug and Cable Prep and Assembly featuring the FlexGrip™ Backshell

**FlexGrip™ Prep Details**: During cable prep specific to using the FlexGrip backshell, be sure excess shielding material is pulled back over the cable jacket and taped down. This allows for ease of sliding FlexGrip™ parts into place.

**Note**: ** Cable prep is same for P1 (Male) connectors using FlexGrip™ backshells as P2 (Female).

Step 7B: (FlexGrip™ Only) Thread into position the bottom part of the Two-Piece Clamp onto the backend of the connector body tightly, ensuring excess shielding material is still exposed underneath the Two-Piece Clamp.

Step 8B: (FlexGrip™ Only) Place the top portion of the Two-Piece Clamp into position and use the enclosed screws to tighten into place.

Step 9B: (FlexGrip™ Only) Cut off excess shielding material behind Two-Piece Clamp.

Step 10B: (FlexGrip™ Only) Slide FlexGrip™ Shell overlap the backend portion of the Two-Piece Clamp hardware.

Step 9A: (Cord Grip Only) Push Rubber Seal Grommet into backend of Cord Grip Body.

Step 10A: (Cord Grip Only) Thread Cord Grip Cap onto Cord Grip Body and tighten to torque specs. (insert torque specs here)
Assembly Instructions

M23 Shielded Backshell Assembly Instructions

1. Slide seal-nut (A), cable grommet (B), and backshell (C) onto cable as shown in Figure 1.

2. Remove outer cable jacket per dimension (42mm) shown in Figure 1. Make sure exposed shielding is not nicked or cut.

3. Accurately locate and tighten tie wrap (D) 8mm from cable jacket (Figure 1).

4. Trim excess tie wrap as close as possible to ratchet body. Refer to Reference View A, shown below.

5. Trim the braided shield flush to the edge of the tie wrap (D), exposing the individual wires as shown in Figure 2.

6. Strip individual wire leads to expose 5mm of bare conductor as shown in Figure 2.

7. Crimp contacts (E) onto stripped wire leads (Figure 3).

8. Insert crimped contacts (E) into connector cavities (F), as shown in Figure 3. Verify contacts are properly sealed once installed.
9. Tighten “backshell” (C) to connector (F) as shown in Figure 4. Use a 24mm open ended wrench for the backshell, and a 25mm open ended wrench for the connector. Tighten to a recommended torque of 10Nm.

10. Slide shielding clip (G) over cable jacket as shown in Figure 4.

11. Push shielding clip (G) into backshell (C) until it stops against inside wall as shown in Reference View-B. Clip must be seated over exposed shielding and not over cable jacket.

   Note: Clip must be slightly compressed to allow it to enter into the backshell.

12. Push cable grommet (B) into backshell (C) as shown Figure 5.

13. Thread and tighten seal-nut (A) onto backshell (C) as shown in Figure 6. Use a 24mm open ended wrench for the backshell, and a 25mm open ended wrench for the seal-nut.

   Note: Seal nut torque required to properly retain and seal cable may vary depending on cable construction.