

“These cables require special handling procedures to extend the life of the assembly and to ensure optimum electrical performance. Taking just a few basic preventative measures during handling could significantly reduce the possibility of damage:

Limit bend radius whenever possible:

Although the cable assemblies can accommodate a very small bend radius, it is recommend to use the widest possible bend radius to fit the application. This will help to keep mechanical stresses low through the bend and prolong the life of the assembly.

Avoid torquing down connector ends until both connectors are mated in position:

It is important to first hand tighten both connectors into position before any torque is applied. If a connector is torqued down before the assembly is routed into position excessive torsion could be applied at the torqued connector's termination during the routing. These torsion forces could cause the dielectric to change its mechanical position at the connector termination. This could ultimately lead to an electrical failure.

Avoid twisting assembly to orient connectors:

When installing assemblies with right angle connectors do not twist the cable or connectors to orient it with the mating connectors. Twisting the assembly could result in mechanically changing the dielectric position at the termination and ultimately lead to an electrical failure. Assemblies should be purchased with a specific connector offset angle to match the proper mating connector. If an offset angle needs to be changed during assembly installation, proper adjustment procedures can be obtained by calling Technical Support.

Avoid bending the assembly at the connector termination:

A cable assembly should never be bent at the back of the connector. Applying a bend prematurely at the end of an assembly and allowing the bend to encompass the connector could lead to the build up of excessive cable forces against the connector and through the bend area. The applied forces will cause the cable to kink. Electrical degradation and possible failure may result.

Avoid pulling an assembly through channeling by the connector end:

Never pull an assembly by its connector when routing it through a frame work, channeling or building. Doing this could mechanically damage the connector termination. The assembly should always be pulled by the cable itself. Furthermore, the installation should be assisted by pushing the assembly through the channeling while the cable is pulled. Additionally, it is less stressful to the assembly if it is installed in phases (through individual sections) rather than a single run across the entire routing length.

Never allow an assembly to support its own weight when routed in a vertical installation:

Never allow an assembly to hang freely by its own weight; Clamp down the cable at equal intervals along its length. Cable hangers can be used when it is not possible to clamp down the assembly in a vertical installation provided the assembly has been reinforced for such an installation. Using multiple hangers whenever possible is also recommended to help evenly distribute the assembly's weight along the run.

Avoid subjecting the connector ends to cable axial loads:

Cable assembly life can be increased by clamping down the cable a few inches from the connector ends in applications where the cable will be moving (such as a moving antenna) or where a high vibration condition exists. Clamping the cable down at the cable ends reduces mechanical loads applied to the connector when the cable is moved.

Always provide adequate drip loops:

Always allow for a drip loop in outside applications to prevent water from flowing down the cable and onto the connector. Over time the water could work its way into the connector assembly causing high insertion losses.

Take extra care on short assemblies:

- Always bend assemblies around mandrels whenever possible:
The use of mandrels or wheels will help to evenly distribute bending loads applied to the cable. This is the preferred method for bending cables.
- Take caution when bending cables by hand:
Sometimes bending a cable by hand is the only option. In this case the following method should be used;
 - Start at bending point keeping hands close together.
 - Bend the cable a little at a time working in an outward direction along the bend.
 - Return to the center point of the bend and work in an outward direction making the bend a little tighter.
 - Continue to return to the center of the bend, and working outward until the desired bend is reached.

Take caution bending cables under 12" in length.

An assembly that is 12" in length and smaller can be very rigid depending on the cable type. The cable becomes rigid because its inner and outer conductors are fully (mechanically) terminated to the cable connectors. The cable is terminated this way to yield maximum electrical performance. Unfortunately, it minimizes the bending characteristics of the assembly because the cable is too short to accommodate the total material volume displacement needed for a typical bend. Often, the minimum bend radius can not be achieved without damaging the assembly. Therefore, short cables should only be used in applications where slight jogging bends will be used. A longer assembly that uses a service loop should be considered as a replacement for a short cable in situation where a tight or sharp bend is needed."

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