

## DIN Connectors and N Connectors

### Installation Guidelines Using an Automated Cable Prep Tool

**NOTE:** These installation instructions have been written for qualified, experienced personnel. Please read them thoroughly before starting assembly work. Superior Essex disclaims any liability or responsibility for the result of improper or unsafe installation practices.

#### Recommended Installation Tools



1. Drill
2. Automated cable prep tool  
*(see the "Cable and Prep Tool Matrix" on page 2)*
3. 19 mm open-ended wrench
4. 19 mm, 21 mm or 22 mm open-ended torque wrench  
*(see the "Cable and Prep Tool Matrix" on page 2)*
5. Cable clamping device (optional)
6. Flaring tool  
*(see the "Cable and Prep Tool Matrix" on page 2)*
7. Cable cutter
8. Razor knife
9. Gloves
10. Eye protection
11. Center Conductor Cleaning Tool







#### Getting Started

Proper safety requirements should always be followed and local practices maintained. It is recommended that the installer wear protective eye gear and gloves during many of the installation steps to avoid the possibility of bodily injury.

#### Table of Contents

Cable and Prep Tool Matrix .....	2
Installing Connectors for LHF-12DR and HFAC-12DR Cables .....	3
Installing Connectors for LHF-12DPV and HFAC-12DPV Cables .....	6
Installing Connectors for HFSC-12DR and HFSC-12DP Cables .....	9

## Cable and Prep Tool Matrix

					
1/2" Riser/RF Feeder Cables	Riser Connectors	Wrenches Torque/Open-Ended	Cable Prep Drill Tool	Drill Tool Blade Replacement Kit	Flaring Tool
LHF-12DR / LHF-12D	CLH-12NM	19/21	T-LHF12DR	TBK-LHFA12	TF-LFHA12
	CLH-12NF	19/21			
	CLH-12NMR	19/22			
	CLH-12NFR	19/22			
HFAC-12DR	CHFA-12NM	19/21	T-HFAC12DR	TBK-LHFA12	TF-LFHA12
	CHFA-12NF	19/21			
	CHFA12NMR	19/22			
	CHFA12NFR	19/22			
HFSC-12DR / HFSC-12D	CHFS-12NM	19/19	T-HFSC12DR	TBK-HFSC12	TF-HFSC12
	CHFS-12NF	19/19			
	CHFS12NMR	22/19			
	CHFS12NFR	22/19			

					
1/2" Plenum Cables	Plenum Connectors	Compatible Wrench Torque/Open-Ended	Cable Prep Drill Tool	Drill Tool Blade Replacement Kit	Flaring Tool
LHF-12DP	CLHP-12NM	19/21	T-LHFA12DP	TBK-LHFA12	TF-LFHA12
	CLHP-12NF	19/21			
	CLHP12NMR	19/22			
	CLHP12NFR	19/22			
LHF-12DPV	CLHPV-1243M	20/21	T-LHFA12DPV	TBK-LHFA12	TF-LFHA12
	CLHPV-1243F	20/21			
	CLHPV-12NM	20/21			
	CLHPV-12NP	20/21			
HFAC-12DPV	CHFAP12NM	19/21	T-LHFA12DPV	TBK-LHFA12	TF-LFHA12
	CHFAP12NF	19/21			
	CHFAP12NMR	19/22			
	CHFAP12NFR	19/22			
HFSC-12DP	CHFSP12NM	19/19	T-HFSC12DP	TBK-HFSC12	TF-HFSC12
	CHFSP12NF	19/19			
	CHFSP12NMR	22/19			
	CHFSP12NFR	22/19			

## Installing Connectors for LHF-12DR and HFAC-12DR Cables



### Procedure

1. Hold or secure cable and clean cut end of cable with appropriate cable cutting device.



2. Insert straightened cable end into prep tool, start drill and apply steady pressure until cut material is discharged and you hear and feel a change in drill speed. Maintain tool rotation while removing the tool from the cable.



3. Thoroughly clean any excess material and debris. Use center conductor cleaning tool to remove any excess clear coat.



4. Install O-ring onto cable at third corrugation from jacket.



5. Apply provided grease on O-ring and spread evenly.



6. Push connector base onto cable until connector base locks over first corrugation. The outer conductor of the cable should protrude slightly past the connector base.



7. Slide flare tool onto cable and flare the outer conductor by rotating clockwise. Clean any leftover debris from the foam, conductors and connector mating surfaces.



8. Hand tighten connector top onto base.



9. With a 21 mm open end wrench, hold connector top in place. Thread connector base to connector top and tighten with a 19 mm torque wrench set at 15 ft-lbs. A 22 mm open-ended wrench should be used for holding the connector top when tightening right angle connectors to the base. The O-ring should no longer be visible and the connector should be tight.



10. Until connector is ready for use, leave plastic cap on connector end to prevent contamination. Installation is complete.



## Installing Connectors for LHF-12DPV and HFAC-12DPV Cables



### Procedure

1. Hold or secure cable and clean cut end of cable with appropriate cable cutting device.



2. Insert straightened cable end into prep tool, start drill and apply steady pressure until cut material is discharged and you hear and feel a change in drill speed. Maintain tool rotation while removing the tool from the cable.



3. Thoroughly clean any excess material and debris. Use center conductor cleaning tool to remove any excess clear coat.



4. Trim dielectric so that it is even with the outer conductor.



5. Install O-ring onto cable at third corrugation from jacket.



6. Apply provided grease on O-ring and spread evenly.



7. Push connector base onto cable until connector base locks over first corrugation. The outer conductor of the cable should protrude slightly past the connector base.



- Slide flare tool onto cable and flare the outer conductor by rotating clockwise. Clean any leftover debris from the foam, conductors and connector mating surfaces.



- Hand tighten connector top onto base.



- With a 21 mm open end wrench, hold connector top in place. Thread connector base to connector top and tighten with a 19 mm torque wrench set at 15 ft-lbs. A 22 mm open-ended wrench should be used for holding the connector top to the base. The O-ring should no longer be visible and the connector should be tight.



- Until connector is ready for use, leave plastic cap on connector end to prevent contamination. Installation is complete.





## Installing Connectors for HFSC-12DR and HFSC-12DP Cables



### Procedure

1. Hold or secure cable and clean cut end of cable with appropriate cable cutting device.



2. Insert straightened cable end into prep tool, start drill and apply steady pressure until cut material is discharged and you hear and feel a change in drill speed. Maintain tool rotation while removing the tool from the cable.



**PLENUM CABLE ONLY:**

Using a razor knife, trim any remaining dielectric so that it is flush with the outer conductor.

**PLENUM AND RISER CABLES:**

Thoroughly clean any excess material and debris. Use center conductor cleaning tool to remove any excess clear coat.



3. Install threaded gasket close to cable jacket.



4. Apply provided grease on gasket and spread evenly.



5. Using a 19 mm wrench, thread the connector base until one full corrugation spiral is exposed beyond the connector end ( $\frac{1}{8}$  inch or 2.5 mm).



- Slide flare tool onto cable and flare the outer conductor by rotating clockwise. Clean any leftover debris from the foam, conductors and connector mating surfaces.



- Hand tighten connector top onto base.



- With a 19 mm open end wrench, hold connector base in place. Thread connector top to connector base and tighten with a 19 mm open end torque wrench set to 15 ft-lbs. A 22 mm open-ended torque wrench set at 15 ft-lbs should be used for tightening right angle connectors to the base. The O-ring should no longer be visible and connector should be tight.



- Until connector is ready for use, leave plastic cap on connector end to prevent contamination. Installation is complete.

