

**Titel**

**1.85 Connector and Cable Assembly (70GHz)**

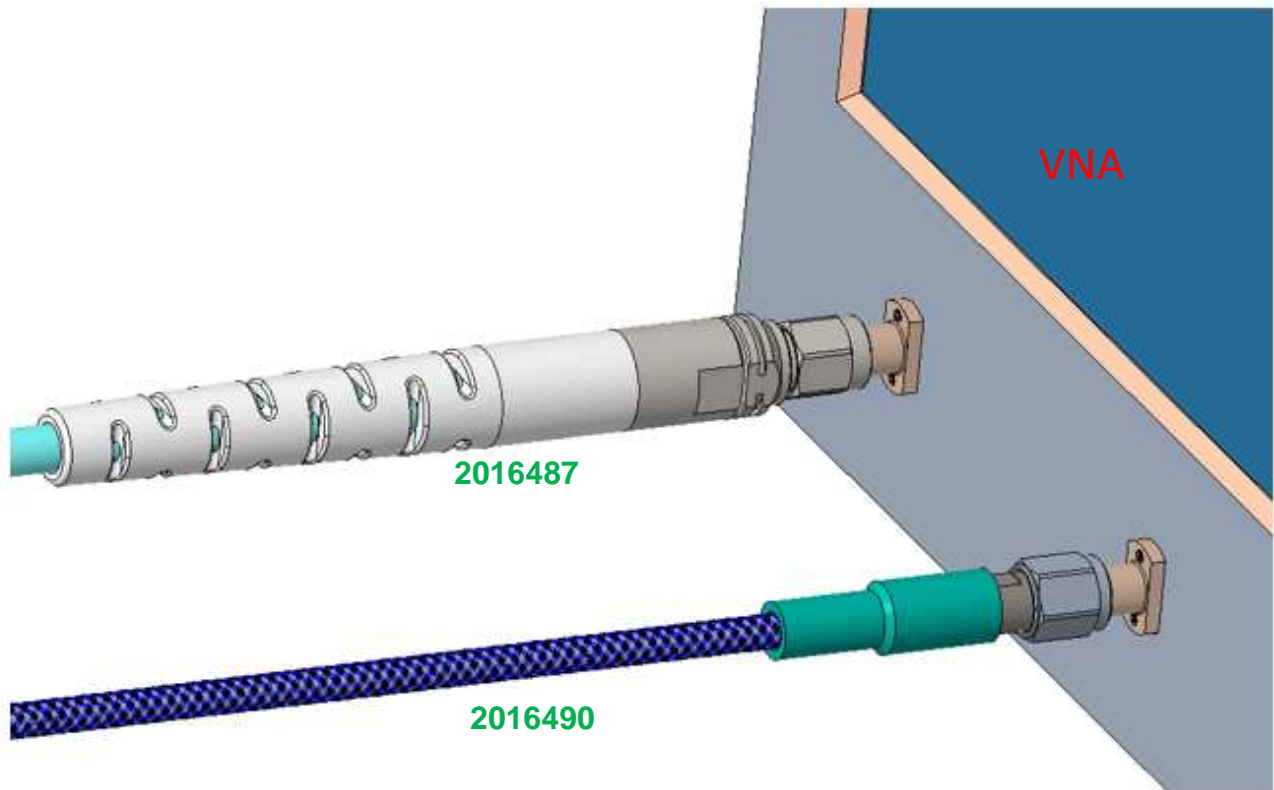
**1. Introduction**

This specification covers the requirements for application of the 70GHz high frequency cable assembly system, which is designed to perform high frequency connections using a variety of cables and connectors.

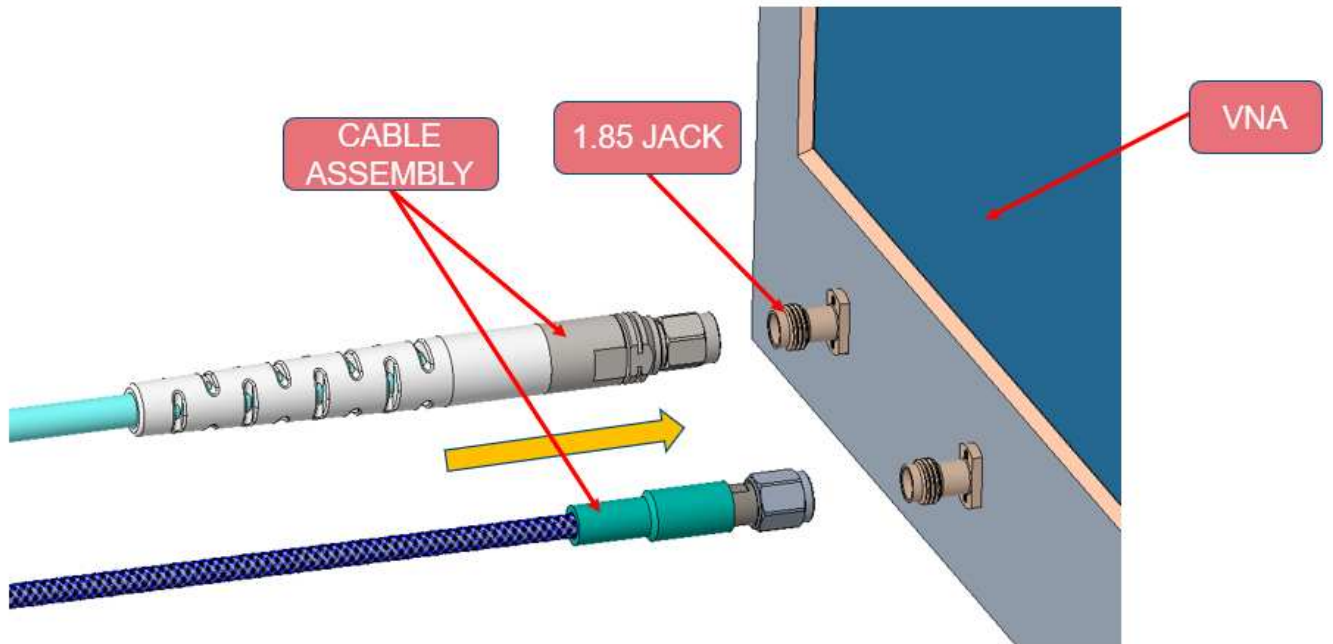
Connector performance characteristics are provided in the product specification for the applied connection type.

When corresponding with personnel, use the terminology provided in this specification to facilitate your inquiries for information. Basic terms and features of this product are provided in figure 1.

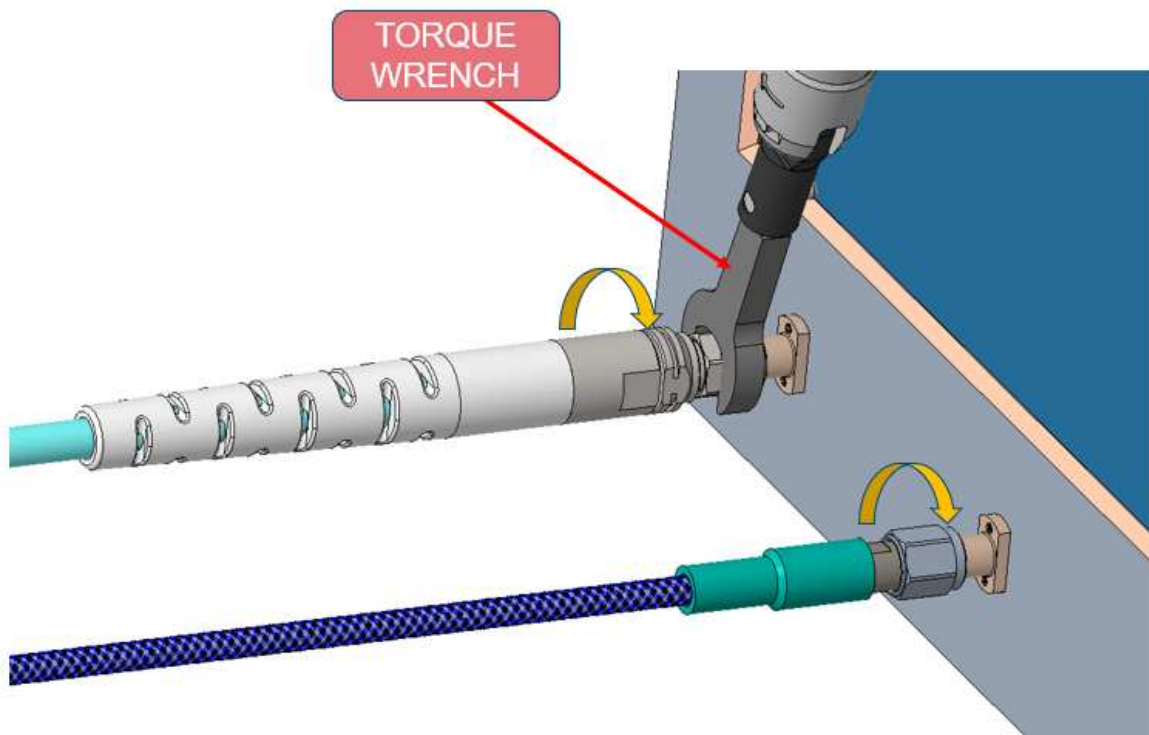
Figure 1



Cable Assembly	Panel Connector	Tooling
2016487	2081937-1	Hex 8mm Torque Wrench
2016490		



**Step1: Align cable assembly with connector, and slide the cable assembly to connect**



**Step2: apply torque wrench and fasten cable assembly on test equipment (eg:VNA,TDR...)**



*In order to avoid decreased network performance, we recommend the use of a torque wrench to ensure proper tightening of your connectors.*

Figure 2. Shows typical application of 1.85, 1.85 coupling (Screw Lock), Carefully align the two connectors, bringing them together along a common axis.

Figure 2

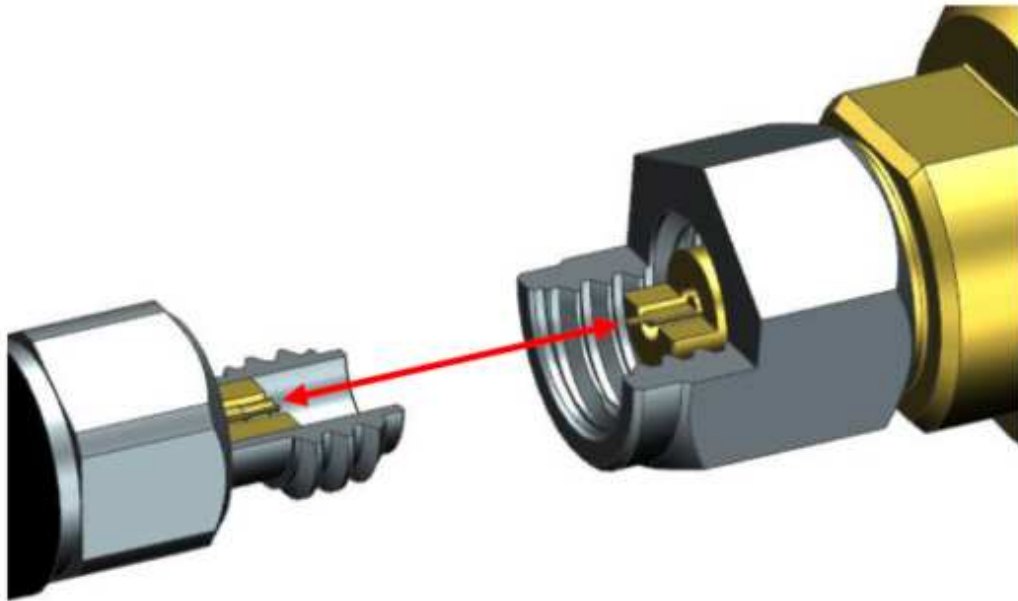


Figure 3. Extra care must be applied on types of connector that have a protruding male pin that engages with the female socket before the outer threaded conductor has started to mesh, to avoid damage to either or both inner conductors,

Figure 3

ONLY TURN THE OUTER CONNECTOR NUT.

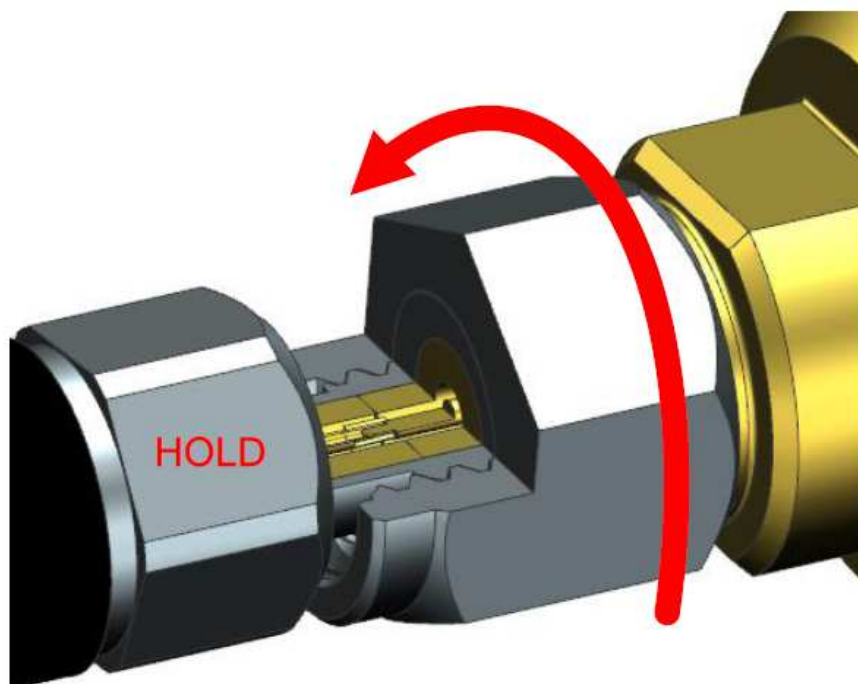
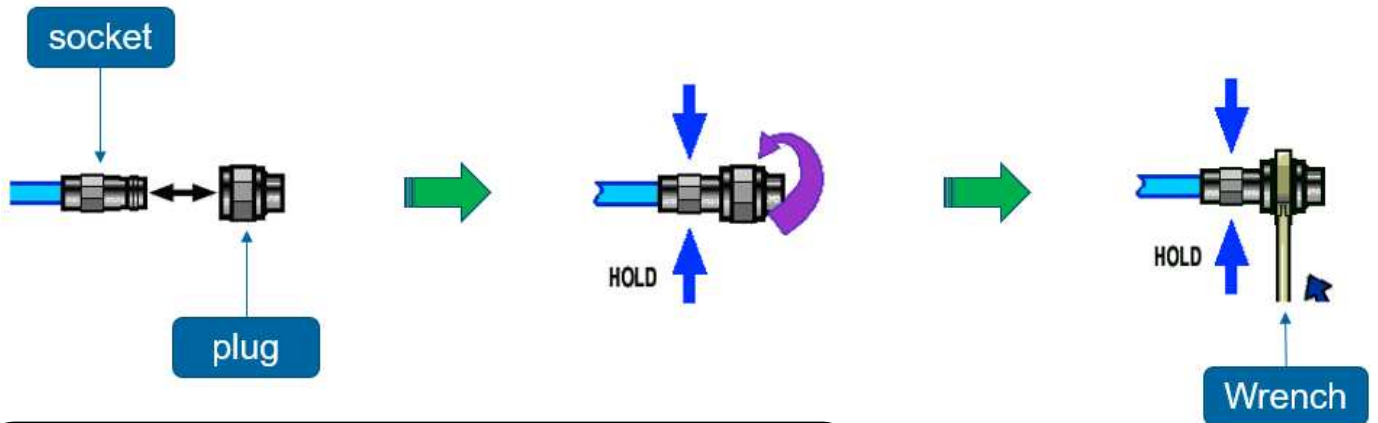


Figure 4. All connectors must be undamaged, clean, and within mechanical specification

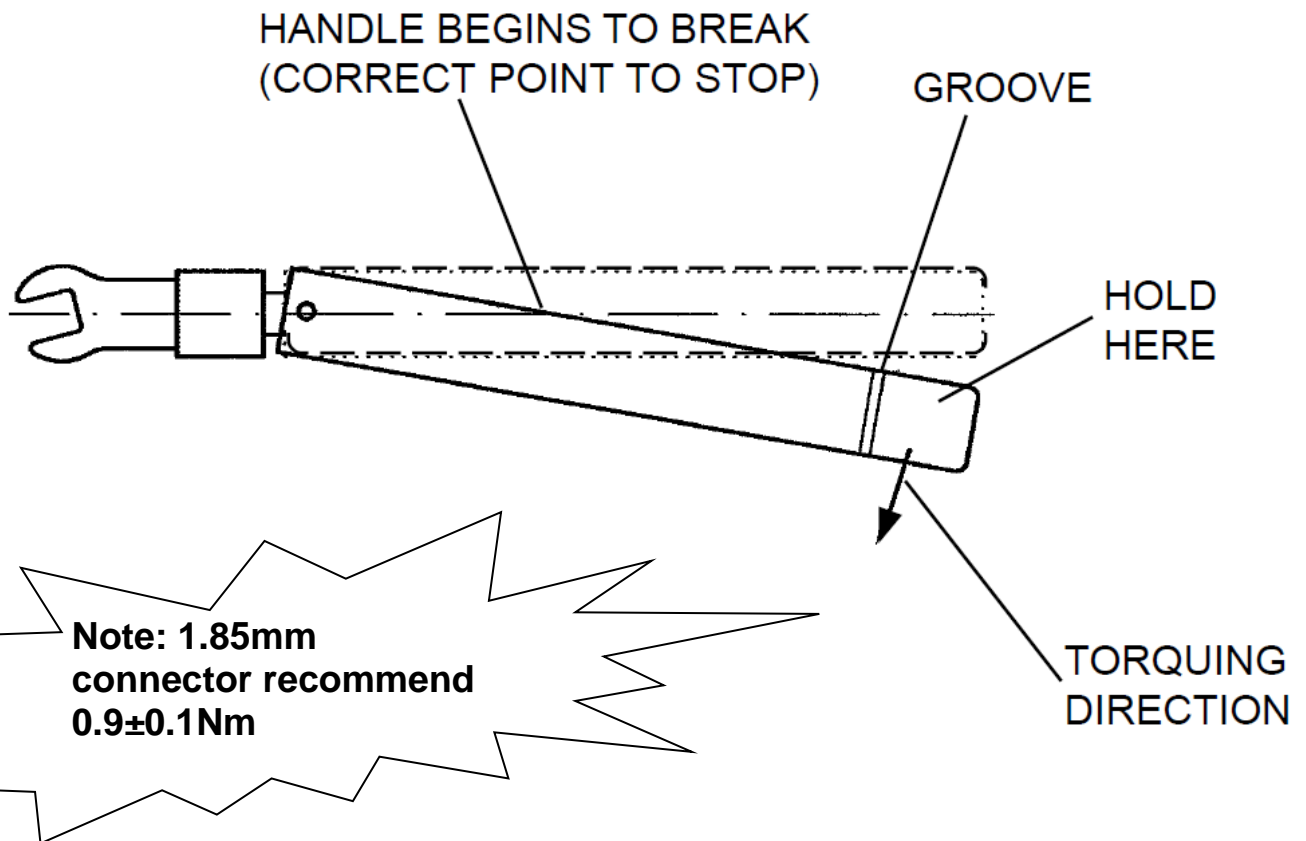
Figure



Cable Connector	Adapter	Tooling
2081911-3	2081924-1	Hex 8mm Torque Wrench
2081912-3	2081550-1	
	2081925-1	
	2081923-1	
	2081549-1	

Figure 5. A torque wrench avoids damage due to over-tightening and helps connectors achieve their rated lifetimes

Figure 5



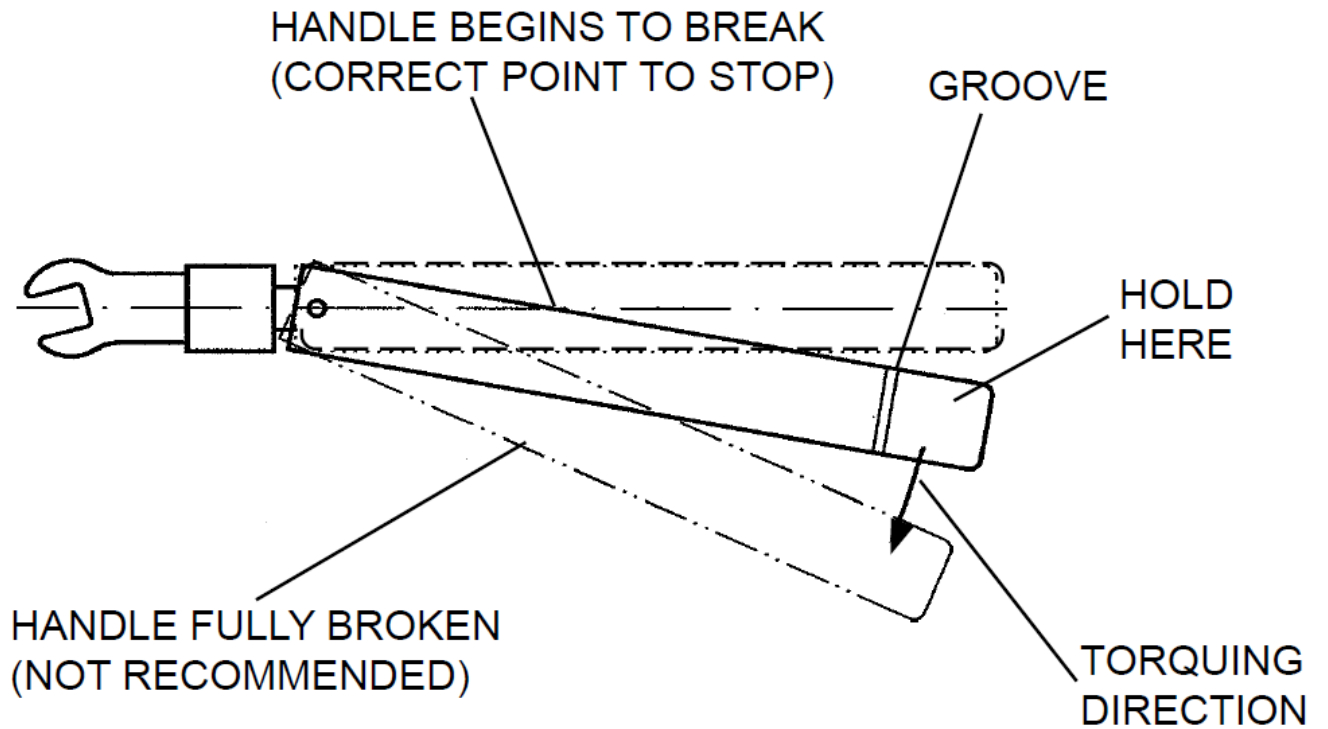
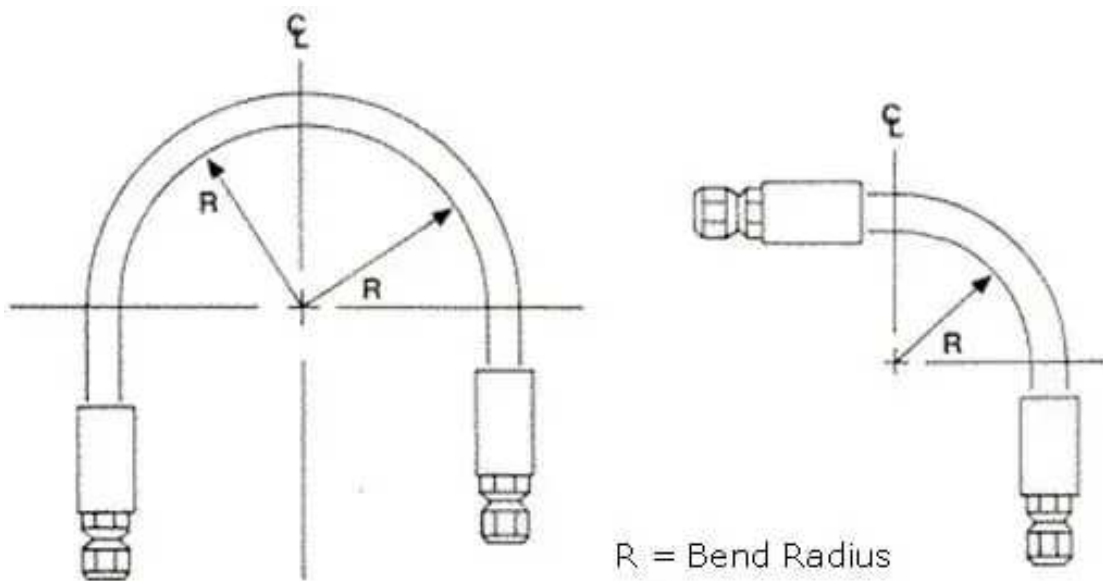


Figure 6. Cable assembly installation shall ensure a sufficient bending radius, the minimum bending radius is generally 8 times the diameter is recommended

Figure 6



## **2. Reference material**

The following documents form a part of this specification to the extent specified herein. Unless otherwise specified, the latest edition of the document applies. In the event of conflict between the requirements of this specification and the product drawing, the product drawing shall take precedence. In the event of conflict between the requirements of this specification and the referenced documents, this specification shall take precedence.

### **2.1 Customer assistance**

Reference Product Base Part Number 2016487 and 2016488,2016489,2016490 is representative for the 1.85 cable assembly. Use of these numbers will identify the product line and help you to obtain product and tooling information. Such information can be obtained through a local company representative or after purchase, by calling the TOOLING ASSISTANCE CENTER or PRODUCT INFORMATION numbers at the bottom of page 1 or visiting our website at [www.te.com](http://www.te.com).

### **2.2 Drawings**

Customer drawings for specific product part numbers are available from the service network. If there is a conflict between the information contained in the customer drawings and this specification or with any other technical documentation supplied, the information contained in the customer drawings takes priority.

Cable assembly drawing: 2016487,2016490

### **2.3 Specifications**

Product specifications (108-160080) provide expected product performance and test information.

Information on RF connectors can be found in standards IEC61169-32 & IEEE287 and TE catalog, Other available documents that pertain to this product are:108-160080 and 501-160328

## **3 Requirements**

### **3.1 Storage**

The cable assemblies should remain in the shipping package until ready for use to prevent deformation of the connector. The cable assemblies should be used on a first-in, first-out basis to avoid storage contamination that could adversely affect performance.

### **3.2 Chemical exposure**

Do not store cable assemblies or accessories near any chemical listed below as they may cause stress corrosion cracking in the materials.

Alkalies	Ammonia	Citrates	Phosphates citrates	Sulfur Compounds
Amines	Carbonates	Nitrites	Sulftur Nitrites	Tartrates

*Table 1.*

### **3.3 Mating parts**

All mating parts is released on "TE Connectivity RF Connector & Cable assembly for Test & Measurement"

REV	DATE (DD-MM-YY)	CATEGORY	ADDITIONS, DELETIONS, CHANGES
1.0	08-July-2021	All	Preliminary version