

The Network of Networks.

# 3M™ Slim Lock Closure 716

## Installation Instructions

**Tip:** Plan ahead to ensure inner and outer shells are oriented in such a direction (i.e. axial seal is located outward/radially from adjacent installations) so that outer shells will have clearance from each other. Also, ensure the latch will remain accessible after installation.

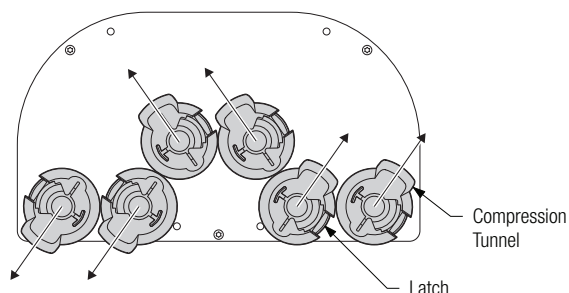


Figure 1.  
3M™ Slim Lock Closure 716 Components

## 1.0 Intended Use

DIN 7-16 cable assemblies, when installed in exterior environments, are known to routinely degrade due to water and contaminant penetration. As a deterrent to this degradation, current practice calls for the application of multiple wrap layers of PVC, butyl rubber, or other tape materials to the connector area. The 3M™ Slim Lock Closure 716 is intended to provide a reusable alternate weatherproofing solution that is reliable as well as quickly and easily installed.

## 2.0 Features

The 3M Slim Lock Closure 716 incorporates a highly compliant gel web technology that provides weather sealing features even when used on widely varying cable and connector geometries. The product consists of two primary parts; a gel web holder and an outer compression sleeve. The gel web holder provides a convenient method to handle and locate the sealing web during installation. The outer sleeve, when properly installed, is designed to impart a compressive load to the gel web holder resulting in an environmental seal.

### 3.0 Package Contents

- Gel web holder
- Compression sleeve
- Installation instructions

### 4.0 Limitations

#### 4.1 Application

##### a) Compatibility

This product is designed to seal a ½ inch nominal diameter jumper cable terminated to any DIN 7-16 compliant receptacle including those with fully threaded barrels. A proper seal will occur on coaxial cables having an outside diameter within the range of .53 to .63 inch (13.4 to 16.0 mm).

##### b) Clearance

For proper installation, adequate clearance must be provided between the assembly to be protected and adjacent hardware. The axial distance between connector nut and receptacle bulkhead must be at least .31 inches. There must be at least .25 inches radially between the connector nut and the nearest side obstruction. Additionally, any strain relief feature such as heat shrink or metal collar must not extend beyond 4 inches from the bulkhead. See Figure 2 for clarification.

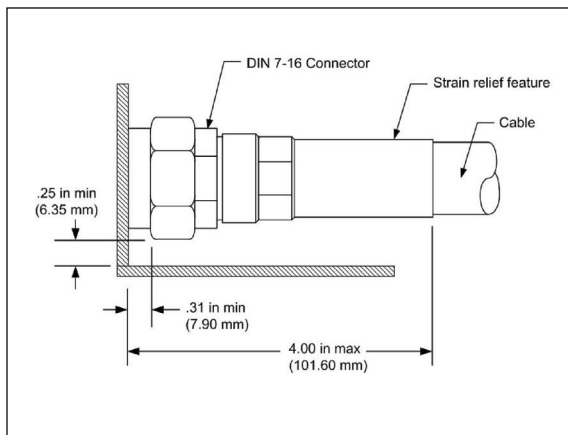


Figure 2.  
Required Clearances

#### 4.2 Cable Bends

Installation ease of the enclosure may be compromised if the coaxial cable starts a bend closer than 10 inches from the connector bulkhead. A cable bend that is closer than 4 inches from the installed closure can impede installation or removal of the closure. See figures 3 and 4.

*Note: A cable bend must never occur inside the closure.*

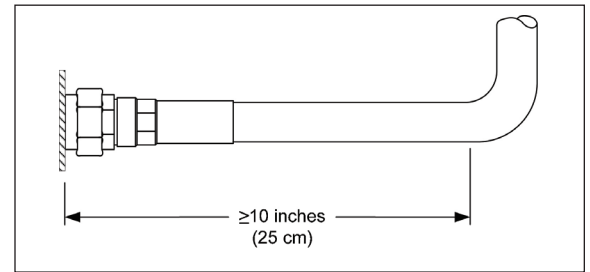


Figure 3.  
Installation Bend Clearance

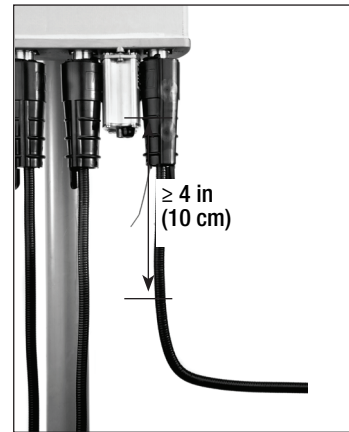


Figure 4.  
Installed Bend Clearance

##### a) Service

The 3M™ Slim Lock Closure 716 is designed for outside pole and tower-mounted installations.

It is not compatible with buried or below ground applications.

##### b) Reuse

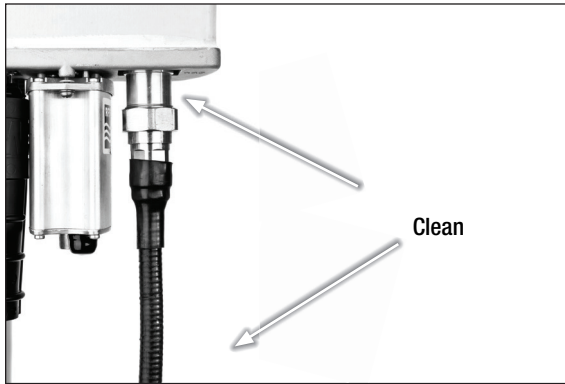
The 3M Slim Lock Closure 716 may be installed and reinstalled up to 10 total times without seal degradation.

##### c) Installation/Removal Thermal Limits

This product may be installed and/or removed when ambient temperatures range between 0°C and +40°C.

## 5.0 Installation

- a) Care should be taken to ensure the sealing surfaces shown in the figure below are free of dust, liquids, and surface contaminants.

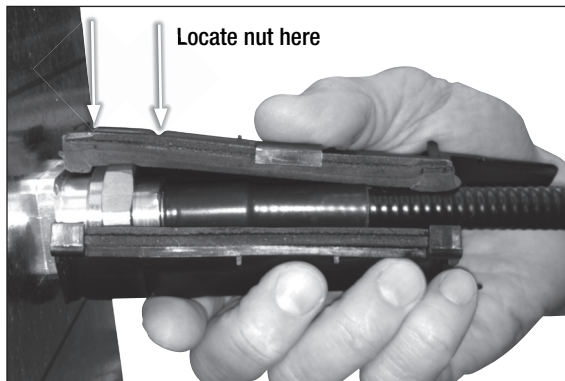


- b) Remove the clear release liner from the gel surface. Note: Carefully follow safety, health and environmental information given on product label or the Material Safety Data Sheet (MSDS) for the sealing gel.

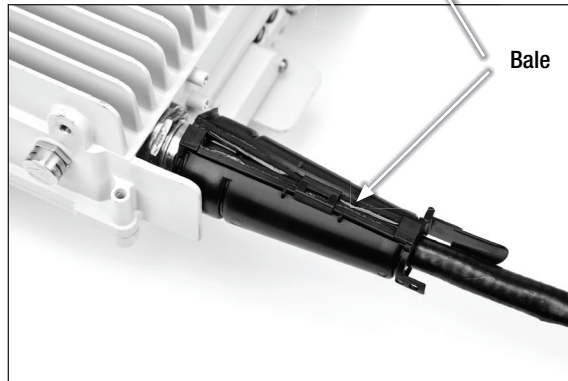
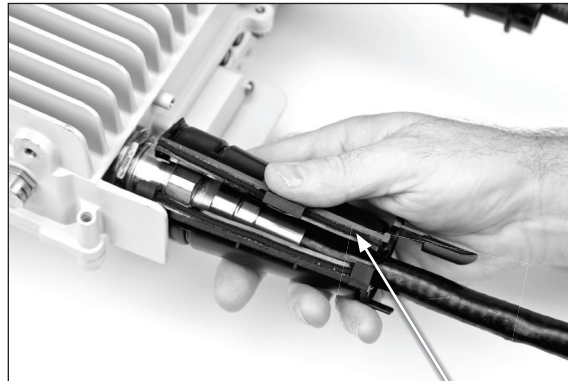


The connector nut must be located in the axial position shown.

**Note:** Care should be taken to avoid dragging or rotating the gel across the cable or connector nut once contact is made as this may degrade the sealing surfaces.



Squeeze the gel web holder shut and simultaneously secure the bale in its locked position. This feature is used only to captivate the gel holder prior to compression sleeve installation.



**Note:** Inspect the sealing gel pad prior to the outer shell installation to ensure gel is in continuous contact with the connector body and that the foam pad is not folded.

**Note:** The cable's strain relief feature must not extend into the sealing area of the closure.

- c) Optional: The compression sleeve may be temporarily stowed during installation by snapping the part on to the cable as shown. Do not perform this operation during windy conditions.

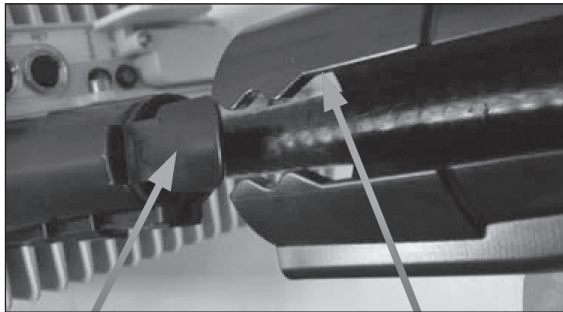


- d) Slide the compression sleeve axially onto the gel web holder until the latch fully engages. Care should be taken to orient the sleeve as shown in the figures.

*Note: It is normal for the bale to open or release after the compression sleeve is installed.*

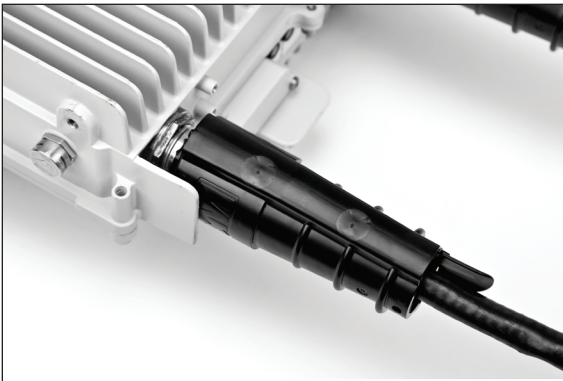
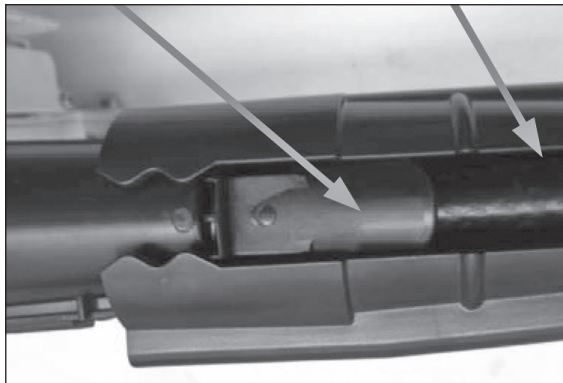


Latch on web holder slides into slot in compression sleeve



Web holder latch

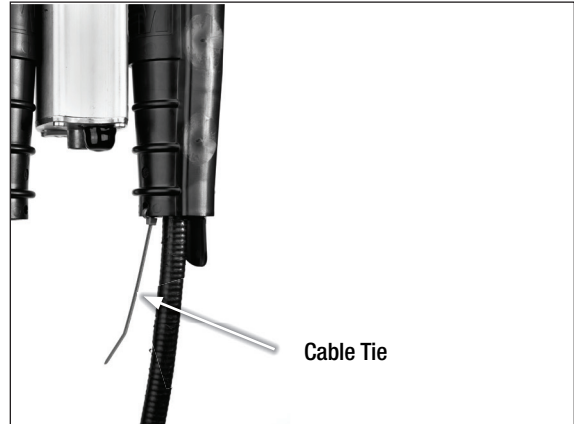
Compression sleeve slot



## **CAUTION**

Avoid contact with other closures or obstructions that may force the housing to move off-center

- e) Optional: If additional security is desired, install a 0.08" (2 mm) nominal width cable tie (not included) in the provided hole.





## 6.0 Removal

- a) Cut and remove cable tie if installed.
- b) Depress the latch using the thumb.



- c) Pull the compression sleeve downward and off with the index finger.



- d) Release the bale if still latched. Bale release may be initiated by squeezing the gel holder until the bale pops open. Remove the gel web holder by spreading it open.

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