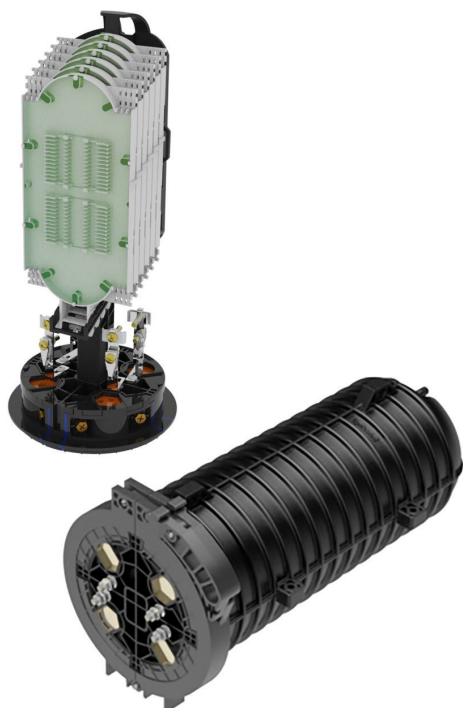# Mechanical Dome Type Closure Installation Instruction Model : K-ridgeDome /A,B Type

K-ridgeDome

The K-ridgeDome Fiber Optic Splice Closure is one of a series of closures designed to support the splicing and storage of single or mass fused optical fibers. The compact and easily to assemble closure measures 7.8" (201mm) x 16" (403mm) , 11.6"(298mm) x 17.5"(450mm) designed for below or above ground sealed applications and has an end plate supporting (4) (6) grommeted entry ports. Each port supports single or multiple cables/ drops with specially designed grommet technology.

The closure interior with a tray stacker and slack storage basket supports up to (6) (8) Splice Trays each designed to manage the storage and routing of Sin- gle or Mass fusion sleeves. Each tray supports up to (24) single fused or 72Core Mass fusion sleeves or a total capacity of (144) (288) Single fusion or (432) (864) Mass fused fibers.

ITEM	K-ridgeDome A Type	K-ridgeDome B Type
Size (L*W)	403×Ø201mm /15.7xØ7.8inch	450×Ø298mm /17.5xØ11.6inch
Weight	2.8kg / 6.17 lbs.	5.5kg / 12.1 lbs.
Inlet Ports	Main 4port	Main 6 port
Cable Dia.	Main cable : 0.571 ~ 0.649 inch (14.5~16.5mm)/ Optional	Main cable : Ø18 ~ Ø20mm / Optional
No. of Splice Tray	Max. 6EA	Max. 8EA
Tray Capacity	24C (Max. 144C) Ribbon 432	36C (Max. 288C) Ribbon 864
Application	Direct Bury, Pole/Wall, Aerial, Below Grade	Direct Bury, Pole/Wall, Aerial, Below Grade

Provides Solutions for Next

Plate Assembly,
Tray Supporter & Splice Tray

Dome Cover

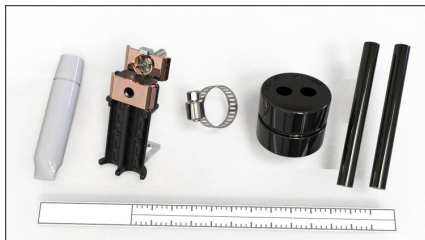Clamp Ass'y

Cable Tie

1m Unit Protection Tube

Splice Protection Sleeve

Grommet Kit—# of bag of your choice

Grommet Kit :
Cable size : 0.512 ~ 0.590 inch (14 ~ 15.0mm)
Cable size : 0.571 ~ 0.649 inch (14.5 ~ 16.5mm)

Grommet Kit :
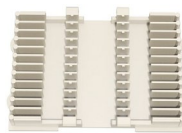Cable size : 0.315 ~ 0.433 inch (8 ~ 11mm)

Grommet Kit :
Cable size : 0.250 ~ 0.312inch (6.35 ~ 7.9mm)

Grommet Kit :
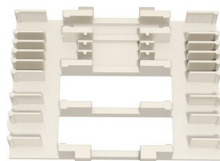Cable size : 0.420 ~ 0.60 Plus 0.125inch
(10.7 ~ 15.2 Plus 3.2mm)

Splice Tray

Heat shrinkable sleeve (12C)
(12C x 2)

Ribbon - Heat shrinkable
sleeve (9slot x 2)

Splitter Chip (1EA)
(Size : Max. 4x7x60mm)
Heat shrinkable sleeve
(3C x 2)

Knet

Direction

Getting Started

1. Check the cable structure and the fiber type before starting the work. Different types of fibers cannot be spliced together.
2. Align the splicing part perfectly and seal to minimize cable damages by moisture. It is important that there are no impact to the cables.
3. Working area should be free from any moisture or dust. Do not bend or twist cables, or add any impact to the cables.
4. During the sheath stripping and the closure assembly procedures, use permitted tools according to an approved fiber optic splicing standard in your region.

Cable Preparation

1. Secure the cables firmly on the working table.
2. Cut off about 1m from the cable end including the pulling eye.
3. Clean the cut area with clean cloth.

4. Measure the cable and make sure it meets the specifications.
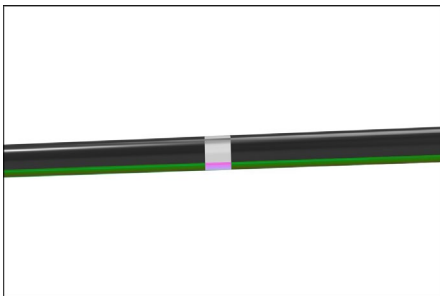
(*Specification : 14–15.8 mm/0.52-0.59inch*)

Marking a Cutting Point

1. Mark a sheath removing point on the cable with a piece of tape at a 150cm/59 inch point from the cable cut end
2. In case of mid-span branching, mark a sheath removing point on the cable with a piece of tape at a 300cm point from the cable cut end.

Sheath Removing

1. Remove the cable sheath from the marked point by using a sheath stripper.

Note. Be sure not to damage the fiber optics.

2. Remove all plastic tape and dummy filler tubes.

3. After trimming off dummy filler tubes, clean the loose tubes by using jelly cleaner.
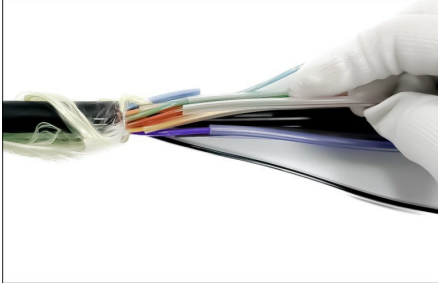
Removing Loose Tubes

1. Leave about 5cm from the cable sheath end and remove the rest of the loose tube.

2. Clean the cut area by using jelly cleaner.
   Note. Be sure not to damage the fiber optics.

Inserting Unit Protection Tube

1. Insert fibers into the unit protection tubes carefully all the way up to the point where loose tubes end.

2. Wrap the tape around the end point of protection tube at cable side

Note1. Be careful not to damage inner fibers.
Note2. The unit protection tube is provided in different colors for unit identification. The colors are blue, orange, green, red, yellow and violet.

Cutting Sheath Gasket

1. Remove the attached gasket rod
2. If using cut cable, insert the cable through the grommet
3. In case of mid-span branching, remove the gasket. Lay the gasket flat on a surface before slitting.
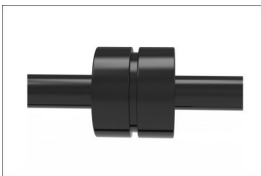
4. The slitting should be done in an angle that is following the circum

5. Attach the cut gasket to the rod to the cable

Installing Tension Member Nut & Bracket
Install TM nut on TM bracket using a bolt.

Fixing the Tension Member (TM)

1. Cut the TM with a nipper to fit the end of the bracket.
   (Cut to TM 1.57in)
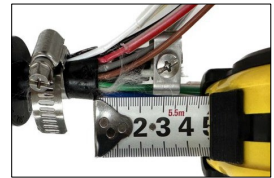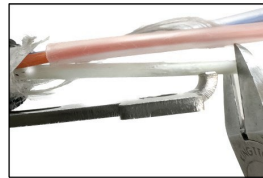
2. Position the TM under the nut.
   (If the cable contains Aramid yarn, wrap the Aramid yarn around the stud of the nut as shown).
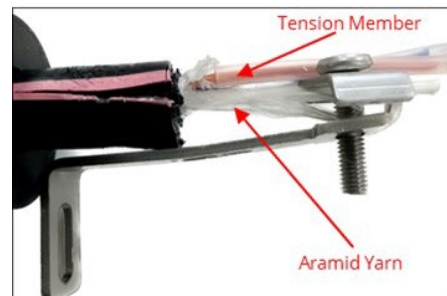
3. Tighten bolt to secure TM and braid under the nut.
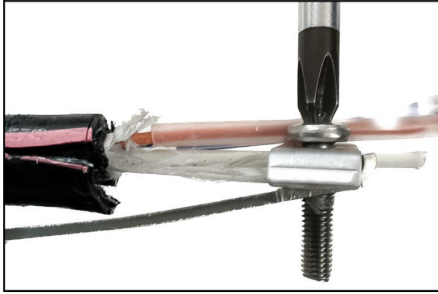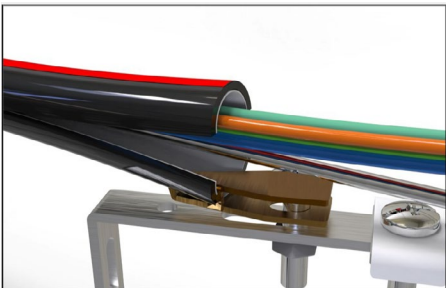

4. Secure cable to TM bracket with hose clamp
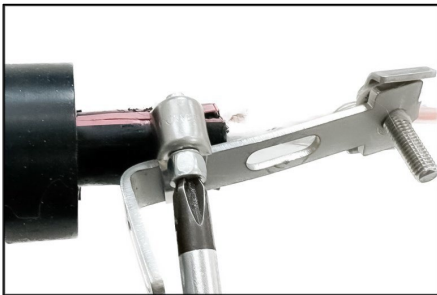
Attaching Shielded Cable to TM Bracket (Case. 1)
1. Install shield connector through slot of TM bracket
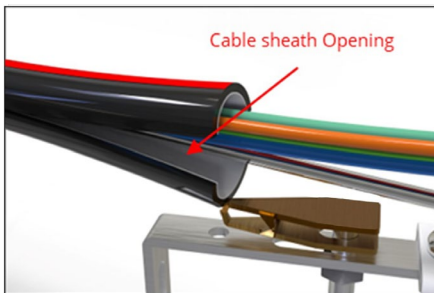
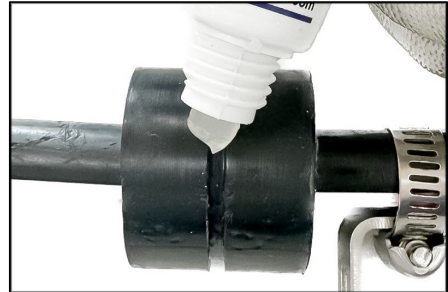2. Secure shield connector to bracket with nut and secure cable TM under nut of the bracket

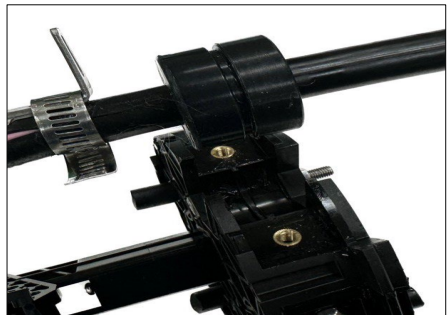3. Secure shielded cable to TM bracket with hose clamp

Note. visually inspect to confirm buffer tubes are not pinched or distorted as shield connector is secured to bracket

Plate assembly
1. Lubricate sealing surface or gasket with silicone lubricant provide

2. Position gasket in end plate slot. Align the gasket grooves with the plate slot inner grooves.

3. Align the slots in the TM bracket with the bolt holes in the plate and secure them with bolts.
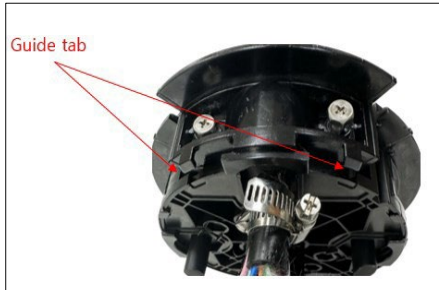
4. Small guide tabs are on each and plate cap to insure proper alignment
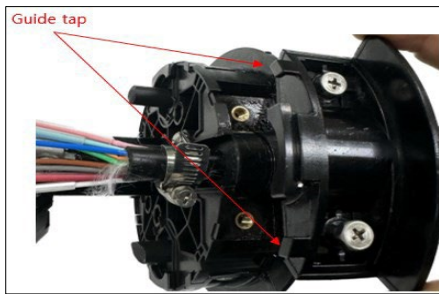
Attaching Shielded Cable to TM Bracket (Case. 2)

1. Set the cable on the bracket by penetrating the grommet and suspension band on which it is mounted.
2. Secure shield connector to bracket with nut and secure cable TM under nut of the bracket.
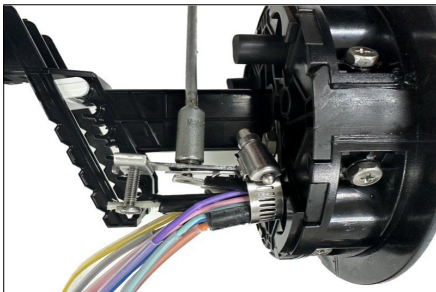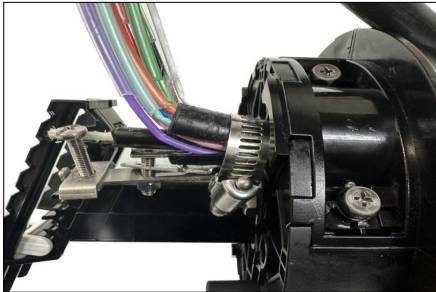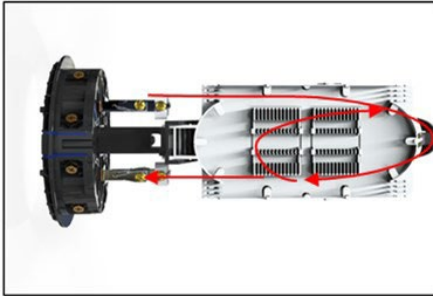

3. Secure cable to TM bracket with TM Nut.

4. Secure cable to TM bracket with Hose Clamp.
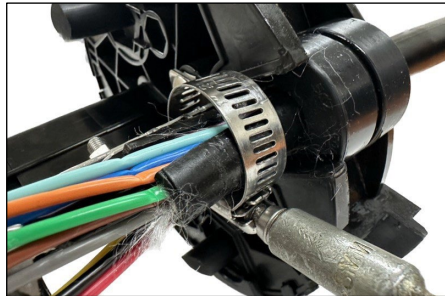
Routing Optical Fiber

1. When entering the left port.

2. When entering the right port.
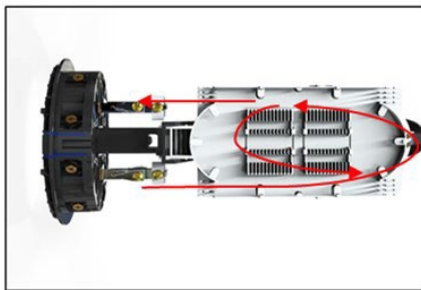
Arranging Unit Protection Tubes

1. Insert the unit protection tube into the inlet on the splice tray and fix the unit protection tubes by using cable ties.
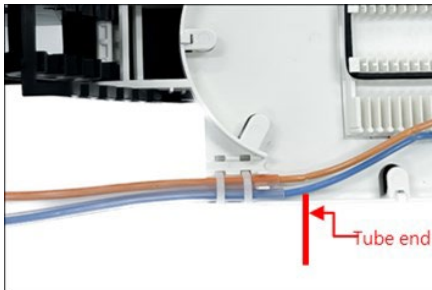
2. Store the exceeding loose tube in the Spool and fix them with cable tie.
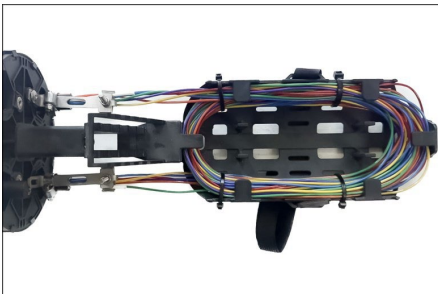
3. In case of mid-span branching with lift up the splice tray and arrange the surplus loose tube .Note. Be careful not to damage the inner fibers

Splicing and Storing Fibers

Preparation

1. Clean the working desk and check the fibers carefully.
2. Cut each fiber end carefully to make a perpendicular cut to the fiber axis.

Splicing

1. Splice fibers in accordance with splicing method to be approved.

Note1. Be careful not to twist or bend fibers.
Note2. There should be no damage or flaw on the cut area and keep the fibers from dust to minimize the data loss
Note3. Single mode fibers should be spliced together carefully to maintain a constant center axis.
Note4. If there is any problems with the splice, then cut the splicing point and splice them again.

Arranging the splices

1. After the splice, insert the splice protection sleeve in each slit accordingly
2. Coil surplus fibers in the tray in a figure 8 shape.
3. After the arrangement, apply the O-ring into the slit and close the tray lid.
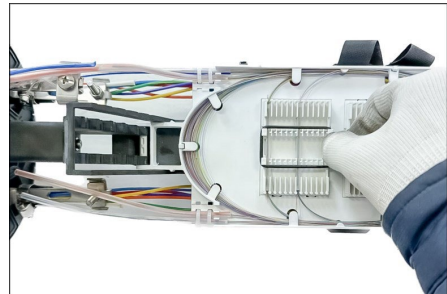
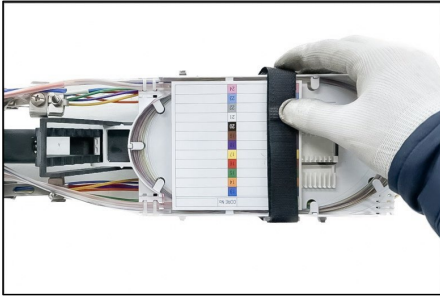4. Record each splice on the index card on the lid.
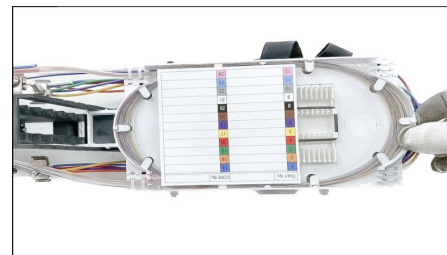
Stacking Splice Trays

1. Place the tray cover on the tray properly and stack the trays by using the connection parts on the side.
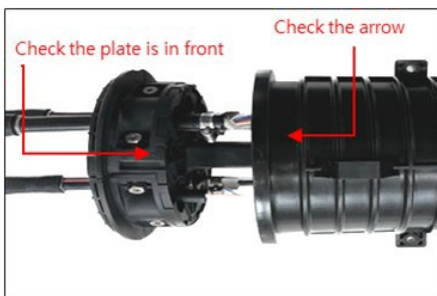
2. Tie the splice trays by using splice tray band to be provided

3. Place the silica gel to be provided around the splice trays

Assembling the Closure

1. Place the dome shaped cover onto the bottom portion. Then assemble the front of the plate and the arrows on the dome-shaped cover so that they are aligned.

2. Fasten the dome shaped cover and the bottom portion together with a band clamp.
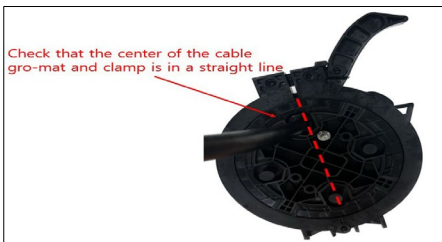
Note. Check the status of silicon gasket ring inserted in the slit of the dome shaped cover.

Installing the Ground Bracket(Optional)

1. If the ground wire is short Insert the ground bracket hole into the ground bolt as shown above.

2. Secure the bracket with a nut and washer.

3. Use grounding in the outer holes of the bracket that are fixed.
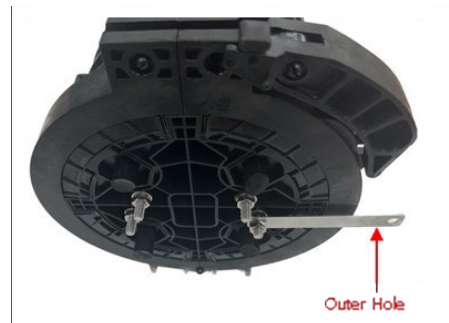
Test Procedure

1. Remove the air valve cap on the top of the dome cover pressurize closure up to a max of 5psi.

2. Use your finger or screwdriver to release the pressure from closing the bump on the top of the air valve and then close the cap.

Hanger connection & Aerial Installation

1. Connect the hangers to the hanger connecting part with bolts and nuts as the figure shown

2. Hang the closure on the wire properly using aerial hangers.

The K-ridgeDome/A type has been made under strict quality control and tests. Our products passed several inspection criteria, specifications and other certification standards.

The technical facts of the products are based upon reliable information, but the user should consider the usage and applicability of the product before operation. Sellers do not assume any liability resulting from improper use. The contents of this manual are made in lieu of all warranties, but sellers do not take the responsibility for any damage caused by users or any statements unrelated to this manual.
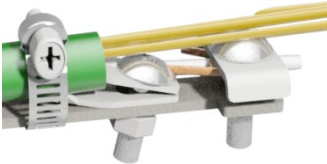
KNET

Email: Inquiry@e-knet.com
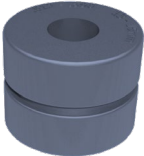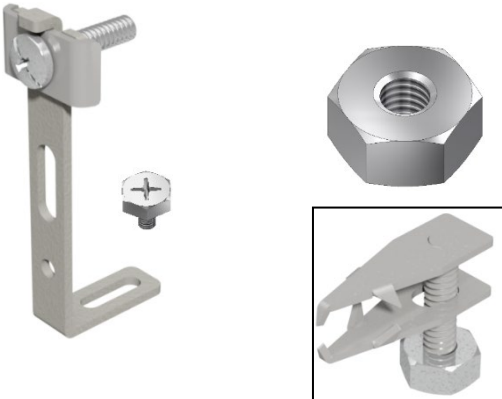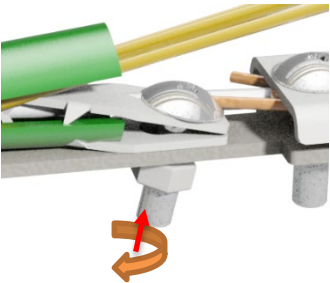
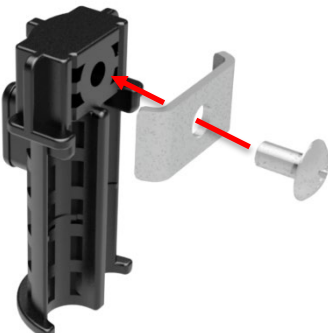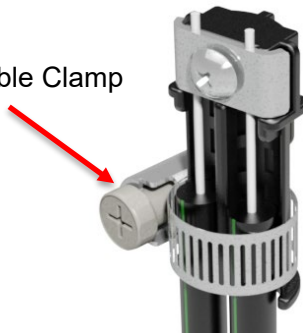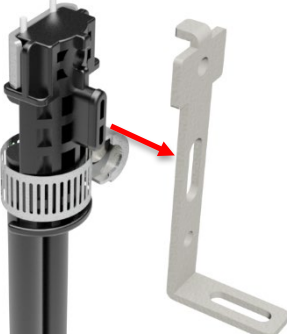Scan QR code for Knet web page

http://www.e-knet.com
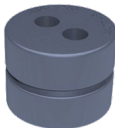
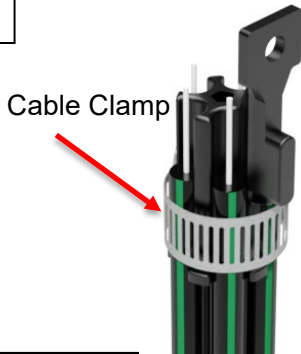# **Appendix -** Installation of cable into grommet using Cable Strength member Holder
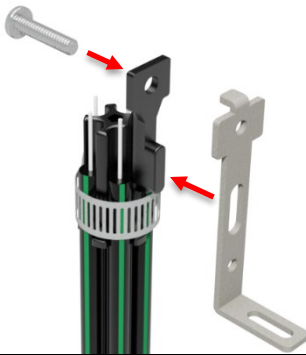
Grommet and CSM holder – 1hole

Cable Range Inches(mm)	Description	Image
0.571 ~ 0.649 inch (14.5~16.5mm)	**1 hole**	

Tension Member	Cable Clamp	Armored Cable Clamp
	 Braided Kevlar 	 **Assemble**
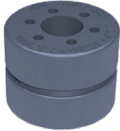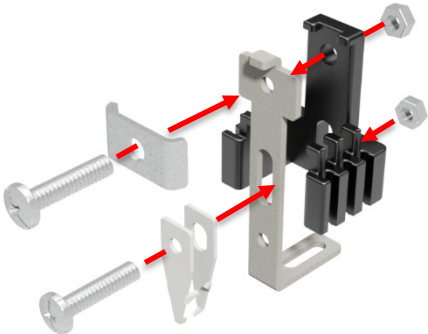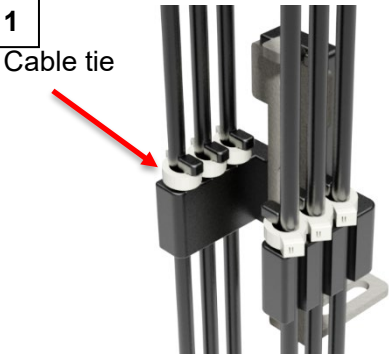
Grommet and CSM holder − 2hole

Cable Range Inches(mm)	Description	Image
0.315 ~ 0.433inch (8 ~ 11mm)	2way	

1 Cable Clamp

2

3

Grommet and CSM holder – 5hole

Cable Range Inches(mm)	Description	Image
0.28" (7mm)	**5hole**	

1		2	
		Cable Clamp	

3		4	

Grommet and CSM holder – 7hole

Cable Range Inches(mm)	Description	Image
0.42~ 0.60 +0.125 inch (10.7 ~ 15.2 + 3.2mm)	7way	

1

Cable tie

2

3