

Eagle Closure

Preparation & Handling Guide



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1.0 Scope

This document is an overview of Prysmian's Eagle Closure. The Eagle was adapted from Prysmian's XMJ family of closures used throughout Europe. The Eagle is a medium-sized closure that can protect splices up to 144f on a midspan and 288f on a butt splice. The instructions in this document explain how to use each port opening, cable seal, CSM retention device, tray, cable seal removal tool, and grounding port seal. Failure to adhere to the preparation and handling procedures may void the closure's warranty and cause user adversity when sealing and grounding the closure.

Please call Customer Support at 1-800-669-0808 if you have any questions.

2.0 Safety

2.1 It is recommended that approved personal protective equipment be used while assembling and splicing in the Eagle Closure.

2.2 When using solvents, wear safety glasses and gloves in well-ventilated areas.

2.3 Never look directly into the end of a fiber that may be carrying a laser light. Laser light may be invisible and can damage your eyes. Viewing it directly may not cause pain. The eye's iris will not close involuntarily as when viewing a bright light. Consequently, severe damage to the retina of the eye is possible. If accidental eye exposure to laser light is suspected, immediately arrange an eye examination.

3.0 Key Points & Glossary

3.1 The minimum cable bend radius during installation (under tension) is 20 times the cable diameter. Unless otherwise specified by the manufacturer, the minimum long-term static bend radius is 10 times the cable diameter.

3.2 DO NOT expose more buffer tube lengths than expressly called for in this document and specified by the cable manufacturer. Exposing excessive buffer tube lengths may increase attenuation and damage fiber. Remove the buffer tube and place the fiber in the splice trays or inside a mesh wrap if a longer buffer tube storage length is needed.

3.3 DO NOT allow blades or sharp edges to contact the fibers.

3.4 Central Strength Members (CSM) **MUST** be secured tightly in the closure to prevent expansion/contraction and potential attenuation increase.

3.5 The jacket sheath **MUST** be secured tightly to the closure. This will prevent expansion/contraction and potential attenuation increases.

3.6 DO NOT exceed the minimum bend radius.

3.7 DO NOT exceed the maximum pull tension.

3.8 When removing buffer tubes, keep the fibers tight and straight to prevent fiber breaks. Pull the buffer tube off the fibers rather than pushing it off. **DO NOT** attempt to remove more than 4 feet of buffer tube at a time from dry fiber, no more than 2 feet at a time from Gel-filled fiber, especially if the temperature is <32°F (0°C)

3.9 DO NOT BEND BUFFER TUBES AT SHARP ANGLES while removing the jacket, armor, yarns, or strength members.

3.10 Proper tools are highly recommended for opening fiber jackets and buffer tubes to prevent fiber damage. Accessing a cable with an open blade is discouraged. Always follow your local practice for cable handling and management when in doubt.

3.11 Glossary

- **CSM** – Central Strength Member
- **SMRA** – Strength Member Retention Assembly
- **SPINE** – Slack Basket (UK Term)
- **GLAND** – Cable Seal (UK Term)
- **4460** – Small Standard Grounding Bond
- **4462** – Large Standard Grounding Bond

4.0 Tools and Materials

Prysmian suggests having the following tools on hand to easily and accurately build out the Eagle closure. **Always follow your local practice for allowable tools.**

- Cut Resistant Gloves
- Safety Glasses
- Snips
- Cable or Razor Knife (Follow your local practice)
- Cable Jacket Removal Tool (Follow your local practice)
- Can wrench (216 Tool)
- #2 Phillips Screwdriver
- Lineman's Screwdriver
- Medium Sized Flat Head Screwdriver
- ¼" Nut Driver
- Tape Measure
- Black Vinyl Tape
- Friction tape
- 4" Cable Ties
- Alcohol Preps
- Cable Wipes

5.0 Parts List

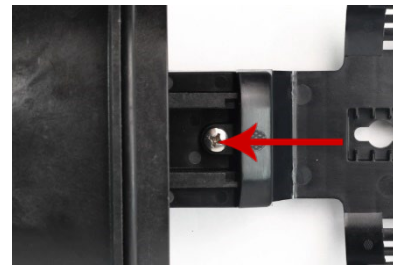
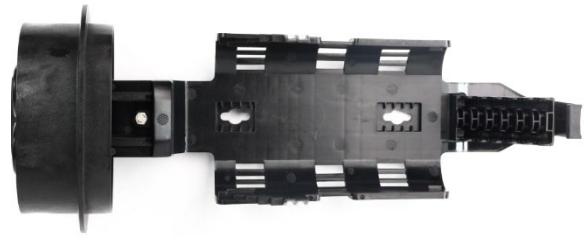
Part Number	Description	UM
BASE CLOSURE		
XJTSC03897	Eagle Closure, 3 Loose Tube Splice Trays w/ Cover, 1 Removal Tool	EA
OVAL PORT CABLE KITS		
XJTSC04107	Oval Mechanical 5.0 - 14.8mm	EA
XJTSC04108	Oval Mechanical 14.9 - 18.8mm	EA
ROUND PORT CABLE SEAL KITS		
XJTSC03908	Round Mechanical 4.0 - 7.0mm	EA
XJTSC03906	Round Mechanical 7.1 - 20.0mm (Most Common)	EA
XJTSC03907	Round Mechanical 20.1 - 23.0mm	EA
4 WAY CABLE SEALS		
XJTSC03912	Round 4-Way Mechanical 4.0 - 6.0mm (Round Micro Cable or Duct)	EA
XJTSC03149	Round 4-Way Mechanical 7.0 - 8.5mm (Round Micro Cable or Duct)	EA
XJTSC03910	Round 4-Way Mechanical 8.5 x 5.0mm (Flat Drop)	EA
ADDITIONAL		
XJTSC04045	Strand Mounting Bracket	EA
XJTSC00136	Pole Mounting Bracket	EA
XJTSC03909	Cable Grounding Kit	EA
XJTSC02320	Entry Wrench	EA
XBFSC00260	Silicone Grease	EA
XJTSC02964	Cable Entry Removal Tool, Pack of 10	PK
XJTSC03924	Splice Tray w/cover, box of 20	BX

6.0 Removing “The Nest” Slack Basket

The Eagle Closure comes with a removable slack basket, which we refer to as “The Nest.” The basket must be removed to access the oval port, but it is unnecessary to remove it to access the round ports, although you may find it more accessible.

6.1 Remove the Slack Basket

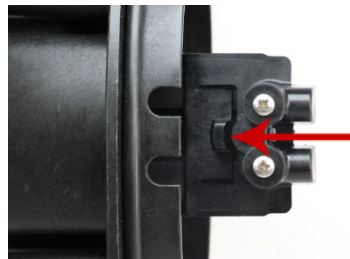
1. The Eagle closure includes the installed slack basket and CSM retention device. You will need to remove these to introduce the cable.
2. Remove the bolt that secures the slack basket to the base.
3. Remove the basket.



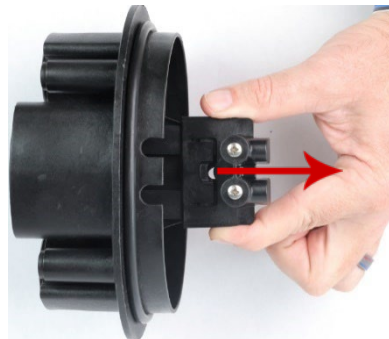
4. Flip the base over to locate the CSM retention device



5. Pull back on the tab to disengage the locking fingers.



6. Simultaneously, Slide the CSM retention device off the base.

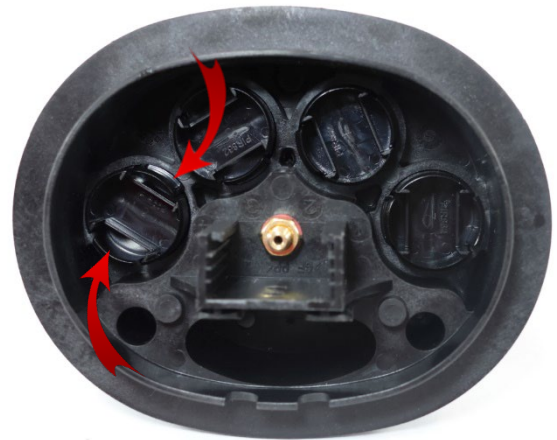


7.0 Removing a Port Blank

The port blanks are in place to ensure that the case remains watertight. To introduce a new cable to the closure, the blank (s) must be removed. This section will examine the step-by-step process for removing a port blank.

7.1 Removing a Port Blank

1. Determine which port(s) are to be used.
2. On the inside of the base, use your fingers to squeeze the two tabs that correspond to the blank you wish to remove and PUSH. If you find it difficult to push the blank out, you may use a pair of pliers to pull on it while squeezing the tabs.
3. Now that the tabs are disengaged, the blank will easily slide out of the base.



4. With the blank removed, ensure that there are no rough edges or scars in the opening that could hamper sealing.
5. Repeat this process to remove any other desired port blanks



8.0 Opening the Oval Port

The oval port allows a single midspan cable to enter the closure. The maximum size of cable recommended for this port is 144f, with a diameter not greater than 20mm. If these measurements are exceeded, the port will not seal correctly, and there will not be enough room in the slack basket to store the buffer tubes.

8.1 Using a Knife.

1. **IF YOUR LOCAL PRACTICE ALLOWS**, use a razor or cable knife to score the ridge at the end of the oval port. You may have to do this several times to break through the plastic. Once through, continue to cut the ridge all the way around to remove the cap.

If your Local Practice **DOES NOT** allow you to use a razor or cable knife, follow these steps.



8.2 Breakout Method.

1. Place the base of the closure face down on a solid surface with the oval port hanging off the side.



2. Insert a flathead screwdriver into the oval port and place the tip against the edge of the cap.



3. Use a hammer to drive the screwdriver into the cap to knock it out. You may have to hit the cap in a few places to get it completely removed.



4. Check the edge of the of the Oval Port to ensure that there are no burrs. If you find any, use a rounded file to remove them. Burrs will cause the cable seal to not seat correctly and not seal well.



9.0 Single Dielectric Cable in a Round Port

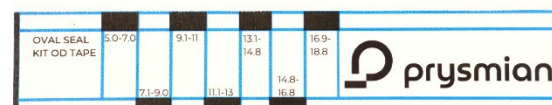
The primary function of the Round Port is to introduce a single cable that will be butt spliced to another cable. The highest fiber count cable that should be placed in a round port is 288f with a diameter no larger than 23mm.

9.1 Cable Seal Chart

Use the following chart to determine the appropriate size of cable seal, anti-torsion clamp, and hose clamp needed with the round port seal. You can use the enclosed cable tape or the Prysmian “mm cable guide” to determine the exact measurements. If the measurement falls between the lines, choose the smaller number.

CABLE RANGE (Circumference)	CABLE RANGE (Diameter)	SEAL SIZE	SPACERS	ANTI-TORSION CLAMP AND HOSE CLAMP
22-25mm	7-8mm	Small Seal	0	Small
25-28mm	8-9mm		1	
28-31mm	9-10mm		2	
31-35mm	10-11mm		3	
35-38mm	11-12mm	Medium Seal	0	Small
38-41mm	12-13mm		1	
41-44mm	13-14mm		2	
44-47mm	14-16mm		3	
47-50mm	16-17mm	Large Seal	0	Large
50-53mm	17-18mm		1	
53-57mm	18-19mm		2	
57-63mm	19-20mm		3	
66-75mm	21-24mm	XL Seal	0	

You can quickly determine which rubber seal to use using the tapes provided in each seal kit.



Wrap the tape tightly around the cable.

Find where the black end of the tape intersects the grid lines.

In that box, you will find the seal size you need.

EX. Oval seal = 11.1-13 mm seal.

EX. Round Seal = 11.1-16mm seal.



9.2 Assemble the Cable Seal (Anti-Torsion)

1. Locate the compression nut and the anti-torsion clamp.



2. Insert the anti-torsion clamp into the nut as shown.



3. Slide the hose clamp onto the cable first.
4. Slide the anti-torsion clamp and nut onto the cable



9.3 Spacers

1. Based on the table above, locate the number of spacers that need to be used.
2. Slide them onto the cable before assembling the cable seal.
3. The cable will be used for demonstration purposes is 17mm. No spacers will be used throughout.



9.4 Assemble the Cable Seal (The Gasket)

1. Locate the cable seal body and the appropriately sized rubber seal.
2. Insert the rubber seal into the cable seal body as shown



9.5 Assemble the Cable Seal (CSM Bracket)

1. Thread the CSM bracket onto the cable seal body.
2. DO NOT over-tighten it; just snug will be adequate.
3. DO NOT place the SMRA (Strength Member Retention Assemble) on now. That will be done after the cable preparation is complete.



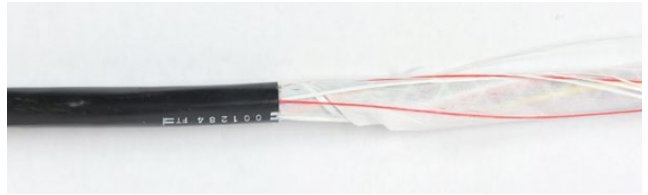
9.6 Assemble the Cable Seal (Whole Assembly)

1. Slide the cable seal body onto the cable as shown.
2. Thread the nut onto the cable seal body. Just get it started; you do not want any pressure on the rubber gasket.
3. Place the Hose clamp onto the end of the anti-torsion clamp and tighten it just enough to hold it in place.
4. Slide the assembly down the cable about 12" (31cm) past the desired cable opening.



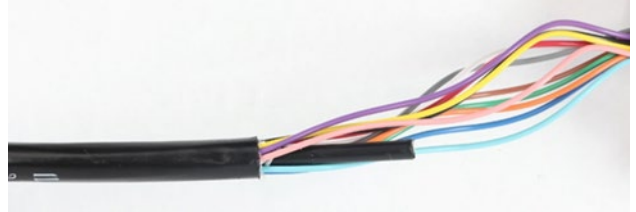
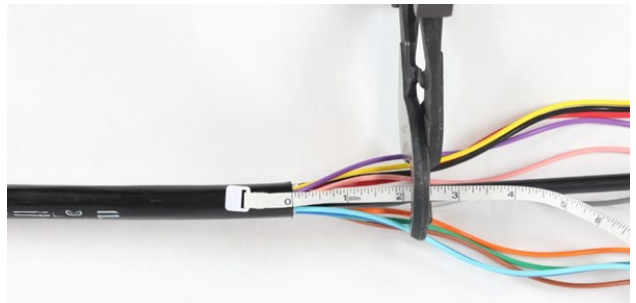
9.7 Opening the Cable

1. Strip off 6 feet (1.85M) of jacket. Refer to **Prysmian's Guide PR01** if you need assistance with this procedure.



9.8 Cable Preparation

1. Remove all the yarn and water-blocking material
2. Cut the CSM to 2.25 inches (5.8cm)



9.9 Attach the SRMA to the CSM Bracket

1. Slide the CSM into the opening of the SRMA.



2. You may need to trim the CSM to length.



3. If the CSM is ≤ 5.0 mm, you must use the Shim Key.



4. Use the small key along with the CSM holder



5. Slide the key into the top of the hole and place the ≤ 5.0 mm CSM underneath it.



6. Tighten the screw to secure the CSM.

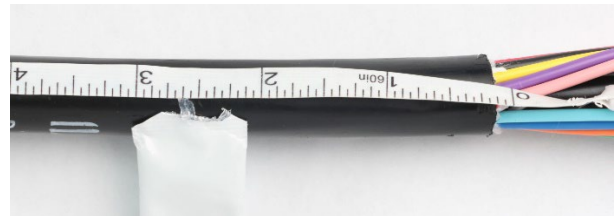


7. ***NOTE*** Do not overtighten these screws. Overtightening the screw will cause the brass insert to become loose and not properly hold the CSM. If you notice the insert move, do not tighten it any further.

Max torque is 1.1 ft lbs or 1.5Nm.

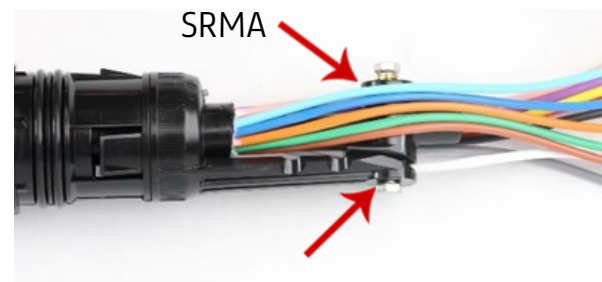
9.10 Grease the Cable

1. Now that the cable has been prepared, open the supplied grease tube. **DO NOT use all the grease in step 2.**
2. Apply a thin layer of grease circumferentially to the cable between 2 and 3 inches (5.0 to 7.5 cm from the ring cut).
3. **REMINDER:** DO NOT use all the grease here; you will need some elsewhere.



9.11 Position the Cable Seal Body.

1. Slide the Cable Seal Body forward to align the hole in the CSM Bracket with the SRMA
2. Using the screw provided, secure the two pieces together.



9.12 Tighten the Cable Sealing Nut

1. Check to ensure that the rubber cable seal is still in place
2. Ensure the anti-torsion clamp is seated correctly to the Cable Seal Body.



3. Slide the nut forward, place a layer of grease on the threads, and tighten it as tight as possible.
4. Ensure the anti-torsion clamp is locked in and will not turn.



9.13 The Hose Clamp

1. Slide the Hose Clamp onto the fingers to the anti-torsion clamp.
2. Tighten the Hose Clamp to 40-inch pounds.
3. Place two wraps of vinyl tape over the clamp to cover any sharp edges.



9.14 Insert the Cable Seal Body into the Base

1. Carefully insert the tubes through the port opening you chose to use. You may find it easier to secure the ends of the tubes with tape during this process to help guide them.
2. Align the Cable Seal with the port opening



3. Use the rest of the grease to coat the O-rings of the Cable Seal.



4. Using firm pressure, push the Cable Seal into the base.



5. You may need to rotate the Cable Seal slightly to get it properly seated.

6. **You should hear an audible “Click” when the Cable Seal is in place.**



10.0 Grounding Port Seal

The Eagle Closure has a unique Grounding Port Seal to bond armored cable to an external ground. It has 4 Bonding leads electrically connected to the studs outside the seal. **Prysmian recommends labeling each cable to indicate which grounding stud it is linked to.**



10.1 Removing the Port Seal

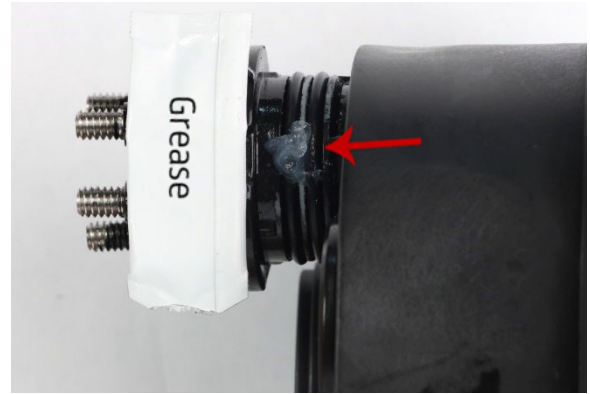
Please refer to section **6.0**
Prysmian suggests that you use ports 1 or 4. However, any port will accept the Grounding Port Seal.

10.2 Installing the Grounding Port Seal

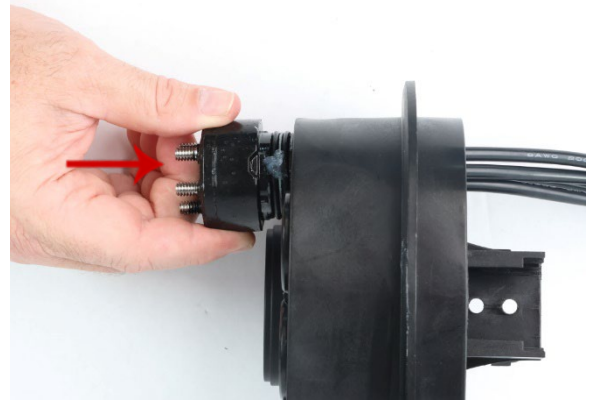
1. Feed the leads through the chosen port.



2. Place a layer of grease on the O-rings

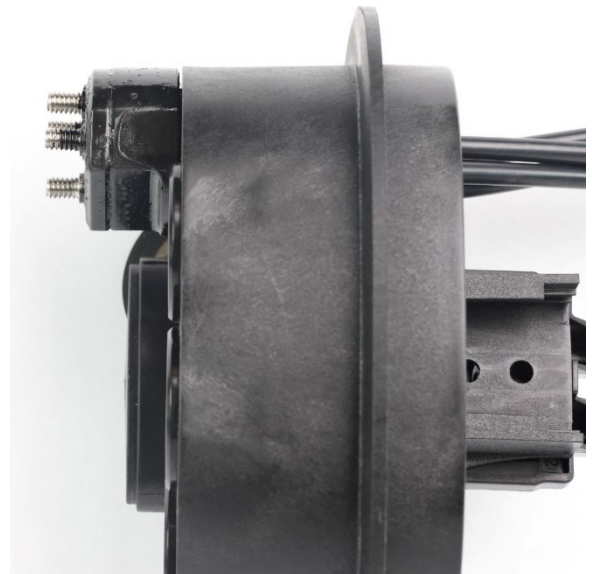


3. Push the Grounding Port Seal into the base using firm pressure.



4. You may have to rotate it slightly to get it to seat.

5. **You should hear an audible "CLICK" when it is in place.**



11.0 Single Armored Cable in a Round Port

The Eagle Closure will accept armored cables in the round ports for splicing needs. There are fundamental differences between the introduction process of armored cables and dielectric cables. Due to the internal diameter of the round ports, bonds with longer studs will not pass through them without damaging the port. This guide will provide an overview of the general process of bonding a cable in the round port.

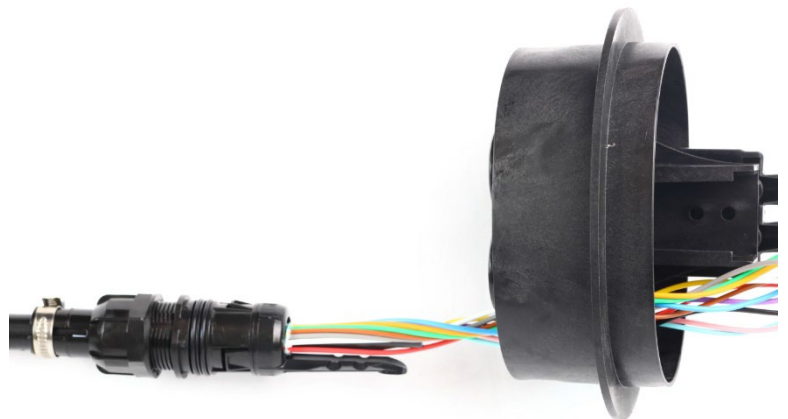
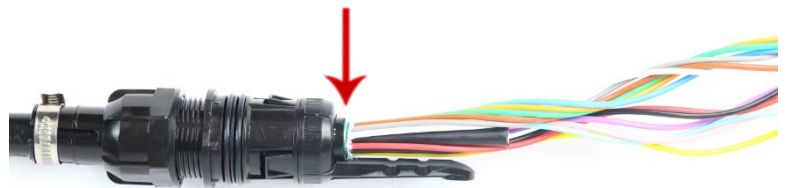
Several types of bonds can be used with armored cables; we will not cover them all. At all times, follow your local practice for bonding and grounding procedures. If you have specific questions, please call 1-800-669-0808.

11.1 Cable Seal Set up.

Please refer to **Section 9, Steps 9.1 through 9.8**, for the initial setup.

11.2 Insert the Cable Seal Body into the Base.

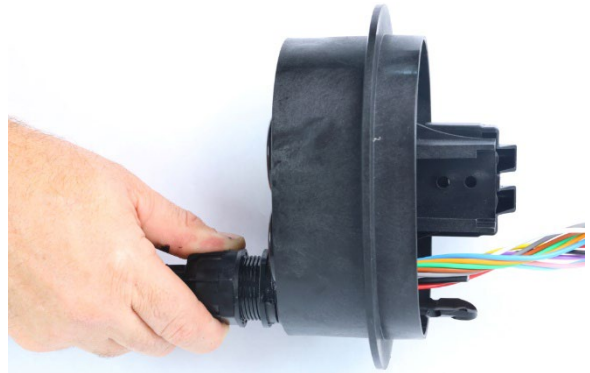
1. Move the cable seal up to the cable opening and tighten the nut just enough to hold it in place. **DO NOT** fully tighten the nut to the cable!
2. Carefully insert the cable through the port opening you chose to use.



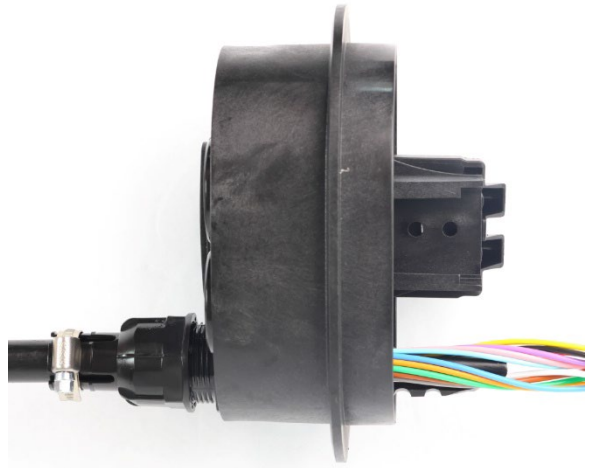
3. Align the Cable Seal with the port opening
4. Use some grease to coat the O-rings of the Cable Seal.



5. Using firm pressure, push the Cable Seal into the base.



6. You may need to rotate the Cable Seal slightly to get it properly seated.
7. **You should hear an audible "Click" when the Cable Seal is in place**



11.5 Placement of the Bond

AT ALL TIMES, FOLLOW YOUR LOCAL PRACTICE FOR BOND TYPE AND PLACEMENT!

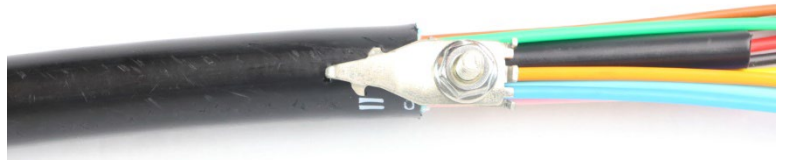
NOTE No vinyl tape was used for demonstration purposes. Prysmian recommends taping the bonds to cover any sharp edges.

1. Slide approximately 6 inches of cable inside the base to prepare it for bonding.

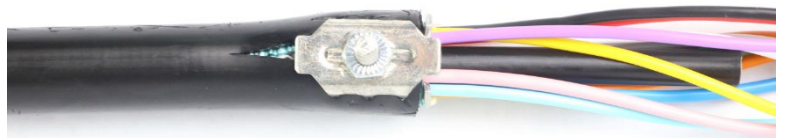


2. ***NOTE*** When bonding is complete, the bond needs to be oriented directly opposite the CSM holder.

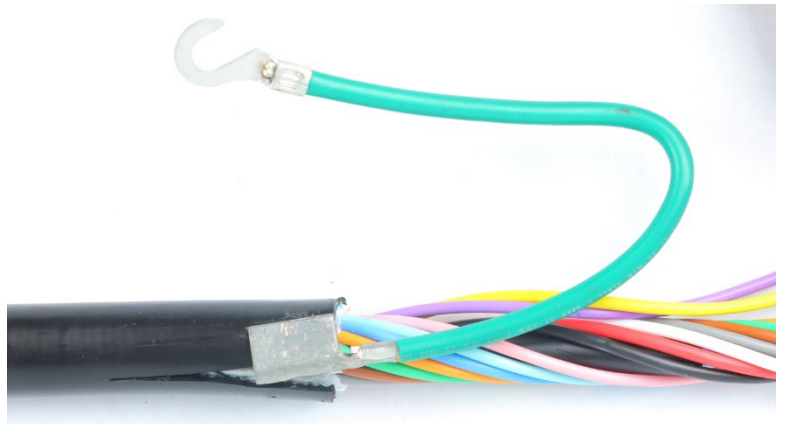
3. 4460.



4. 4462.



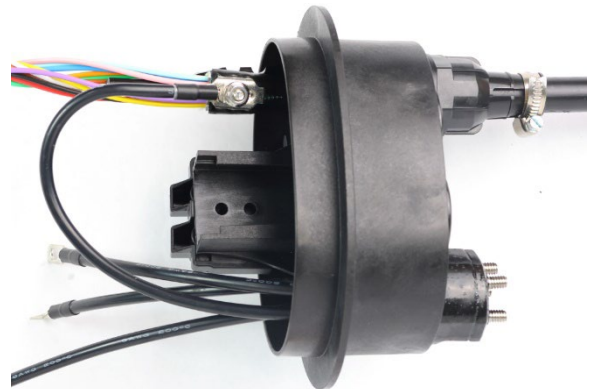
5. Low Profile Crimp Bond



11.6 Connecting the bond to the Grounding Port.

1. Refer to **Section 10** for instructions on installing the Grounding Port.
2. Attach the appropriate length of the Grounding lead to the bond and torque it to the manufacturer's specifications.

NOTE It is much easier to install the Grounding lead before retracting the cable!



11.7 Retract the Cable.

1. With the bond in place and secured, pull the cable back through the cable seal until the bond is seated against the CSM bracket.

NOTE Grounding leads have been removed for clarity.

2. 4460. ***NOTE*** Grounding leads have been removed for clarity.



3. 4462. ***NOTE*** Grounding leads have been removed for clarity.

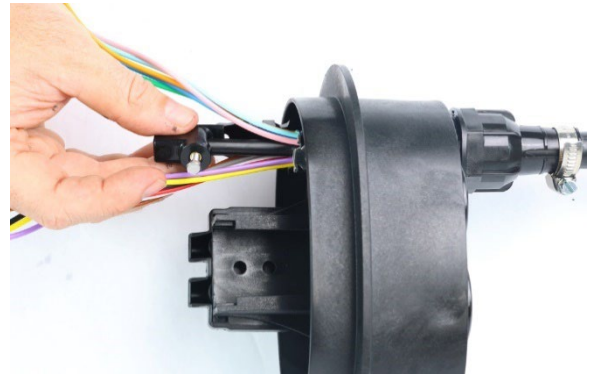


4. Low Profile Crimp.

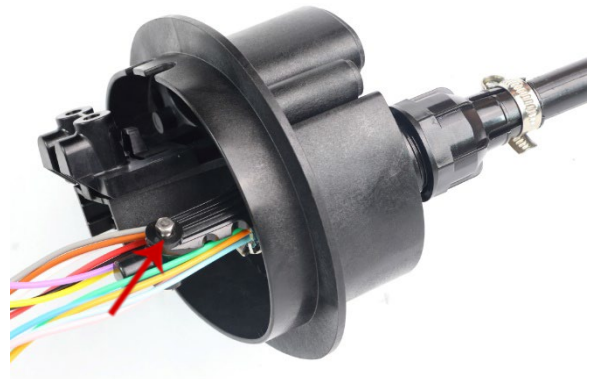


11.8 Attach the SRMA to the CSM Bracket

1. Slide the CSM into the opening of the SRMA.
2. You may need to trim the CSM to length.



3. Attach the SRMA to the Support Bracket with the Phillips screw



4. If the CSM is ≤ 5.0 mm, you must use the Shim Key.

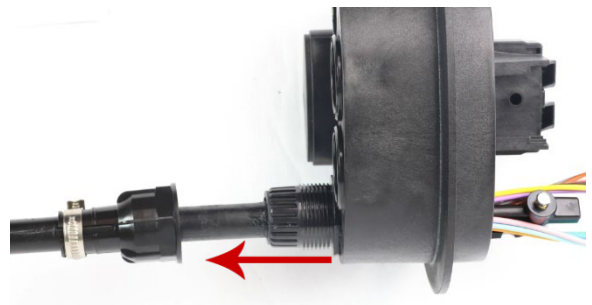
Refer to **Section 8.8** for instructions on how to use the key.

5. Tighten the bolt to secure the CSM

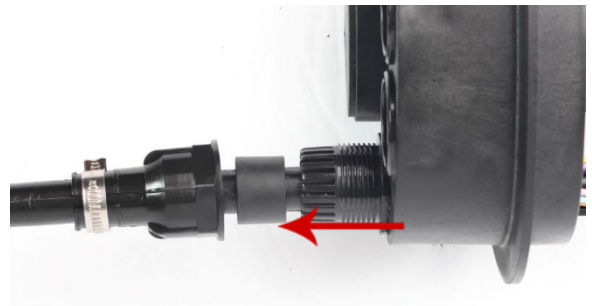


11.9 Grease and seal the cable.

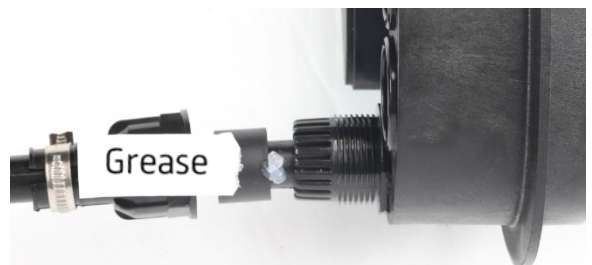
1. Remove the compression nut from the cable seal body.



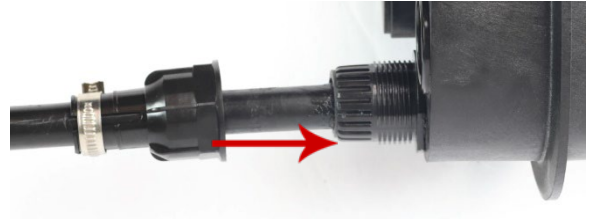
2. Remove the rubber seal from the cable seal body.



3. Apply a small amount of grease to the cable at the end of the cable seal body and spread it evenly around the cable.



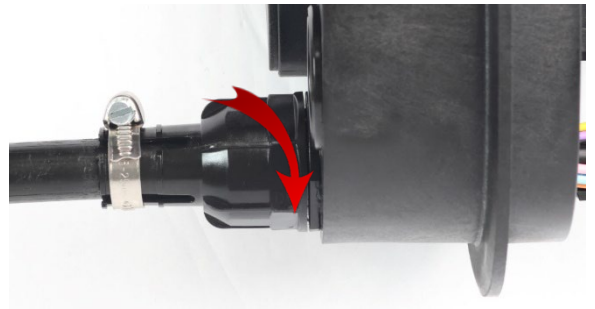
4. Slide the rubber seal back into the cable seal body.



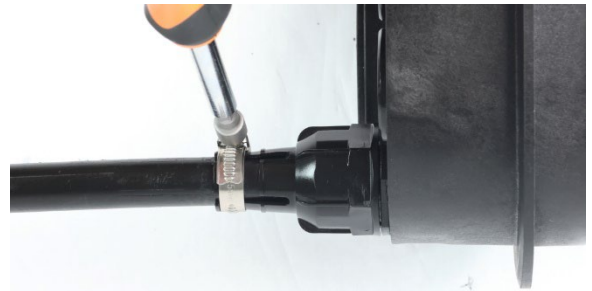
5. Apply a small amount of grease to the cable body threads and spread it evenly around them.



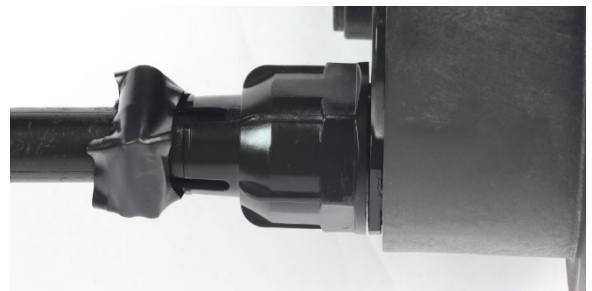
6. Tighten the compression nut onto the cable seal body.



7. Tighten the hose clamp to 40" lbs.



8. Place 2 wraps of vinyl tape over the clamp to cover any sharp edges.



12.0 Installing Dielectric or Armored Cable in the Oval Port.

The Eagle Closure has been designed to accept a midspan cable through the Oval Port. Oval Port seals come in various sizes. You must select the appropriate cable seal for the size of the cable being installed. They range from .2 inches (5mm) to .75 inches (18.8mm). Please see the parts list in Section 5. This section will guide you through the basics of using the cable seals and the CSM holder and orienting the bonds.

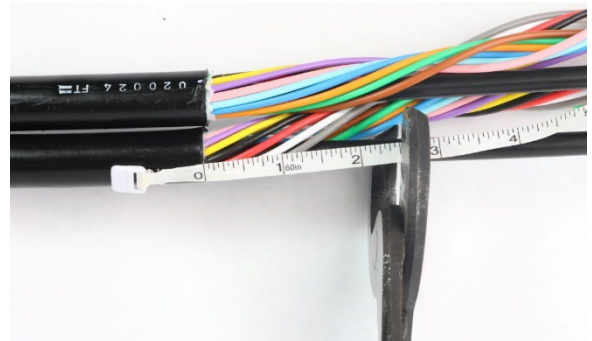
12.1 Opening the Oval Port.

Please refer to **Section 7** for specific instructions on how to remove the Slack Basket.

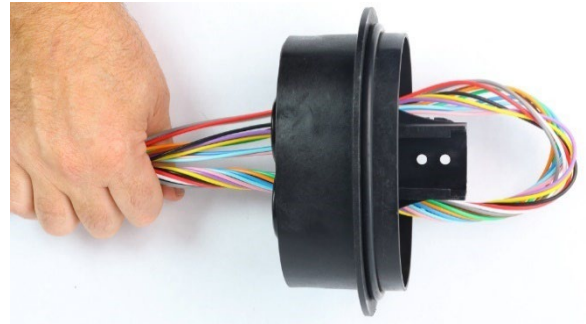
Please refer to **Section 8** for specific instructions on how to open the Oval Port.

12.2 Cable Preparation.

1. Remove the jacket from 96 inches (245cm) of cable. Refer to **Prysmian's Guide PR01** if you need assistance with this procedure. ***NOTE*** Always confirm that the cable being installed is rated for mid-span buffer tube storage.
2. Remove the binding threads and water-blocking material.
3. Cut each CSM to 2.5 inches (58mm) from the cable opening.



4. Carefully pass the buffer tubes through the Oval Port.

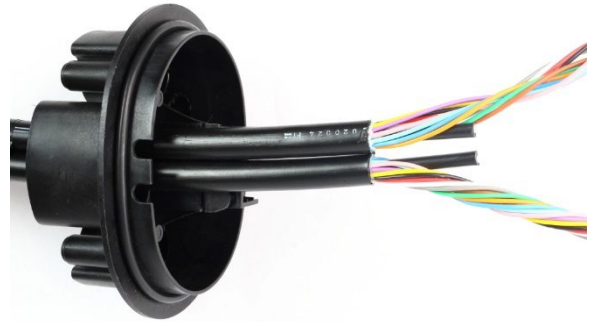


5. Pass approximately 12 inches (30cm) of jacket through the Oval Port.

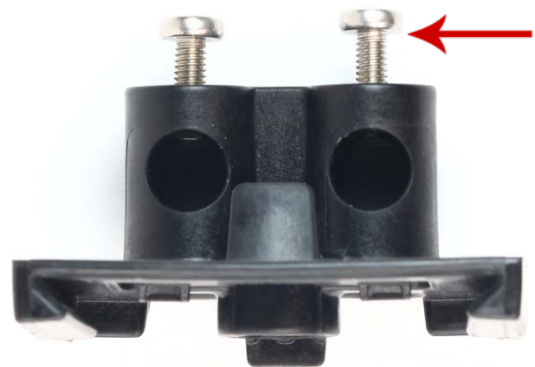


12.3 Dielectric Cable

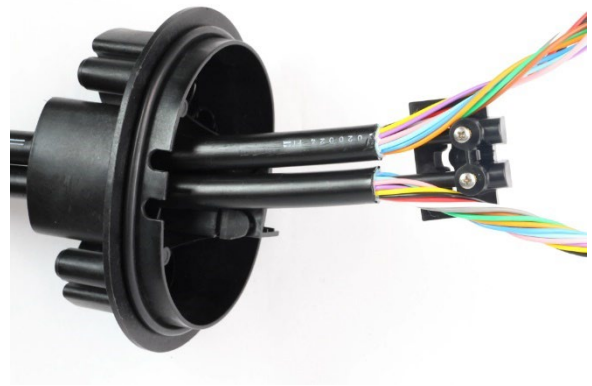
1. Ensure that the cable openings are even and the buffer tubes have been moved to the outside CSMs.



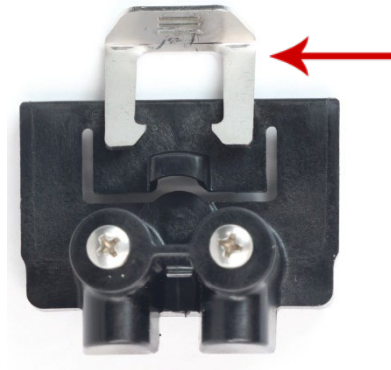
2. Loosen the two bolts on the top of the CSM retention device, but do not remove them.



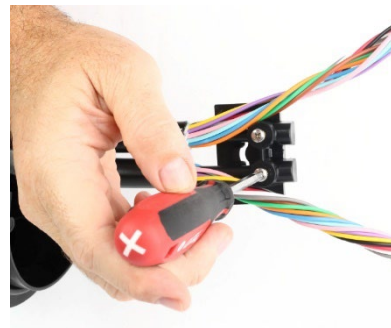
3. Slide the CSM retention Device onto the CSM of each cable.



4. If the CSM is ≤ 5.0 mm, you must use the shim key.



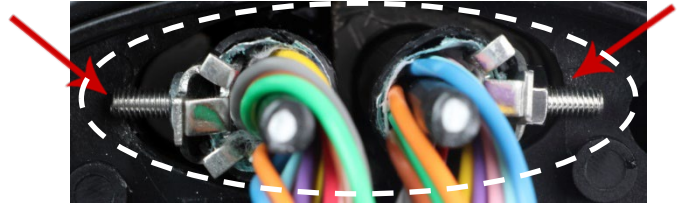
5. Tighten the bolts onto the CSM to hold it in place.
6. Max torque is 1.1 ft lbs or 1.5Nm.



AT ALL TIMES, FOLLOW YOUR LOCAL PRACTICE FOR BOND TYPE AND PLACEMENT!

12.4 Armored Cable

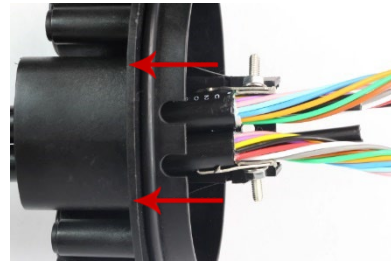
1. When preparing the cable for bonding, the studs on the bond must align with the narrowest part of the oval port.



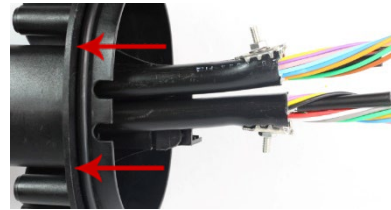
2. Place the appropriate bond

NOTE No vinyl tape was used for demonstration purposes. Prysmian recommends taping the bonds to cover any sharp edges.

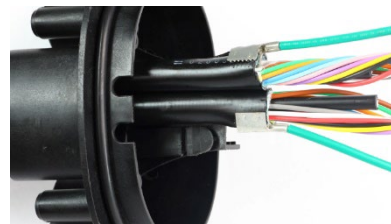
3. 4460



4. 4462



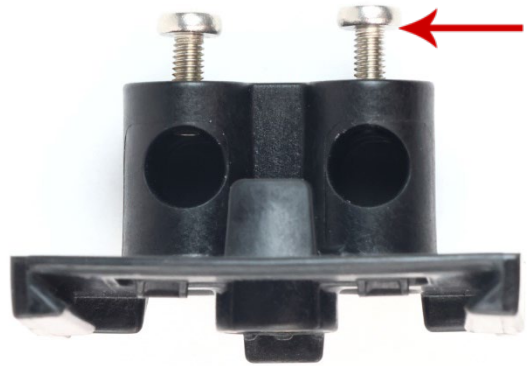
5. Low Profile Crimp



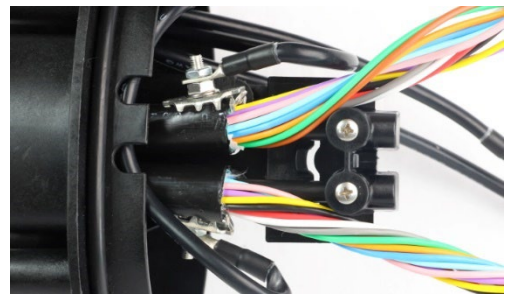
6. Attach the bonding lead to the stud and tighten it to the manufacturer's spec.



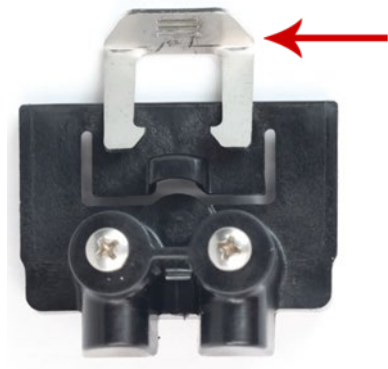
7. Loosen the two screws on the top of the CSM retention device, but do not remove them.



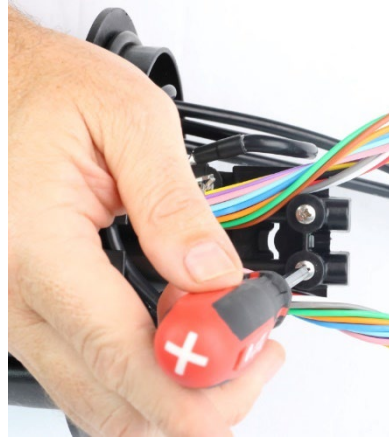
8. Slide the CSM retention Device onto the CSM of each cable. You may have to trim the CSMs to fit them properly.



9. If the CSM is ≤ 5.0 mm, you must use the shim key.

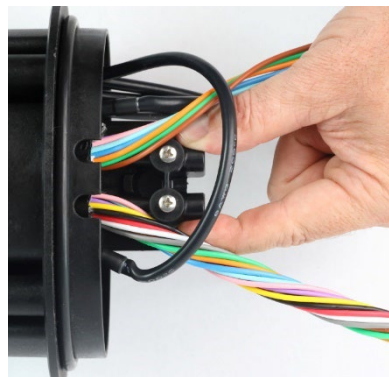
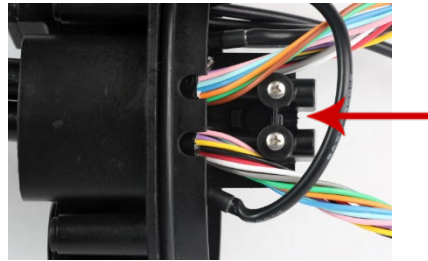
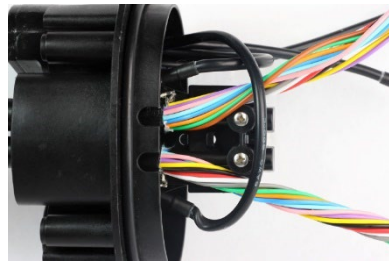


10. Tighten the screws onto the CSM to hold it in place.



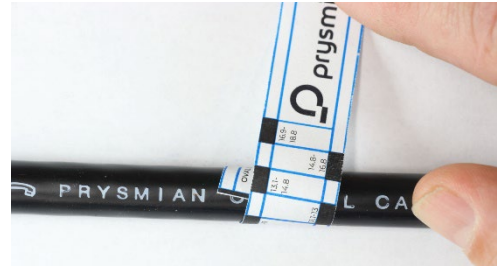
12.5 Attach the CSM Retention Device to the Base (shown with armor cable; the procedure is the same for dielectric cable.)

1. Pull the cables back through the Oval Port until the CSM Retention Device aligns with the Base.
2. Push the CSM Retention Device into place.
3. Tug to ensure the locking tabs have engaged.



12.6 Placing the Cable Seal

1. Measure the cable to determine the diameter. Choose the correct size cable seal.



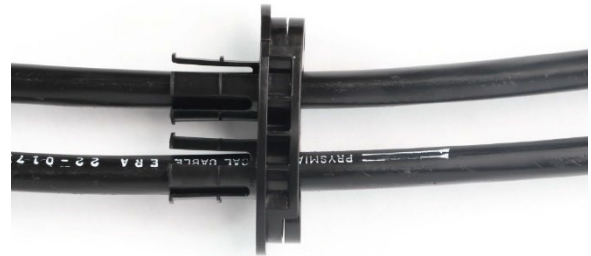
2. Clean any debris from the cable using an alcohol wipe.



3. Place the external plate of the cable seal onto the cable.

NOTE The smaller seals are in two pieces. The larger seals are one piece.

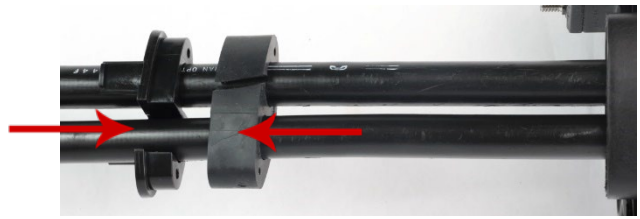
4. Small



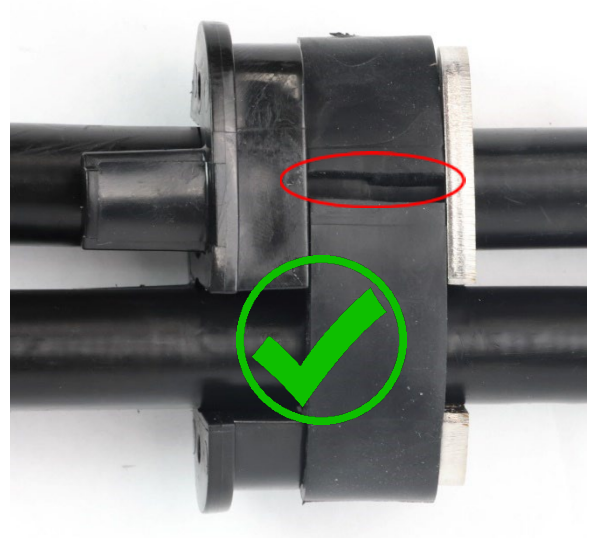
5. Large



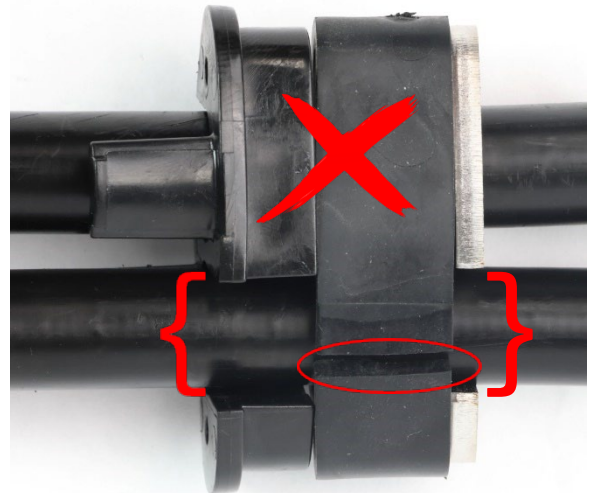
6. Place the rubber seal. It is slit on opposing sides. Ensure the slits do not line up with the opening in the cable seals.



7. The plates will compress the slit in the rubber seal. This is installed correctly and will not leak.

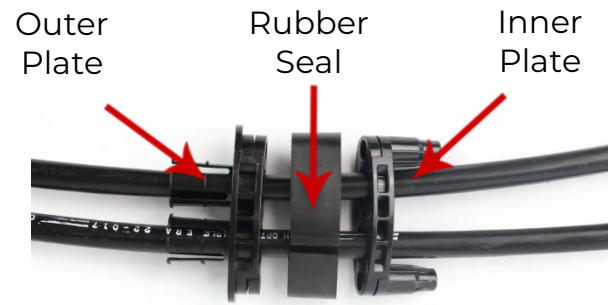


8. The slit in the rubber seal lines up with the openings in the plates. This will not seal well and has the potential to leak.



9. Place the inner plate of the cable seal.

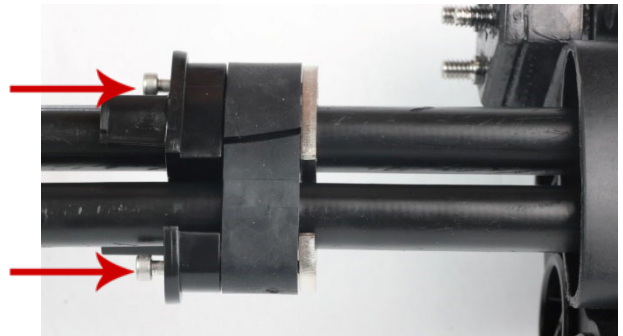
10. Small



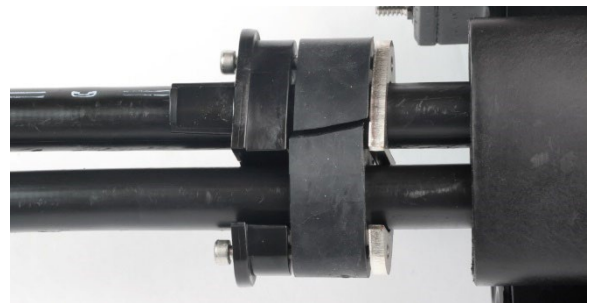
11. Large



12. Insert Allen bolts through the pieces and start the threads.



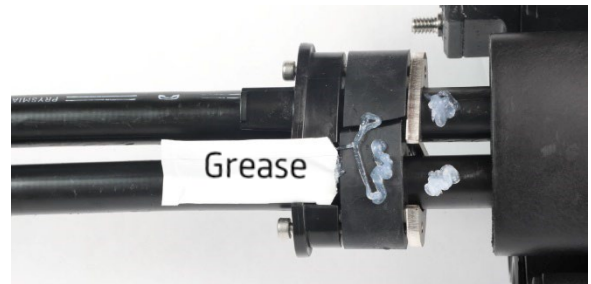
13. Slide the cable seal up to the edge of the Oval Port.



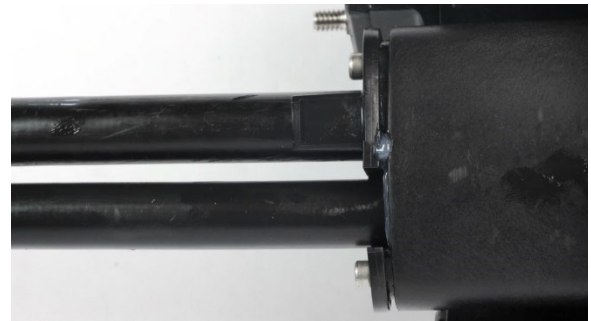
14. Place a thick layer of grease circumferentially on the cables in front of the seal.



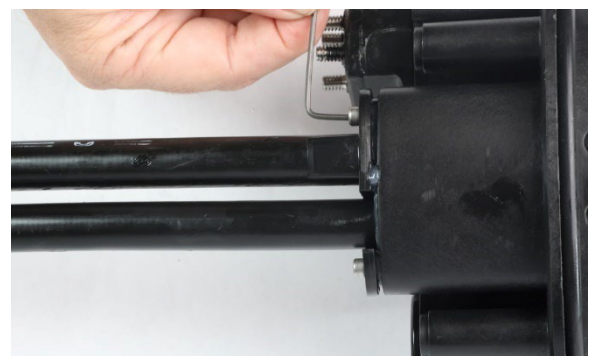
15. Place a layer of grease circumferentially on the outside of the rubber grommet.



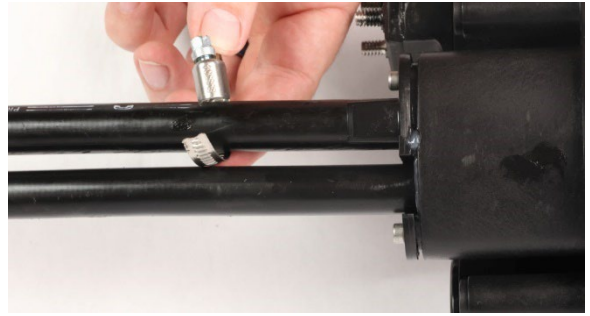
16. Slide the cable seal into the Oval Port until the external piece is firmly against the base.



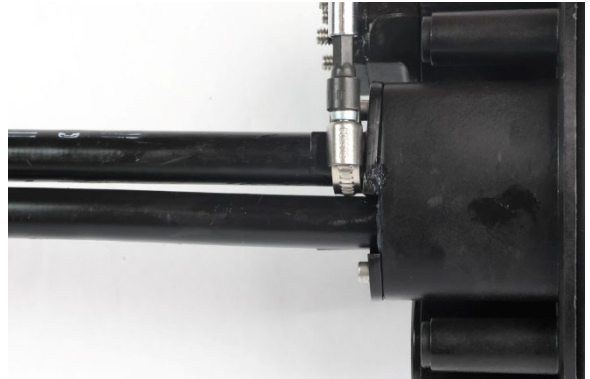
17. Tighten the Allen bolts with the provided Allen wrench. They need to be very tight.



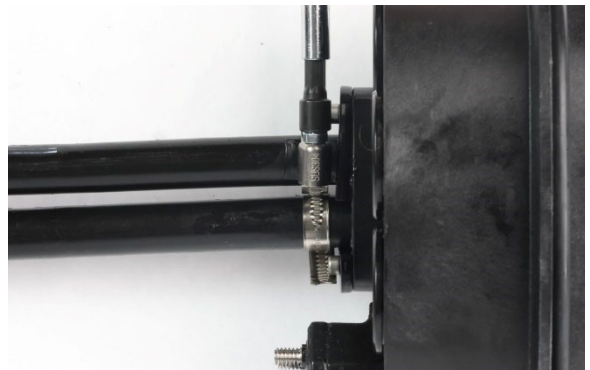
18. Take the hose clamp apart, place it over the cable, and reassemble it.



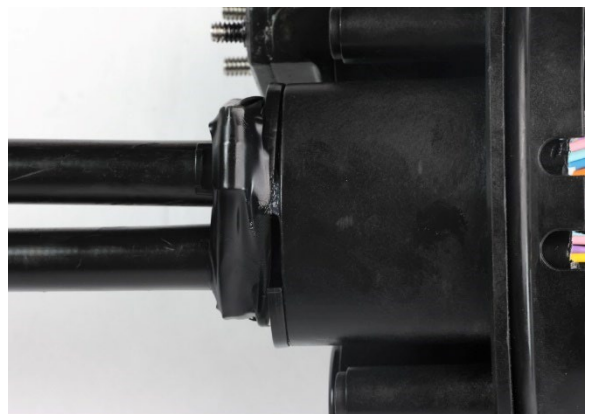
19. Slide it over the end of the cable seal and tighten it to 40-inch lbs.



20. Follow steps 18 & 19 for the other cable.



21. Place 2 wraps of vinyl tape over the hose clamps.



13.0 4-Way Cable Seal

The Eagle Closure accepts a uniquely designed cable seal, allowing 4 small (<7mm) cables to enter through a single port. This seal comes with port blanks to seal unused ports until they are needed. Prysmian makes no specific recommendation on which port should be used for this cable seal. This cable seal will work well with CSM or dual-strength members.

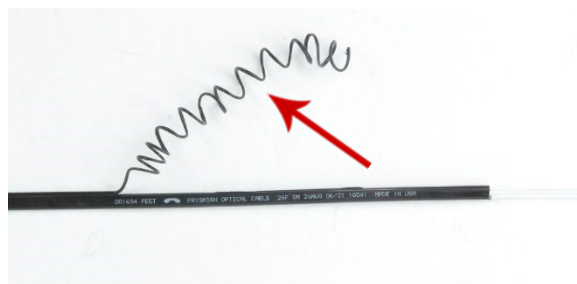
13.1 Remove the port blank.

Please refer to **Section 7** for specific instructions on how to remove a port blank.

For demonstration purposes, we will use a flat toneable drop. (Drop with a messenger wire)

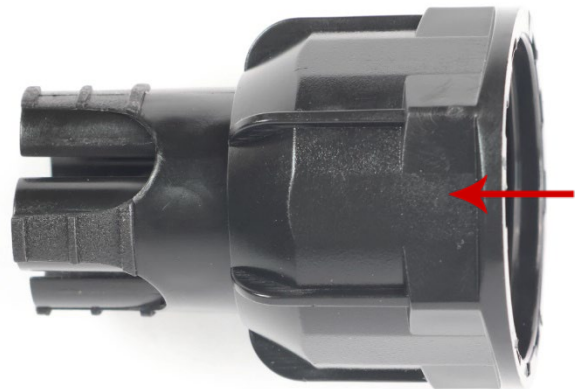
13.2 Preparation of the drop

1. Remove 6 feet of jacket from the drop. Please refer to the **Prysmian guide PR05** for assistance with this step.
2. Detach the messenger from the drop. Ensure that it is at least 12 inches from the cable opening. Follow your local practice for bonding the messenger.
3. Cut the dual-strength members 2.5 inches from the cable opening.
4. Tape the dual-strength members to the central tube. This will make it easier to insert them into the cable seal.



13.3 Prepare the Cable Seal

1. Locate the anti-torsion clamp
2. Locate the Compression nut and insert the anti-torsion clamp as shown
3. Locate the SMRA and thread it onto the cable seal body
4. Slide the nut and anti-torsion clamp onto the cable.
5. Slide the cable through one of the holes in the rubber seal, ensuring it exits the SRMA in the corresponding opening.



6. Locate the tube of grease and place a layer circumferentially around the cable.



7. Slide the rubber seal into the fingers of the cable body.



8. Start the nut onto the cable body.



13.4 Secure the GRPs or CSM

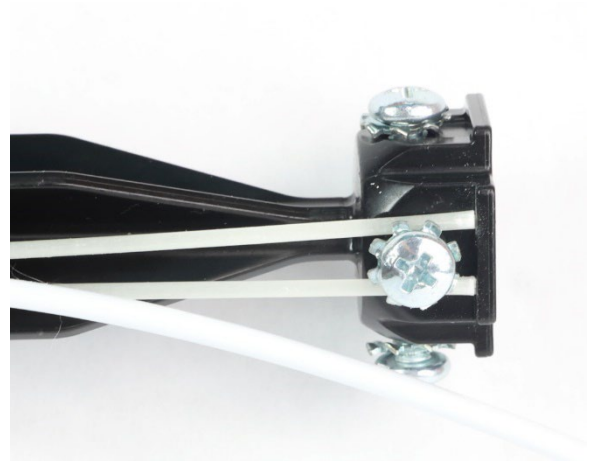
1. Remove the tape from the end of the CSM or dual-strength members



2. Loosen the screw and star washer.



3. Slide the CSM or dual-strength members under the star washer.



4. Tighten the screw to secure the CSM or dual-strength members. Make sure the buffer tube is clear of the screw head and the star washer.



13.5 Installing the port blanks.

1. Locate the port blanks.



2. Apply a thin layer of grease to the port banks.



3. Insert the port blanks into the end of the cable seal.



4. Grease the threads of the cable seal.

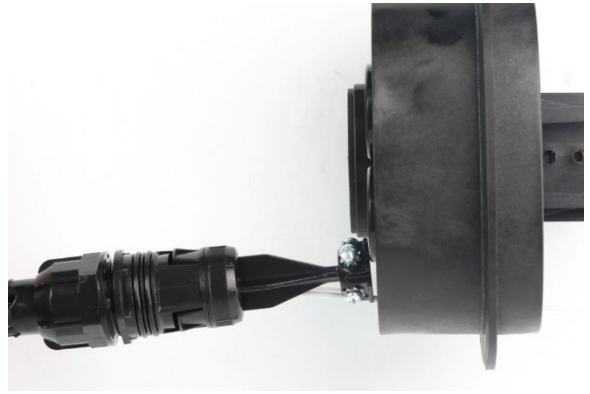


5. Tighten the compression nut. Then, secure the cables to the anti-torsion device using a provided cable tie.



13.6 Install the cable seal in the base.

1. Insert the cable into the desired port opening in the base.



2. Grease the O-rings.



3. Using firm pressure, push the cable seal into the base. You may have to rotate the cable seal slightly to get it to seat correctly. You should hear a "Click."



14.0 Using “THE NEST” Slack Basket and Splicing Trays

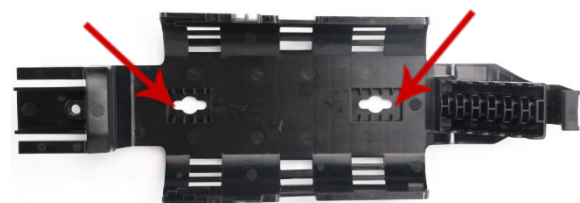
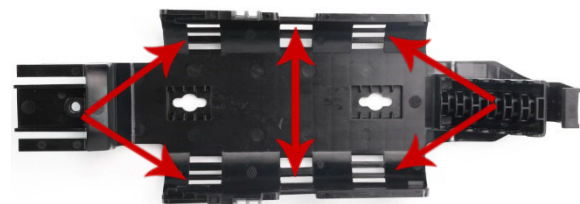
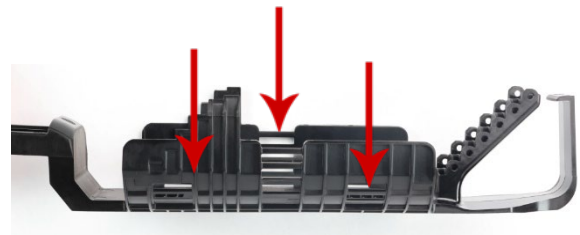
The Slack Basket was designed with the splicer in mind. Prysmian has provided numerous features to help secure buffer tubes, route cables, and support splicing trays. If you follow the splicing guide regarding lengths of cables, you should have no issues with slack storage. The Slack Basket will accommodate 6 trays for splice storage. When splicing a cable that is ≤ 144 , use the top three positions. If you are splicing a cable greater than 144f, you must utilize the lower three positions. If splicing a large cable (288f), you must adjust slack storage to accommodate the extra trays.

The Trays are designed to allow maximum fiber storage and splicing. The Trays will accept 2.5 mm to 3.3 mm shrink sleeves. The trays will accept 48 single fiber splices; you must double-stack the sleeves to facilitate this. The trays will also accept one splitter, should you choose to use one. The largest splitter that the tray will accept is Prysmian’s 1x16.

The Trays are connected to the Slack Basket with a pressurized hinge system. The hinge allows the trays to be tilted upward for easy access. The Slack basket also comes with a tool called “The Talon.” When inserted in the slack basket appropriately, it will hold the trays out of the way for splicing or assist in securing them for storage. The Slack Basket also comes with a 3-foot (1M) length of Velcro to assist you in buffer tube and tray storage.

14.1 Slack Basket

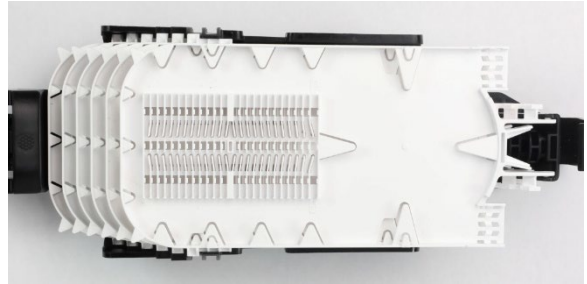
1. Side view of Slack Basket. Arrows show places to Velcro buffer tubes in place
2. Top view of Slack Basket. Arrows show places to Velcro buffer tubes in place
3. Top View of Slack Basket. The basket can be mounted to a wall or in a closure using these screw mounts.



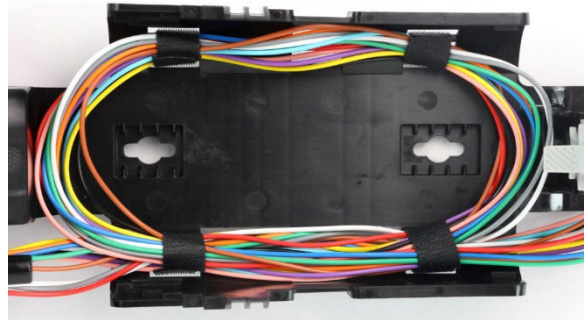
4. Side View of Slack basket with Trays in place.



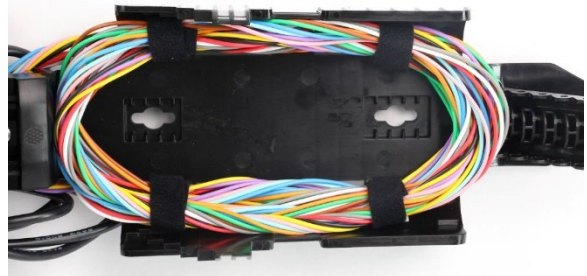
5. Top view of Slack Basket with trays in place.



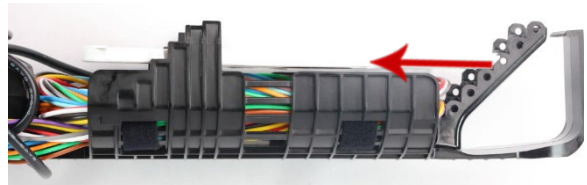
6. This is an example of a 144-fiber cable in the slack basket.



7. This is an example of a 144-fiber midspan cable in the slack basket.

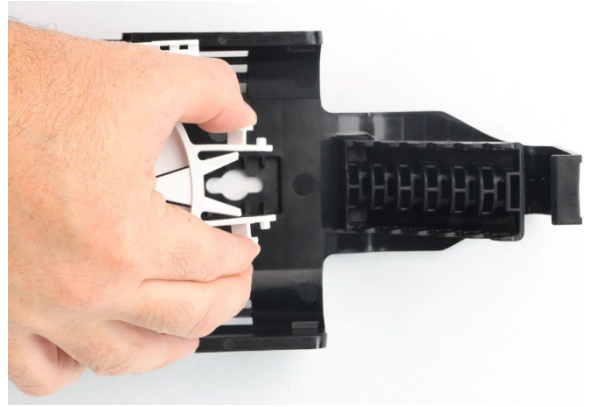


8. There is plenty of room to get trays on above the slack storage.

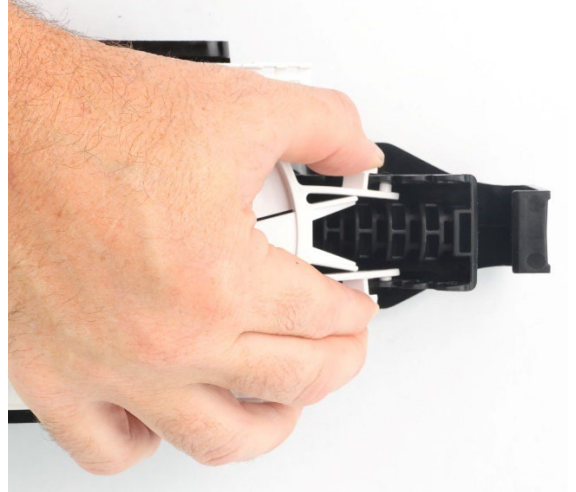


14.2 Installing or removing a Tray.

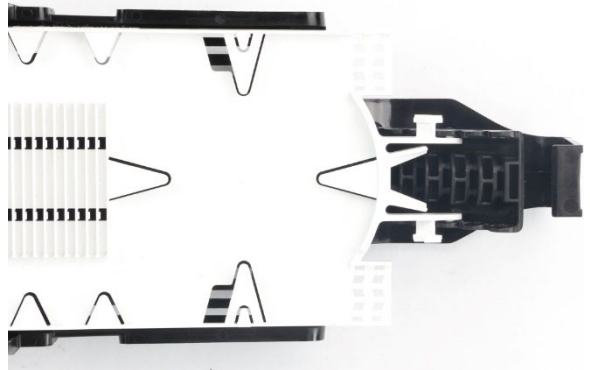
1. Push the pressure tabs together.



2. Move the tray into position.

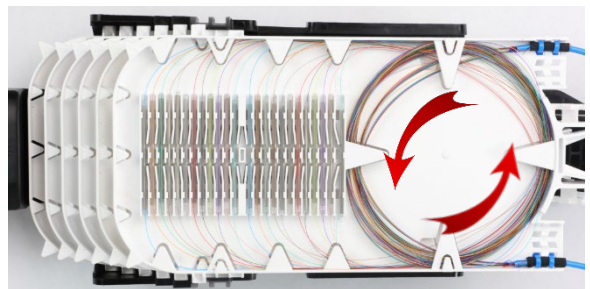


3. Release the tabs.

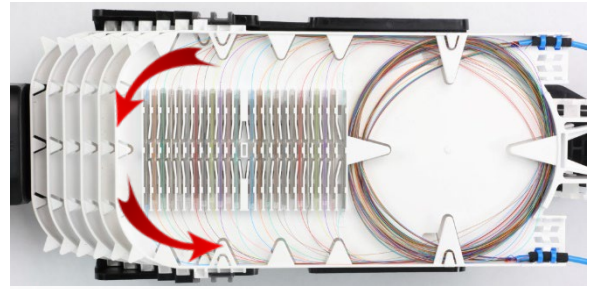


14.3 Fiber management in the Trays.

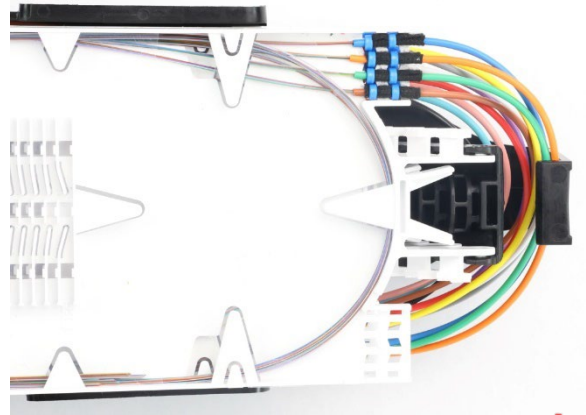
1. You can coil the fiber slack in the round area.



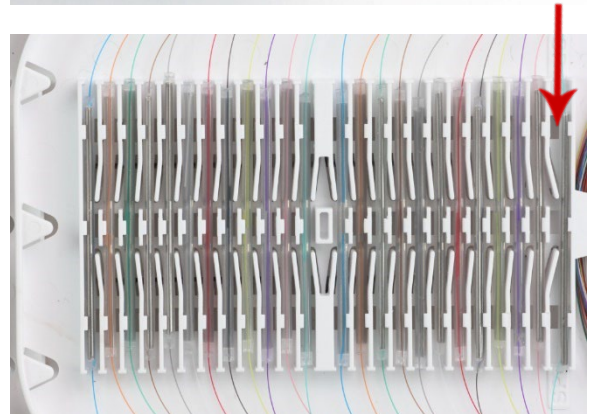
2. You have the option to coil the fiber slack around the outside edge of the tray.



3. Each tray can support 4 buffer tubes per side. Prysmian suggests wrapping each buffer tube with friction tape before securing it to the tray. You should also use 2 x 4-inch cable ties per tube.



4. Each tray will hold 48 single fiber splices. Each holder will accept splicing sleeves from 2.5 mm to 3.3 mm.
5. You can also install a splitter at the bottom of the tray.

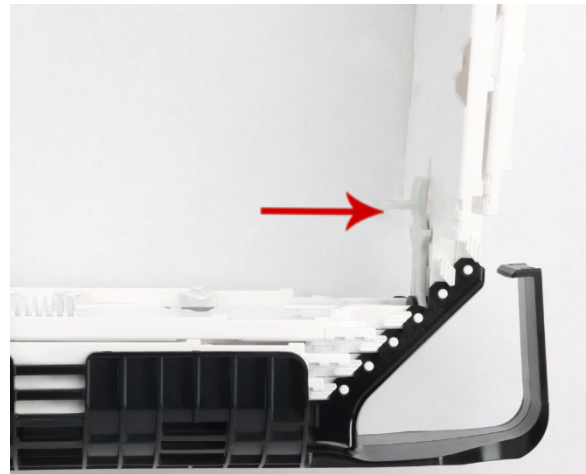


13.4 The Talon

1. The Talon was designed to help secure the trays while being stored.



2. The Talon will also hold the trays out of the way while you are splicing.

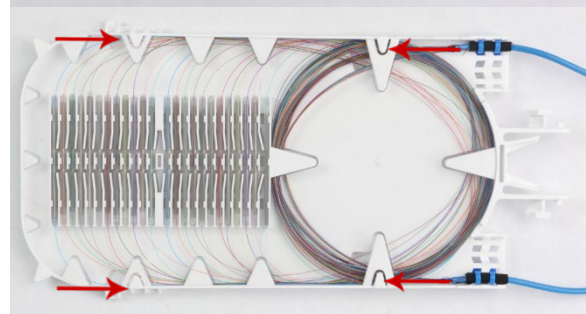
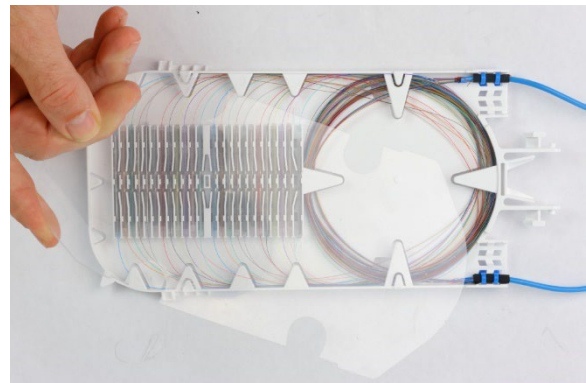


3. Insert the Talon into the holes beneath the tray. You want the smooth side against the tray.



14.5 The Cover

1. The Trays also have a clear plastic cover to protect the splice.
2. The cover will flex, allowing you to secure it underneath these four tabs.



15.0 Cable Seal Removal

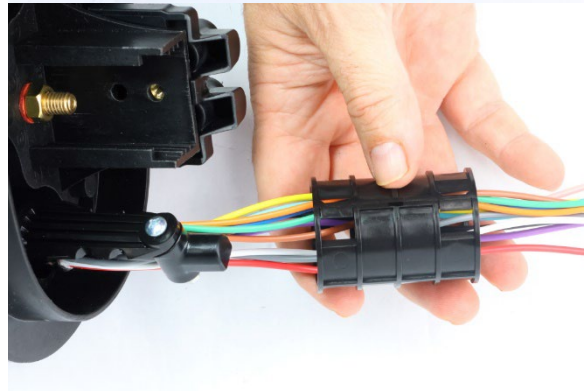
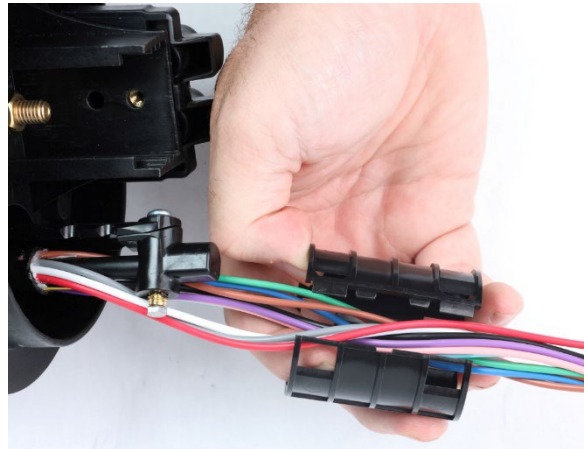
Prysmian has made removing a cable seal from the base very easy. Using the removal tool, the locking tabs can be compressed, allowing the cable seal to be extracted.

15.1 Cable seal removal tool.

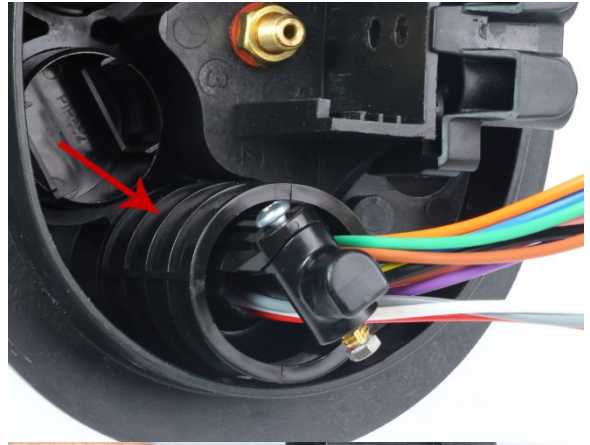
1. Locate the two halves of the cable seal removal tool.



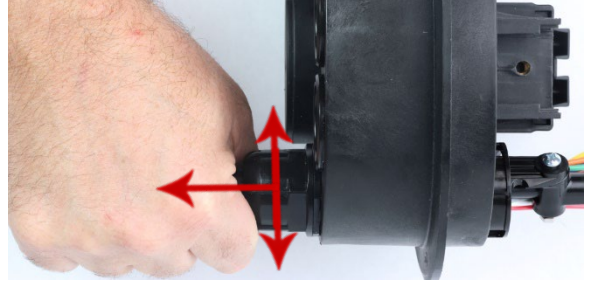
2. Clamp the halves together around the cable and seal being removed.



3. Slide the cable seal removal tool down into the base and over the end of the cable seal to engage the locking tabs.



4. Wiggle the cable seal and pull it from the base.



5. Cable seal easily removed.



6. Sometimes, the seal is very tight, and a flat-headed screwdriver is necessary to back the cable seal out.



16.0 The Eagle Wrench

The Eagle Wrench is available for purchase with the closure. The round end is designed to grip the compression nut. Once two or more cables have been installed in the base, it may be challenging to grip the compression nut with your hand. The tool's square end will help you tighten the compression nut before inserting it into the base.

