



## UTS MPO Series

BT 319



**SOURIAU**  
Connection Technologies





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## Tool & Material

The following tools and materials are necessary for preparation, assembly, inspection, and maintenance of the connector and cable assembly. Follow the tool instruction for operation and safety guidelines.

### Tools

- Cable jacket strip tool
- Aramid Fiber Shears
- Fiber Stripping Tool
- 15 mm U-wrench
- 28 mm U-wrench
- 36.5 mm U-wrench
- Nipper (Oeticker Standard)
- Heat gun (optional)

### Material

- MPO contact: the UTS MPO connector range can adapt all kind of MPO contact as defined per IEC 61754-20
- Cable: the UTS MPO connector range can adapt all type of standard cable from 3 to 6mm outer diameter.
- Above these diameter limits some adaptations are necessary
- Suggested glue: LOCTITE® 480 PRISM Instant Adhesive

### Assembly instructions

The assembly should be done in a dust free and dried environment, in accordance with fiber optics good practices. Make sure that all components are free from contamination.

The assembly instruction is only a guideline and the assembly/manipulations are under the responsibility of the assembler. Any change of product or material is under the responsibility of the assembler.



## Connector part numbers

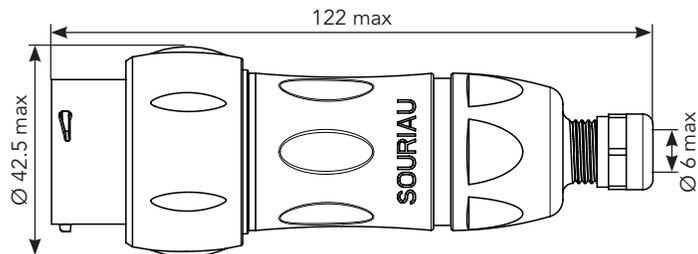
Connector type	Backshell	Part number	
		Male insert	Female insert
Free hanging receptacle	Cable gland	<b>UTS1JC18MPN</b>	-
Plug	Cable gland	-	<b>UTS6JC18MPN</b>
Jam nut receptacle	Without	<b>UTS718MPN</b>	-

## Accessories

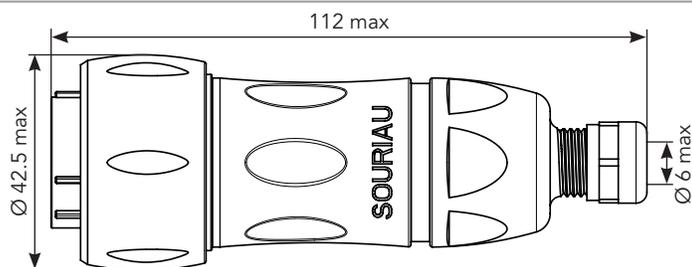
Sealing caps	
For UTS6JC18MPN	For UTS1JC18MPN & UTS718MPN
Part number <b>UTS618DCG2</b>	Part number <b>UTS18DCG2</b>

## Dimensions

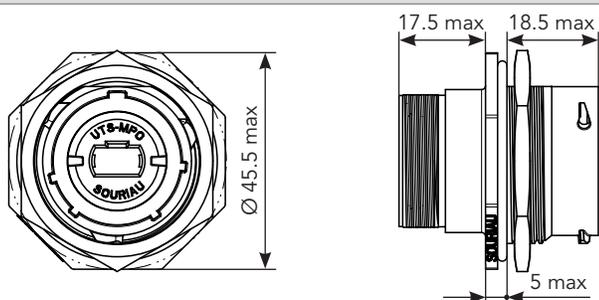
### Free hanging receptacle - UTS1JC18MPN



### Plug - UTS6JC18MPN

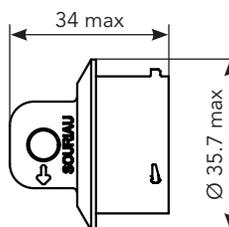


### Jam nut receptacle - UTS718MPN

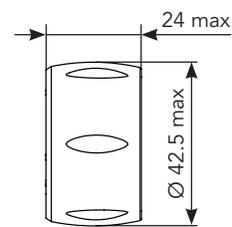


### Sealing cap

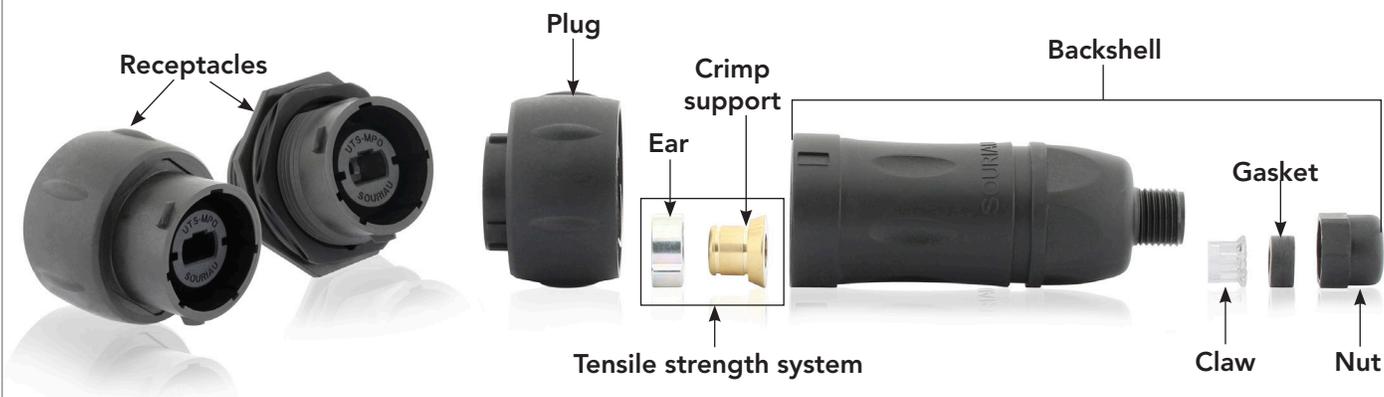
UTS618DCG2  
for UTS6JC18MPN



UTS18DCG2  
for UTS1JC18MPN & UTS718MPN



### UTS1JC18MPN, UTS6JC18MPN, UTS718MPN overview

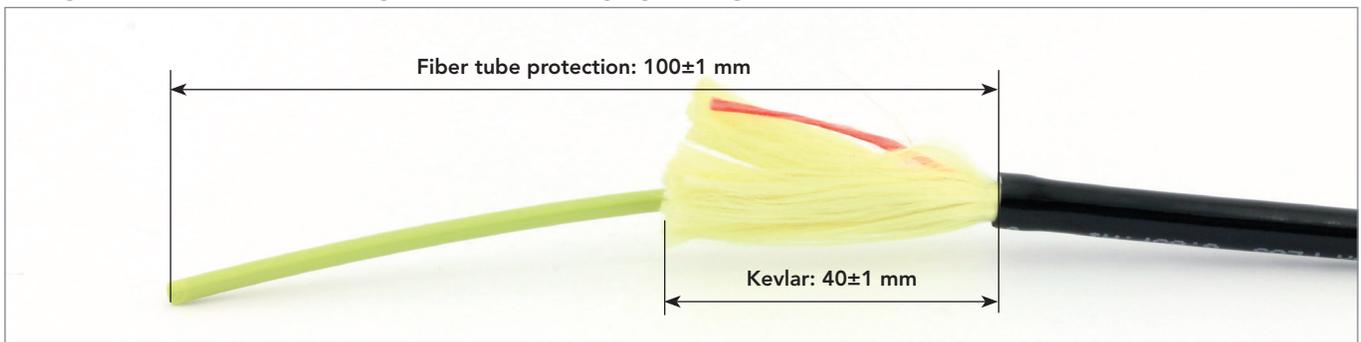


## Assembly instructions

### UTS1JC18MPN & UTS6JC18MPN

#### Cable preparation

1. Slide the backshell onto the cable allowing 50 cm at the end of the cable for stripping the cable. Make sure to orient each component as shown in the UTS MPO Component details section.
2. Using the cable jacket strip tool, strip the jacket to the dimension given in figure below, exposing the kevlar strength members and fiber.
3. Using the shears, trim the kevlar strength members to the length given in figure below.



4. Fix the Kevlar using an adhesive tape on the "individual fibers" to facilitate the insertion of the crimp support.



5. Slide the crimp support (large diameter end first) over the fibers and the kevlar strength members until it bottoms on the cable outer jacket.



### UTS1JC18MPN & UTS6JC18MPN (Continued)

6. Separate the kevlar strength members in two groups. Use an adhesive tape to fix the kevlar strength members on the jacket.



7. Apply the instant adhesive on the fiber and cover the crimp support. (e.g. Loctite 480 PRISM).

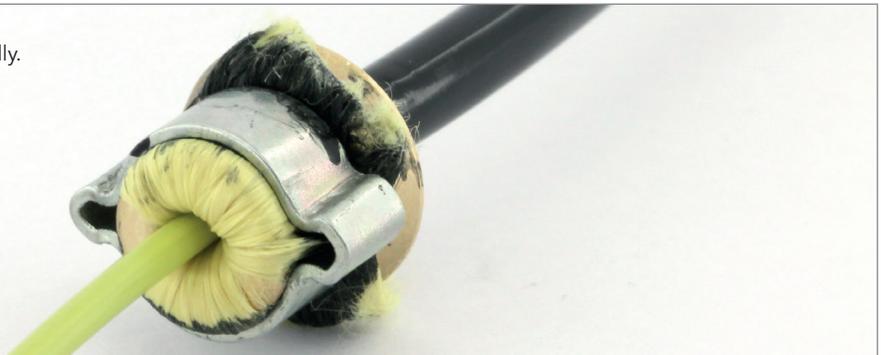


8. Before the instant adhesive begins to harden, quickly slide the ear clamp over the fiber, orient the Clamp according the picture. Push the strength members back over the clamp until it bottoms on the rear flange of the support.



9. Crimp the both ear of the Clamp using the Nipper. Remove the kevlar strength members using using the shears.

Check the good crimping by pulling manually.



## Assembly instructions (Continued)

### UTS1JC18MPN & UTS6JC18MPN (Continued)

11. Terminate the MPO contact on the fiber according to your supplier instruction for gluing, cliving and polishing.

Free hanging receptacle UTS1JC18MPN



Plug UTS6JC18MPN

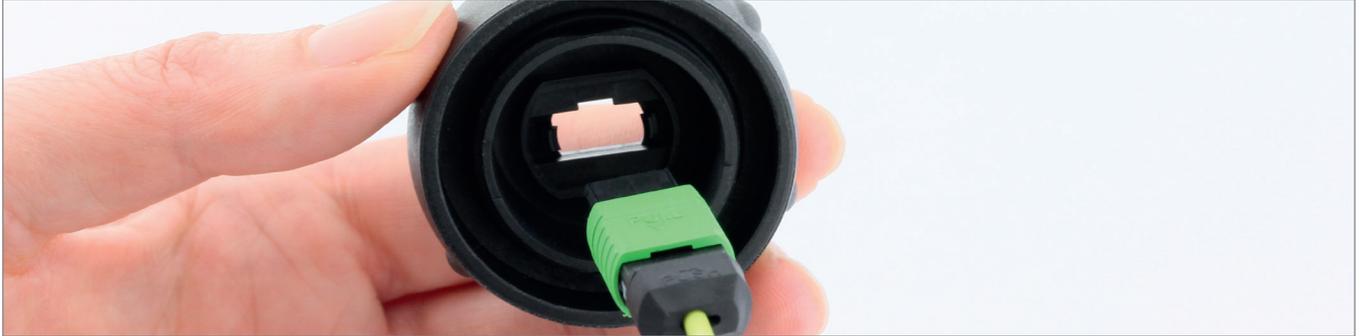


12. Fix the cable in a tool to avoid the rotation.



### UTS1JC18MPN & UTS6JC18MPN (Continued)

13. Plug the MPO in the cavity.  
 You need to hear a "click".



### Backshell screwing for UTS1JC18MPN

1. Slide the backshell and screw it using a 28 mm U-wrench. Tightened the backshell with a 4 Nm torque.



2. Control: Pull on the cable to ensure that the retention system bottoms in the backshell.



3. Screw the head nut using a 15 mm U-wrench. Tightened the head nut with a 2 Nm torque.



## Assembly instructions (Continued)

### Backshell screwing for UTS6JC18MPN

1. You need a receptacle counter-part. Orient the polarization keys before you start mating the connectors.



2. Coupling plug with receptacle



3. Slide the backshell and screw it using a 28 mm U-wrench. Tightened the backshell with a 4 Nm torque.



4. Control: Pull on the cable to ensure that the retention system bottoms in the backshell.



### Backshell screwing for UTS6JC18MPN (Continued)

5. Screw the head nut using a 15 mm U-wrench. Tightened the head nut with a 2 Nm torque.



### Recommendation

Use the caps, UTS618DCG2 for plug or UTS18DCG2 for receptacle to protect the MPO contacts from surrounding contamination.

You need to hear a "click".



## Assembly instructions (Continued)

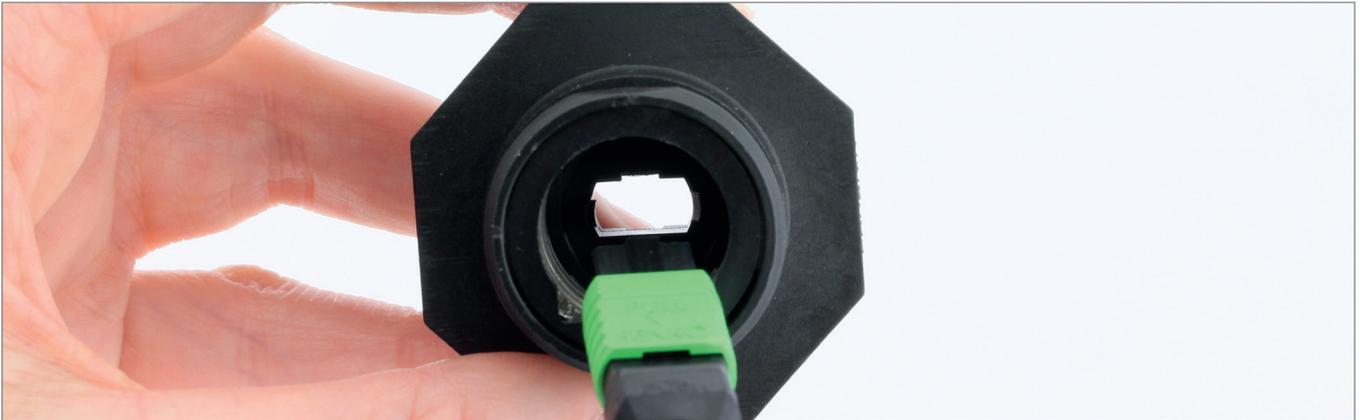
### Assembly instructions for UTS718MPN

2. Terminate the MPO contact on the fiber according to your supplier instruction for gluing, cliving and polishing.

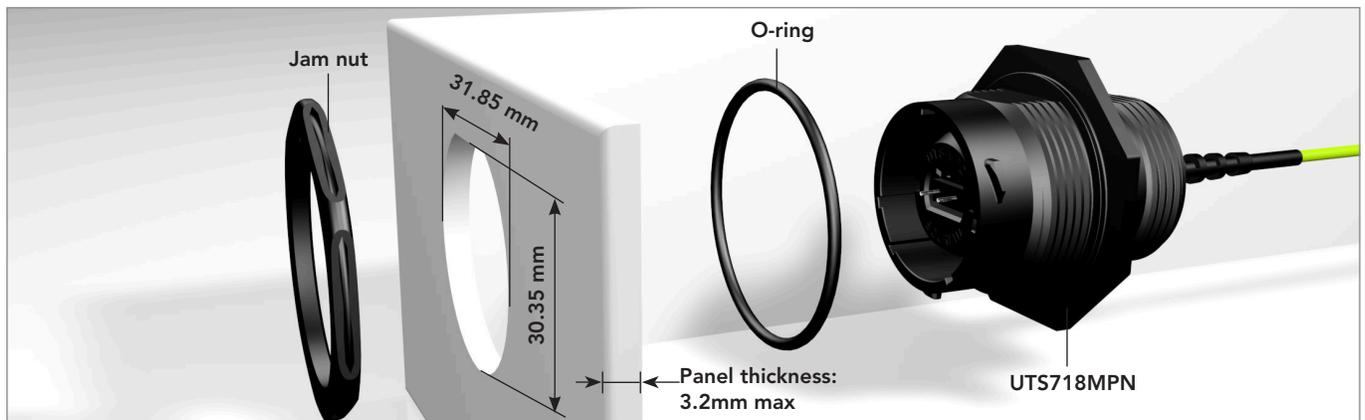


3. Plug the MPO in the receptacle.

You need to hear a "click".



4. Seat o-ring, place receptacle in the panel cut-out.



### Assembly instructions for UTS718MPN (Continued)

5. Tightened the jam nut with a torque of 5 Nm, using a 36.5 mm U- wrench.



6. Coupling.



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