



The Snaplock connector series is a miniature power cable hook up system offering high current capability while maintaining minimal physical dimensions.

Snaplock offers a commercially viable option to historical hard wiring techniques. In addition, Snaplock offers improved safety characteristics through utilization of insulated bodies, sealing mechanisms, locking mechanisms and protected current carrying elements.

Snaplock connectors are available in a range of colors for simple identification of individual lines.

The contact elements are based on our proven Louvre band technology which ensures low contact resistance thus minimizing power loss, low physical insertion forces with a self wiping action, and high number of mating cycles. The male contact elements are protected by a non-conductive tip which makes physical contact with the current carrying element impossible.

The contacts are held in the insulators via a clip retention system. This allows for fast, simple assembly and good retention of the contact sets, especially where vibration is an environmental concern.



Contact termination to the cable conductor is by standard compression crimp or set-screw fixing and for panel mounting a threaded M12 post. Connectors for panel mounting and cable mounting are available. All connectors are IP67 sealed when mated through utilization of integral sealing rings and cable gland strain relief.

The speed of connection and disconnection offers great savings in equipment down time, servicing and maintenance procedures. The security of the connection is maintained by a simple but very effective locking mechanism which can be utilized as a temporary or semi-permanent lock.

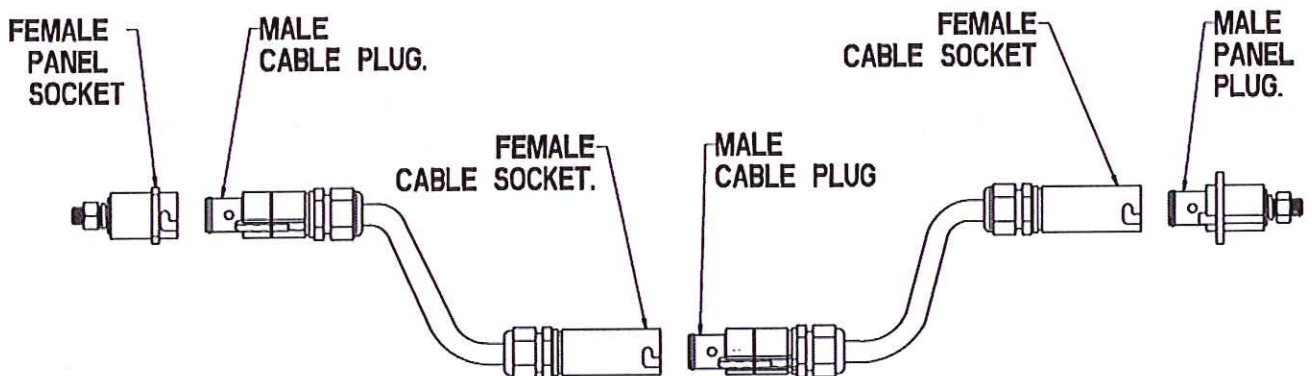


Slide forward using a screw driver to provide a semi-permanent lock

The spring loaded slide lock feature shown above locks into bayonet groove on the mating half, and can be disengaged by sliding back using ones thumb. This lock feature can be made semi-permanent by sliding the retainer forward.



	Example =	Body Style SNLM	Contact Gender P	Contact Size C50	Gland Nut 25L	Body Color GN
<b>Description</b>	<b>Code</b>					
Panel Male - M12 post fixing	SNPM					
Panel Female - M12 post fixing	SNPF					
Cable Male - cable fixing	SNLM					
Cable Female - cable fixing	SNLF					
Male Contact (pin) use with SN..M	P					
Female Contact (skt) use with SN..F	S					
Crimp 70mm <sup>2</sup>	C70					
Crimp 50mm <sup>2</sup>	C50					
Crimp 35mm <sup>2</sup>	C35					
Crimp 25mm <sup>2</sup>	C25					
Set-Screw 70mm <sup>2</sup>	S70					
Set-Screw 50mm <sup>2</sup>	S50					
Set-Screw 35mm <sup>2</sup>	S35					
Set-Screw 25mm <sup>2</sup>	S25					
Threaded Post (Panel Mount)	TP					
Gland nut 10-14mm Ø	25S	Cable fixing versions only				
Gland nut 13-18mm Ø	25L					
Red	R					
Black	BK					
Green	GN					
Blue	BL					
Brown	BN					
Grey	GY					
White	W					
Yellow	Y					



Specifications and dimensions subject to change

[www.ittcannon.com](http://www.ittcannon.com)



**Electrical**

Number of Contacts	Single Pole
Current Rating	250 amp continuous
Operating Voltage	1000V AC / 1500V DC
Test Voltage	4500V AC
Dielectric Strength	4500V AC
Electrical Protection	IP2X on male connector
Contact Resistance	<0.1 mOhm

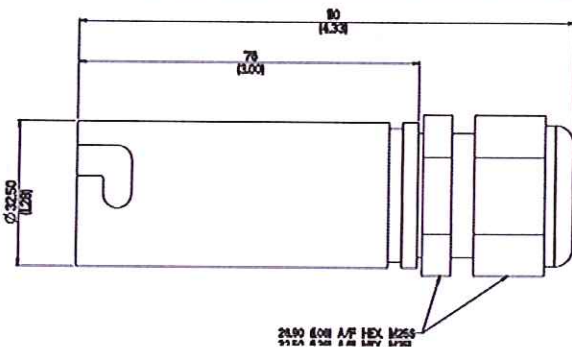
**Mechanical**

Contact Material	Brass (Set-screw) or Copper (Crimp), Silver Plated
Housing Material	High Temperature Thermoplastic
Locking	Bayonet with slide lock
Vibration	10-2000Hz/15g
Mating Cycles	500
Contact Type	Set Screw or Crimp
Contact to Housing retention	C clip
Cable Retention	Cable gland nut

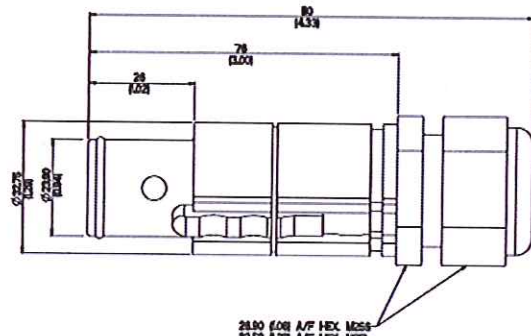
**Environmental**

Operating Temperature	-30°C to +125°C (-22°F to +257°C)
Ingress Protection	IP67 when mated
Flammability	UL94-V0

**Cable Connectors**



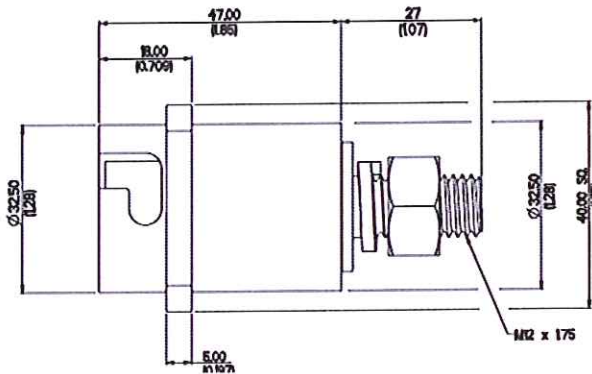
**Female Cable Socket**  
Order code-  
SNLF-S-XXX-XXX-XX



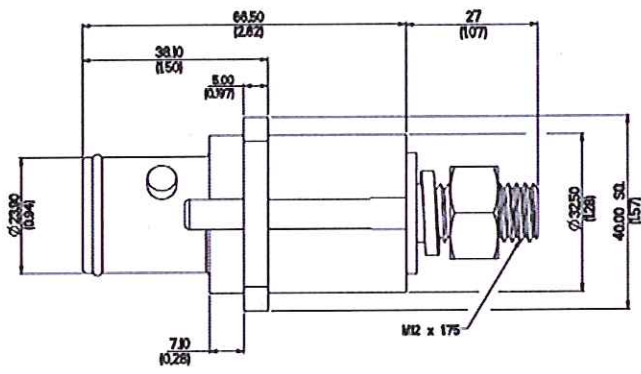
**Male Cable Plug**  
Order code-  
SNLM-P-XXX-XXX-XX

Cable connectors are available with contacts to fit a range of cables with centre conductors from, 25mm<sup>2</sup> to 70 mm<sup>2</sup>. Contacts can be specified for either crimping to cable or for set-screw fixing. Gland nuts are offered in 2 sizes to suit cable overall diameters from 10mm to 18mm.





**Female Panel Socket**  
Order code-  
SNPF-S-TP-XX

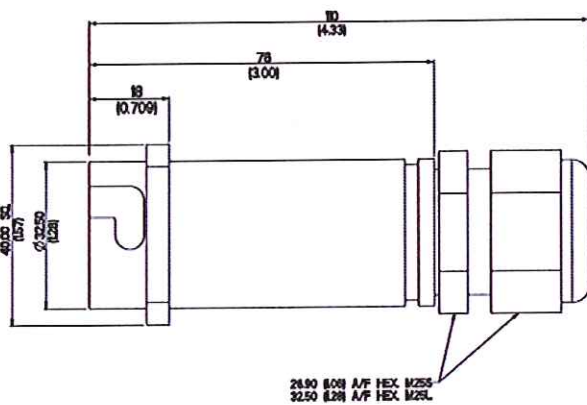


**Male Panel Plug**  
Order code-  
SNPM-P-TP-XX

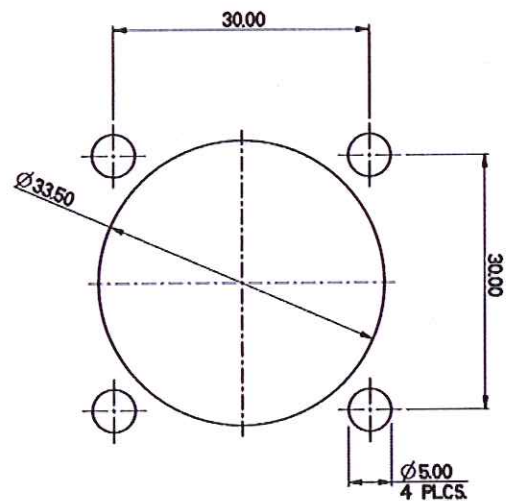
The standard panel connectors are mounted through 4 holes in the flange. The rear of the connector has an M12 threaded post fitted with a nut and lock washer, to take a cable fitted with a standard cable lug. Male and female connectors are available in a range of colors, and all panel connectors are fitted with a gasket.

The male connector is fitted with a sliding latch to prevent accidental disconnection. This latch can be locked in place to make this a more permanent lock.

The panel female connector can also be supplied with a cable gland nut fitting, this version uses a crimped or set-screw contact, the contact size needs to be specified with this item.



**Female Panel Socket with cable fixing**  
Order code-  
SNPFL-S-XXX-XXX-XX



**Panel Cut out for all versions**

# Assembly Instructions For Snaplock Connectors AI1320.

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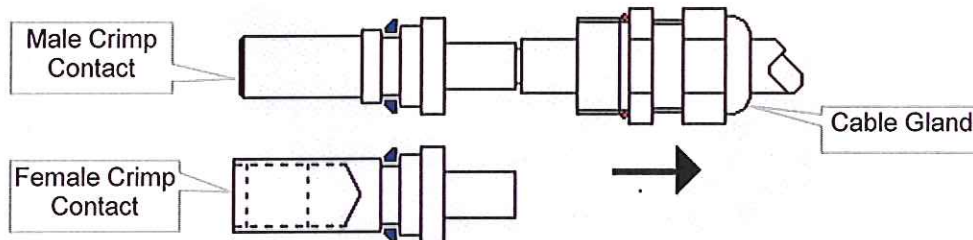
# Assembly Instructions For Snaplock Connectors AI1320.

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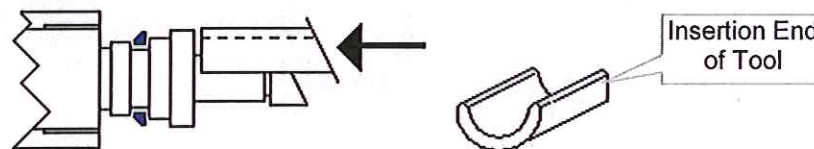


## 1. CONTACT INSERTION PROCEDURE (Retaining Clip)

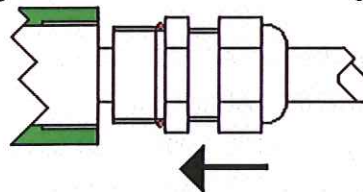
Check that the contact has been assembled correctly and that the cable gland has been fitted onto the cable.



Using the insertion end of insertion/ male removal tool (Part No. 500066100), position it over the cable jacket and against the rear of the contact shoulder.



Slide the contact into the rear of the inline connector and push the insertion tool hard against the contact shoulder. This will compress the retaining clip and the contact will move forward. The clip will then spring open retaining the contact within the moulding.

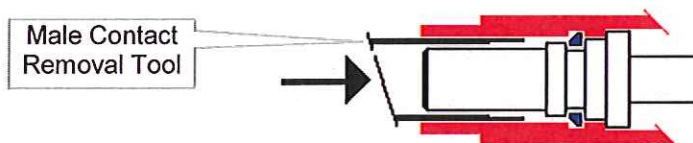


Slide the cable gland body down the cable and screw it into the rear of the moulding. Tighten it to 4 Nm (35lbf-in). Slide the cable gland nut and tighten it onto the cable gland body to 4 Nm (35lbf-in). Check that the cable gland has sealed onto the cable jacket.

## 2. CONTACT REMOVAL PROCEDURE (Retaining Clip)

Release the cable gland nut by turning it anti-clockwise. Release the cable gland body from the moulding by turning it anti-clockwise.

To remove a male contact, position the male end of the removal tool (Part No. 500066100) over the male contact nose and up inside the front of the male connector. Push it hard towards the moulding. This will release the retaining clip and the contact can be removed from the rear.



To remove a female contact, position the removal tool (Part No. 500066003) inside the front of the inline female connector. Push it hard towards the moulding. This will release the retaining clip and the contact can be removed from the rear.

# Assembly Instructions For Snaplock Connectors AI1320.

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Gasket

30mm Pitch

Align the moulding and gasket holes with the panel cut out and fit four screws.  
The recommended fixing are M5 x 16 socket cap screws, 8 x M5 plain washers and  
4 x M5 locknuts. The recommended torque to tighten the screws is 130 cN-m (11.5lbf-in).

## 5. PART NUMBERS

The part numbers shown below should be used as required.

500066100	Snaplock Insertion / Male Extraction Tool
500066003	Snaplock Female Extraction Tool

## 6. DISCLOSURE STATEMENT

As these connectors form part of the connector system, it is vital that they are correctly fitted. It is advisable to contact your local sales office if any additional information or guidance is required. ITT Industries cannot be held responsible for any injury following incorrect fitting of these components.

## 7. CONTACT DETAILS

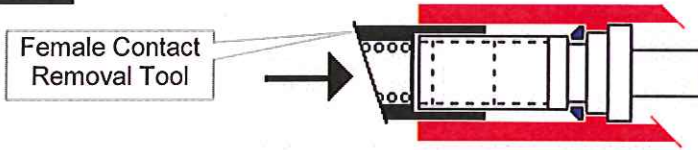
If any further assistance is required, please contact;

UK	44.1256.311200
Germany	49.7151.699.0
Italy	39.2.93532.1
USA	1.860.274.9681

To enhance the level of information made available for this product range, this document along with all relevant information on the Powerlock range can be viewed on the ITT Industries website:  
<http://www.ittcannon.com/>

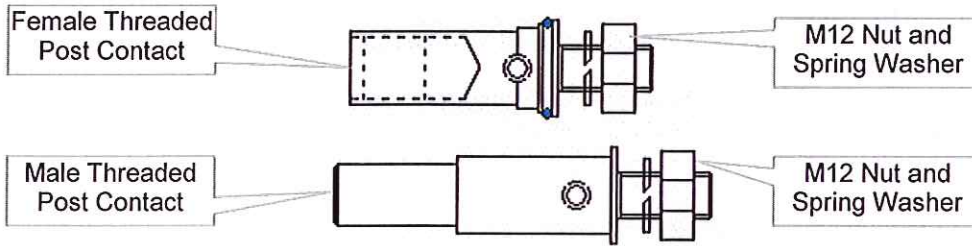
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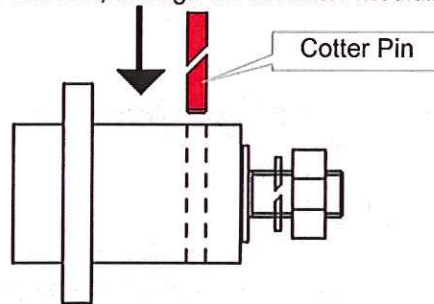


### 3. ASSEMBLY OF THREADED POST PANEL CONNECTOR

Check that contact has been assembled correctly.



Fit the contact into the rear of the panel insulator and align the holes. Press fit the cotter pin, tapered end first, through the insulator moulding and contact until flush.



**NEVER REFIT A COTTER PIN. ALWAYS REPLACE THE COTTER PIN AND MOULDING.**

Remove the M12 nut and spring washer from the contact threaded post and fit the cable, via a cable lug, to the M12 stud.

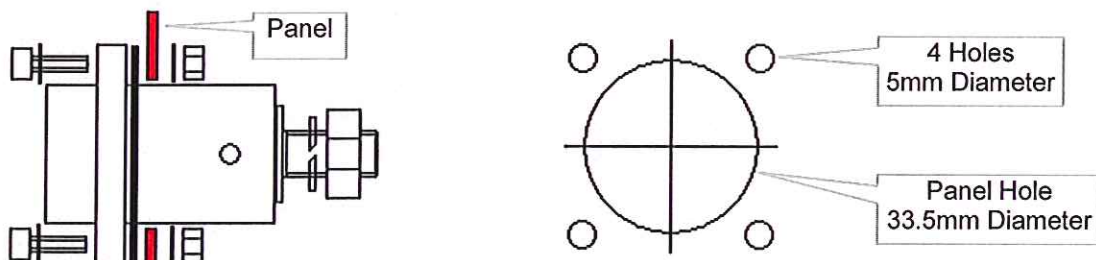
Replace the washer and M12 nut and secure by tightening to 12 Nm (106lbf-in).

Special crimp contacts can also be fitted to panel connectors. The crimping **must be done first** before fitting the contact to the connector. The assembly procedure is the same as for the threaded post contact.

### 4. ASSEMBLY OF PANEL CONNECTOR TO MOUNTING PANEL

This is based on a panel thickness of 3mm. Check that the panel cut out has been prepared correctly to the dimensions shown below.

Position the gasket over the rear of the connector and fit the connector **rear first** through the panel cut out.



Dimensions are shown in millimetres.  
Specifications and dimensions subject to change

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