

ASSEMBLY INSTRUCTIONS

Assembly instructions for connector series TH406



Safety Note

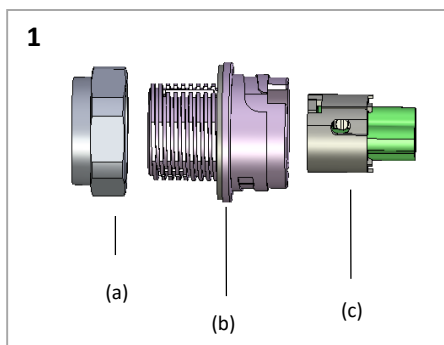
- Disconnect power supply before commencing.
- If the preparation and assembly instructions described here are disregarded then neither safety nor compliance with the technical data can be guaranteed.
- Unconnected connectors must always be protected from pollution (e.g. dust, humidity, foreign particles, etc.) prior to installation. Do not leave unconnected (unprotected) connectors exposed to the environment. The usage of Techno connector sealing caps is strongly recommended.

Technical data

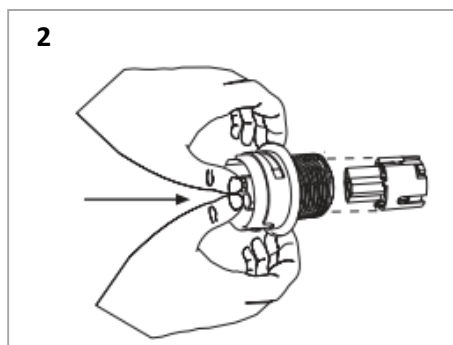
Part Numbers	THB.406.A1B THB.405.B2B	THB.406.A1A THB.405.B2A
Number of poles	3 poles	5 poles
Type of connection	Screw connection	Screw connection
Rated Voltage	20 A	20 A
Rated current	400 V	400 V
Cable type	UL Listed Type TC or TC-ER	UL Listed Type TC or TC-ER
Cable size	12 AWG Stranded and solid	12 AWG Stranded and solid
Cord diameter min – max	10.2 mm – 12.1 mm	10.2 mm – 12.1 mm
Conductor cross section min - max	1.5 sqmm – 4 sqmm	1.5 sqmm – 4 sqmm
Dismantling length	30 mm	30 mm
Insulation strip length	8 mm	8 mm
Housing color	Black	Black
Insert color	Natural (THB.405.B2B) Natural (THB.406.A1B)	Natural (THB.405.B2A) Black (THB.406.A1A)

Products are a Type 6/6P enclosure ONLY when assembled with a Combined TC and Outdoor are rated cable type (such as Listed TC/STOOW)

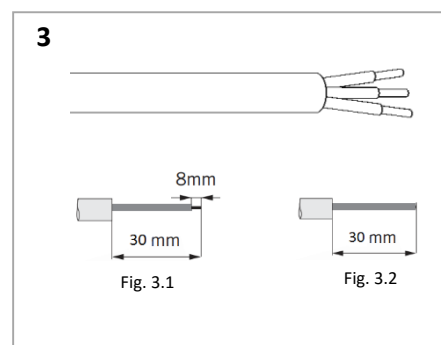
Assembly steps



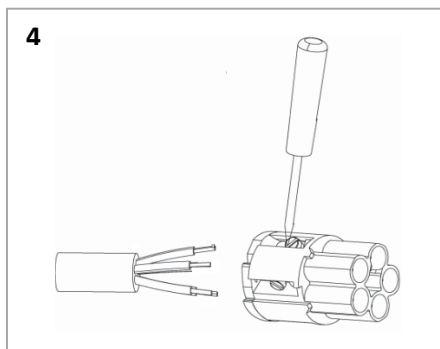
- 1**
- Set-up of the male connector THB.406.xxx: (a) Lock nuts, (b) connector housing, (c) connector insert (male or female)



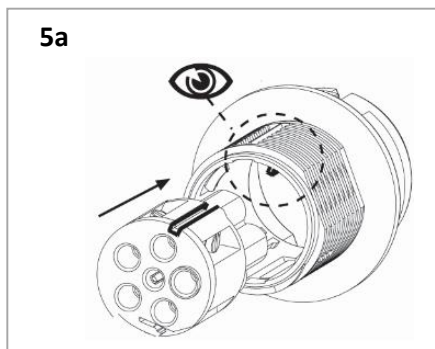
- 2**
- Push with both hands on the connector to pull it out from the connector housing



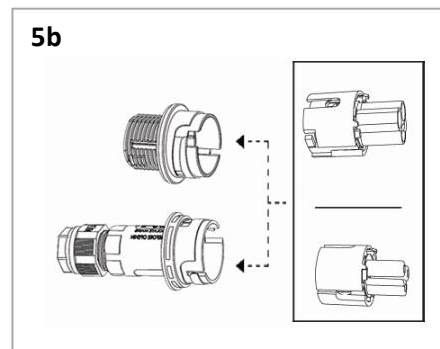
- 3**
- Strip the cable a length of 1.181 inches (30 mm) (Fig. 3.1)
 - In case of screw connection (PN: THB.406.xxx) strip the wires a length of 0.315 inches (8 mm) and twist them together (Fig. 3.1)
 - In case of piercing screw connection (PN: THP.406.xxx) do not strip the wires (Fig. 3.2)



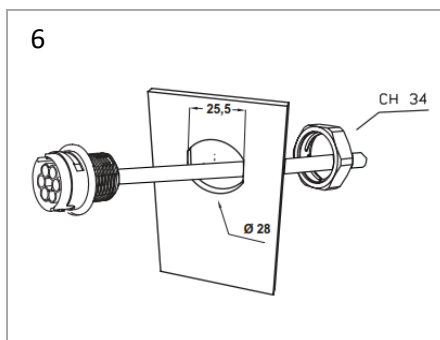
- Connect the wires to the male connector insert (or female connector insert) with a screw driver
- Screws must be closed using a torque of 0.8 Nm for pressure wire



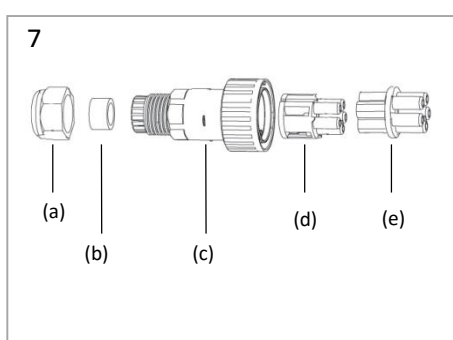
- Insert the male connector insert in the housing until it stop. Make sure the housing's protrusion match with the connector insert's cavity



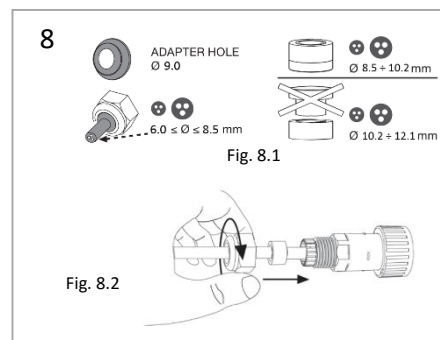
- The female connector insert and the male connector insert can be inserted in both connector housings (male or female) depending on the application needs



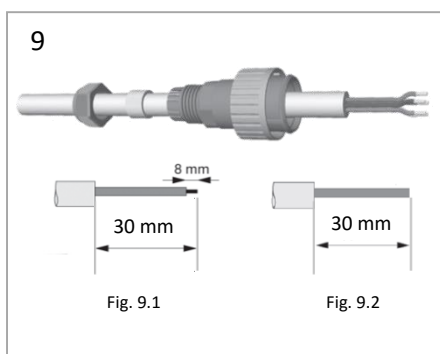
- Firstly create a hole in the mounting surface
- Secondly, tighten the lock nut using the appropriate tool to a torque between 2.5 Nm and 4 Nm



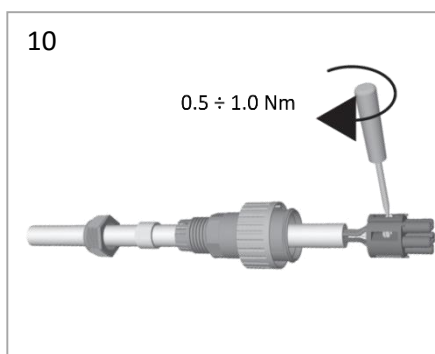
- Set-up of the female connector THB.405.xxx:
(a) Pressure nut, (b) cable seal, (c) connector housing, (d) connector insert (male or female), (e) fixing tool.



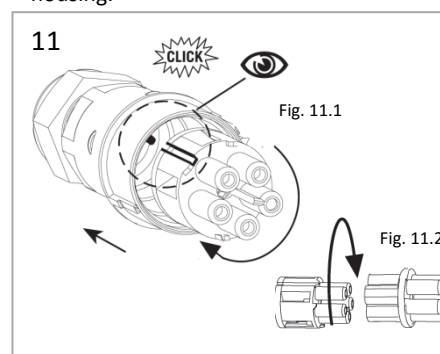
- Choose the cable seal and the cable adapter according to the cable diameter (Fig. 8.1).
- Push the pressure nut and the cable seal over the cable (Fig. 8.2).
- Insert the cable in the female connector housing (Fig. 8.2). Do not insert the cable nut and seal in the connector housing.



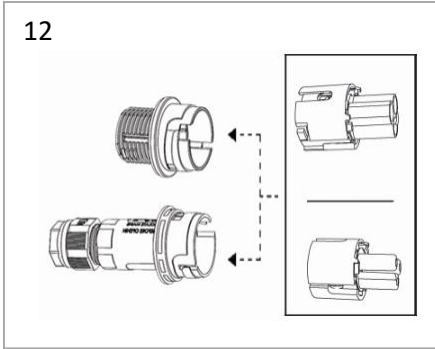
- Strip the cable a length of 1.378 inches (35 mm) (Fig. 9.1)
- In case of screw connection (PN: THB.405.xxx) strip the wires a length of 0.315 inches (8 mm) and twist them together (Fig. 9.1)
- In case of piercing screw connection (PN: THP.405.xxx) do not strip the wires (Fig. 9.2)



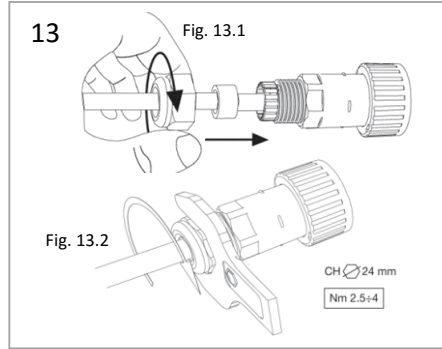
- Connect the wires to the female connector insert (or male connector insert) with a screw driver.
- Screws must be closed using a torque of 0.8 Nm for pressure wire



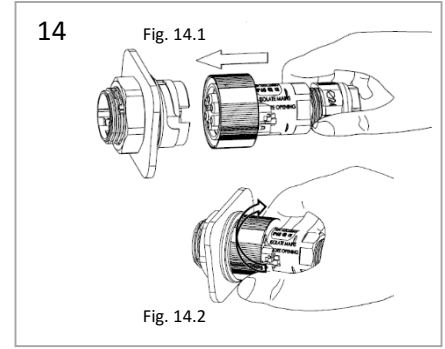
- Insert the female connector insert in the housing until it stop. Make sure the housing's protrusion match with the connector insert's cavity (Fig. 11.1)
- Screw the insert until you hear its give an audible click and you feel the insert reach the end position (Fig. 11.1)
- Use the fixing tool to screw the insert (Fig.11.2)



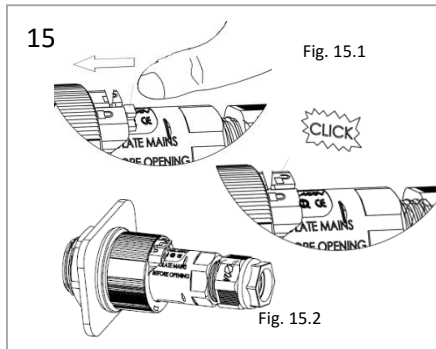
- The female connector insert and the male connector insert can be inserted in both connector housings (male or female) depending on the application needs.



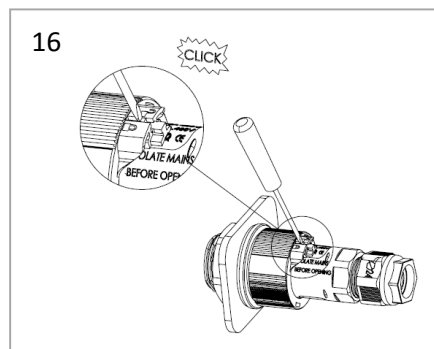
- Firstly, press the cable seal into the connector housing until it stop and screw the pressure nut on the connector housing (Fig. 13.1)
- Secondly (Fig. 13.2), tighten the pressure nut using the appropriate tool to a torque between 2.5 Nm and 4 Nm



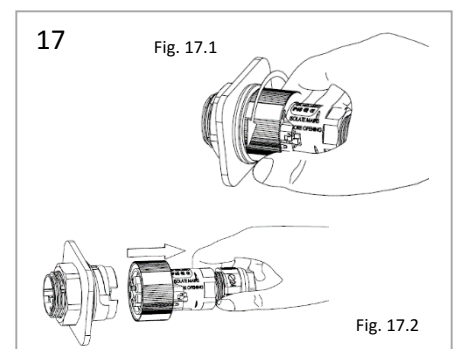
- For mating align the two half connectors and mate them together by hand until they stop (male and female connectors incorporate keying features) (Fig. 14.1)
- Screw the locking nut until it stop (Fig. 14.2)



- Push by hand the safe lock slider till it stop. A "click" should be heard or felt when the slider is seated in correct position (Fig 15.1)
- The connector system is fully mated only when the safe lock slider is in the lock position (Fig. 15.2)



- For un-mating, a tool is required to disconnect the connector.
- To unlock the connector system, gently pull the safe locker slider out till it is in the unlock position.



- To un-mate connectors unscrew the locking nut until it stop.
- Pull the connector housings apart