



Vanten

250 and 400 Amp Keyed
Single Pole Connectors



Introduction

Vanten

Miniature keyed single pole power connectors ideal for cable sizes from 16mm² to 120mm² with a current capacity of up to 400amps. These connectors offer a compact, lightweight and cost effective method over traditional Powerlock style variants for cable to cable or cable to equipment connections.

Vanten connectors incorporate many safety features as standard. Individually colour coded, stamped and mechanically keyed to prevent cross connection errors, with an innovative locking mechanism. Sealed to IP67 when mated. IP2X Finger protection on both male and female sides.

The main features are:

- KSPC: Keyed Single Pole Connectors to EN 61984, IEC 60529 and BS7909*
- IP2X: Finger Protection on Male and Female contacts
- Male or Female connector can be used as power source
- Colour coded and mechanically keyed to prevent connection errors.
- UL94-V0 Rated
- Cable range from 16mm² to 120mm² (4/0AWG)
- Multi louver contact system
- Reduced flange size option
- No special tools for assembly or disconnection
- Spring Locking action
- CE compliant
- Good for up to 2000 mating cycles

*where applicable

Panel Female
VTPF



Panel Male
VTPM



Cable Male
VTCM

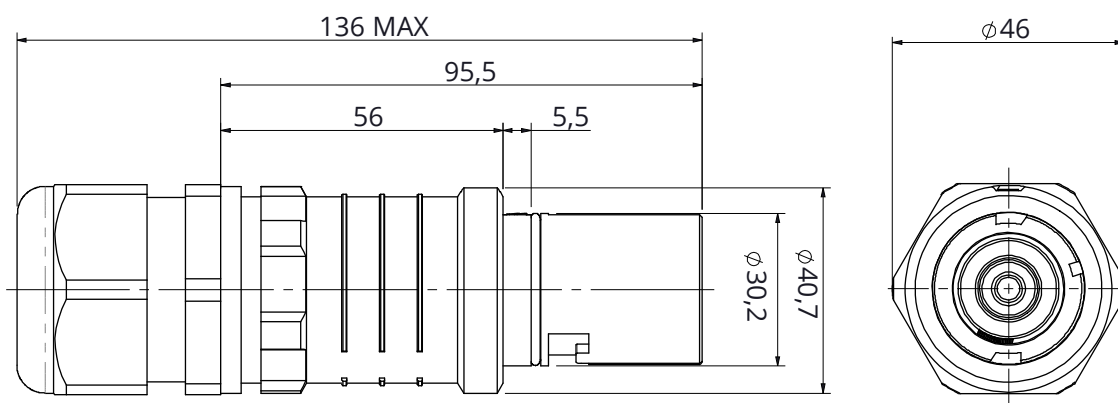


Cable Female
VTCF



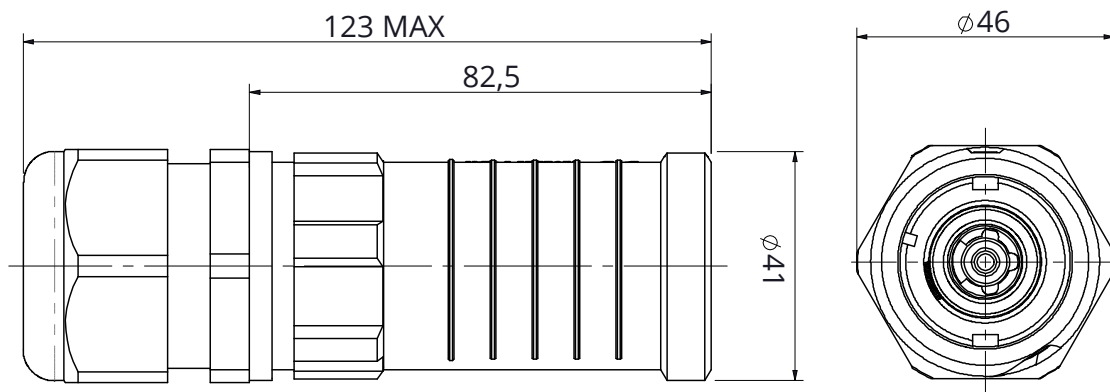
Connector Dimensions

Cable Male | VTCM



Dimensions in mm

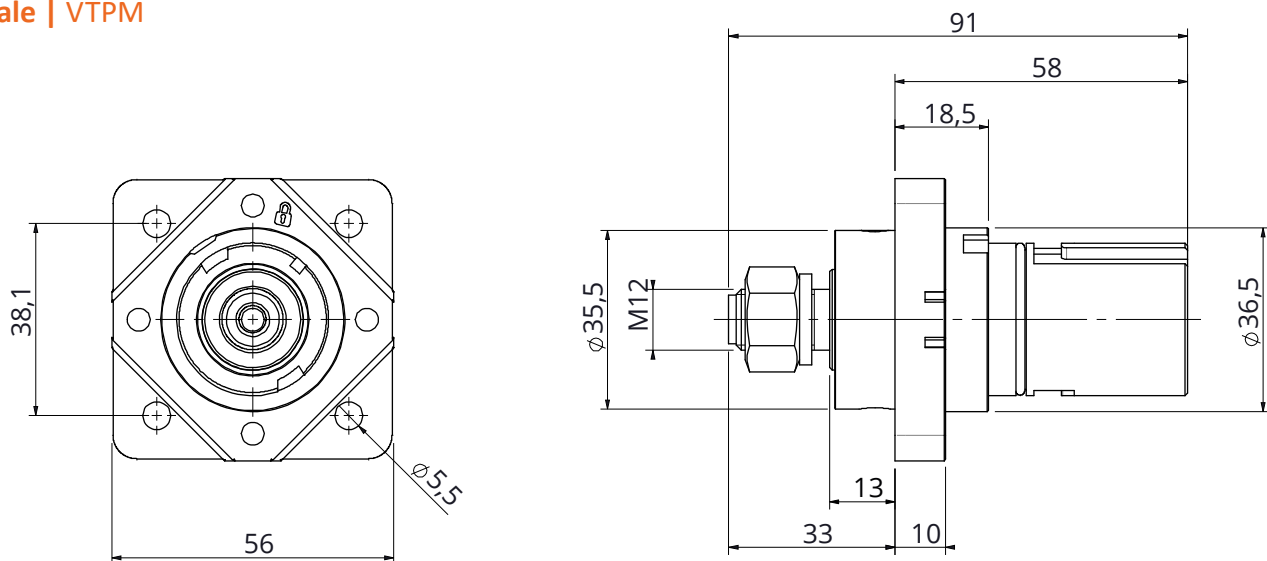
Cable Female | VTCF



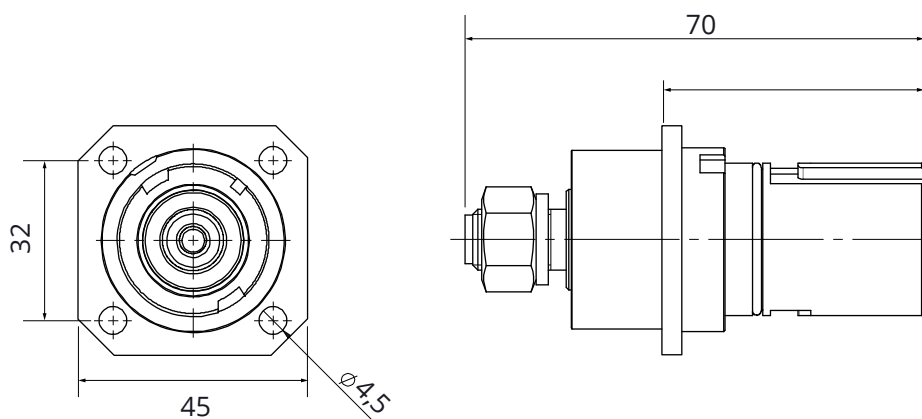
Dimensions in mm

Connector Dimensions

Panel Male | VTPM



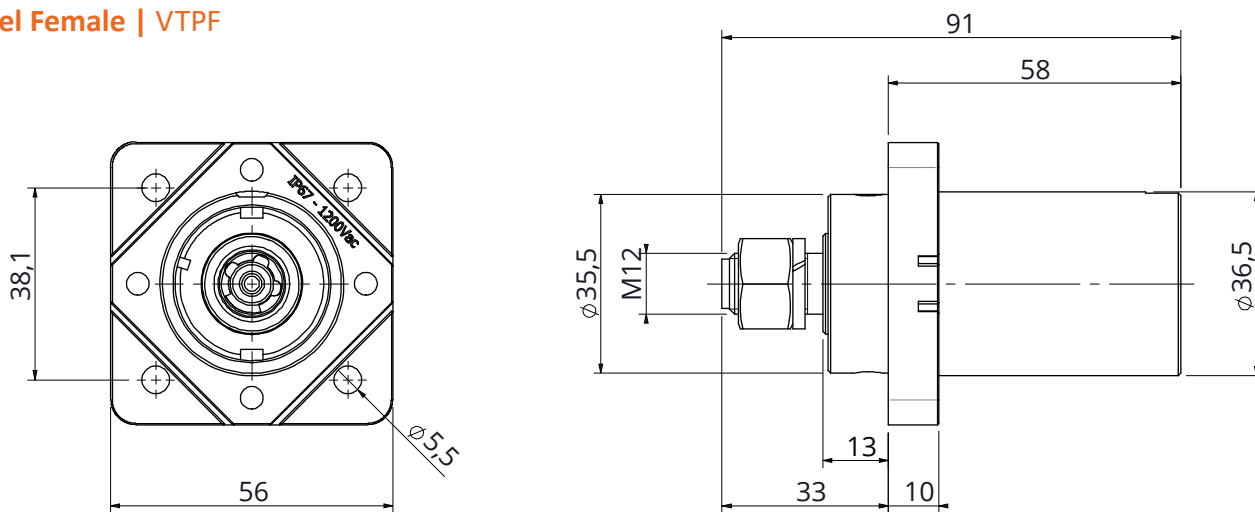
Panel Male | VTPM Reduced Flange



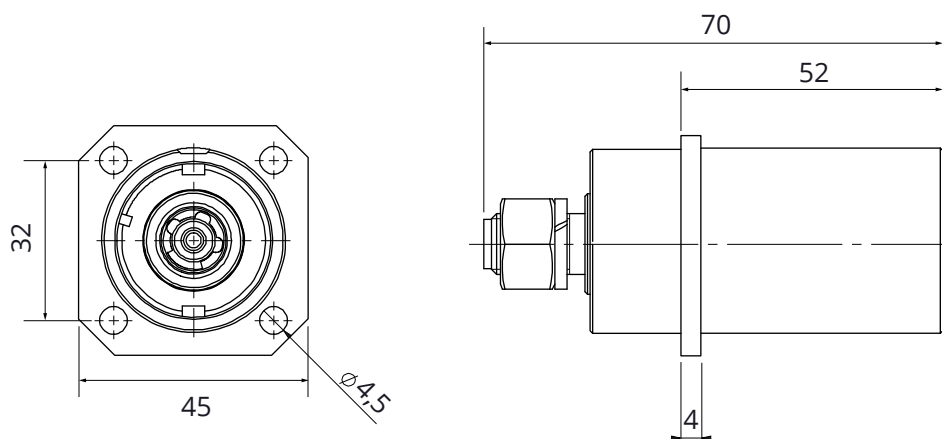
Dimensions in mm

Connector Dimensions

Panel Female | VTPF



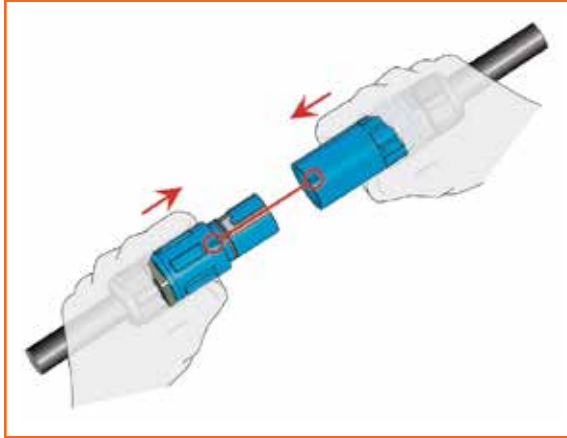
Panel Female | VTPF Reduced Flange



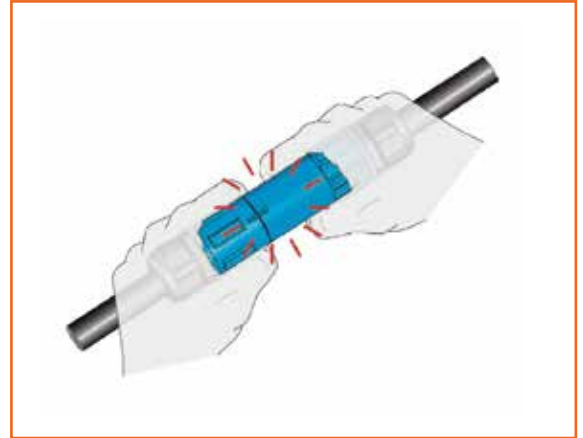
Dimensions in mm

Assembly Instructions

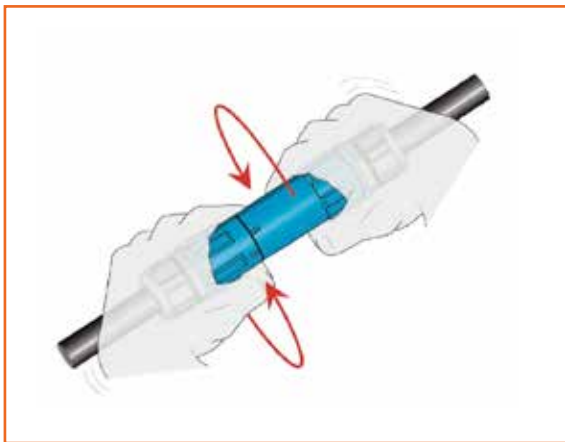
1 Position major key alignment arrows.



2 Firmly push the male and female connectors together.



3 Rotate the Male and Female connectors in opposite directions until the Padlock symbol is in alignment with the Arrow symbol.



4 Release the connectors and they spring into the locked position. To un-lock, push the connectors firmly together, rotate in opposite directions and pull apart.



Contact Removal

Contact Release Tool | Part Number: REM-VT



Insert the Contact Release Tool into the front face of the connector. This releases the internal locking clip. Push home the plunger and the contact is released from the rear of the connector.



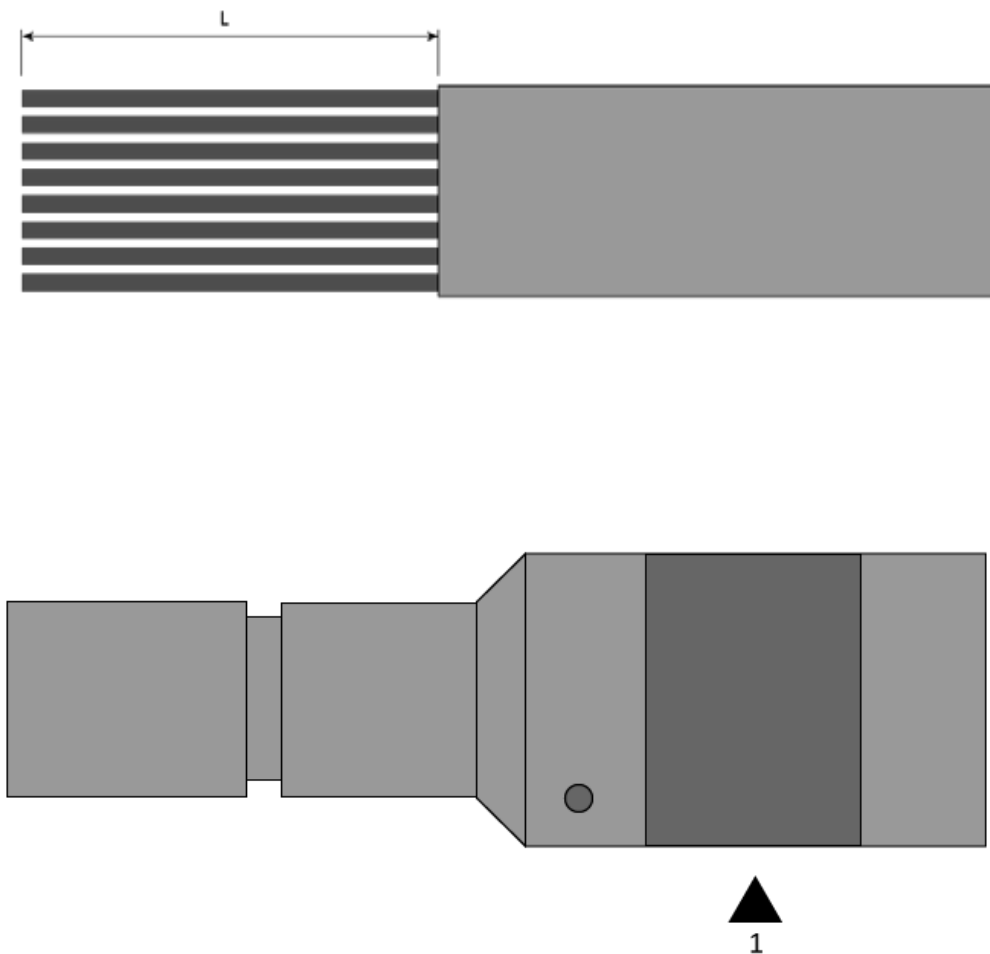
Crimping Instructions

It is recommended to apply crimp compressions in accordance with the below table to obtain optimum mechanical and electrical performance.

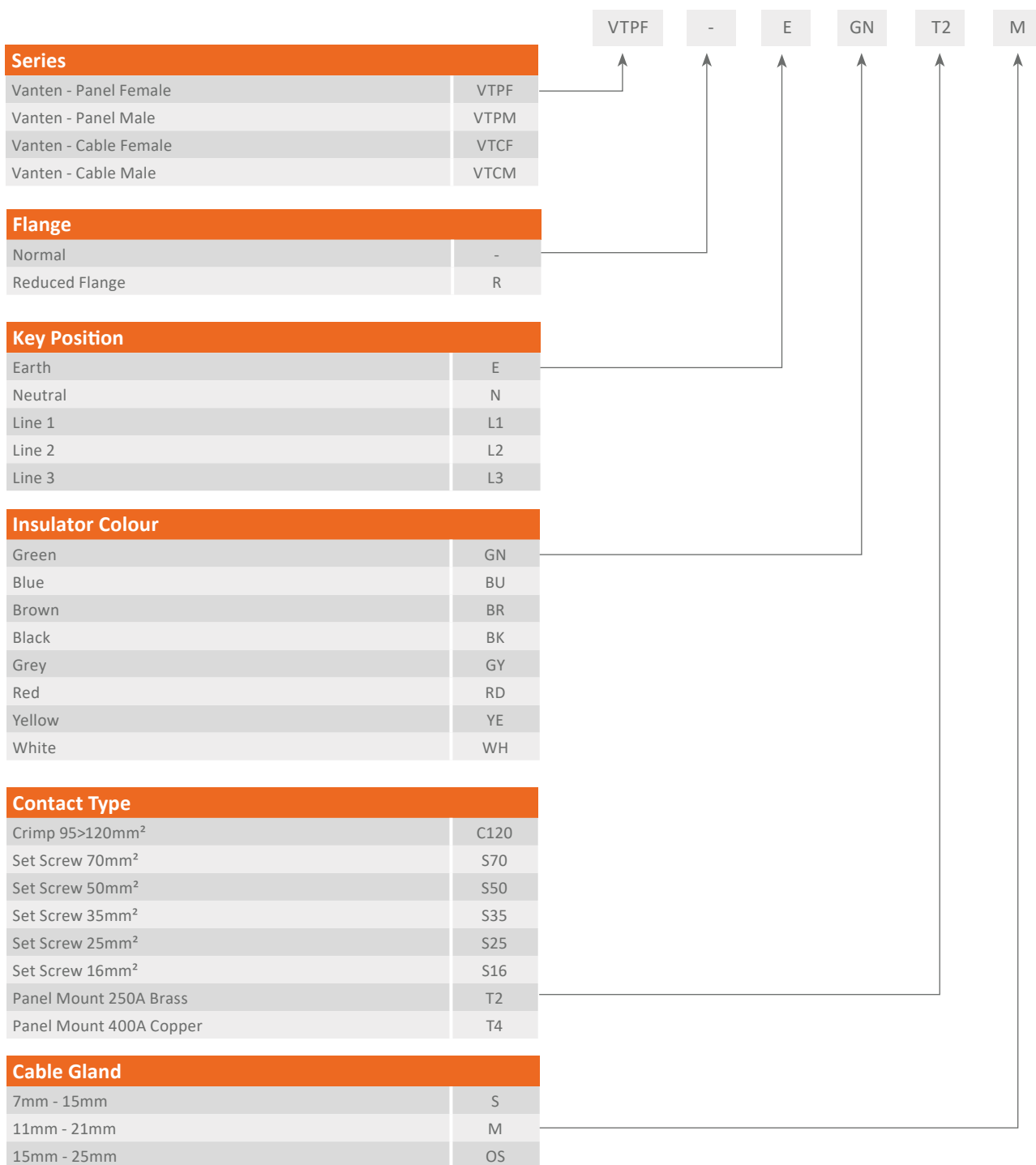
The correct compressions are shown below.

Due to the Numerous cable types available, it is recommended to contact our Customer Service team to confirm cable and crimp suitability.

Cable Size	Up to 70mm	95mm	120mm AWG 4/0
Insulation Strip (dim L)	26mm	20mm	20mm
Reccomended Number of Crimps	N/A (set screw)	1	1
Reccomended Hand Operated Crimp Tool	N/A	HT120	HT120
Crimp Die Set	N/A	ME24-C	ME29-C
Reccomended Contact Removal Tool	REM-VT	REM-VT	REM-VT



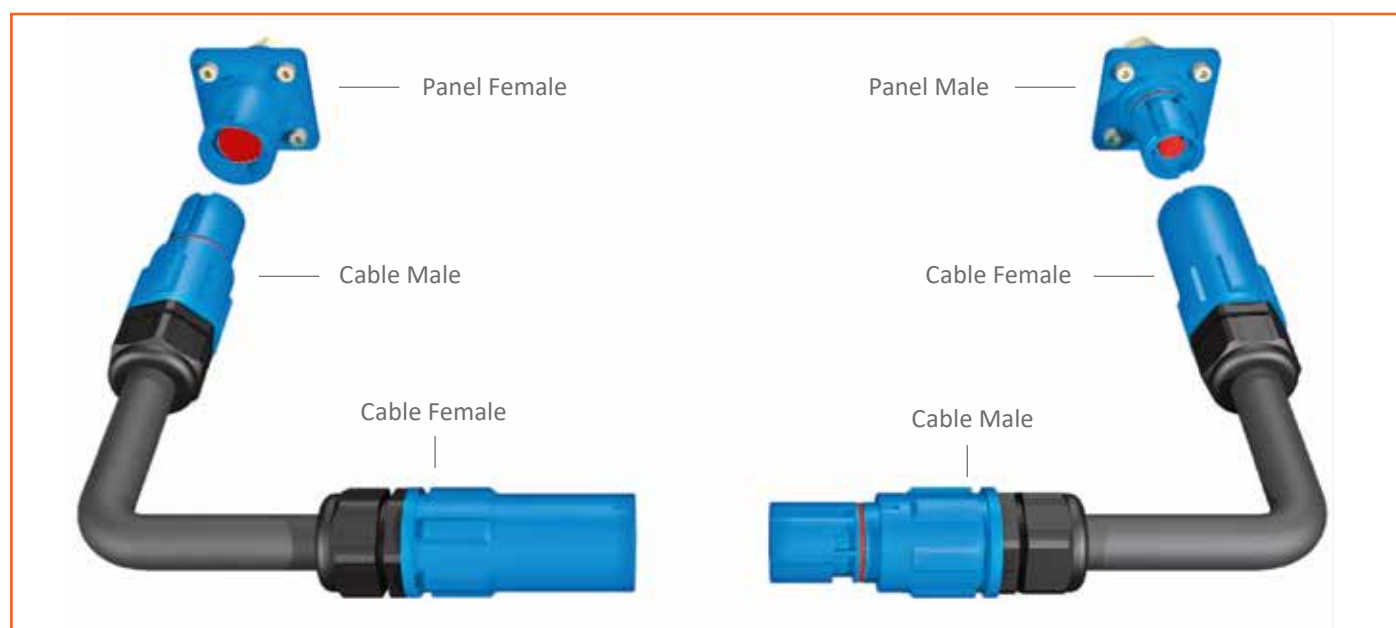
Part Number Explanation



	Earth	Neutral	Line 1	Line 2	Line 3
UK & Europe	Green	Blue	Brown	Black	Grey
USA	Green	White	Black	Red	Blue
Australia	Green	Black	Red	White	Blue

Connector Parameters

Technical Parameter	Value
Insulation	1250V
Maximum Panel Thickness to Guarantee Insulation	6mm
Set Screw Tightening Torque	12Nm Max
Panel Contact Tightening Torque	25Nm Max
Contact Retention in Insulator	400N axial load
Inline Contact Retention	Plastic Clip
Panel Mount Contact Retention	Dowel Pin
Contact Release	Front
M32 Clamping Range	7mm ÷ 25mm
Flammability	UL94 V0
Environmental Sealing (when mated)	IP67
Connector Protection (unmated)	IP2X
Rated Voltage to Earth	1750VAC, panel thickness<4mm
Contact Resistance	<0.1mOhms
Short Circuit Current – 1 second	11KA
Short Circuit Current – 3 seconds	4KA
Surge Current (din VDE 0102/1.90)	45KA – 10 mseconds
Temperature Range	-30°C / +125°C
Reccomended Mating Cycles	Up to 2000



Also available from Ten 47



Cable Protection Systems

Our ever growing **cable ramp range** stretches from a low profile single channel to a modular system where you can effectively have a limitless number of large channels. We also have mobility access systems and have innovated by design a locking lid system to deter cable theft.

Our customer branded products at a low cost and short lead time have proven to be extremely popular. **CableGuard** is made to the highest specification and quality.



Powerline QC

Our unique single pole connector

Building on our proven original Powerline connector series with familiar safety features such as mechanically keyed, colour coded insulators and finger proof contacts. The Ten 47 "**Powerline QC**" range offers many enhancements over existing designs. Compatible with ITT/Veam Powerlock connectors and similar products.





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