

1. Overview of Termination Methods

Powerfit connectors can be terminated using three methods depending on cable construction and installation requirements:

- 1. Crimp termination
- 2. Set screw termination
- 3. Threaded post termination (panel mount)

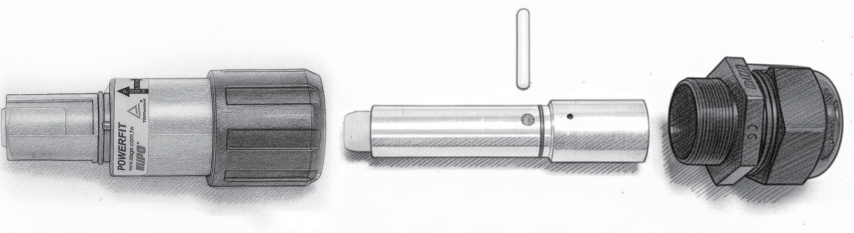
This guide provides the essential procedures and key precautions for reference. Before proceeding, please pay attention to the followings:

- Install by a qualified person in accordance with national and local electrical code
- Disconnect power before installation. Never wire energized electrical components
- Use copper conductors only
- Ensure proper crimp tool, die size, and torque values.
- Cotter pin must not be reused—reuse invalidates IP rating.

2. Crimp Termination

Required components:

- Cable gland
- Contact
- Housing (insulator)
- Cotter pin (single use)



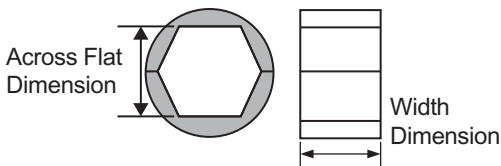
Key Points:

- 1. Use appropriate hexagonal crimp dies. (Fig. A)
- 2. Strip cable insulation to 42 mm; avoid damaging strands.
- 3. Keep cable straight within 1 meter to prevent strand displacement.
- 4. Recommended method: double crimp, especially for cables ≥ 150 mm² (Fig.B)

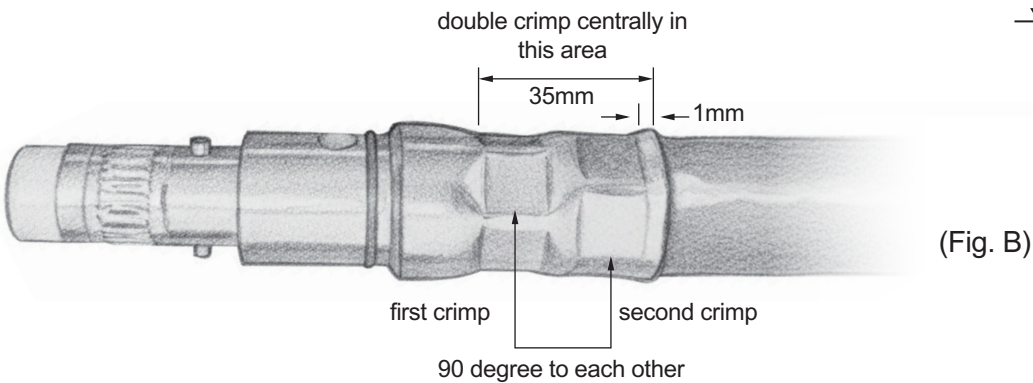
● Crimp Die

A hexagon type crimp is recommended. Main variables are the across flats dimension and the die width.

| Description | Crimp Die Details | |
|-------------|-------------------|--------------------------|
| | Die Across Flat | Die Width Dimension (mm) |
| C25 | 7.6 | 9.0 |
| C35 | 9.0 | 12.0 |
| C50 | 10.0 | 12.0 |
| C70 | 12.0 | 12.0 |
| C95 | 14.0 | 12.0 |
| C120 | 16.0 | 12.0 |
| C150 | 17.3 | 12.0 |
| C185 | 19.0 | 12.0 |
| C240 | 23.6 | 12.0 |
| C240 | 21.5 | 12.0 |
| C300 | 23.0 | 12.0 |



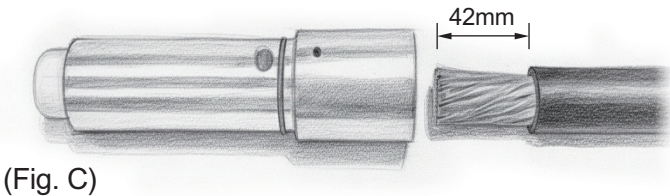
(Fig. A)



(Fig. B)

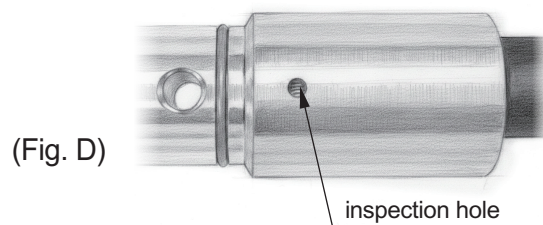
Crimp Assembly Procedure

- 1. Remove cable gland and slide it onto the cable.
- 2. Strip 42 mm of insulation. (Fig.C)
- 3. Insert conductor fully into contact.



(Fig. C)

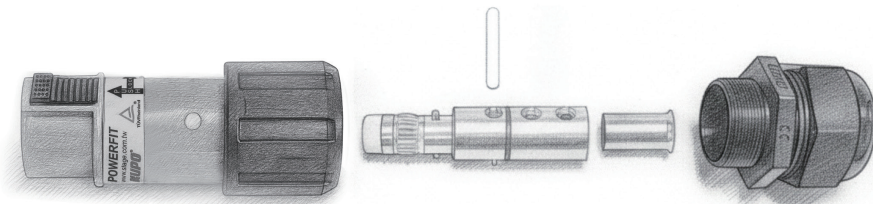
4. Ensure copper strands are visible in inspection hole. (Fig. D)
5. Apply two crimps in the defined crimp zone, and refer to Fig.B.
6. Insert contact into insulator and align cotter pin hole.
7. Insert the single use cotter pin, and use soft hammer to drive in.
8. Tighten the cable gland to 11 Nm.
9. Perform final inspection.



3. Set Screw Termination

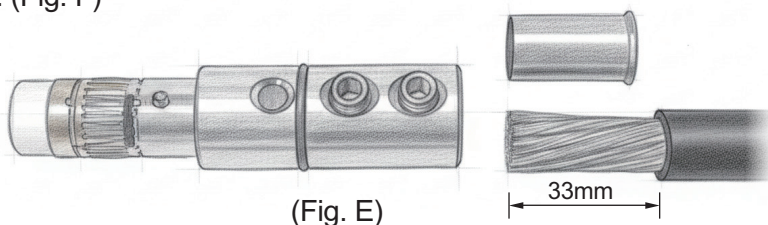
Required components:

- Cable gland
- Contact
- Insulator
- Cotter pin (single use)
- Reduction sleeves (R120 supplied, R95/R70/R50 optional)



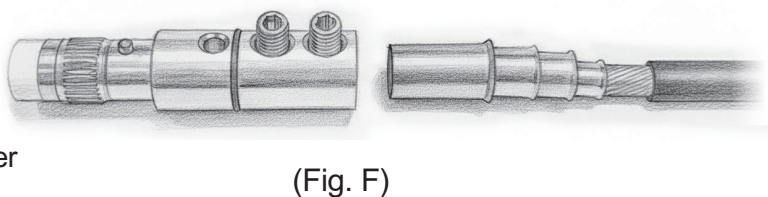
Key Points:

1. Strip cable insulation to 33 mm. (Fig. E)
2. All applicable reduction sleeves must be used (largest to smallest).
Example: For 50 mm² use R120 + R95 + R70 + R50. (Fig. F)
3. Tighten set screws to minimum 10.5 Nm.
4. Use a 5mm Allen key wrench for tightening.



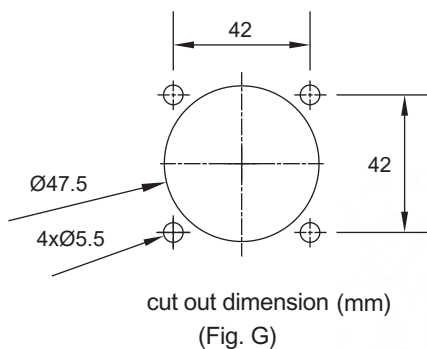
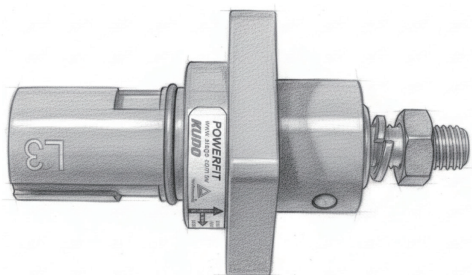
Set Screw Assembly Procedure

1. Slide cable gland onto cable.
2. Strip 33 mm of insulation.
3. Install appropriate reduction sleeves in correct order.
4. Insert into contact and tighten set screws to 10.5 Nm minimum.
5. Insert contact into insulator and align cotter pin hole.
6. Insert the single use cotter pin, and use soft hammer to drive in.
7. Tighten the cable gland to 11 Nm.
8. Perform final inspection.



4. Threaded Post Termination (Panel Mount)

Used for panel mounted versions. Supplied with contact, M12 nut and washer. Panel cut out dimension according to the illustration. (Fig G).



Threaded Post Assembly Procedure

1. Remove M12 nut and washer.
2. Place cable lug/terminal onto threaded post. (Fig. H)
3. Reinstall washer and nut.
4. Tighten to a maximum of 12-14 Nm torque.
5. Perform final inspection.

