



MVJT 350T SERIES

35 kV Medium Voltage Trifurcating Joint
Three-core to three, single-core 33-36 kV
extruded dielectric shielded power cables

Description

The Innovative Power Products MVJT 350T series joint is a heatshrinkable system for jointing *shielded* three-core 35 kV (33-36 kV) extruded dielectric medium voltage cable to three, single-core extruded dielectric power cables. The kit has a heatshrinkable cable breakout boot and jacketing tubings to convert the three-core cable into three single-core cables. After converting the three-core cable, the MVJ 350T kits are installed to complete the trifurcation. The joint can be installed on three-core armored and unarmored cables.

MVJT 350T kits provide a lightweight, compact, and environmentally sealed system for splicing extruded dielectric shielded power cable. These features allow the installation of this jointing system in duct systems, vaults, submersible or direct-buried applications. This system provides a total environmental seal; joint failures in flooded vaults are eliminated.

Related Product Information

MVJT 350T series:

- Price List PL-659

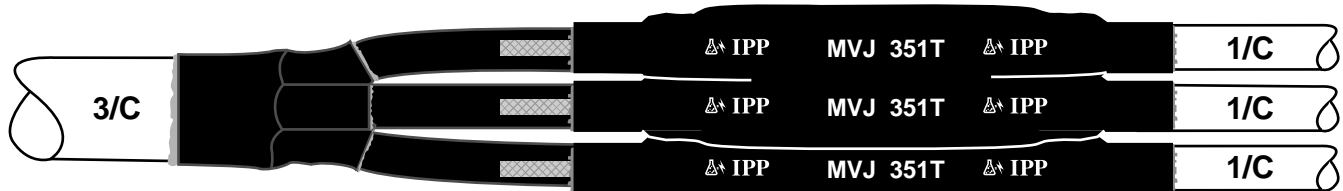
Versatility

MVJT 350T kits cover a wide range of conductor sizes and shapes. It will accommodate out-of-round or off-tolerance cables, in both round and sector shaped conductor. The standard kit fits all cable constructions including: metallic tape, drain wire shielded or Unishield® power cable. The MVJT kits can be used for size transitions within the actual kit's cable use range. Three (3) kit sizes cover all cable sizes from 1 AWG through 1000 kcmil. When preparing the cable ends, no penciling of the cable insulation is required.

Performance

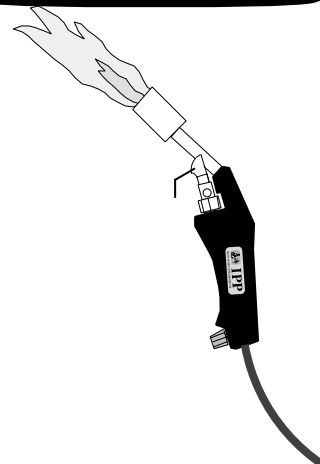
MVJT 350T kits are factory engineered to provide fast and easy installations with reliable performance.

All MVJT kits are designed to meet or exceed the requirements of the applicable sections of the following cable and cable accessory standards: IEEE-404, IEEE-48, ICEA-66-524, ICEA-66-516, and ANSI C119.2.



Convenient Packaging

Each MVJ factory engineered kit is an individually packaged single-core *shielded* cable joint. Everything is included to splice three single-core cables *less* the butt-splice connector and external grounding components. External grounding components can be included as a kit option. Connectors can be supplied in the kits; subject to factory quote. See section 5 for connector information.



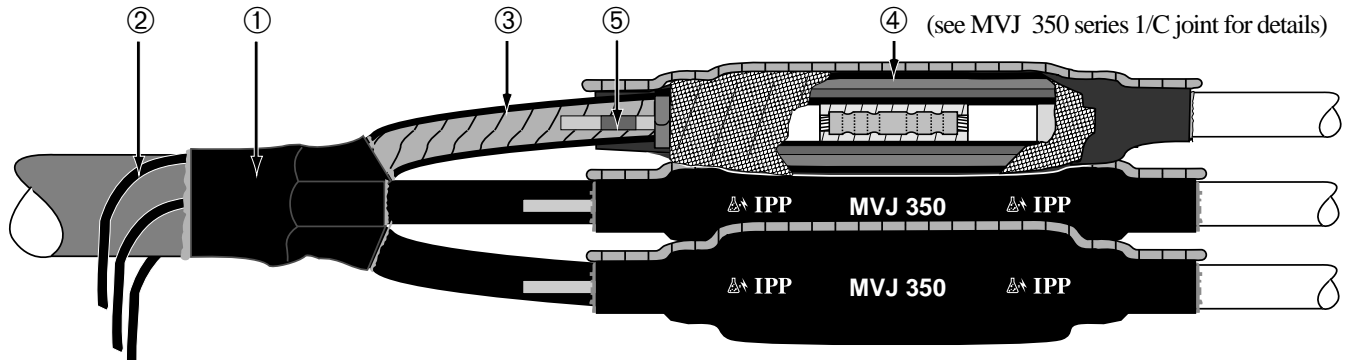
9 M.V. Cable Acc. 35 kV

ELECTRICAL SPECIFICATIONS: 35 kV Rated Trifurcating Joints

| Test Requirement | Value | MVJT 350T |
|---|----------------|------------------|
| AC withstand, 1 minute (60 hz) | 69 kV | PASS |
| DC withstand, 15 minutes | 125 kV | PASS |
| Partial Discharge (Corona) Voltage <3pC | 30.3 kV | > 30.3 kV |
| Impulse withstand 1.2 x 50 μs (crest kV) | 200 kV | > 200 kV |
| AC withstand, 1 hour (60 hz) | 103.5 kV | PASS |
| AC withstand, 5 hours (60 hz) | 69 kV | PASS |
| Continuous current rating | = cable | = cable |
| Cyclical submersion test (ANSI C119.2) | Pass 52 cycles | Passed 52 cycles |

BILL OF MATERIALS (Std. Pkg: 1 kit = 1 each, 3/C to 3-1/C joint)

| Key | Item Description | Quantity | Supplied | Key | Item Description | Quantity | Supplied |
|-----|---|-----------|-------------|-----|------------------------|-----------|------------------|
| ① | Cable Breakout Boot | 1 per kit | in all kits | ⑤ | Sealed Grounding Kit | 3 per kit | Gmod (if spec'd) |
| ② | Ground Jacketing Tube | 3 per kit | in all kits | • | Cable cleaning kit | 1 per kit | Pmod (if spec'd) |
| ③ | Core Jacketing Tube | 3 per kit | in all kits | • | Butt-splice Connector* | 1 per kit | Factory quoted |
| ④ | MVJ 350T series Kit Black Jacketing Tube | 3 per kit | in all kits | • | Installation Guide | 1 per kit | in all kits |



35 kV SELECTION GUIDE

| Conductor Range | Kit Catalog Number | Insulation min. | Diameter max. | Connector Length max. | Connector O.D. max. | Installed Length min. | Installed Length max. |
|-----------------|--------------------|-----------------|---------------|-----------------------|---------------------|-----------------------|-----------------------|
| 1-3/0 AWG | MVJT 351T | 0.98 | 1.35 | 3.75 | 1.00 | 40.0 | 80.0 |
| 4/0-500 kcmil | MVJT 352T | 1.25 | 1.69 | 5.50 | 1.50 | 46.0 | 84.0 |
| 600-1000 kcmil | MVJT 353T | 1.60 | 2.18 | 8.00 | 1.88 | 54.0 | 90.0 |

ORDERING INFORMATION

- Find your cable size in the selection guide above and identify the kit catalog number. This kit will be all that is needed to splice one three-core cable to three single-core cables *less* the connectors and shield grounding kits. **Confirm dimensional data at extremes of size range**

- Add the *mod kit* letter designation as needed to change the base kit :

G - solderless sealed grounding kit (Gmod).

P - cable cleaning kit including; solvent saturated towels and non-conductive abrasive cloth (Pmod).

EXAMPLES:

For 3/C (armored or unarmored), 35 kV, 1/0 AWG cable spliced to 3-1/C, 35 kV 1/0 AWG, cables with a solder-less grounding kit: **MVJT 351T G**

For a 3/C, 35 kV, 250 kcmil cable spliced to 3-1/C, 35 kV 400 kcmil cables with a cable cleaning kit: **MVJT 352T P**

* **CONNECTORS:** To have connectors supplied in the kits, please refer to [Section 5](#) in this catalog for connector selection information. The connectors must be ordered separately but can be packaged within the kits if detailed information is supplied.