



MVJ 3150T SERIES

15 kV, 3/C Medium Voltage Joint
Straight joint for three-core 12-17.5 kV,
extruded dielectric shielded power cables

Description

The Innovative Power Products MVJ 3150T series joint is a heatshrinkable system for jointing three-core *shielded* 15 kV (12-17.5 kV) extruded dielectric medium voltage power cable. The kit has field control material to control electrical stress over the connectors and at the shield cutbacks and provide internal moisture seals. Insulating tubing and shielding tubing reinsulate and reshield the areas over the spliced conductors. Tinned copper mesh and braids reestablish the shielding across the joint. A tough abrasion resistant black jacketing tube or wraparound jacketing sleeve provides the joint with external moisture seals and mechanical protection.

MVJ 3150T kits provide a lightweight, compact, and environmentally sealed system for splicing three-core 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.

Versatility

MVJ 3150T kits cover a wide range of conductor sizes and shapes. They accommodate out-of-round or off-tolerance cables, in both round and sector shaped conductors. The standard kits fit all cable constructions including: metallic tape, drain wire shielded or Unishield® power cable. The MVJ 3150T kits can be used for size transitions within the actual kit's cable use range. Four (4) kit sizes cover all cable sizes from 2 AWG through 1000 kcmil. When preparing the cable ends, no pencilling of the cable insulation is required.

Performance

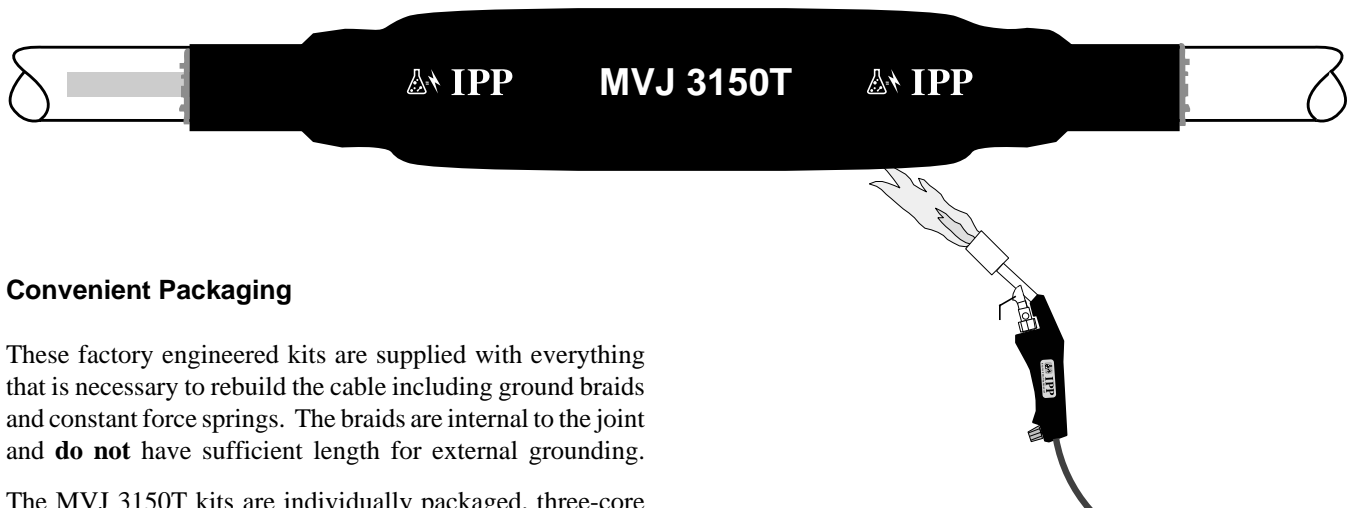
MVJ 3150T kits are factory engineered to provide fast and easy installations with reliable performance.

All MVJ 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.

Related Product Information

MVJ 3150T series:

• Price List PL-639



Convenient Packaging

These factory engineered kits are supplied with everything that is necessary to rebuild the cable including ground braids and constant force springs. The braids are internal to the joint and **do not** have sufficient length for external grounding.

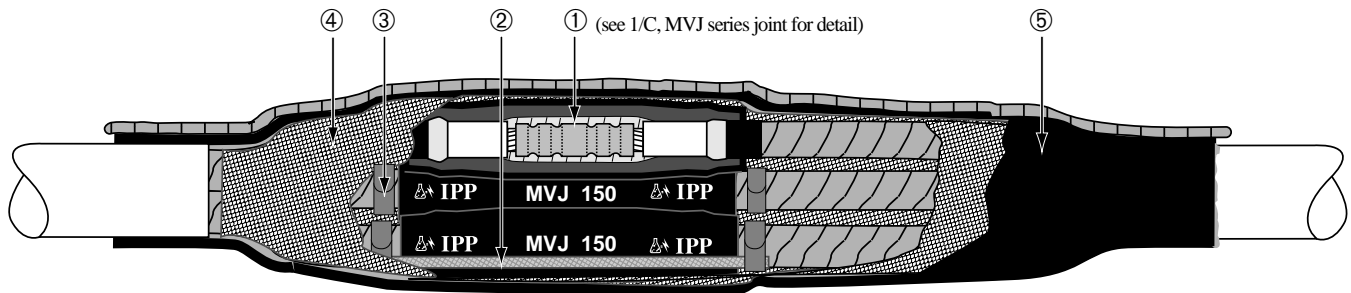
The MVJ 3150T kits are individually packaged, three-core *shielded* cable joints. Everything is included to splice one, three-core cable, with or without grounds, *less* the external grounding hardware and butt-splice and ground wire connectors. External grounding components can be included as a kit option. Connectors can be supplied in the kits; subject to factory quote. See section 5 for connector information.

ELECTRICAL SPECIFICATIONS: 15 kV Rated Three-core Joints

| Test Requirement | Value | MVJ 3150T |
|--|----------------|------------------|
| AC withstand, 1 minute (60 hz) | 35 kV | PASS |
| DC withstand, 15 minutes | 70 kV | PASS |
| Partial Discharge (Corona) Voltage <3pC | 13.0 kV | > 13.0 kV |
| Impulse withstand 1.2 x 50 μs (crest kV) | 110 kV | > 110 kV |
| AC withstand, 1 hour (60 hz) | 52.5 kV | PASS |
| AC withstand, 5 hours (60 hz) | 35 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 joint)

| Key | Item Description | Quantity | Supplied | Key | Item Description | Quantity | Supplied |
|-----|--|-----------|-------------|-----|------------------------|-----------|------------------|
| ① | MVJ 150 Joint (<i>no jacket</i>) | 3 per kit | in all kits | • | Sealed grounding kit | 1 per kit | Gmod (if spec'd) |
| ② | Tinned Copper Braid | 3 per kit | in all kits | • | Cable cleaning kit | 1 per kit | Pmod (if spec'd) |
| ③ | Constant Force Spring | 6 per kit | in all kits | • | Butt-splice Connector* | 3 per kit | Factory quoted |
| ④ | Tinned Copper Mesh | as req'd | in all kits | • | Ground Connectors* | as req'd | Factory quoted |
| ⑤ | Black jacketing tube or Wraparound sleeve - Contact IPP | 1 per kit | in all kits | • | Installation Guide | 1 per kit | in all kits |



15 kV SELECTION GUIDE

| Conductor Range <i>All dimensions in inches</i> | Kit Catalog Number | Insulation min. | Diameter max. | Connector Length max. | Connector O.D. max. | Installed Length max. |
|--|--------------------|-----------------|---------------|-----------------------|---------------------|-----------------------|
| 2-4/0 AWG | MVJ 3151T | 0.65 | 1.05 | 3.75 | 0.75 | 40.0 |
| 250-350 kcmil | MVJ 3152T | 0.90 | 1.30 | 5.00 | 1.00 | 48.0 |
| 500-750 kcmil | MVJ 3153T | 1.10 | 1.60 | 6.00 | 1.35 | 48.0 |
| 750-1000 kcmil | MVJ 3154T | 1.30 | 1.85 | 8.00 | 1.85 | 60.0 |

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 *less* the phase and ground wire connectors.

Confirm dimensional data at extremes of size range.

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

- P** - cable cleaning kit including; solvent saturated towels and non-conductive abrasive cloth (Pmod).
- G** - solderless sealed grounding kit (Gmod)

* **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.

EXAMPLES:

To splice 3/C, 2 AWG, 15 kV cable to the same cable size or within the kit size range: **MVJ 3151T**

To splice 3/C, 250 kcmil, 15 kV cable to a 3/C, 350 kcmil 15 kV cable with a cable cleaning kit: **MVJ 3152TP**

To splice a 3/C Armored, 15 kV, 500 kcmil cable to a 3/C Unarmored cable of the same size: **MVJ 3153T**