



MVJ 3050T SERIES

5 kV, 3/C Medium Voltage Joint
Straight joint for three-core 2.3-6.6 kV
extruded dielectric shielded power cables

Description

The Innovative Power Products MVJ 3050T series joint is a heatshrinkable system for jointing three-core *shielded* 5 kV (2.3-6.6 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 braid reestablish the metallic shielding across the joint. A tough abrasion resistant black jacketing tube or wraparound jacketing sleeve provides the joint with an external moisture seal plus mechanical protection.

MVJ 3050T 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.

Versatility

MVJ 3050T 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 3050T kits can be used for size transitions within the actual kit's cable use range. Four (4) kit sizes cover all cable sizes from 6 AWG through 1000 kcmil. When preparing the cable ends, no pencilling of the cable insulation is required.

Performance

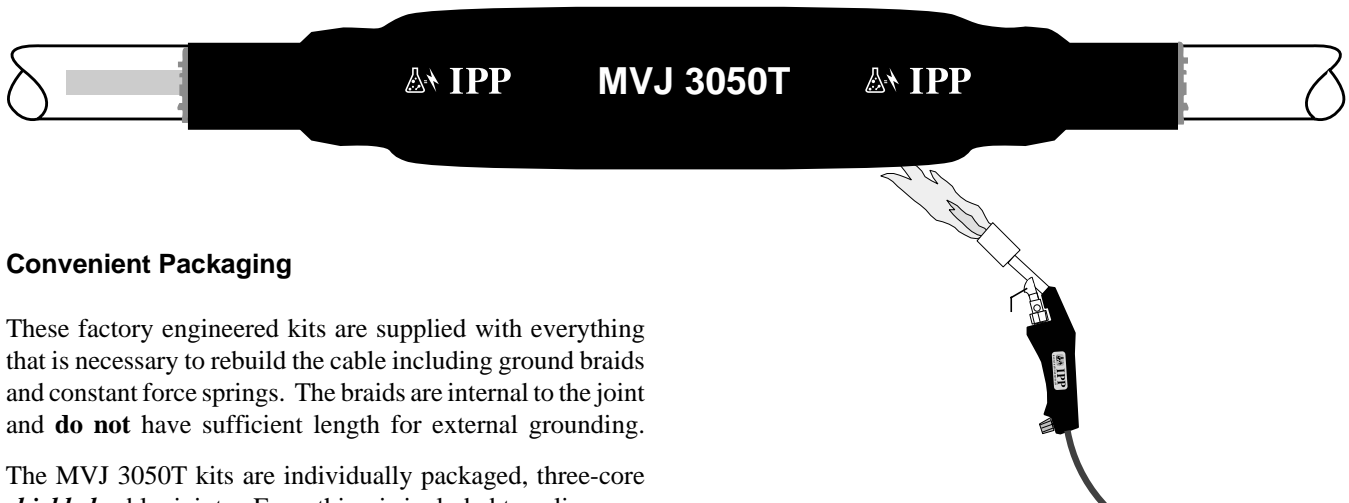
MVJ 3050T kits are factory engineered to provide fast and easy installations with reliable lifetime performance.

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 3050T series:

• Price List PL-619



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 3050T 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.

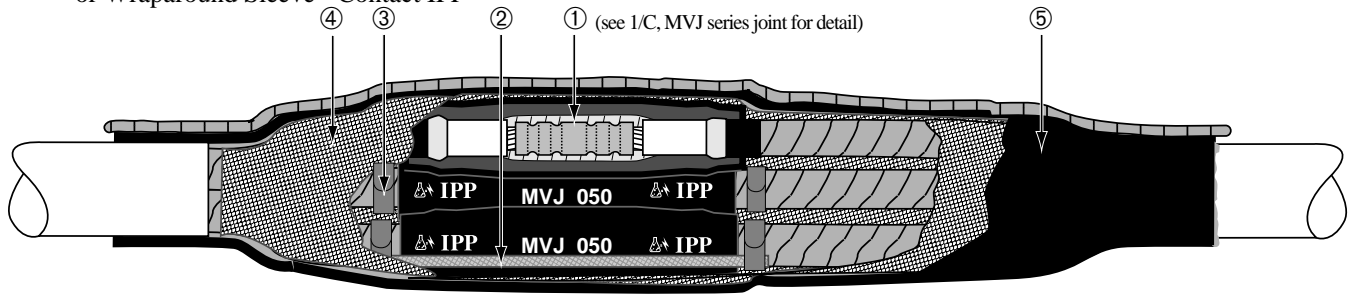
9 M.V. Cable Acc. 5 kV

ELECTRICAL SPECIFICATIONS: 5 kV Rated Three-core Joints

Test Requirement	Value	MVJ 3050T
AC withstand, 1 minute (60 hz)	18 kV	PASS
DC withstand, 15 minutes	35 kV	PASS
Partial Discharge (Corona) Voltage <3pC	4.3 kV	> 4.3 kV
Impulse withstand 1.2 x 50 µs (crest kV)	75 kV	> 75 kV
AC withstand, 1 hour (60 hz)	27 kV	PASS
AC withstand, 5 hours (60 hz)	18 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 050 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



5 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.
6-1/0 AWG	MVJ 3051T	0.35	0.70	3.00	0.60	39.0
2/0-250 kcmil	MVJ 3052T	0.55	0.90	4.25	0.80	48.0
350-750 kcmil	MVJ 3053T	0.80	1.30	6.00	1.30	48.0
1000 kcmil	MVJ 3054T	1.30	1.60	8.00	1.60	60.0

ORDERING INFORMATION

1. 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 and shield grounding kits.
Confirm dimensions at the extremes of the size range.

2. 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)

EXAMPLES:

To splice 3/C, 5 kV, 2 AWG cable to the same cable size and construction: **MVJ 3051T**

To splice 3/C, 5 kV, 4/0 AWG cable to the same cable size and construction and cable cleaning kit: **MVJ 3052TP**

To splice a 3/C Armored, 5 kV, 750 kcmil cable to a 3/C Unarmored cable of the same size: **MVJ 3053T**

* **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.