



# MVJ 3050T Series

## 5kV, 3/C Medium Voltage Joint

Straight joint for three-core 2.3-6.6kV extruded dielectric shielded cable

### Description

The Innovative Power Products MVJ 3050T series joint is a heatshrinkable system for jointing three-core shielded 5kV (2.3-6.6kV) 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.



### 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.

### Related Product Information

MVJ 3050T: Price List PL-619

## Electrical Specifications: 5kV 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	> 4.3kV
Impulse withstand 1.2 x 50 $\mu$ s (crest kV)	75 kV	> 75kV
AC withstand, 1 hour (60hz)	27 kV	PASS
AC withstand, 5 hour (60hz)	18 kV	PASS
Continuous current rating	= Cable	= Cable
Submersion test (ANSI C119.1)	Pass 52 cycles	Pass 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 (no jacket)	3 per kit	In All Kits	-	Sealed Grounding Kit	1 per kit	Gmod**
2	Tinned Copper Braid	3 per kit	In All Kits	-	Cable Preparation Kit	1 per kit	Pmod**
3	Constant Force Spring	6 per kit	In All Kits	-	Butt-Splice Connector	3 per kit	Factory Quoted*
4	Tinned Copper Mesh	As Required	In All Kits	-	Ground Connectors	As Required	Factory Quoted*
5	Black Jacketing Tube or Wraparound Sleeve***	1 per kit	In All Kits	-	Installation Guide	1 per kit	In All Kits

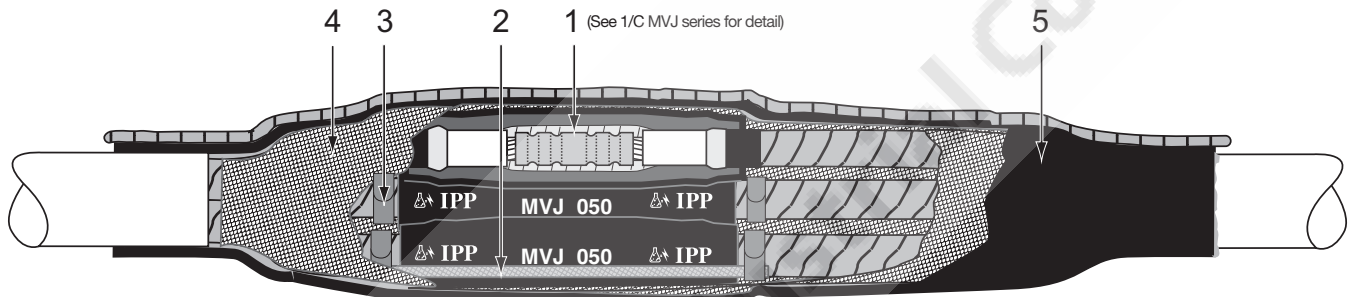


Image shows product with wraparound sleeve.

## 5kV 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 - 1500 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 :

**G** - sealed grounding kit (Gmod)

**P** - cable cleaning kit (Pmod)

### EXAMPLE 1:

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

**MVJ 3051T**

### EXAMPLE 2:

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

**MVJ 3052T 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. \*\* Supplied if specified. \*\*\* WRAPAROUND SLEEVE with stainless steel channel-Contact IPP for more information.