



# MVJ 050 SERIES

5 kV Medium Voltage Joint  
Straight joint for single core 2.3 - 6.6 kV  
extruded dielectric shielded power cables

## Description

The Innovative Power Products MVJ 050T series joint is a heatshrinkable system for jointing **shielded** 5 kV (2.3-6.6 kV) extruded dielectric, medium voltage cable. The kit uses special materials to control electrical stress over the connector and at the shield cutbacks and provides an internal moisture seal. Insulating and shielding tubes reinsulate and reshield the area over the spliced conductor. Tinned copper mesh and braid reestablish the metallic shielding across the joint. A tough abrasion resistant black jacketing tube or wraparound jacketing sleeve provides external moisture seals plus mechanical protection.

MVJ 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 050T 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 shield or Unishield® shielded power cables. The MVJ kits can be used for size transitions within the actual kit's cable use range. Four (4) kit sizes cover all cable sizes from 8 AWG through 1000 kcmil. When preparing the cable ends, pencilling of the insulation is not required.

## Performance

MVJ kits are factory engineered to provide fast and easy installation with reliable performance.

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

## Related Product Information

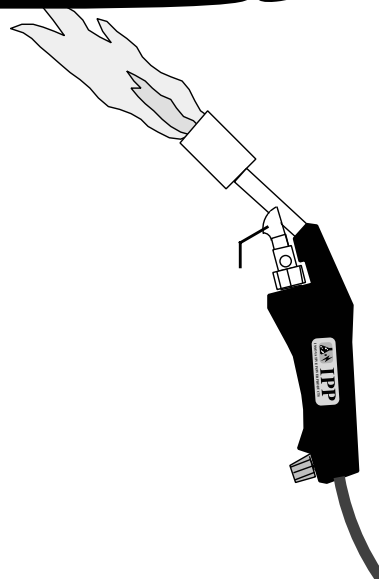
MVJ 050T series:

• Price List PL-617



## Convenient Packaging

The MVJ factory engineered kits are individually packaged single-core **shielded** cable joints. Everything is included to splice one single-core cable **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.

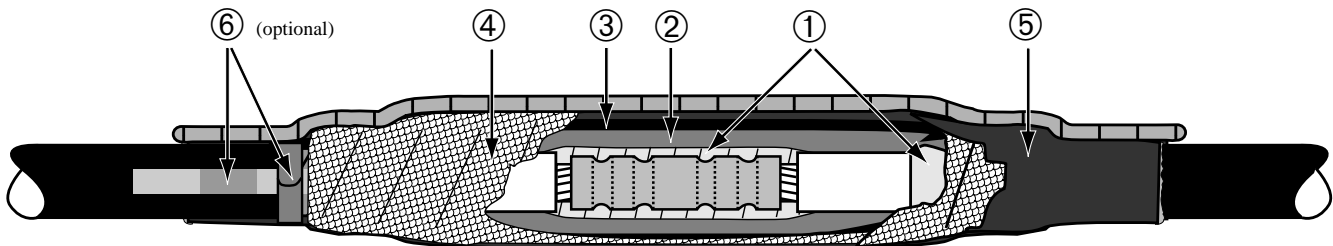


## ELECTRICAL SPECIFICATIONS: 5 kV Rated Accessories

Test Requirement	Value	MVJ 050T
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, 1/C joint)

Key	Item Description	Quantity	Supplied	Key	Item Description	Quantity	Supplied
①	Field Control Material	as required	in all kits	⑥	Sealed Grounding Kit	1 per kit	Gmod (if spec'd)
②	Insulating Tube(s)	as required	in all kits	•	Cable cleaning kit	1 per kit	Pmod (if spec'd)
③	Shielding Tube	1 per kit	in all kits	•	Butt-splice Connector*	1 per kit	Factory quoted
④	Shielding Braid & Mesh	as required	in all kits	•	Installation Guide	1 per kit	in all kits
⑤	Black Jacketing Tube	1 per kit	in all kits				
	or Wraparound Sleeve - Contact IPP						



## 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 051T	0.35	0.70	3.00	0.60	20.0
2/0-250 kcmil	MVJ 052T	0.55	0.90	4.25	0.90	21.0
350-750 kcmil	MVJ 053T	0.80	1.30	6.00	1.25	25.0
1000-1500 kcmil	MVJ 054T	1.30	1.60	8.00	1.60	26.0

## 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 single-core cable, *less* the butt-splice connector and shield grounding hardware. **Confirm dimensions at the extremes of the 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. (Pmod2).

### EXAMPLES:

1/C, 1/0 AWG, 5 kV cable spliced to the same exact cable with a solderless grounding kit (G mod) and a cable cleaning kit: **MVJ 051T GP**

1/C, 250 kcmil, 5 kV cable spliced to the same exact cable with a solderless grounding kit: **MVJ 052T G**

\* **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.