



# MVJ 350T Series

## 35kV Medium Voltage Joint

Striaight joints for single-core 33-36kV extruded dielectric power cables

### Description

The Innovative Power Products MVJ 350T series joint is a heatshrinkable system for jointing shielded 35kV (33-36 kV) extruded dielectric, medium voltage power cable. The kit uses special materials to control electrical stress over the connector and at the shield cutbacks, and provide internal moisture seals. A heatshrinkable field control tubing controls stress over the connector and shield cutbacks. 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 the joint with external moisture seals and 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. The system is totally sealed; joint failures in flooded vaults are eliminated.

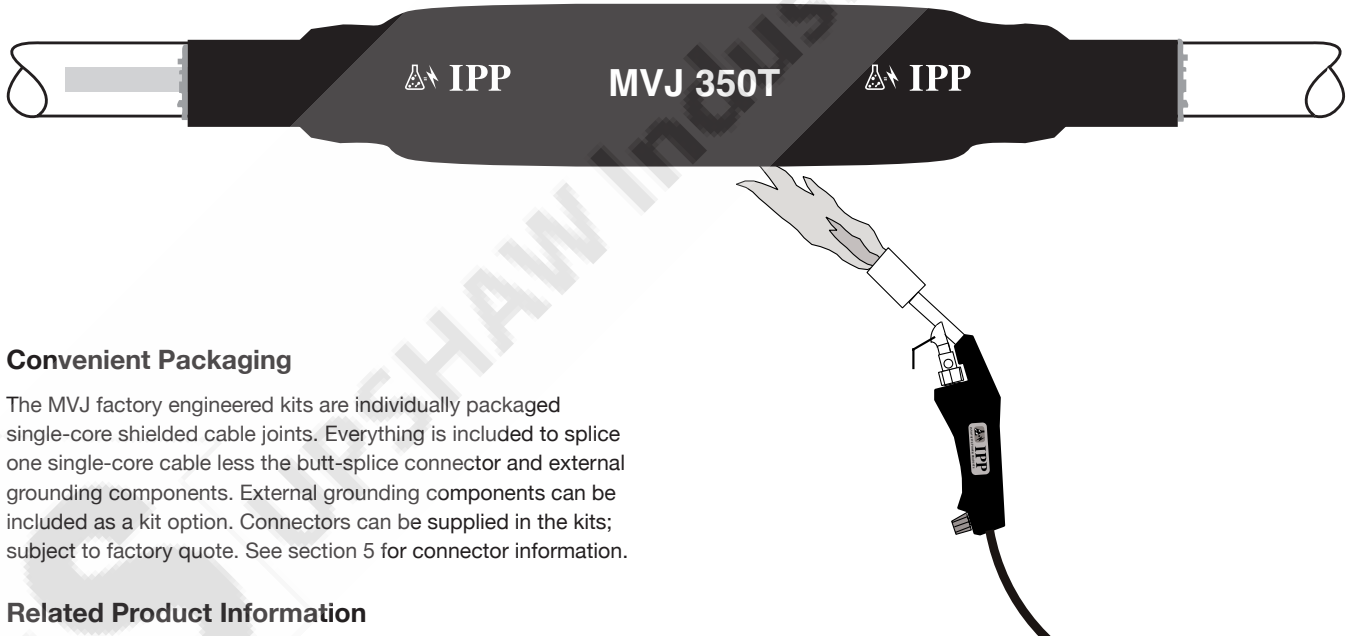
### Versatility

MVJ 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 shield or Unishield® shielded power cables. The MVJ 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, penciling 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 and cable accessory standards: IEEE-404, IEEE-48, ICEA-66-524, ICEA-66-516, and ANSI C119.2.



### 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.

### Related Product Information

MVJ 350T series: Price List PL-658

## Electrical Specifications: 35kV Rated Accessories

Test Requirement	Value	MVJ 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	> 30.3kV
Impulse withstand 1.2 x 50 $\mu$ s (crest kV)	200 kV	> 200kV
AC withstand, 1 hour (60hz)	103.5 kV	PASS
AC withstand, 5 hour (60hz)	69 kV	PASS
Continuous current rating	= Cable	= Cable
Cyclical Submersion test (ANSI C119.2)	Pass 52 cycles	Pass 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	Black Jacketing Tube or Wraparound Sleeve***	1 per kit	In All Kits
2	Field Control Tube	1 per kit	In All Kits	7	Sealed Grounding Kit	1 per kit	Gmod**
3	Insulating Tubes	As Required	In All Kits	-	Cable Cleaning Kit	1 per kit	Pmod**
4	Shielding Tube	1 per kit	In All Kits	-	Butt-splice Connector	1 per kit	Factory Quoted*
5	Shielding Braid & Mesh	As Required	In All Kits	-	Installation Guide	1 per kit	In All Kits

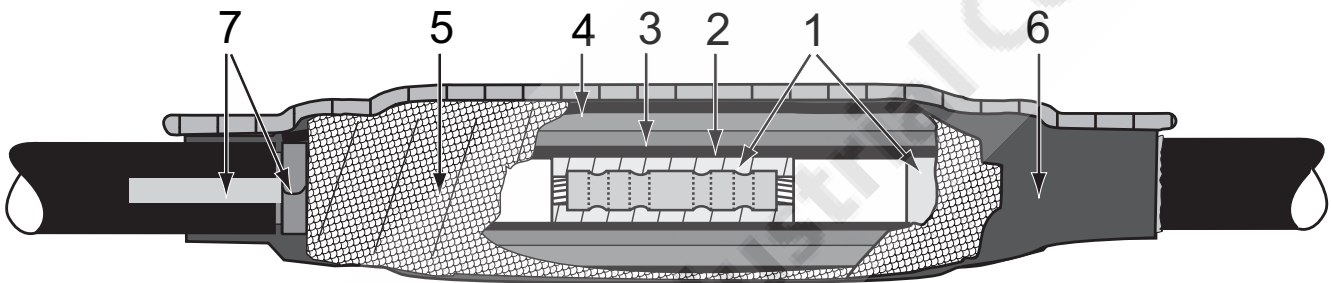


Image shows product with wraparound sleeve.

## 35kV Selection Guide

Conductor Range <i>All Dimensions in Inches</i>	Kit Catalog Number	Insulation Dia.		Connector Dimension		Joint Installed Length Max
		Max	Min	Length Max	O.D. Max	
1 - 3/0 AWG	MVJ 351T	0.98	1.35	3.75	1.00	30.0
4/0 - 500 kcmil	MVJ 352T	1.25	1.69	5.50	1.50	34.0
600 - 1000 kcmil	MVJ 353T	1.60	2.18	8.00	1.88	41.0

## 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 single-core cable, less the butt-splice connector and shield grounding hardware.

**Confirm dimensions at the extremes of the size range.**

2. Add the mod kit letter designation as needed to change the base kit:

**G** - Solderless Sealed Grounding Kit (Gmod)

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

### EXAMPLE 1:

For a 1/C, 35kV, 2/0 AWG cable spliced to the same exact cable with a solderless grounding kit (G mod) and a cable cleaning kit:

**MVJ 351TGP**

### EXAMPLE 2:

For a 1/C, 35kV, 250 kcmil, cable spliced to a 1/C, 35kV, 500 kcmil cable with cable cleaning kit:

**MVJ 352TP**

\* 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.