



MVJ 150UD & 150T UDJ Series

15kV Medium Voltage URD Joint

For single-core 15kV, extruded dielectric bare and jacketed concentric neutral power cables

Description

The Innovative Power Products, Inc. MVJ 150UD and MVJ 150T UDJ series joints are heatshrinkable systems for splicing bare or jacketed concentric neutral 15kV extruded dielectric, power cable. It 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 tubings reinstate the cable insulation across the joint and insulating shielding tubing reshields the joint and forms an internal seal to the cable semiconductive layer. A stainless steel constant force spring clamps the neutral wires to the joint. For jacketed concentric neutral cable, a tough abrasion resistant black jacketing tube or wraparound sleeve provides the joint with external moisture seals and mechanical protection.

MVJ 150UD and 150T UDJ kits provide a lightweight, compact and environmentally sealed system for splicing bare or jacketed concentric neutral cable. These features allow the installation of this jointing system in duct systems, vaults, submersible or direct-buried applications. This joint is ideal for almost any non-tension application. The system is totally sealed. Joint failures in flooded vaults are eliminated.

Versatility

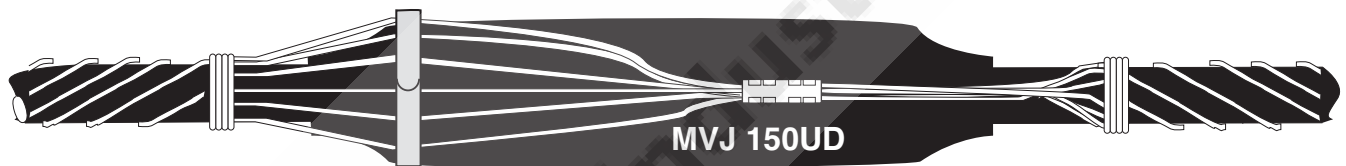
MVJ 150UD and 150T UDJ kits cover a wide range of conductor sizes. They accommodate out-of-round or off-tolerance cables. The MVJ 150UD and 150T UDJ kits can be used for size transitions within the actual kit's cable use range. Four (4) kit sizes cover all cable sizes from #2 AWG through 1000 kcmil. When preparing the cable ends, pencilling of the insulation is not required.

Performance

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

MVJ 150UD and 150T UDJ joints' performance is based on the design and testing of the MVJ 150 series joint for metallic tape and wire shielded power cables.

MVJ kits are designed to meet or exceed the requirements of the applicable sections of the following cable/cable accessory standard IEEE-404.

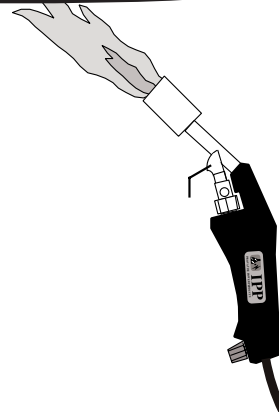


Convenient Packaging

MVJ 150UD and MVJ 150T UDJ factory engineered kits are individually packaged single-core cable joints. Everything is included to splice one single-core cable less the butt-splice connector. Connectors can be supplied in the kits; subject to factory quote. See section 5 for connector information.

Related Product Information

MVJ 150UD & 150T UDJ: Price List PL-635



Electrical Specifications: 15kV Rated Accessories

Test Requirement	Value	MVJ 150UD(J)
AC withstand, 1 minute (60 hz)	35 kV	PASS
DC withstand, 15 minutes	70 kV	PASS
Partial Discharge (Corona) Voltage (<3pC)	13 kV	> 13kV
Impulse withstand 1.2 x 50 μ s (crest kV)	110 kV	> 110kV
AC withstand, 1 hour (60hz)	52.5 kV	PASS
AC withstand, 5 hour (60hz)	35 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	5	Spring Clamp, S.S.	1 per kit	In All Kits
2	Field Control Tube	1 per kit	In All Kits	6	Black Jacketing Tube or Wraparound Sleeve***	1 per kit	UDJ Kits Only
3	Insulating Tubes	As Required	In All Kits	-	Cable Preparation Kit	1 per kit	Pmod**
4	Shielding Tube	1 per kit	In All Kits	-	Installation Guide	1 per kit	In All Kits

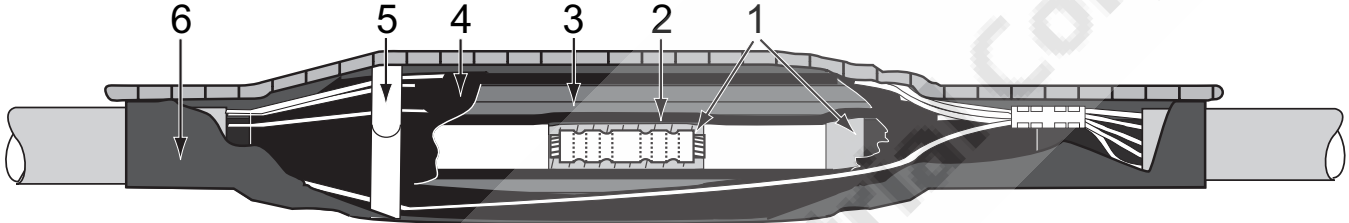


Image shows product with wraparound sleeve.

15 kV Selection Guide

Conductor Range <i>All Dimensions in Inches</i>	Kit Catalog Number	Insulation Min.	Diameter Max.	Jacket Diameter Max.	Connector Length Max.	Connector O.D. Min.	Installed Length Max
Bare Concentric Neutral Cable Joint							
2 - 4/0 AWG	MVJ 151UD	0.65	1.05	N/A	3.75	0.75	16.0
250 - 350 kcmil	MVJ 152UD	0.90	1.30	N/A	5.00	1.00	19.0
500 - 750 kcmil	MVJ 153UD	1.10	1.60	N/A	6.00	1.35	20.0
750 - 1000 kcmil	MVJ 154UD	1.30	1.85	N/A	8.00	1.88	22.0
Jacketed Concentric Neutral Cable Joint							
2 - 4/0 AWG	MVJ 151T UDJ	0.65	1.05	1.25	3.75	0.75	27.0
250 - 350 kcmil	MVJ 152T UDJ	0.90	1.30	1.65	5.00	1.00	30.0
500 - 750 kcmil	MVJ 153T UDJ	1.10	1.60	1.95	6.00	1.35	36.0
750 - 1000 kcmil	MVJ 154T UDJ	1.30	1.85	2.25	8.00	1.88	40.0

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 connectors. **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 (Pmod)

EXAMPLE 1:

1/C, 1/0 AWG, 15kV bare concentric neutral cable spliced to the same cable with a cable cleaning kit:
MVJ 151UDP

EXAMPLE 2:

1/C, 250 kcmil, 15kV jacketed concentric neutral (JCN) cable spliced to a 1/C, 350 kcmil, 15kV JCN cable:
MVJ 152T UDJ

* 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.