



MVJ 350UD & 350T UDJ Series

35kV, Medium Voltage URD Joint

For single-core 35kV, extruded dielectric bare and jacketed concentric neutral power cables

Description

The Innovative Power Products, Inc. MVJ 350UD and MVJ 350T UDJ series joints are heatshrinkable systems for splicing bare or jacketed concentric neutral 35kV extruded dielectric, power cable. It uses special materials to control electrical stress at the connector and shield cutbacks and provides 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 shielding tubing reshields the joint and forms a moisture 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 350UD and 350T 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 350UD and 350T UDJ kits cover a wide range of conductor sizes. They accommodate out-of-round or off-tolerance cables. The MVJ 350UD and 350T UDJ kits can be used for size transitions within the actual kit's cable use range. Three (3) kit sizes cover all cable sizes from 1/0 AWG through 1000 kcmil. When preparing the cable ends, pencilling is not required.

Performance

MVJ kits are factory engineered to provide fast and easy installation with reliable lifetime performance. MVJ 350UD and 350T UDJ joints' performance is based on the design and testing of the MVJ 350 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.

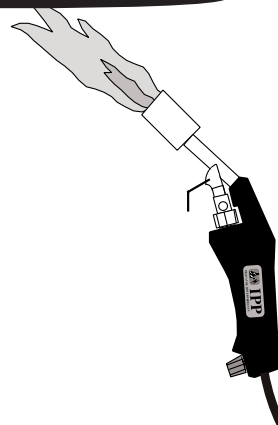


Convenient Packaging

MVJ 350UD and MVJ 350UDJ 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 350UD & MVJ 350T UDJ series: Price List PL-657



Electrical Specifications: 35kV Rated Accessories

Test Requirement	Value	MVJ 350UD(J)
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 μ 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	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	in all UDJ Kits
3	Insulating Tubes	As Required	In All Kits	-	Cable Cleaning Kit	1 per kit	Pmod**
4	Shielding Tube	1 per kit	In All Kits	-	Installation Guide	1 per kit	In All Kits

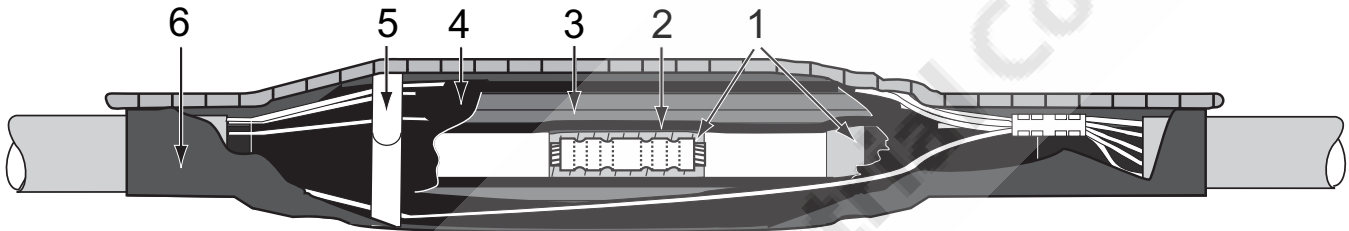


Image shows product with wraparound sleeve.

35kV Selection Guide

Conductor Range <i>All Dimensions in Inches</i>	Kit Catalog Number	Insulation Dia.		Jacket Dia.	Connector Dimension		Joint Installed
		Max	Min	Max	Length	O.D. Max	Length Max
Bare Concentric Neutral Cable Joint							
1 - 3/0 AWG	MVJ 351UD	0.98	1.35	N/A	3.75	1.00	22.0
4/0 - 500 kcmil	MVJ 352UD	1.25	1.65	N/A	5.50	1.50	25.0
600 - 1000 kcmil	MVJ 353UD	1.60	2.25	N/A	8.00	1.88	27.0
Jacketed Concentric Neutral Cable Joint							
1 - 3/0 AWG	MVJ 351T UDJ	0.98	1.35	1.55	3.75	1.00	36.0
4/0 - 500 kcmil	MVJ 352T UDJ	1.25	1.65	1.69	5.50	1.50	40.0
600 - 1000 kcmil	MVJ 353T UDJ	1.60	2.25	2.18	8.00	1.88	45.0

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 - sealed grounding kit (Gmod)

P - cable cleaning kit (Pmod)

EXAMPLE 1:

1/C, 2/0 AWG, 35kV bare concentric neutral cable spliced to the same cable with a cable cleaning kit:
MVJ 351UDP

EXAMPLE 2:

1/C, 750 kcmil, 35kV jacketed concentric neutral (JCN) cable spliced to the same cable:
MVJ 353T 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.