



MVJ 150UD & 150T UDJ series

15 kV MEDIUM VOLTAGE URD JOINT
For single-core 15 kV, 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 15 kV 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

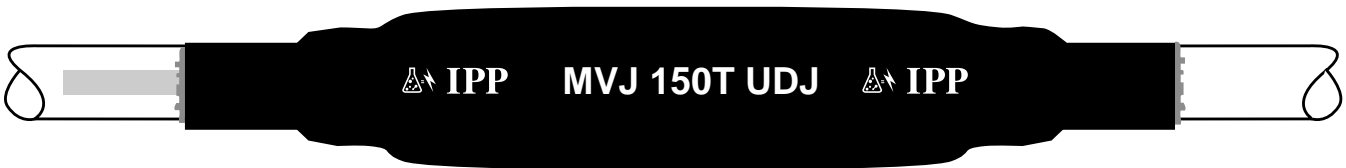
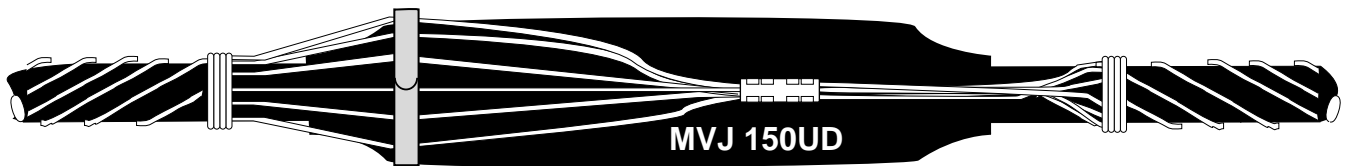
MVJ kits are factory engineered to provide fast and easy installation with reliable lifetime performance.

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.

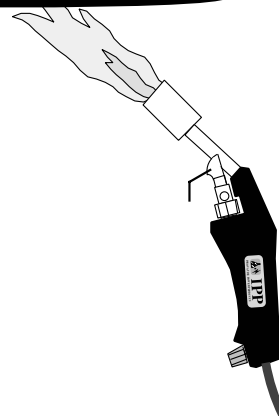
Related Product Information

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



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.



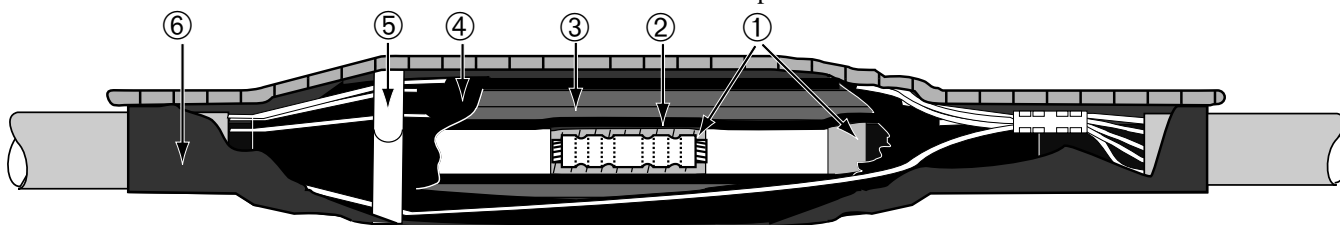
ELECTRICAL SPECIFICATIONS: 15 kV Rated Accessories

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	13.0 kV	> 13.0 kV
Impulse withstand 1.2 x 50 μs (crest kV)	110 kV	> 110 kV
AC withstand, 1 hour (60 hz)	52.5 kV	PASS
AC withstand, 5 hours (60 hz)	35 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	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	1 per kit	in UDJ kits only
③	Insulating Tubes	as required	in all kits	•	Cable cleaning kit	1 per kit	Pmod (if spec'd)
④	Shielding Tube	1 per kit	in all kits	•	Installation Guide	1 per kit	in all kits

Wraparound sleeve - Contact IPP



15 kV SELECTION GUIDE

Conductor Range	Kit Catalog Number	Insulation Dia. min.	Insulation Dia. max.	Jacket Dia. max.	Connector Length / O.D. max.	Joint installed Length max.
Bare Concentric Neutral Cable Joint						
#2-4/0 AWG	MVJ 151UD	0.65	1.05	NA	3.75 0.75	16.0
250-350 kcmil	MVJ 152UD	0.90	1.30	NA	5.00 1.00	19.0
500-750 kcmil	MVJ 153UD	1.10	1.60	NA	6.00 1.35	20.0
750-1000 kcmil	MVJ 154UD	1.30	1.85	NA	8.00 1.88	22.0
Jacketed Conc. 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

- 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 dimensional data at extremes of size range.

- Add the *mod kit* letter designation as needed to change the base kit :

P - cable cleaning kit including; solvent saturated towels and non-conductive abrasive cloth (Pmod2)

EXAMPLES:

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

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

When detailed information is supplied, connectors can be supplied. Refer to Section 5. for connector selection. They are ordered separately, but can be packaged in the kits.