



# MVJ 250UDR(J) series

**25 kV MEDIUM VOLTAGE URD REPAIR JOINT**  
For single-core 25-28 kV, extruded dielectric bare and jacketed concentric neutral power cables

## Description

The Innovative Power Products, Inc. MVJ 250UDR and MVJ 250T UDRJ series joints are heatshrinkable systems for splicing faulted bare or jacketed concentric neutral cable or cable joints. 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 250UDR and 250T UDRJ 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 250UDR and 250T UDRJ kits cover a wide range of conductor sizes. They accommodate out-of-round or off-tolerance cables. The MVJ 250UDR and 250T UDRJ kits can be used for size transitions within the actual kit's cable use range. Two (2) kit sizes cover all cable sizes from #2 AWG through 500 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 250UDR and 250T UDRJ joints' performance is based on the design and testing of the MVJ 250 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.

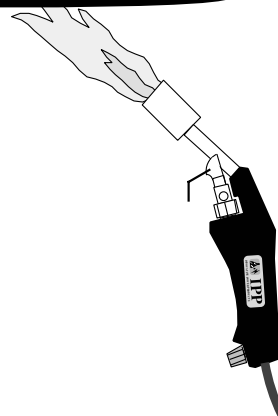
## Related Product Information

MVJ 250UDR & 250T UDRJ series: • Price List PL-646



## Convenient Packaging

MVJ 250UDR and MVJ 250T UDRJ factory engineered kits are individually packaged single-core cable joints. Everything is included to splice/repair one single-core cable or joint failure *less* the butt-splice connectors. Connectors can be supplied in the kits; subject to factory quote. See section 5 for connector information.

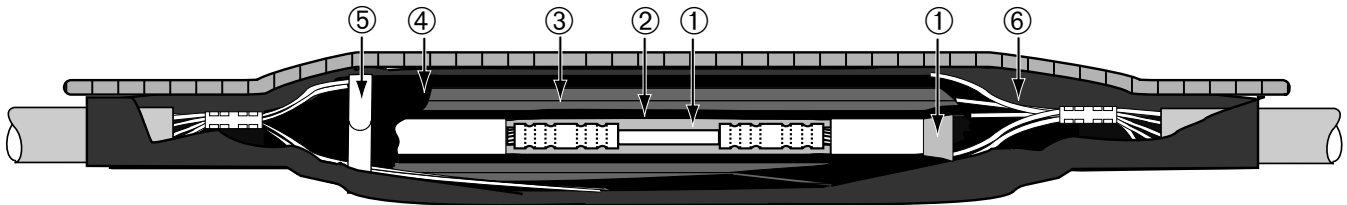


## ELECTRICAL SPECIFICATIONS: 25 kV Rated Accessories

Test Requirement	Value	MVJ 250UDR(J)
AC withstand, 1 minute (60 hz)	52 kV	PASS
DC withstand, 15 minutes	100 kV	PASS
Partial Discharge (Corona) Voltage <3pC	21.6 kV	> 21.6 kV
Impulse withstand 1.2 x 50 µs (crest kV )	150 kV	> 150 kV
AC withstand, 1 hour (60 hz)	78 kV	PASS
AC withstand, 5 hours (60 hz)	52 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 UDJ kits only
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	<b>P</b> mod (if spec'd)
④	Shielding Tube	1 per kit	in all kits	•	Installation Guide	1 per kit	in all kits
Wraparound sleeve - Contact IPP							



## 25 kV SELECTION GUIDE

Conductor Range <i>All dimensions in inches</i>	Kit Catalog Number	Insulation Dia. min. max.	Jacket Dia. max.	Connector Dimensions Length / O.D. max.	Joint installed Length max.
<b>Bare Concentric Neutral Cable Joint</b>					
#2-4/0 AWG	MVJ 251UDR	0.80 1.20	NA	10.00 0.85	26.0
250-500 kcmil	MVJ 252UDR	1.05 1.45	NA	10.00 1.35	26.0
<b>Jacketed Concentric Neutral Cable Joint</b>					
#2-4/0 AWG	MVJ 251T UDRJ	0.80 1.20	1.50	10.00 0.85	40.0
250-500 kcmil	MVJ 252T UDRJ	1.05 1.45	1.90	10.00 1.35	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, 25 kV bare concentric neutral cable spliced or repaired, with a cable cleaning kit: **MVJ 251UDRP**

1/C, 250 kcmil, 25 kV jacketed concentric neutral (JCN) cable or a damaged section repaired: **MVJ 252T UDRJ**

**Note: for 28 kV joint selection confirm dimensional data**

*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.*