

MVJT 050T Series

5kV Medium Voltage Trifurcating Joint Three-core to three, single core 2.3-6.6kV extruded dielectric shielded cable

Description

The Innovative Power Products MVJT 050T series joint is a heatshrinkable system for jointing shielded three-core 5kV (2.3-6.6kV) extruded dielectric medium voltage cable to three, single-core extruded dielectric power cables. The kit has a heatshrinkable cable breakout boot and jacketing tubings to convert the three-core cable into three, single-core cables. After converting the three-core cable, the MVJT 050T kits are installed to complete the trifurcation. The joint can be installed on three-core armored and unarmored cables.

MVJT 050T 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. This system provides a total environmental seal; joint failures in flooded vaults are eliminated.

Versatility

MVJT 050T 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 shielded or Unishield® power cable. The MVJT kits can be used for size transitions within the actual kit's cable use range. Four (4) kit sizes cover all cable sizes from 6 AWG through 1500 kcmil. When preparing the cable ends, no pencilling of the cable insulation is required.

Performance

MVJT 050T kits are factory engineered to provide fast and easy installations with reliable performance.

All MVJT 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.

	∆ * IPP	MVJT 051T 🖓 II	PP 1/C
3/C	۵+ IPP	MVJT 051T & I	PP 1/C
	۵+ IPP	MVJT 051T & I	PP 1/C

Convenient Packaging

Each MVJ factory engineered kit is an individually packaged single-core shielded cable joint. Everything is included to splice three single-core cables 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

MVJT 050T: Price List PL-618

Electrical Specifications: 5kV Trifurcating Joints

Test Requirement	Value	MVJT 050T
AC withstand, 1 minute (60 hz)	18 kV	PASS
DC withstand, 15 minutes	35 kV	PASS
Partial Discharge (Corona) Voltage (<3pC)	4.3 kV	> 4.3kV
Impulse withstand 1.2 x 50 µs (crest kV)	75 kV	> 75kV
AC withstand, 1 hour (60hz)	27 kV	PASS
AC withstand, 5 hour (60hz)	18 kV	PASS
Continuous current rating	= Cable	= Cable
Submersion test (ANSI C119.1)	Pass 52 cycles	Pass 52 cycles

Bill of Materials: Std. Pkg.(1 kit) = 1 each, 3/C to 3-1/C joint

Key	Item Description	Quantity	Supplied	Key	Item Description	Quantity	Supplied
1	Cable Breakout Boot	1 per kit	In All Kits	5	Sealed Grounding Kit	3 per kit	Gmod**
2	Ground Jacketing Tube	3 per kit	In All Kits	-	Cable Preparation Kit	3 per kit	Pmod**
3	Core Jacketing Tube	3 per kit	In All Kits	-	Butt-Splice Connector	1 per kit	Factory Quoted*
4	MVJ 050T Series Kit	3 per kit	In All Kits	-	Installation Guide	1 per kit	In All Kits
-	Black Jacketing Tube						
		3	5	I +۵ ۱ +۵	PP MVJT 050	D PP	C joint for details)

5 kV Selection Guide

Conductor Range All Dimensions in Inches	Kit Catalog Number	Insulation Min.	Diameter Max.	Connector Max. Length	Connector O.D. Length	Installed Min.	Length Max
6 - 1/0 AWG	MVJT 051T	0.35	0.70	3.00	0.60	26.0	64.0
2/0 - 250 kcmil	MVJT 052T	0.55	0.90	4.25	0.90	28.0	65.0
350 - 750 kcmil	MVJT 053T	0.80	1.30	6.00	1.25	29.5	67.0
1000 - 1500 kcmil	MVJT 054T	1.30	1.60	8.00	1.60	32.0	70.0

Ordering Information

1. Find the cable's conductor size in the selection guide above and identify the kit catalog number. This kit will be all that is needed to splice one three-core cable to three single-core cables less the connectors and shield grounding kits. **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:

For a 3/C (armored or unarmored), 5kV, 2 AWG, cable spliced to a 3-1/C, 5 kV, 2 AWG, cables with a solderless grounding kit (G mod): MVJT 051T G

EXAMPLE 2:

For a 3/C, 2/0 AWG, copper conductor 5kV cable spliced to 3-1/C, 250 kcmil, copper conductor, 5kV cable with cable cleaning kit: **MVJT 052T P**

* 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.