



MVES 150 Series

15kV Medium Voltage Live End Seal

Clear cap for single-core 12-17.5kV extruded dielectric shielded cable

Description

The Innovative Power Products MVES 150 series live end seal is a heatshrinkable system for live ending (clear capping) 15kV extruded dielectric, jacketed power cable that has been abandoned but still energized. The MVES uses an extruded dielectric plug to encasulate the conductor and special materials to control electrical stress at the plug/cable-end interface and at the shield cutbacks. A heat-shrinkable field control tubing is used to control stress over the interface and at the shield cutbacks. Insulating tubings reinstate the cable insulation and insulating shielding tubing reshields the joint and forms an internal seal to the cable's semiconductive layer. Tinned copper mesh reestablishes the metallic shielding around the assembly. An end cap covers the shielded assembly's end. A tough abrasion resistant jacketing tube and sealants provide moisture seals and mechanical protection.

MVES 150 kits provide a lightweight, compact and environmentally sealed system for live ending jacketed power cables. These features allow the installation of this system in duct systems, vaults, submersible or direct-buried applications. The system is totally sealed. Live end failures failures in flooded vaults are eliminated.

Versatility

MVES 150 kits cover a wide range of conductor sizes. It will accommodate out-of-round or off-tolerance cables. Four (4) kit sizes cover cable sizes from #2 AWG through 1000 kcmil.

Performance

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

MVES 150 live cap performance is based on the design and testing of the IPP MVJ 150 series joint for metallic tape and wire shielded power cables.

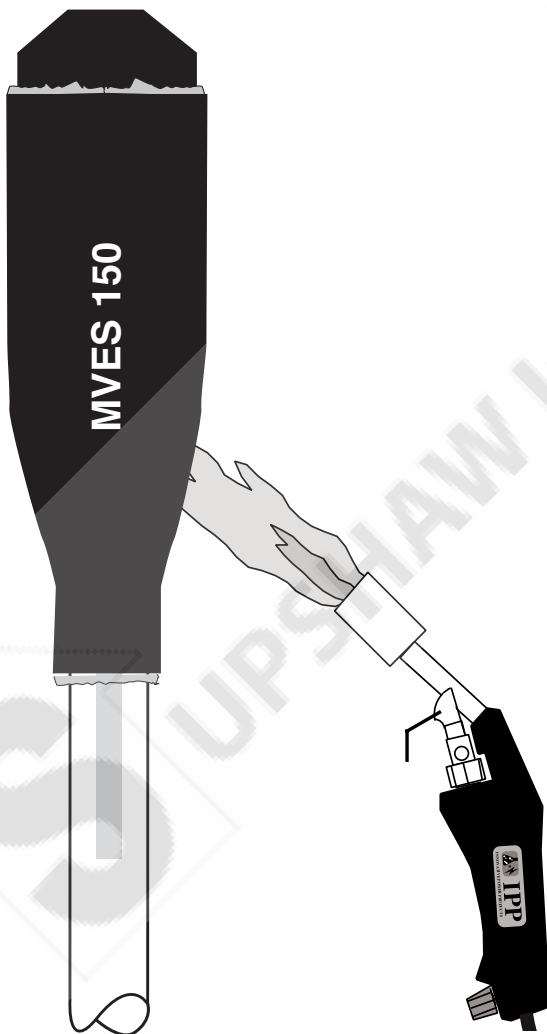
MVES kits are designed to meet the requirements of the applicable sections of the cable accessory standard IEEE-404.

Convenient Packaging

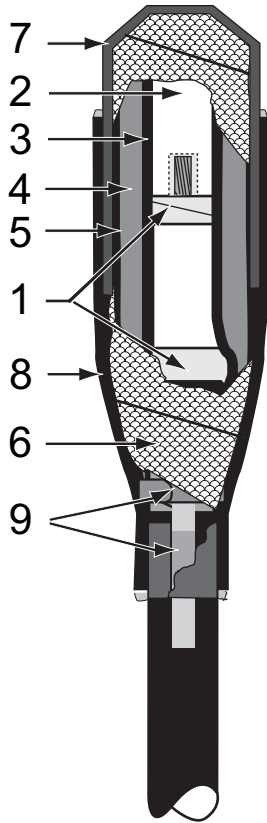
MVES 150 series factory engineered kits are individually packaged single-core kits. Everything is included to live end cap (clear cap), one single-core cable end.

Related Product Information

MVES 150: Price List PL-634



Electrical Specifications: 15kV Related Accessories



Test Requirement	Value	MVES 150
AC withstand, 1 minute (60 hz)	35 kV	PASS
DC withstand, 15 minutes	70 kV	PASS
Partial Discharge (Corona) Voltage (<3pC)	13 kV	PASS
Impulse withstand 1.2 x 50 μ s (crest kV)	110 kV	> 110kV
AC withstand, 1 hour (60hz)	53 kV	PASS
AC withstand, 5 hour (60hz)	35 kV	PASS
Continuous current rating	N/A	N/A
Submersion test (ANSI C119.1)	PASS	PASS

Bill of Materials: Std. Pkg.(1 kit) 1 ea., 1/C extruded dielectric cable; live end seal

Key	Item Description	Quantity	Supplied
1	Extruded Dielectric Plug	1 per kit	In All Kits
2	Field Control Material	As Required	In All Kits
3	Field Control Tube	1 per kit	In All Kits
4	Insulating Tube	2 per kit	In All Kits
5	Shielded Tube	1 per kit	In All Kits
6	Shielding Mesh	As Required	In All Kits
7	End Sealing Cap	1 per kit	In All Kits
8	Jacketing Tube	1 per kit	In All Kits
9	External Ground Kit	1 per kit	In All Kits
-	Cable Preparation Kit (P)	1 per kit	When Specified
-	Installation Guide	1 per kit	In All Kits

15kV Selection Guide

Conductor Range <i>All Dimensions in Inches</i>	Kit Catalog Number	Insulation Min.	Diameter Max.	Installed Length
#4 - 2/0 AWG	MVES 151	0.64	0.95	14.0
3/0 - 300 kcmil	MVES 152	0.80	1.10	14.0
350 - 500 kcmil	MVES 153	1.00	1.40	14.0
600 - 1000 kcmil	MVES 154	1.31	1.85	14.0

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 clear cap one single-core extruded dielectric cable.

Confirm dimensional data before ordering

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 1/C, 1/0 AWG, aluminum or copper, XLPE 15kV extruded dielectric cable with a cable cleaning kit:

MVES 151P

EXAMPLE 2:

For 1/C, 4/0 AWG, aluminum or copper, EPR 15kV extruded dielectric cable:

MVES 152

EXAMPLE 3:

For 1/C, 500 kcmil, aluminum or copper, EPR 15kV extruded dielectric cable with external grounding kit and cable cleaning kit:

MVES 153GP