## **Description**

The Innovative Power Products MVES 250 series live end seal is a heatshrinkable system for live ending (clear capping) 25kV 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 heatshrinkable 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 250 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 250 kits cover a wide range of conductor sizes. It will accommodate out-of-round or off-tolerance cables. Three (3) 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 250 live cap performance is based on the design and testing of the IPP MVJ 250 series joint for metallic tape and wire shielded power cables.

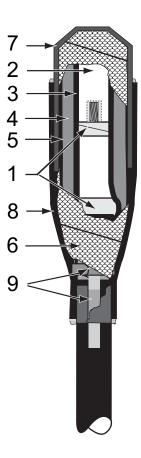
MVES kits are designed to meet the requirements of the applicable sections of the cable accessory standard IEEE-404.

# **Convenient Packaging**

MVES 250 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 250: Price List PL-647



# Electrical Specifications: 25kV Related Accessories

Test Requirement	Value	<b>MVES 250</b>
AC withstand, 1 minute (60 hz)	52 kV	PASS
DC withstand, 15 minutes	100 kV	PASS
Partial Discharge (Corona) Voltage (<3pC)	21.6 kV	PASS
Impulse withstand 1.2 x 50 µs (crest kV)	150 kV	> 150kV
AC withstand, 1 hour (60hz)	78 kV	PASS
AC withstand, 5 hour (60hz)	52 kV	PASS
Continuous current rating	Not Applicable	Not Applicable
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 (Pmod)	1 per kit	When Specified
-	Installation Guide	1 per kit	In All Kits

# 25kV Selection Guide

Conductor Range All Dimensions in Inches	Kit Catalog Number	Insulation Min.	Diameter Max.	Installed Length
#2 - 250 kcmil	MVES 251	0.70	1.20	24"
300 - 500 kcmil	MVES 252	1.00	1.55	24"
750 - 1000 kcmil	MVFS 253	1.25	1.85	24"

# **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 25kV extruded dielectric cable with a cable cleaning kit: **MVES 251P** 

#### **EXAMPLE 2:**

For 1/C, 350 kcmil, aluminum or copper, EPR 25kV extruded dielectric cable: MVES 252

#### **EXAMPLE 3:**

For 1/C, 500 kcmil, aluminum or copper, EPR 25kV extruded dielectric cable with external grounding kit and cable cleaning kit:

MVES 253GP