MVES 080 Series
8kV Medium Voltage Live End Seal Clear cap for single-core $7.2-11 \mathrm{kV}$ extruded dielectric shielded power cables

## Description

The Innovative Power Products MVES 080 series live end seal is a heatshrinkable system for live ending (clear capping) 8 kV extruded dielectric, jacketed power cable that has been abandoned but still energized. The MVES uses an extruded dielectric plug to encapsulate the conductor and special materials to control electrical stress at the plug/cable-end interface and at the shield cutbacks. Field control material 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.


## Versatility

MVES 80 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 \#4 AWG through 1000 kcmil.

## Performance

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

MVES 080 live cap performance is based on the design and testing of the IPP MVJ 080 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 080 series factory engineered kits are individually packaged single-core kits. Everything is included to live end cap (clear cap), and one single-core cable end.

## Related Product Information

MVES 080: Price List PL-624


Electrical Specifications: 8kV Related Accessories

| Test Requirement | Value | MVES 080 |
| :--- | :--- | :--- |
| AC withstand, 1 minute ( 60 hz ) | 23 kV | PASS |
| DC withstand, 15 minutes | 45 kV | PASS |
| Partial Discharge (Corona) Voltage ( $<3 \mathrm{pC}$ ) | 6.9 kV | PASS |
| Impulse withstand $1.2 \times 50 \mu \mathrm{~s}$ (crest kV) | 95 kV | $>95 \mathrm{kV}$ |
| AC withstand, 1 hour (60hz) | 34.5 kV | PASS |
| AC withstand, 5 hour (60hz) | 23 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 | Field Control Material | As Required | In All Kits |
| 2 | Extruded Dielectric Plug | 1 per kit | In All Kits |
| 3 | Insulating Tube | 2 per kit | In All Kits |
| 4 | Shielded Tube | 1 per kit | In All Kits |
| 5 | Shielding Mesh | As Required | In All Kits |
| 6 | End Sealing Cap | 1 per kit | In All Kits |
| 7 | Jacketing Tube | 1 per kit | In All Kits |
| 8 | 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 |


| 8kV Selection Guide |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Conductor Range | Kit Catalog | Insulation | Diameter | Installed |
| All Dimensions in Inches | Number | Min. | Max. | Length |
| \#6- \#2 AWG | MVES 081 | 0.40 | 0.65 | $12 "$ |
| $\# 1-4 / 0$ AWG | MVES 082 | 0.55 | 0.91 | $12^{\prime \prime}$ |
| $250-350$ kcmil | MVES 083 | 0.80 | 1.25 | $12 "$ |
| $500-1000$ kcmil | MVES 084 | 0.98 | 1.60 | $12 "$ |

## 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:

P - cable cleaning kit (Pmod)
G - sealed grounding kit (Gmod)

## EXAMPLE 1:

For 1/C, 4/0 AWG, aluminum or copper, XLPE, 8kV extruded dielectric cable with cleaning kit:
MVES 082P

EXAMPLE 2:
For $1 / \mathrm{C}, 250 \mathrm{kcmil}$, aluminum or copper, EPR, 8 kV extruded dielectric cable:

## MVES 083

EXAMPLE 3:
For $1 / \mathrm{C}, 500 \mathrm{kcmil}$ aluminum or copper, EPR 8 kV extruded dielectric cable with external grounding kit and cable cleaning kit:
MVES 084GP

