



# MVES 050 SERIES

5 kV Medium Voltage Live End Seal  
Clear cap for single-core 2.3-6.6 kV  
extruded dielectric, shielded cable

## Description

The Innovative Power Products MVES 050 series live end seal is a heatshrinkable system for live ending (clear capping) 5 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.

MVES 50 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 in flooded vaults are eliminated.

## Convenient Packaging

MVES 50 series factory engineered kits are individually packaged single-core kits. Everything is included to live end cap (clear cap), one single-core cable end.

## Versatility

MVES 50 kits cover a wide range of conductor sizes. It will accommodate out-of-round or off-tolerance cables. Five (5) kit sizes cover cable sizes from #8 AWG through 1000 kcmil.

## Performance

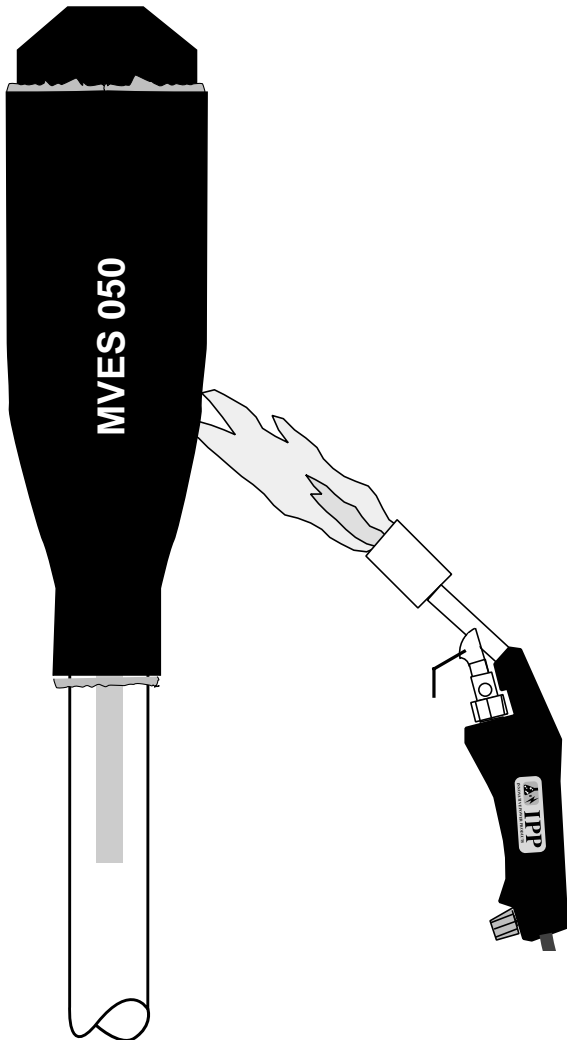
MVES kits are factory engineered to provide fast and easy installation with reliable lifetime performance.

MVES 050 live cap performance is based on the design and testing of the IPP MVJ 050 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.

## Related Product Information

MVES 050: • Price List PL-614

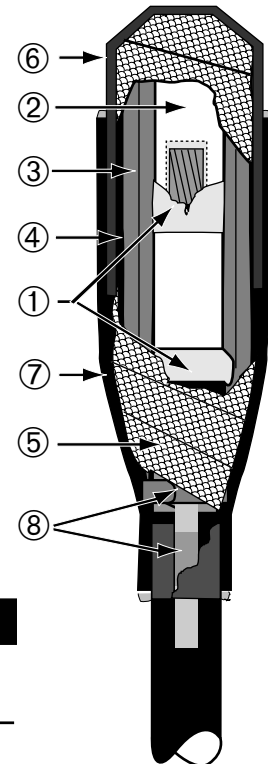


## ELECTRICAL SPECIFICATIONS: 5 kV Rated Extruded Dielectric Cable Accessories

Test Requirement	Value	MVES 050
AC withstand, 1 minute (60 hz)	18 kV	PASS
DC withstand, 15 minutes	35 kV	PASS
Partial Discharge (Corona) Voltage <3pC	4.3 kV	PASS
Impulse withstand 1.2 x 50 µs (crest kV )	75 kV	> 75kV
AC withstand, 1 hour (60 hz)	27 kV	PASS
AC withstand, 5 hours (60 hz)	18 kV	PASS
Continuous current rating	Not applicable	Not applicable
Submersion test (ANSI C119.1)	PASS	PASS

## BILL OF MATERIALS (Std. Pkg: 1 kit = 1 each, 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	Shielding 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 Grounding Kit	1 per kit	in all kits
•	Cable Preparation Kit	1 per kit	when specified (-P)
•	Installation Guide	1 per kit	in all kits (not shown)



## 5 kV SELECTION GUIDE

Conductor Range <i>All dimensions in inches</i>	Kit Catalog Number	Insulation min.	Diameter max.	Installed Length max.
#8-#2 AWG	MVES 051	0.40	0.55	12.0
#1-2/0 kcmil	MVES 052	0.50	0.70	12.0
3/0-250 kcmil	MVES 053	0.64	0.90	12.0
300-500 kcmil	MVES 054	0.78	1.10	12.0
600-1000 kcmil	MVES 055	1.04	1.47	12.0

## 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 :

**P** - cable cleaning kit including: solvent saturated towels and non-conductive abrasive cloth. (Pmod2).

### EXAMPLES:

For 1/C, 1/0 AWG, aluminum or copper, XLPE, 5 kV extruded dielectric cable with a cable cleaning kit: **MVES 052P**

For 1/C, 4/0 AWG, aluminum or copper, EPR, 5 kV extruded dielectric cable : **MVES 053**

For 1/C, 500 kcmil, aluminum or copper, EPR 5 kV extruded dielectric cable with cable cleaning kit : **MVES 054P**