

25kV Medium Voltage Power Cable — MV-90 / MV-105

XLPE & EPR Insulated | Copper Tape Shielded | Sub-Transmission Feeder & Industrial MV

PRODUCT OVERVIEW

Mirabel Energy USA 25kV medium voltage cable is engineered for the sub-transmission and high-capacity distribution segment of North American power infrastructure — serving utility feeders, large industrial service entrances, wind and solar generation interconnects, and campus power systems requiring higher voltage class performance than 15kV distribution. Available in both MV-90 and MV-105 temperature ratings with XLPE or EPR insulation, 25kV cables are designed for demanding installation environments including long conduit pulls, direct burial, and cable tray runs where thermal performance and dielectric integrity over decades of service life are paramount. Copper tape shielded constructions are standard for all ungrounded and resistance-grounded system applications.

90°C Normal Operation	130°C Emergency Overload	250°C Short-Circuit Fault	1,000 lbs/ft Max Sidewall Pressure
25 kV (150kV BIL) Voltage Rating	90°C / 105°C Temp Rating	XLPE or EPR Insulation	260 mils Min Insul. Thick.

APPLICATIONS

- Utility sub-transmission underground feeders (25kV class)
- Large industrial facility primary service entrance (25kV)
- Wind and solar generation MV collection and step-up systems
- Military installation and federal facility power distribution
- Large data center and hyperscale campus 25kV utility infrastructure
- Refinery, petrochemical, and heavy industrial MV power systems

KEY SPECIFICATIONS

- 25kV (150kV BIL) voltage rating — MV-90 and MV-105 temperature classes
- XLPE insulation: low dielectric loss, high thermal endurance for long circuits
- EPR insulation: flexibility and aging resistance for harsh service conditions
- 260 mil minimum insulation wall — per ICEA S-93-639 for 25kV systems
- Copper tape shield — continuous helical overlap, grounded at termination points
- Suitable for solidly grounded, ungrounded, and resistance-grounded systems
- 1,000 lbs/ft maximum sidewall pressure — engineered for long underground pulls
- Single-conductor and three-conductor triplexed configurations available

TECHNICAL SPECIFICATIONS

Parameter	MV-90 (XLPE)	MV-105 (EPR)
Voltage Rating	25kV / 150kV BIL	25kV / 150kV BIL
Conductor Temp (Normal)	90°C	105°C
Conductor Temp (Emerg.)	130°C	140°C
Conductor Temp (Fault)	250°C	250°C
Min. Insulation Thick.	260 mils	260 mils
Shield Type	Copper tape	Copper tape
Jacket	PVC / LSZH / CSPE	PVC / LSZH / CSPE