Electric Utility – EmPowr® Medium-Voltage Power Cable Jacket Ripcords

When medium-voltage (MV), concentric neutral, extruded-to-fill, jacketed cables have their jacket removed, typically one of the concentric neutrals is pulled through the jacket with pliers. This method can be a safety concern for installers, as a large amount of force may be applied to pull neutrals through the jacket. Additionally, this method can lead to breakage of neutrals and uncontrolled installer movements.

Alternatively, a jacket spiral stripping tool, that scores and cuts the jacket, may be used. This method also poses a potential risk of damaging the metallic shield/neutral if the tool is not properly adjusted to avoid contact with the metallic shield/neutral. Purchasing and maintaining this specialized piece of equipment is also an additional burden.

Utilizing ripcords for removal of MV cable jackets is the safer and easier method that does not potentially jeopardize the installers safety or integrity of the metallic shield/neutral. Two longitudinally applied, 180° apart, tightly twisted multi-cords of aramid fibers, i.e. Kevlar®, are typically utilized for this application. Other ripcord materials and configurations are also available if alternate strength and cut through properties are desired.

**How are ripcords used?**

Ripcords are well suited for cutting through the jackets of MV concentric neutral cables, but they can also serve as a universal tool. A piece of ripcord from the last job can be used to make a perfect ring cut where you want to strip the jacket back to and have it stop. The same piece of ripcord can also be used to make a longitudinal cut at the end of the cable to expose the underlying ripcord of the next cable.

When a MV cable design includes a water swellable separator tape under a jacket, ripcords under the tape will cut through both the tape and the jacket at the same time.

Ripcords incorporated in MV longitudinally applied corrugated tape (LACT) shield designs can even be used to cut through the metallic shield and the jacket at the same time. This helps prepare cables for splicing or terminating quicker and easier, all while maintaining cable core integrity.

2 ARAMID RIPCORDS 180° APART