



## PowerGlide® 600V UD Cable Proper Handling

There's an easier way to install multi-conductor 600V UD in HDPE or PVC conduit systems that's cleaner and more cost-effective—PowerGlide® 600V UD cable.

### Handling & Installation

- PowerGlide® 600V UD cable is available in standard or ruggedized triplex and quadruplex configurations and does not require new accessories, tooling, or cleaning supplies.
- Handling PowerGlide 600V UD cable is exactly the same as handling standard 600V UD cables:

Prior to installation, tape the Glide Wire™ to the conductor (**fig. 1**).

Before it is cut, tape the Glide Wire to the conductor (**fig. 2**).

On installs where there is a reduction in conduit size during installation, stagger the PowerGlide 600V UD cable conductor legs the same as traditional cable so that the cable end will flow through the conduit reducer more easily. Cut and tape the Glide Wire just past the last conductor (**fig. 3**). Prior to cutting the cable from the reel, make sure to tape the Glide Wire down on both sides of the cut so that it stays tight on cable assembly (**fig. 4**).

- On pulling installations, attach a Kellems grip to end of the cable. Once the grip is attached, tape down the end over the cable & Glide Wire (**fig. 5**).

### Save Materials, Time, and Money with PowerGlide® 600V UD Cable

- Traditional methods for installing cable in HDPE or PVC conduit can require additional pulling equipment, setup time, and material costs. PowerGlide 600V UD cable's patented technology helps to eliminate these by making installations into conduit easier.
- The Glide Wire is designed to:
  - Reduce friction and allow installers to push the cable further, in less time, while using less effort
  - Prevent the cable from springing out or "bird-caging" when going into the duct
  - Decrease contact with debris or sharp edges within ducts, protecting the integrity and reliability of the cable
  - Reduce hand fatigue by providing an easier grip for installers
  - Potentially eliminate the need for lube when installing PowerGlide 600V UD cable into conduit – reducing costs, mess, and cleanup time.



# PowerGlide® 600V UD Cable

## Frequently Asked Questions

### What is the coefficient of friction for Sweetbriar pushed or pulled into 2" conduit?

The classical coefficient of friction does not change whether something is pushed or pulled. What does change is other frictional forces in a push or pull situation. In a push or pull situation, PowerGlide® 600V cable reduces contact area and the performance monofilament Glide Wire™ has a lower coefficient of friction in contact with PVC or HDPE. These aspects reduce kinetic (while cable is in motion) frictional forces in a push or pull situation compared to conventional 600V UD cables.

In addition, when you have a push situation, the “ballooning” or “bird-caging” of conventional cable produces other forces, not related to gravity, which act on the cable. These forces are radially outward as the conductors are forced into contact with the duct in all directions. These forces increase as you push further and are also impacted by the conduit diameter and plexed cable diameter. The total pushing force is a summation of all the frictional forces present.

### Can PowerGlide® 600V cable be pulled the same through existing or dirty conduit?

We always recommend that for optimum results, ducts should be clean before installing cable. However, we have noticed numerous times in the field that when the cable exits the duct after a PowerGlide 600V UD cable install, the performance monofilament Glide Wire has taken the abuse instead of the insulation on the conductors. Small pebbles or other small debris present in duct may have caused this abuse. The conductor insulation does not get the same abuse since it does not contact the duct.

### What happens if the lashing or Glide Wire™ breaks?

The performance monofilament has tremendous strength and elongation before breakage. We have never had an instance where the monofilament has broken during installation. Before cutting the cable, the monofilament needs to be taped down securely to the conductor before starting the next install.

### Will the slightly larger OD on PowerGlide 600V UD cable force utilities to change their current reel sizes?

No. The extra space that the Glide Wire occupies is not enough to change the reel size for either standard XLP or ruggedized products.

### Will PowerGlide 600V UD cable work with lubricant?

Yes, although it will not be necessary in short pushes, it is beneficial. In fact, the Glide Wire will help to increase the dispersion of the lubricant for longer pushes by not allowing the lubricant to settle in the bottom of the conduit.

### Is a nose on the front end of the PowerGlide 600V UD cable necessary to prevent hanging on the lip of conduit couplings?

Although great results are attainable with just taping the end of the cable before installing in the conduit, better results can be obtained with the use of a nose or Kellems grip.



For more information on PowerGlide 600V UD cable, contact your Southwire representative or visit [southwire.com](http://southwire.com)