High Speed Xtra Low Friction (XLF) Industrial Cables

The Low Friction Advantage in Cable Installation

General Cable's new High Speed industrial cable, with Xtra Low Friction (XLF) technology, facilitates easier and safer installation conditions. The High Speed XLF jacket technology allows for significant reductions in required pulling force, up to 80% versus standard cables. These pulling efficiencies translate into time, labor and money savings for the electrical contractor.

General Cable's High Speed XLF technology has been engineered into our PVC, as well as our high performance CPE and LSZH low- and medium-voltage product lines. High Speed XLF cables demonstrate General Cable's commitment to the premium and environmentally conscious market space by providing a low friction solution for a full range of commercial, industrial and utility applications.

General Cable's High Speed Xtra Low Friction industrial cables are designed to deliver reliable performance to meet the rigorous requirements associated with industrial applications. Contact your local General Cable representative for assistance in selecting the right High Speed industrial cable to meet your specific project needs.



General Cable offers the following low- and medium-voltage industrial cables with Xtra Low Friction technology:

- DuraSheath® EPR/XL-CPE 600 Volt and 2400 Volt Power Cable
- \bullet GenFree $^{\otimes}$ II XLPO/XLPO 600 Volt Low-Smoke, Zero-Halogen Power Cable
- Uniblend® 5 kV to 35 kV EPR/PVC Jacketed Medium-Voltage Power Cable
- GenFree® Uniblend® 5 kV to 35 kV EPR/Low-Smoke, Zero-Halogen Jacketed Medium-Voltage Power Cable
- Uniblend® CPE 5 kV to 35 kV EPR/CPE Jacketed Medium-Voltage Power Cable



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The proof is in the results!

To demonstrate the performance of High Speed XLF cables, General Cable conducted a study simulating worst-case conditions per NEC® guidelines, defined as a 300-foot pull with up to 360 degrees in bends. Our testing rig consisted of a 20-foot pull with four 90-degree bends, which closely correlated to the NEC guidelines.

Three separate General Cable 500 kcmil single conductor 600 V CPE jacketed cables were pulled into conduit.

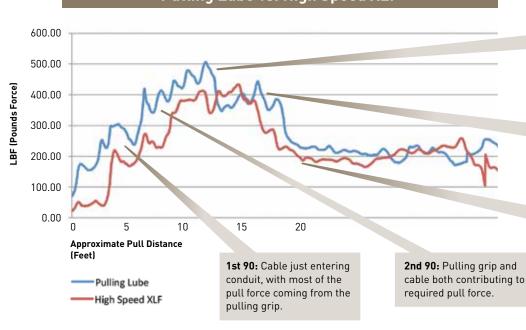
- 1. High Speed XLF jacketed cable
- 2. Standard cable with pulling lubricant
- 3. Standard cable without pulling lubricant

All cables were pulled into a 2" electrical metallic (EMT) conduit with a conduit fill rate of 27.3%, which was verified by a licensed contractor.

The Results

Test results show
little to no difference
in required pulling
force when comparing
General Cable's High
Speed cable to the cables
installed with pulling
lubricant. Tests on cable
installed without pulling
lubricant were stopped
almost immediately, as
the required pull force
prevented completion of
the test.

Conduit Pull LBF Measurement Pulling Lube vs. High Speed XLF



3rd 90: Pulling grip still plays a part of the total required pull force. However, conductor has more impact due to weight and surface friction.

4th 90: Pull force drops as more of the conduit gets coated with lubricant.

Cables exit conduit: Pulling tension stabilizes as cable completes conduit run.

