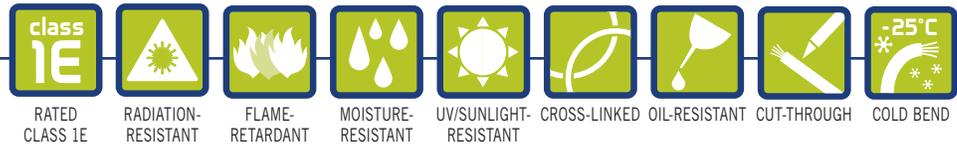


# ULTROL® 60+ Medium-Voltage Power Cable Shielded, Single Conductor

SPEC 340-60  
May, 2013

## Class 1E Nuclear

5 kV and 8 kV, UL Type MV-105, 133%/100% Ins. Levels; 15 kV, UL Type MV-105, 133% Ins. Level



## Product Construction

### 1. Conductor:

- 5 kV (133%) and 8 kV (100%): 6 AWG thru 1000 kcmil annealed tinned copper compressed Class B strand
- 15 kV (133%): 2 AWG thru 1000 kcmil annealed tinned copper compressed Class B strand

### 2. Extruded Strand Shield (ESS):

- Extruded thermoset semi-conducting stress-control layer over conductor

### 3. Insulation:

- Radiation-resistant Ethylene Propylene Rubber (EPR) insulation, colored to contrast with the black semi-conducting shield layers

### 4. Extruded Insulation Shield (EIS):

- Thermoset semi-conducting polymeric layer free stripping from insulation

### 5. Metallic Shield:

- Longitudinally applied 8 mil corrugated tinned copper tape with overlap

### 6. Jacket:

- Flame-retardant, moisture-, oil-, sunlight- and radiation-resistant, thermoset ULTROL® 60+ Cross-linked Polyolefin (XLPO) — Black

### Print:

- GENERAL CABLE (PLANT OF MFG) DAY MONTH YEAR LIGHTNING BOLT SYMBOL ULTROL® 60+ 1/C SIZE (AWG OR KCMIL) CU (INSULATION THICKNESS) EPR TYPE MV-105 (VOLTAGE) KV% INSULATION LEVEL SUN RES FOR CT USE\* (UL) NUCLEAR TRACEABILITY NUMBER SEQUENTIAL FOOTAGE MARK

\* Note: Sizes 1/0 AWG and larger include: FOR CT USE

### Applications:

- Superior performance in utility power generating plants and other industrial three-phase applications
- For power to emergency diesel motors
- Class 1E rated wire construction specifically designed for applications in nuclear generating stations
- For use in wet or dry locations
- For use in aerial, conduit, open tray, underground duct installations, and direct burial

### Features:

- UL Rated 105°C
- ICEA Rated at 90°C wet or dry
- Qualified for 60-year service life
- Fully traceable
- Gamma and Beta radiation resistant (up to 350 megarads)
- Submergence operability
- Long-term thermal endurance and superior electricals
- Long-term moisture and radiation stability
- Excellent heat and moisture resistance
- Outstanding corona resistance
- Flexibility for easy handling
- High dielectric strength
- Low moisture absorption
- Electrical stability under stress
- Low dielectric loss
- Chemical-resistant
- Meets cold bend test at -25°C

### Industry Compliances:

- Class 1E Qualified in accordance with IEEE 323-1974/2003 and IEEE 383-1974/2003
- UL 1072
- ICEA S-93-639/NEMA WC74
- ICEA S-97-682
- AEIC CS8-07
- UL listed as Type MV-105 for use in accordance with NEC, UL File # E90501
- Sizes 1/0 AWG and larger are listed and marked "FOR CT USE" in accordance with NEC

### Flame Test Compliances:

- IEEE 383:1974
- IEEE 383:2003
- ICEA T-29-520
- IEEE 1202/FT4-1991, Aged & Unaged
- VW-1

### Other:

- Quality assurance program in accordance with NRC 10CFR50 Appendix B
- ANSI N45.2
- ASME NQA-1
- NIAC
- NUPIC

### Packaging:

- Material cut to length and shipped on non-returnable wood reels.
- Extra charges apply for cuts less than 1000 ft., lagging, pulling eyes, paralleling and triplexing

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VOLTAGE	SIZE RANGE (AWG/kcmil)	INSULATION THICKNESS (mils)
5 kV (133%), 8 kV (100%)	6 thru 1000	115
15 kV (133%)	2 thru 1000	220