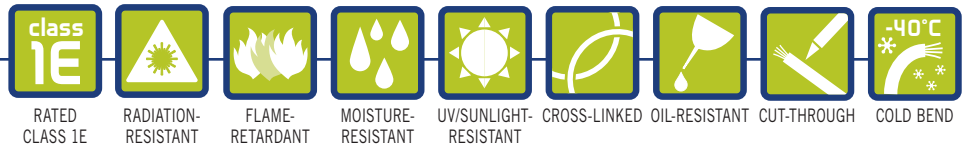


# ULTROL® 60+ Control Cable Multi-Conductor

Class 1E Nuclear

600 V, 90°C, VW-1, UL Type TC-ER\*

SPEC 275-60  
May, 2013



## Product Construction

### 1. Conductor:

- 14 AWG thru 10 AWG tinned annealed copper; Class B stranding; 2 thru 37 conductors

### 2. Insulation:

- Flame-retardant, heat-, moisture- and radiation-resistant, thermoset ULTROL® 60+ Cross-linked Polyethylene (FR-XLPE)
- Color code: Per ICEA Method 1, Table E-1

### 3. Jacket:

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

### Print:

- GENERAL CABLE (WC) ULTROL® 60+ XX/C  
XXAWG COPPER FR-XLPE XLPO 600 V  
90°C SUN RES OIL RES I & II DIR BUR (UL)  
TYPE-TC-ER\* XHHW-2 VW-1 NUCLEAR DAY  
MONTH YEAR TRACEABILITY NUMBER  
SEQUENTIAL FOOTAGE MARK

\* -ER for > 2 conductors

### Options:

- Conductor stranding
- ISO Metric conductors
- E-2 color code

### Applications:

- ULTROL® 60+ control cable is a 600 V multi-conductor, thermoset, Class 1E rated construction specifically designed for applications in nuclear generating stations and where flame retardancy is critical
- For use in Class 1E power distribution and control circuits for power lighting, control and signal circuits
- Can be installed in trays, conduit, ducts, or in direct burial applications

### Features:

- Rated at 90°C wet or dry
- Fully traceable
- Qualified for 60-year service life
- Gamma and beta radiation resistant (up to 350 megarads)
- Submergence operability
- Long-term thermal endurance and superior electricals
- Excellent mechanical cut-through properties
- Long-term moisture and radiation stability
- Free stripping for ease of termination
- Meets cold bend test at -40°C

### Industry Compliances:

- Class 1E Qualified in accordance with IEEE 323-1974/2003 and IEEE 383-1974/2003
- ICEA S-73-532
- UL 1277 Type TC-ER\*
- UL 44 XHHW-2
- \* -ER for > 2 conductors

### 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 to be shipped on non-returnable wooden reels

# ULTROL® 60+ Control Cable Multi-Conductor

Class 1E Nuclear

600 V, 90°C, VW-1, UL Type TC-ER\*



CATALOG NUMBER	NO. OF COND.	COND. SIZE (AWG)	COND. STRAND	MINIMUM AVG. INSULATION THICKNESS		MINIMUM AVG. JACKET THICKNESS		NOMINAL CABLE O.D.		COPPER WEIGHT		NET WEIGHT	
				INCHES	mm	INCHES	mm	INCHES	mm	LBS/1000 FT	kg/km	LBS/1000 FT	kg/km
27560.14.2	2	14	7/.0242	0.030	0.76	0.045	1.14	0.359	9.12	26	38	87	130
27560.14.3	3	14	7/.0242	0.030	0.76	0.045	1.14	0.379	9.63	38	57	98	146
27560.14.4	4	14	7/.0242	0.030	0.76	0.045	1.14	0.414	10.5	51	76	122	182
27560.14.5	5	14	7/.0242	0.030	0.76	0.045	1.14	0.452	11.5	64	95	142	211
27560.14.7	7	14	7/.0242	0.030	0.76	0.045	1.14	0.492	12.5	90	134	201	299
27560.14.9	9	14	7/.0242	0.030	0.76	0.060	1.52	0.603	15.3	116	173	277	412
27560.14.12	12	14	7/.0242	0.030	0.76	0.060	1.52	0.675	17.2	155	231	339	505
27560.14.19	19	14	7/.0242	0.030	0.76	0.060	1.52	0.785	19.9	245	365	536	797
27560.14.25	25	14	7/.0242	0.030	0.76	0.080	2.03	0.951	24.2	321	478	661	984
27560.14.30	30	14	7/.0242	0.030	0.76	0.080	2.03	1.013	25.7	385	573	836	1244
27560.14.37	37	14	7/.0242	0.030	0.76	0.080	2.03	1.091	27.7	476	708	924	1375
27560.12.2	2	12	7/.0305	0.030	0.76	0.045	1.14	0.397	10.1	41	61	112	167
27560.12.3	3	12	7/.0305	0.030	0.76	0.045	1.14	0.420	10.7	61	91	129	192
27560.12.4	4	12	7/.0305	0.030	0.76	0.045	1.14	0.460	11.7	81	121	182	271
27560.12.5	5	12	7/.0305	0.030	0.76	0.045	1.14	0.503	12.8	102	152	216	322
27560.12.7	7	12	7/.0305	0.030	0.76	0.060	1.52	0.579	14.7	143	213	289	430
27560.12.9	9	12	7/.0305	0.030	0.76	0.060	1.52	0.671	17.1	184	274	379	564
27560.12.12	12	12	7/.0305	0.030	0.76	0.060	1.52	0.754	19.2	245	365	479	713
27560.12.19	19	12	7/.0305	0.030	0.76	0.080	2.03	0.923	23.4	389	579	738	1098
27560.12.25	25	12	7/.0305	0.030	0.76	0.080	2.03	1.067	27.1	512	762	913	1358
27560.12.30	30	12	7/.0305	0.030	0.76	0.080	2.03	1.138	28.9	613	912	1058	1574
27560.12.37	37	12	7/.0305	0.030	0.76	0.080	2.03	1.227	31.2	756	1125	1274	1896
27560.10.2	2	10	7/.0385	0.030	0.76	0.045	1.14	0.443	11.3	65	96	147	219
27560.10.3	3	10	7/.0385	0.030	0.76	0.045	1.14	0.470	11.9	97	144	177	263
27560.10.4	4	10	7/.0385	0.030	0.76	0.045	1.14	0.515	13.1	130	194	265	394
27560.10.5	5	10	7/.0385	0.030	0.76	0.060	1.52	0.595	15.1	162	241	324	483
27560.10.7	7	10	7/.0385	0.030	0.76	0.060	1.52	0.648	16.5	227	338	388	578
27560.10.9	9	10	7/.0385	0.030	0.76	0.060	1.52	0.754	19.2	292	435	550	818
27560.10.12	12	10	7/.0385	0.030	0.76	0.080	2.03	0.890	22.6	390	580	684	1018
27560.10.19	19	10	7/.0385	0.030	0.76	0.080	2.03	1.038	26.4	614	918	1014	1509

Insulated conductor diameter (inches) 14 AWG (.14), 12 AWG (.16) and 10 AWG (.18).  
Dimensions and weights are nominal; subject to industry tolerances.