

ULTROL® 60+ Instrumentation Cable

Multi-Conductor

Class 1E Nuclear
600 V, 90°C, VW-1



SAFETY
RELATED



RADIATION-
RESISTANT



FLAME-
RETARDANT



MOISTURE
RESISTANT



UV/SUNLIGHT-
RESISTANT



CROSS-
LINKED



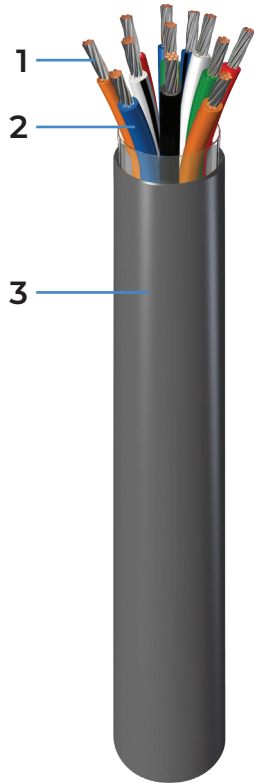
OIL-
RESISTANT



CUT-
THROUGH



COLD
BEND



Product Construction

1. Conductor:

- 18 AWG and 16 AWG tinned annealed copper per ASTM B33; Class B stranding per ASTM B8

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)
- Color code: Black

Print:

- PRYSMIAN (WC) ULTROL® 60+ XX/C XXAWG COPPER FR-XLPE XLPO 600V 90C SUN RES OIL RES I & II DIR BUR NUCLEAR DAY/MONTH/YEAR TRACEABILITY NUMBER SEQUENTIAL FOOTAGE

Options:

- Conductor stranding
- ISO Metric conductor
- UL Type TC-ER (-ER for > 2 conductors) with 30 mil insulation wall thickness

Applications:

- ULTROL® 60+ instrumentation cable is a 600 V multi-conductor, thermoset, Class 1E rated construction specifically designed for safety-related or non-safety-related applications in nuclear generating stations and where flame retardancy and radiation resistance is critical
- For use in Class 1E monitoring data recording and transmitting information on low energy circuits where shielding from external electrostatic interference is not required
- 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 383-1974/2003/2015
- ICEA S-73-532

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



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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	Lb/ 1000 Ft	kg/km
20060.18.2	2	18	7/0152	0.025	0.64	0.045	1.14	0.290	7.36	10	15	40	59
20060.18.3	3	18	7/0152	0.025	0.64	0.045	1.14	0.305	7.75	15	22	52	77
20060.18.4	4	18	7/0152	0.025	0.64	0.045	1.14	0.340	8.64	20	30	76	113
20060.18.5	5	18	7/0152	0.025	0.64	0.045	1.14	0.370	9.40	25	37	84	125
20060.18.7	7	18	7/0152	0.025	0.64	0.045	1.14	0.400	10.16	35	52	104	155
20060.18.9	9	18	7/0152	0.025	0.64	0.045	1.14	0.460	11.68	46	68	129	192
20060.18.12	12	18	7/0152	0.025	0.64	0.045	1.14	0.515	13.08	51	76	165	246
20060.18.19	19	18	7/0152	0.025	0.64	0.060	1.52	0.630	16.00	96	143	255	379
20060.18.25	25	18	7/0152	0.025	0.64	0.060	1.52	0.730	18.54	127	189	327	486
20060.18.30	30	18	7/0152	0.025	0.64	0.060	1.52	0.765	19.43	151	225	372	554
20060.18.37	37	18	7/0152	0.025	0.64	0.060	1.52	0.830	21.08	188	280	451	671
20060.16.2	2	16	7/0192	0.025	0.64	0.045	1.14	0.315	8.00	16	24	50	74
20060.16.3	3	16	7/0192	0.025	0.64	0.045	1.14	0.330	8.38	24	36	64	95
20060.16.4	4	16	7/0192	0.025	0.64	0.045	1.14	0.365	9.27	37	55	87	129
20060.16.5	5	16	7/0192	0.025	0.64	0.045	1.14	0.395	10.03	40	60	104	155
20060.16.7	7	16	7/0192	0.025	0.64	0.045	1.14	0.430	10.92	57	84	135	201
20060.16.9	9	16	7/0192	0.025	0.64	0.045	1.14	0.490	12.45	73	108	170	263
20060.16.12	12	16	7/0192	0.025	0.64	0.060	1.52	0.590	15.00	97	144	233	346
20060.16.19	19	16	7/0192	0.025	0.64	0.060	1.52	0.680	17.27	154	229	335	498
20060.16.25	25	16	7/0192	0.025	0.64	0.060	1.52	0.790	20.07	203	302	427	635
20060.16.30	30	16	7/0192	0.025	0.64	0.060	1.52	0.880	22.35	244	363	543	808
20060.16.37	37	16	7/0192	0.025	0.64	0.080	2.03	0.945	24.00	300	446	648	964

Insulated conductor diameter (inches) 18 AWG (.10) and 16 AWG (.11).
Dimensions and weights are nominal; subject to industry tolerances.

