

ULTROL® 60+ Instrumentation Cable

Individually Shielded Pairs or Triads

Overall Shield

Class 1E Nuclear

600 V, 90°C, VW-1



SAFETY
RELATED



RADIATION-
RESISTANT



FLAME-
RETARDANT



MOISTURE
RESISTANT



UV/SUNLIGHT-
RESISTANT



CROSS-
LINKED



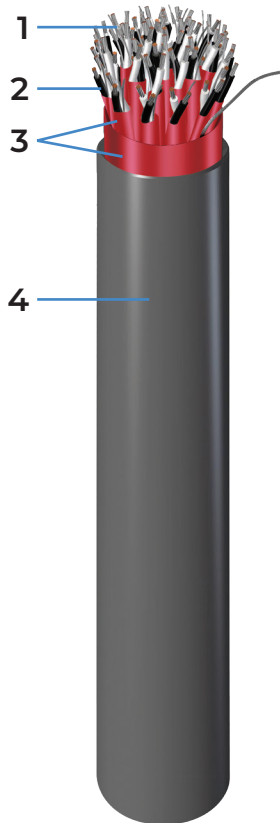
OIL-
RESISTANT



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 – Pairs: black and white; Triads: black, white and red. One conductor in each pair/triad is printed alpha-numerically for easy identification

3. Shields:

- Individually shielded: pairs or triads are 100% shielded with a copper/polyester tape in contact with a stranded tinned copper drain wire and an overall polyester electrical isolation tape
- Overall shield: copper/polyester tape in contact with a stranded tinned copper drain wire

4. 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/ PR OR TRIADS XXAWG COPPER FR-XLPE XLPO SHIELDED 600V 90C SUN RES OIL RES I & II DIR BUR NUCLEAR DAY/MONTH/YEAR TRACEABILITY NUMBER SEQUENTIAL FOOTAGE

Options:

- Conductor stranding
- ISO Metric conductor
- Tinned copper braid shield
- 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
- Designed for use on critical circuits where total isolation is required between pairs/ triads and from external interference
- 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 Pairs/Triads	Cond. Size (AWG)	Cond. Strand	Minimum Avg. Insulation Thickness		Drain Wire Size (AWG)	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
25060.18.2P	2 SPS	18	7/0152	0.025	0.64	20	0.045	1.14	0.474	12.0	31	46	117	174
25060.18.3P	3 SPS	18	7/0152	0.025	0.64	20	0.045	1.14	0.490	12.5	43	64	173	257
25060.18.4P	4 SPS	18	7/0152	0.025	0.64	20	0.060	1.52	0.567	14.4	57	85	245	365
25060.18.5P	5 SPS	18	7/0152	0.025	0.64	20	0.060	1.52	0.619	15.7	70	104	290	432
25060.18.7P	7 SPS	18	7/0152	0.025	0.64	20	0.060	1.52	0.673	17.1	97	144	313	465
25060.18.9P	9 SPS	18	7/0152	0.025	0.64	20	0.060	1.52	0.784	19.9	125	186	389	579
25060.18.12P	12 SPS	18	7/0152	0.025	0.64	20	0.080	2.03	0.923	23.4	165	246	536	798
25060.18.19P	19 SPS	18	7/0152	0.025	0.64	20	0.080	2.03	1.077	27.4	259	385	708	1054
25060.16.2P	2 SPS	16	7/0192	0.025	0.64	18	0.045	1.14	0.519	13.2	47	70	142	211
25060.16.3P	3 SPS	16	7/0192	0.025	0.64	18	0.060	1.52	0.581	14.7	70	104	190	282
25060.16.4P	4 SPS	16	7/0192	0.025	0.64	18	0.060	1.52	0.635	16.1	89	132	223	332
25060.16.5P	5 SPS	16	7/0192	0.025	0.64	18	0.060	1.52	0.695	17.6	113	168	269	400
25060.16.7P	7 SPS	16	7/0192	0.025	0.64	18	0.060	1.52	0.757	19.2	154	229	348	518
25060.16.9P	9 SPS	16	7/0192	0.025	0.64	18	0.080	2.03	0.887	22.5	199	296	551	820
25060.16.12P	12 SPS	16	7/0192	0.025	0.64	18	0.080	2.03	0.996	25.3	264	393	694	1033
25060.16.19P	19 SPS	16	7/0192	0.025	0.64	18	0.080	2.03	1.164	29.6	414	616	935	1391
25060.18.2T	2 STS	18	7/0152	0.025	0.64	20	0.045	1.14	0.489	12.4	40	60	188	280
25060.18.3T	3 STS	18	7/0152	0.025	0.64	20	0.045	1.14	0.519	13.2	59	87	235	350
25060.18.4T	4 STS	18	7/0152	0.025	0.64	20	0.060	1.52	0.599	15.2	77	115	337	502
25060.18.5T	5 STS	18	7/0152	0.025	0.64	20	0.060	1.52	0.655	16.6	96	143	398	592
25060.18.7T	7 STS	18	7/0152	0.025	0.64	20	0.060	1.52	0.714	18.1	133	198	433	644
25060.18.9T	9 STS	18	7/0152	0.025	0.64	20	0.060	1.52	0.833	21.2	170	253	533	793
25060.18.12T	12 STS	18	7/0152	0.025	0.64	20	0.080	2.03	0.979	24.9	226	336	741	1102
25060.18.19T	19 STS	18	7/0152	0.025	0.64	20	0.080	2.03	1.145	29.1	356	530	977	1454
25060.16.2T	2 STS	16	7/0192	0.025	0.64	18	0.060	1.52	0.613	15.5	64	95	175	260
25060.16.3T	3 STS	16	7/0192	0.025	0.64	18	0.060	1.52	0.650	16.5	93	138	227	338
25060.16.4T	4 STS	16	7/0192	0.025	0.64	18	0.060	1.52	0.700	17.8	125	186	291	433
25060.16.5T	5 STS	16	7/0192	0.025	0.64	18	0.060	1.52	0.769	19.5	154	229	348	518
25060.16.7T	7 STS	16	7/0192	0.025	0.64	18	0.060	1.52	0.838	21.3	211	314	444	661
25060.16.9T	9 STS	16	7/0192	0.025	0.64	18	0.080	2.03	1.027	26.1	270	402	603	897
25060.16.12T	12 STS	16	7/0192	0.025	0.64	18	0.080	2.03	1.151	29.2	359	534	770	1146
25060.16.19T	19 STS	16	7/0192	0.025	0.64	18	0.080	2.03	1.351	34.3	566	842	1144	1702

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

