

UL Type PLTC / ITC Armored Instrumentation, 300 V

Armored Instrumentation cables can be used to minimize noise and signal interference by preventing crosstalk between pairs and triads. This cable can also be used to convey analog or digital signals. Tray Instrumentation cables can be installed in raceways, direct burial applications and in outdoor exposed industrial applications.

Standards:

PLTC /
ITC-ER



Product Construction

Insulation:

- FR PVC rated: 60°C wet/105°C dry
- XLPE rated (optional)
- VW-1 rated (optional)

Shielding (foil-free edge):

- ISOS (standard)
- OS (optional)

Armor:

- Aluminum Interlocked Armor (standard)
- Steel Interlocked Armor (optional)
- Served Wire Armor (SWA) (optional)

Jacket:

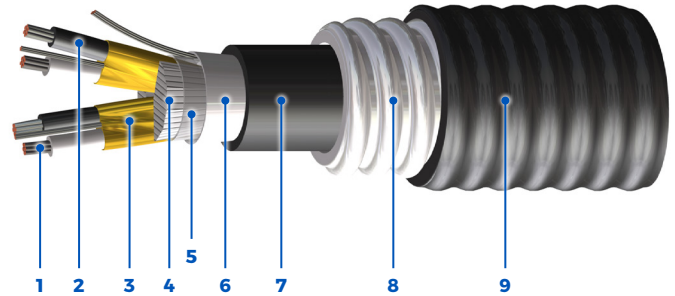
- FR PVC outer black jacket rated: 90°C to -40°C
- Thermoset CPE (optional)
- Thermoplastic CPE (optional)
- Thermoplastic LSZH (optional)

Available in:

- Custom insulation/jacket color
- Composite constructions
- PLTC/ITC-ER with CPE jackets

Certification/Compliances

- UL 13, Power Limited Tray Cable (PLTC)
- UL 2250, Instrumentation Tray Cable (ITC)
- UL 83, Thermoplastic Insulated Wires and Cables



1 - Stranded Bare Copper Conductors (Tin-coated Available)

2 - FR PVC Insulated Conductors

3 - Individual Shield & Overall Shielded Pairs/Triads

4 - Polypropylene Fillers

5 - Polyester Separator Tape

6 - Overall Aluminum/Mylar Shield with Tin-coated Copper/Drain Wire

7 - FR PVC Inner Protective Jacket

8 - Aluminum Interlocked Armor (AIA)

9 - FR PVC Outer Protective Jacket

- UL 1685 / FT4, Vertical Tray Flame Test rated (optional)
- IEEE 1202/383 (70,000 BTU/hr), Vertical Flame Test rated (optional)
- ICEA T-30-520 (70,000 BTU/hr), Vertical Flame Test rated
- UV sunlight resistant "SUN RES" (all colors)
- -40°C cold bend rated
- Rated for use in hazardous locations:
 - Class I Zone 2 (Div 2)
 - Class II Zone 22 (Div 2)

Color Coding

- Pairs - Black, & white, with black printing on white (standard)
- Triads - Black, white & red, with black printing on white (standard)

300 V

Voltage

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Instrumentation

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Pairs

PART NUMBER	NUMBER OF PAIRS	CONDUCTOR SIZE	OD OVER INNER JACKET	NORMAL DIAMETERS		CABLE WEIGHT	MAX PULLING TENSION (PULLING EYE)	MIN BEND RADIUS (PULL)
				OVER ARMOR	OVERALL CABLE			
		(AWG/kcmil)	(in/mm)	(in/mm)	(in/mm)	(lbs/1000ft) (kg/km)	(lb/kg)	(in/mm)
23621U160100700	1	16	0.267 / 6.8	0.507 / 12.9	0.619 / 15.7	159 / 237	41 / 19	11.1 / 283
23622U160200700	2	16	0.426 / 10.8	0.666 / 16.9	0.778 / 19.8	260 / 387	82 / 37	14 / 356
23622U160400700	4	16	0.492 / 12.5	0.732 / 18.6	0.844 / 21.4	324 / 482	165 / 75	15.2 / 386
23622U160600700	6	16	0.586 / 14.9	0.826 / 21.0	0.938 / 23.8	411 / 611	247 / 112	16.9 / 429
23622U160800700	8	16	0.654 / 16.6	0.894 / 22.7	1.007 / 25.6	494 / 735	330 / 150	18.1 / 460
23622U161200700	12	16	0.791 / 20.1	0.995 / 25.3	1.107 / 28.1	638 / 950	494 / 224	19.9 / 506
23622U161600700	16	16	0.880 / 22.4	1.084 / 27.5	1.196 / 30.4	767 / 1141	659 / 299	21.5 / 547
23622U162400700	24	16	1.111 / 28.2	1.315 / 33.4	1.426 / 36.2	1076 / 1601	989 / 449	25.7 / 652
23622U163600700	36	16	1.276 / 32.4	1.480 / 37.6	1.592 / 40.4	1431 / 2130	1483 / 673	28.6 / 728
23621U180100700	1	18	0.243 / 6.2	0.483 / 12.3	0.595 / 15.1	145 / 215	26 / 12	10.7 / 272
23622U180200700	2	18	0.366 / 9.3	0.606 / 15.4	0.718 / 18.2	215 / 320	52 / 24	12.9 / 328
23622U180400700	4	18	0.444 / 11.3	0.684 / 17.4	0.796 / 20.2	278 / 414	104 / 47	14.3 / 364
23622U180600700	6	18	0.525 / 13.4	0.765 / 19.4	0.877 / 22.3	346 / 514	156 / 71	15.8 / 401
23622U180800700	8	18	0.568 / 14.4	0.808 / 20.5	0.920 / 23.4	394 / 586	208 / 94	16.6 / 421
23622U181200700	12	18	0.707 / 18.0	0.947 / 24.0	1.059 / 26.9	523 / 779	312 / 142	19.1 / 484
23622U181800700	18	18	0.827 / 21.0	1.031 / 26.2	1.143 / 29.0	666 / 991	468 / 212	20.6 / 522
23622U182400700	24	18	0.987 / 25.1	1.191 / 30.3	1.303 / 33.1	847 / 1260	624 / 283	23.5 / 596
23622U183600700	36	18	1.131 / 28.7	1.335 / 33.9	1.447 / 36.8	1112 / 1654	936 / 425	26 / 662
23621U200100700	1	20	0.211 / 5.4	0.451 / 11.5	0.563 / 14.3	129 / 192	16 / 7	10.1 / 257
23622U200200700	2	20	0.313 / 8.0	0.553 / 14.1	0.665 / 16.9	182 / 270	32 / 15	12 / 304
23622U200400700	4	20	0.360 / 9.1	0.600 / 15.2	0.712 / 18.1	221 / 329	64 / 29	12.8 / 325
23622U200600700	6	20	0.445 / 11.3	0.685 / 17.4	0.797 / 20.2	282 / 420	96 / 44	14.3 / 364
23622U200800700	8	20	0.479 / 12.2	0.719 / 18.3	0.831 / 21.1	317 / 472	128 / 58	15 / 380
23622U201200700	12	20	0.574 / 14.6	0.814 / 20.7	0.926 / 23.5	400 / 596	192 / 87	16.7 / 423
23622U201600700	16	20	0.656 / 16.7	0.896 / 22.8	1.008 / 25.6	485 / 722	256 / 116	18.2 / 461
23622U202400700	24	20	0.803 / 20.4	1.007 / 25.6	1.119 / 28.4	632 / 940	384 / 174	20.1 / 512
23622U203600700	36	20	0.938 / 23.8	1.142 / 29.0	1.254 / 31.9	839 / 1249	576 / 261	22.6 / 573

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Triads

PART NUMBER	NUMBER OF TRIADS	CONDUCTOR SIZE	OD OVER INNER JACKET	NORMAL DIAMETERS		CABLE WEIGHT	MAX PULLING TENSION (PULLING EYE)	MIN BEND RADIUS (PULL)
				OVER ARMOR	OVERALL CABLE			
		(AWG/kcmil)	(in/mm)	(in/mm)	(in/mm)	(lbs/1000ft) (kg/km)	(lb/kg)	(in/mm)
23631U160100700	1	16	0.280 / 7.1	0.520 / 13.2	0.632 / 16.1	174 / 259	62 / 28	11.4 / 289
23632U160200700	2	16	0.478 / 12.1	0.718 / 18.2	0.830 / 21.1	302 / 449	124 / 56	14.9 / 379
23632U160400700	4	16	0.555 / 14.1	0.795 / 20.2	0.907 / 23.0	390 / 580	247 / 112	16.3 / 415
23632U160600700	6	16	0.684 / 17.4	0.924 / 23.5	1.036 / 26.3	523 / 778	371 / 168	18.7 / 474
23632U160800700	8	16	0.741 / 18.8	0.981 / 24.9	1.093 / 27.8	614 / 914	494 / 224	19.7 / 500
23632U161200700	12	16	0.919 / 23.4	1.124 / 28.5	1.235 / 31.3	832 / 1238	742 / 336	22.2 / 565
23632U161600700	16	16	1.023 / 26.0	1.227 / 31.2	1.339 / 34.0	1012 / 1505	989 / 449	24.1 / 612
23632U162400700	24	16	1.268 / 32.2	1.472 / 37.4	1.584 / 40.2	1398 / 2081	1483 / 673	28.5 / 724
23631U180100700	1	16	0.255 / 6.5	0.495 / 12.6	0.607 / 15.4	156 / 232	39 / 18	10.9 / 277
23632U180200700	2	18	0.433 / 11.0	0.673 / 17.1	0.785 / 19.9	262 / 390	78 / 35	14.1 / 359
23632U180400700	4	18	0.500 / 12.7	0.740 / 18.8	0.852 / 21.7	327 / 486	156 / 71	15.3 / 390
23632U180600700	6	18	0.596 / 15.1	0.836 / 21.2	0.948 / 24.1	414 / 616	234 / 106	17.1 / 433
23632U180800700	8	18	0.665 / 16.9	0.905 / 23.0	1.017 / 25.8	497 / 740	312 / 142	18.3 / 465
23632U181200700	12	18	0.804 / 20.4	1.008 / 25.6	1.120 / 28.4	642 / 956	468 / 212	20.2 / 512
23632U181800700	18	18	0.964 / 24.5	1.168 / 29.7	1.280 / 32.5	863 / 1285	702 / 318	23 / 585
23632U182400700	24	18	1.128 / 28.7	1.332 / 33.8	1.444 / 36.7	1081 / 1609	936 / 425	26 / 660
23631U200100700	1	18	0.220 / 5.6	0.460 / 11.7	0.572 / 14.5	136 / 203	24 / 11	10.3 / 262
23632U200200700	2	18	0.350 / 8.9	0.590 / 15.0	0.702 / 17.8	208 / 310	48 / 22	12.6 / 321
23632U200400700	4	20	0.424 / 10.8	0.664 / 16.9	0.776 / 19.7	266 / 396	96 / 44	14 / 355
23632U200600700	6	20	0.500 / 12.7	0.740 / 18.8	0.852 / 21.6	330 / 491	144 / 65	15.3 / 389
23632U200800700	8	20	0.539 / 13.7	0.779 / 19.8	0.891 / 22.6	376 / 560	192 / 87	16 / 407
23632U201200700	12	20	0.670 / 17.0	0.910 / 23.1	1.022 / 26.0	499 / 743	288 / 131	18.4 / 467
23632U201600700	16	20	0.742 / 18.9	0.982 / 24.9	1.094 / 27.8	592 / 881	384 / 174	19.7 / 500
23632U202400700	24	20	0.932 / 23.7	1.136 / 28.9	1.248 / 31.7	806 / 1199	576 / 261	22.5 / 571