COPPER INSTRUMENTATION CABLE

Overall Shield

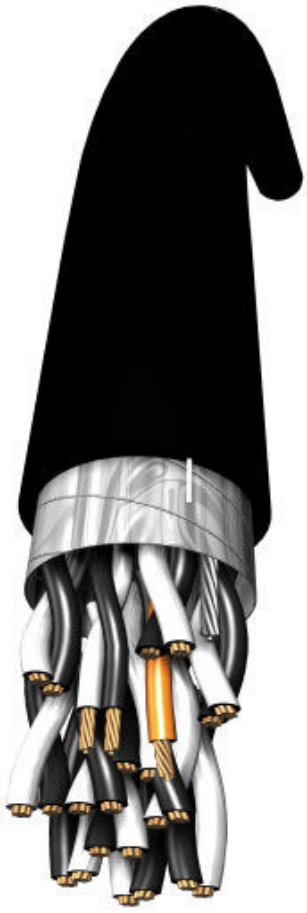
UL Listed 600 Volt PVC/Nylon Insulated 194°F (90°C)

Applications

- Petrochemical Plants
- Utilities and Industrial Plants
- Power and Control Circuits
- For use in NEC Article 501
  ...Class 1 Division 2 Hazardous
  ...Locations
- Complies with NEC 725 for
  ...use in Class 1 Control Circuits
- For use in Accordance with
  ...NEC 340

Product Features

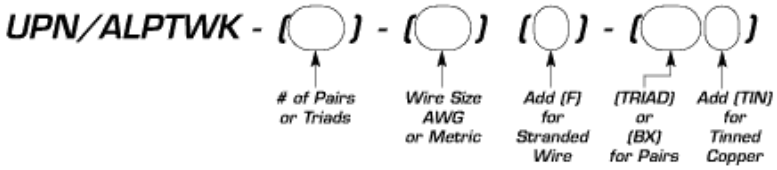
- UL Listed Subject 1277 TC
- Rated 90C 600 Volt
- Flame Retardant
- Primaries Type TFN and THHN
- Passes IEEE 383 Flame Test
- Sunlight Resistant
- Direct Burial
- CPE and TPE Constructions
  ...Are Also Available



Product Specifications

Conductors:	Solid or stranded, bare or tinned copper 12 to 18 AWG (2.44 to 1.2MM) (Thermocouple conductors are also available)
Insulation:	Nominal .016" (.40MM) flame retardant PVC
Insulation Jacket:	Nominal .0045" (.11MM) clear nylon
Color Code:	Per customer request, pairs or triads numbered
Construction:	Twisted pairs or triads
Communication Wire:	18 AWG (1.2MM) 7-strand copper insulated with nominal .016" (.40MM) orange PVC/.0045" (.11MM) clear nylon
Cable Shield:	(4 pair/triad and larger) .002" (.05MM) aluminum/polyester tape,
Cable Drain Wire:	25% overlap
Outer Jacket:	20 AWG (.91MM) 7-strand tinned copper Flame retardant PVC with ripcord under jacket

Ordering Code



(Call for CSA Data)

Wire Size	Numbers of Pairs/Triads	Outer Jacket Thickness inches	(MM)	Outer Diameter inches	(MM)	Bend Radius inches	(MM)	Pull. Tension LB	KG	Net Weight LB/MF	KG/KM
14 AWG	1....	.047	(1.19)	.336	(8.5)	2.0	(51)	86	(39)	69	(103)
(1.80MM)	2....	.047	(1.19)	.506	(12.9)	3.0	(77)	139	(63)	117	(174)
7-Strand	4....	.064	(1.63)	.619	(15.7)	3.7	(94)	270	(123)	212	(315)
	8....	.064	(1.63)	.777	(19.7)	4.7	(118)	532	(242)	369	(549)

	12....	.085	(2.15)	.954	(24.2)	5.7	(145)	794	(361)	560	(833)
	16....	.085	(2.15)	1.067	(27.1)	6.4	(163)	1056	(480)	715	(1064)
	24....	.085	(2.15)	1.259	(32.0)	7.6	(192)	1418	(645)	1018	(1515)
	36....	.085	(2.15)	1.429	(36.3)	8.6	(218)	1580	(718)	1453	(2162)
	1	.047	(1.19)	.353	(2.1)	2.1	(54)	118	(54)	89	(132)
	4	.064	(1.63)	.730	(18.6)	4.4	(111)	400	(182)	284	(423)
	8	.085	(2.15)	.990	(25.1)	5.9	(151)	794	(361)	545	(811)
	12	.085	(2.15)	1.194	(30.3)	7.2	(182)	1184	(538)	772	(1149)
	24	.085	(2.15)	1.644	(41.8)	9.9	(251)	2360	(1073)	1427	(2123)
16 AWG (1.47MM) 7-Strand	1....	.047	(1.19)	.308	(7.8)	1.8	(47)	54	(25)	54	(80)
	2....	.047	(1.19)	.457	(11.6)	2.7	(70)	90	(41)	90	(134)
	4....	.064	(1.63)	.560	(14.2)	3.4	(85)	172	(78)	160	(238)
	8....	.064	(1.63)	.698	(17.7)	4.2	(106)	336	(153)	269	(400)
	12....	.064	(1.63)	.817	(20.8)	4.9	(125)	500	(227)	376	(559)
	16....	.085	(2.15)	.958	(24.3)	5.7	(146)	664	(302)	518	(771)
	24....	.085	(2.15)	1.127	(28.6)	6.8	(172)	992	(451)	729	(1085)
	36....	.085	(2.15)	1.275	(32.4)	7.7	(194)	1484	(675)	1027	(1528)
	1	.047	(1.19)	.323	(8.2)	1.9	(49)	75	(34)	67	(100)
	4	.064	(1.63)	.657	(16.7)	3.9	(100)	254	(115)	209	(311)
	8	.085	(2.15)	.891	(22.6)	5.3	(136)	500	(227)	397	(591)
	12	.085	(2.15)	1.069	(27.2)	6.4	(163)	746	(339)	556	(827)
	24	.085	(2.15)	1.644	(41.8)	8.8	(223)	1484	(675)	1006	(1497)
18 AWG (1.2MM) 7-Strand	1....	.047	(1.19)	.284	(7.2)	1.7	(43)	34	(15)	43	(64)
	2....	.047	(1.19)	.415	(10.5)	2.5	(63)	60	(27)	71	(106)
	4....	.047	(1.19)	.475	(12.1)	2.9	(72)	112	(51)	109	(162)
	8....	.064	(1.63)	.631	(16.0)	3.8	(96)	216	(98)	204	(304)
	12....	.064	(1.63)	.736	(18.7)	4.4	(112)	320	(145)	280	(417)
	16....	.064	(1.63)	.823	(20.9)	4.9	(125)	424	(193)	354	(527)
	24....	.085	(2.15)	1.013	(25.7)	6.1	(154)	632	(287)	539	(802)
	36....	.085	(2.15)	1.143	(29.0)	6.9	(174)	944	(429)	748	(1113)
	1	.047	(1.19)	.297	(7.5)	1.8	(45)	47	(21)	52	(77)
	4	.064	(1.63)	.595	(15.1)	3.6	(91)	164	(76)	160	(238)
	8	.064	(1.63)	.763	(19.4)	4.6	(116)	320	(145)	268	(400)
	12	.085	(2.15)	.962	(24.4)	5.8	(147)	476	(217)	414	(616)
	24	.085	(2.15)	1.308	(33.2)	7.8	(199)	944	(429)	732	(1089)

The products referenced above represent the most popular constructions. Other constructions can be manufactured to meet individual specification and application requirements. Contact factory for additional information.

Electrical Characteristics

Insulation passes 6000 V ac spark test per UL Subject 1277.
Completed cable passes a dielectric test of 3000 V dc for
60 seconds, conductor to conductor and conductor to shield, per UL Subject 1277.

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