COPPER INSTRUMENTATION CABLE
Overall Shield
UL Listed 300 Volt PVC Insulated 221°F (105°C)

Applications

- Petrochemical Plants
- Utilities and Industrial Plants
- Instrumentation Circuits
- For use in NEC Article 725
  ...Class 1 Division 2 Hazardous
  ...Locations
- Complies with NEC 725 for use in
  ...Class 2 and Class 3 Circuits

Product Features

- UL Listed Subject 13 PLTC
- Rated 105C 300 Volt
- Flame Retardant
- Passes IEEE 383 Flame Test
- Passes VW-1 Flame Test
- Sunlight Resistant
- Available as Type ITC
- CPE and TPE Constructions
  ...Are Also Available

Product Specifications

Conductors: Solid or stranded, bare or tinned copper 12 to 22 AWG (2.44 to .63MM)

Insulation: Nominal .016" (.40MM) flame retardant PVC

Color Code: Pairs-black & white, numbered. Triads-black, white & red, numbered (other colors available)

Construction: Twisted pairs or triads

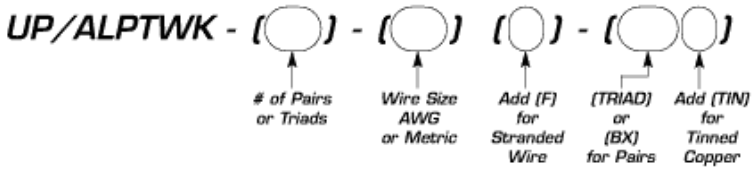
Communication Wire: 22 AWG (.61MM) 7-strand copper insulated with nominal .015" (.38MM) orange PVC (4 pair/triad and larger)

Cable Shield: .002" (.05MM) aluminum/polyester tape, 25% overlap

Cable Drain Wire: 20 AWG (.91MM) 7-strand tinned copper

Outer Jacket: 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
16 AWG	1...	.037	(0.94)	.270	(6.9)	1.7	(41)	54	(25)	47	(70)
(1.47MM)	2...	.053	(1.35)	.437	(11.1)	2.6	(67)	90	(41)	100	(149)
7-Strand	4...	.053	(1.35)	.500	(12.7)	3.0	(77)	172	(78)	148	(220)
	8...	.064	(1.63)	.648	(16.5)	3.9	(99)	336	(153)	268	(399)
	12...	.064	(1.63)	.756	(19.2)	4.5	(115)	500	(227)	372	(554)
	16...	.064	(1.63)	.846	(21.5)	5.1	(129)	664	(302)	473	(704)
	24...	.074	(1.88)	1.019	(25.9)	6.1	(156)	992	(451)	695	(1034)
	36...	.074	(1.88)	1.154	(29.3)	6.9	(176)	1484	(675)	1539	(2290)

	...1	.042	(1.07)	.294	(7.5)	1.8	(45)	75	(34)	62	(93)
	...4	.053	(1.35)	.591	(15.0)	3.5	(90)	254	(115)	206	(307)
	...8	.064	(1.63)	.786	(20.0)	4.7	(120)	500	(227)	385	(573)
	...12	.074	(1.88)	.969	(24.6)	5.8	(148)	746	(339)	556	(827)
	...24	.074	(1.88)	1.328	(33.7)	8.0	(202)	1484	(675)	1022	(1521)
18 AWG	1...	.037	(0.94)	.246	(6.2)	1.5	(37)	34	(15)	36	(54)
(1.2MM)	2...	.042	(1.07)	.373	(9.5)	2.3	(57)	60	(27)	71	(106)
7-Strand	4...	.053	(1.35)	.450	(11.4)	2.7	(69)	112	(51)	112	(167)
	8...	.053	(1.35)	.559	(14.2)	3.4	(85)	216	(98)	184	(274)
	12...	.064	(1.63)	.675	(17.1)	4.1	(103)	320	(145)	268	(399)
	16...	.064	(1.63)	.752	(19.1)	4.5	(115)	424	(193)	337	(501)
	24...	.074	(1.88)	.905	(23.0)	5.5	(138)	632	(287)	490	(729)
	36...	.074	(1.88)	1.022	(26.0)	6.1	(156)	944	(429)	688	(1024)
	...1	.037	(0.94)	.258	(6.5)	1.6	(39)	47	(21)	44	(65)
	...4	.053	(1.35)	.529	(13.4)	3.2	(81)	164	(76)	149	(222)
	...8	.064	(1.63)	.700	(17.8)	4.2	(107)	320	(145)	271	(403)
	...12	.064	(1.63)	.841	(21.4)	5.0	(128)	476	(217)	377	(561)
	...24	.074	(1.88)	1.172	(29.8)	7.0	(177)	944	(429)	710	(1056)
20 AWG	1...	.037	(0.94)	.226	(5.7)	1.3	(34)	21	(10)	28	(42)
(0.91MM)	2...	.042	(1.07)	.338	(8.6)	2.0	(52)	40	(18)	55	(82)
7-Strand	4...	.053	(1.35)	.408	(10.4)	2.4	(62)	72	(33)	88	(131)
	8...	.053	(1.35)	.503	(12.8)	3.0	(77)	136	(62)	145	(216)
	12...	.053	(1.35)	.584	(14.8)	3.5	(89)	200	(91)	191	(284)
	16...	.064	(1.63)	.674	(17.1)	4.0	(103)	264	(120)	262	(390)
	24...	.064	(1.63)	.790	(20.1)	4.7	(120)	392	(178)	348	(518)
	36...	.074	(1.88)	.912	(23.2)	5.5	(139)	584	(265)	508	(756)
	...1	.037	(0.94)	.236	(6.0)	1.4	(36)	29	(13)	35	(51)
	...4	.053	(1.35)	.476	(12.1)	2.9	(73)	104	(47)	118	(176)
	...8	.064	(1.63)	.627	(15.9)	3.8	(96)	200	(91)	206	(307)
	...12	.064	(1.63)	.750	(19.1)	4.5	(114)	296	(135)	285	(242)
	...24	.074	(1.88)	1.040	(26.4))	6.2	(158)	584	(265)	528	(786)

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 3000 V ac spark test per UL Subject 13.
Completed cable passes a dielectric test of 2500 V dc for
10 seconds, conductor to conductor and conductor to shield, per UL Subject 13.

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A Marmon Wire & Cable/Berkshire Hathaway Company