



APPLICATION

Soft annealed bare or tinned copper conductors and PVC flame retardant insulations and jackets are the standard for 300V instrumentation installation. Constructions with Heat resistant PVC/PVC that have three or more conductors and 20 AWG or larger conductors may also be used for direct burial installations.

CHARACTERISTICS

Voltage Rating

300V

Test Voltage

Core-Core: 1500V

Core-Screen: 1500V

Temperature Rating

Fixed: -40°C +105°C

During installation: -5°C +50°C

Minimum Bending Radius

7.5 x overall diameter

CONSTRUCTION

Conductor

Plain annealed copper wires

Insulation

PVC (Polyvinyl Chloride)

Tape

Polyester tape

Sheath

PVC (Polyvinyl Chloride)

Core Identification

Pairs: Black White numbered

Triads: Black White numbered Red

Sheath Colour:Black Blue

STANDARDS

UL 1685 (vertical tray), UL 13 (VW-1), IEC/EN 60332-1,

IEC 60332-3-22 (CAT-A), (BS 4066 part 1&3), EN 50266-2-2

ASTM No 2 oil 70°C 4 (ICEA S-73-532), ASTM B-3,

ASTM B-8, UL 1581 class 105°C, EN 50363-3 TI3,

UL 13 - UL 2250

DIMENSIONS

NO. OF PAIRS/TRIADS	CONDUCTOR AWG	NOMINAL THICKNESS OF INSULATION mm	NOMINAL THICKNESS OF OUTER SHEATH mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
1P	14	0.51	1.02	7.94	119

1P	16	0.38	0.89	6.48	76
1P	18	0.38	0.89	5.88	57
1P	20	0.3	0.89	5.08	40
2P	14	0.51	1.27	12.14	270
2P	16	0.38	1.27	10.14	182
2P	18	0.38	1.27	9.14	139
2P	20	0.3	1.02	7.34	86
4P	14	0.51	1.52	14.54	454
4P	16	0.38	1.27	11.74	289
4P	18	0.38	1.27	10.54	215
4P	20	0.3	1.27	8.84	147
6P	14	0.51	1.52	17.34	665
6P	16	0.38	1.52	14.44	440
6P	18	0.38	1.27	12.44	310
6P	20	0.3	1.27	10.34	207
10P	14	0.51	1.78	22.56	1128
10P	16	0.38	1.52	18.14	716
10P	18	0.38	1.52	16.14	529
10P	20	0.3	1.52	13.44	355
12P	14	0.51	1.78	23.26	1271
12P	16	0.38	1.78	19.26	837
12P	18	0.38	1.52	16.74	596
12P	20	0.3	1.52	13.84	395
18P	14	0.51	2.03	27.76	1870
18P	16	0.38	1.78	22.46	1195
18P	18	0.38	1.78	19.96	877
18P	20	0.3	1.52	16.04	556
24P	14	0.51	2.03	32.46	2525
24P	16	0.38	2.03	26.66	3220
24P	18	0.38	1.78	23.16	1176
24P	20	0.3	1.78	19.06	775
50P	14	0.51	2.29	44.08	4979
50P	16	0.38	2.29	35.98	3878
50P	18	0.38	2.03	31.36	2301
50P	20	0.3	1.78	25.16	1466
1T	14	0.51	1.02	8.34	154
1T	16	0.38	1.02	7.14	103
1T	18	0.38	0.89	6.18	73
1T	20	0.3	0.89	5.28	50
2T	14	0.51	1.27	13.44	362
2T	16	0.38	1.27	11.24	243
2T	18	0.38	1.27	10.14	181
2T	20	0.3	1.02	8.04	113
4T	14	0.51	1.52	16.14	616

4T	16	0.38	1.27	13.04	391
4T	18	0.38	1.27	11.64	289
4T	20	0.3	1.27	9.74	193
6T	14	0.51	1.78	19.86	940
6T	16	0.38	1.52	16.04	599
6T	18	0.38	1.52	14.34	441
6T	20	0.3	1.27	11.54	277
8T	14	0.51	1.78	22.36	1215
8T	16	0.38	1.52	18.04	771
8T	18	0.38	1.52	16.04	567
8T	20	0.3	1.27	12.84	358
10T	14	0.51	1.78	25.16	1544
10T	16	0.38	1.78	20.86	1011
10T	18	0.38	1.52	18.04	714
10T	20	0.3	1.52	14.94	475
12T	14	0.51	1.78	26.16	1759
12T	16	0.38	1.78	21.56	1146
12T	18	0.38	1.52	18.64	810
12T	20	0.3	1.52	15.44	534
16T	14	0.51	2.03	29.56	2305
16T	16	0.38	1.78	23.86	1472
16T	18	0.38	1.78	21.16	1070
16T	20	0.3	1.78	17.04	678
18T	14	0.51	2.03	31.16	2584
18T	16	0.38	1.78	25.16	1646
18T	18	0.38	1.78	22.36	1191
18T	20	0.3	1.78	17.94	756
24T	14	0.51	2.29	37.08	3551
24T	16	0.38	2.03	29.96	2267
24T	18	0.38	1.78	26.06	1612
24T	20	0.3	1.78	21.36	1052
50T	14	0.51	2.29	49.78	6945
50T	16	0.38	2.29	40.88	4470
50T	18	0.38	2.03	35.26	3177
50T	20	0.3	2.03	28.76	2056

ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA AWG	MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C Ω/kft	INSULATION RESISTANCE AT 15.6°C MΩxkft
14	2.71	100.1
16	4.36	100.1
18	6.95	100.1
20	10.92	100.1