



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 (7-stranded)

Insulation

PVC (Polyvinyl Chloride)

Individual shield

Aluminum tape, tinned copper drain wire.

Tape

Polyester tape

Overall shield

Aluminum tape, tinned copper drain wire.

Communication Wire

Stranded plain annealed copper wire, size AWG 22,

PVC insulated colored Orange

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
2P	14	0.51	1.27	13.44	324
2P	16	0.38	1.27	11.34	226
2P	18	0.38	1.27	10.24	177
2P	20	0.3	1.02	8.34	117
4P	14	0.51	1.52	16.14	538
4P	16	0.38	1.27	13.04	354
4P	18	0.38	1.27	11.84	271
4P	20	0.3	1.27	10.04	194
6P	14	0.51	1.52	19.34	785
6P	16	0.38	1.52	16.14	532
6P	18	0.38	1.27	14.04	389
6P	20	0.3	1.27	11.84	275
10P	14	0.51	1.78	25.16	1335
10P	16	0.38	1.52	20.34	870
10P	18	0.38	1.52	18.24	662
10P	20	0.3	1.52	15.44	464
12P	14	0.51	1.78	26.06	1499
12P	16	0.38	1.52	21.04	979
12P	18	0.38	1.52	18.84	741
12P	20	0.3	1.52	15.84	518
18P	14	0.51	1.78	30.46	2151
18P	16	0.38	1.78	25.16	1441
18P	18	0.38	1.78	22.46	1089
18P	20	0.3	1.52	18.44	729
20P	14	0.51	2.03	32.76	2445
20P	16	0.38	1.78	26.56	1600
20P	18	0.38	1.78	23.76	1206
20P	20	0.3	1.78	23.76	815
24P	14	0.51	2.03	36.36	2969
24P	16	0.38	2.03	29.96	1982
24P	18	0.38	1.78	26.26	1463
24P	20	0.3	1.78	26.06	1015
50P	14	0.51	2.29	49.38	5842
50P	16	0.38	2.29	40.48	3876
50P	18	0.38	2.03	35.56	2857
50P	20	0.3	1.78	29.06	1930
2T	14	0.51	1.27	14.84	429
2T	16	0.38	1.27	12.54	291

2T	18	0.38	1.27	11.24	230
2T	20	0.3	1.02	9.04	149
4T	14	0.51	1.52	17.74	718
4T	16	0.38	1.27	14.54	465
4T	18	0.38	1.27	12.94	355
4T	20	0.3	1.27	10.94	249
6T	14	0.51	1.52	21.34	1056
6T	16	0.38	1.52	17.94	706
6T	18	0.38	1.27	15.44	516
6T	20	0.3	1.27	12.94	359
8T	14	0.51	1.78	24.56	1411
8T	16	0.38	1.52	20.14	911
8T	18	0.38	1.52	17.84	696
8T	20	0.3	1.27	14.44	460
10T	14	0.51	1.78	27.86	1792
10T	16	0.38	1.52	22.84	1160
10T	18	0.38	1.52	20.24	879
10T	20	0.3	1.52	16.84	602
12T	14	0.51	1.78	28.86	2030
12T	16	0.38	1.78	24.16	1349
12T	18	0.38	1.52	20.84	990
12T	20	0.3	1.52	17.34	677
16T	14	0.51	1.78	32.06	2609
16T	16	0.38	1.78	26.76	1728
16T	20	0.3	1.52	19.24	860
18T	14	0.51	2.03	34.36	2975
18T	16	0.38	1.78	28.26	1935
18T	18	0.38	1.78	24.96	1453
18T	20	0.3	1.52	26.36	962
24T	14	0.51	2.03	40.36	4038
24T	16	0.38	2.03	33.66	2661
24T	18	0.38	1.78	29.16	1972
24T	20	0.3	1.78	24.16	1338
50T	14	0.51	2.29	55.08	7990
50T	16	0.38	2.29	45.68	5233
50T	18	0.38	2.03	39.66	3862
50T	20	0.3	1.78	32.06	2564

ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA AWG	MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C Ω/kft	CAPACITANCE (800 HZ) pF/ft	INSULATION RESISTANCE AT 15.6°C MΩxkft
14	2.71	51.8	100.1
16	4.36	51.8	100.1
18	6.95	51.8	100.1
20	10.92	51.8	100.1

