



## 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

Overall shield

Plastic coated aluminum tape

Drain Wire

Tinned Copper

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

## 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	8.04	128
1P	16	0.38	0.89	6.58	83
1P	18	0.38	0.89	5.98	65
1P	20	0.3	0.89	5.18	47
2P	14	0.51	1.27	12.24	280
2P	16	0.38	1.27	10.24	191
2P	18	0.38	1.27	9.24	148
2P	20	0.3	1.02	7.44	94
4P	14	0.51	1.52	14.64	465
4P	16	0.38	1.27	11.84	298
4P	18	0.38	1.27	10.64	224
4P	20	0.3	1.27	8.94	156
6P	14	0.51	1.52	17.44	676
6P	16	0.38	1.52	14.54	451
6P	18	0.38	1.27	12.54	319
6P	20	0.3	1.27	10.44	215
8P	14	0.51	1.78	20.06	901
8P	16	0.38	1.52	16.24	577
8P	18	0.38	1.52	14.54	430
8P	20	0.3	1.27	11.64	272
10P	14	0.51	1.78	22.66	1141
10P	16	0.38	1.52	18.24	727
10P	18	0.38	1.52	16.24	538
10P	20	0.3	1.52	13.54	365
12P	14	0.51	1.78	23.36	1284
12P	16	0.38	1.78	19.36	848
12P	18	0.38	1.52	16.84	606
12P	20	0.3	1.52	13.94	404
16P	14	0.51	1.78	25.96	1646
16P	16	0.38	1.78	21.46	1080
16P	18	0.38	1.78	19.06	798
16P	20	0.3	1.78	15.34	511
18P	14	0.51	2.03	27.86	1884
18P	16	0.38	1.78	22.56	1208
18P	18	0.38	1.78	20.06	889
18P	20	0.3	1.52	16.14	569
24P	14	0.51	2.03	32.56	2542
24P	16	0.38	2.03	26.76	1663
24P	18	0.38	1.78	23.26	1189
24P	20	0.3	1.78	19.16	787

50P	14	0.51	2.29	44.18	5000
50P	16	0.38	2.29	36.08	3239
50P	18	0.38	2.03	31.46	2318
50P	20	0.3	1.78	25.26	1480
1T	14	0.51	1.02	8.44	162
1T	16	0.38	1.02	7.24	111
1T	18	0.38	0.89	6.28	80
1T	20	0.3	0.89	5.38	57
2T	14	0.51	1.27	13.54	373
2T	16	0.38	1.27	11.34	253
2T	18	0.38	1.27	10.24	190
2T	20	0.3	1.02	8.14	122
4T	14	0.51	1.52	16.24	629
4T	16	0.38	1.27	13.14	403
4T	18	0.38	1.27	11.74	298
4T	20	0.3	1.27	9.84	202
6T	14	0.51	1.78	19.96	955
6T	16	0.38	1.52	16.14	612
6T	18	0.38	1.52	14.44	454
6T	20	0.3	1.27	11.64	287
8T	14	0.51	1.78	22.46	1232
8T	16	0.38	1.52	18.14	786
8	18	0.38	1.52	16.14	580
8T	20	0.3	1.27	12.94	369
10T	14	0.51	1.78	25.36	1563
10T	16	0.38	1.78	20.96	1028
10T	18	0.38	1.52	18.14	730
10T	20	0.3	1.52	15.04	487
12T	14	0.51	1.78	26.26	1776
12T	16	0.38	1.78	21.66	1163
12T	18	0.38	1.52	18.74	823
12T	20	0.3	1.52	15.54	547
16T	14	0.51	2.03	29.66	2324
16T	16	0.38	1.78	23.96	1490
16T	18	0.38	1.78	21.26	1086
16T	20	0.3	1.52	17.14	692
18T	14	0.51	2.03	31.26	2605
18T	16	0.38	1.78	25.26	1665
18T	18	0.38	1.78	22.46	1210
18T	20	0.3	1.52	18.04	768
24T	14	0.51	2.29	37.18	3576
24T	16	0.38	2.03	30.06	2288
24T	18	0.38	1.78	26.16	1631
24T	20	0.3	1.78	21.46	1070

50T	14	0.51	2.29	49.88	6976
50T	16	0.38	2.29	40.68	4497
50T	18	0.38	2.03	35.36	3201
50T	20	0.3	2.03	28.86	2075

**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