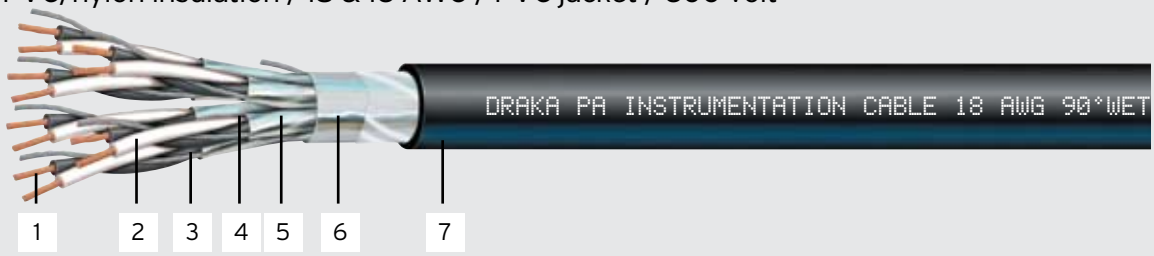
Instrumentation Cable

PVC/nylon insulation / 18 & 16 AWG / PVC jacket / 600 volt



Applications

These instrumentation cables are constructed with flame-retardant polyvinyl chloride (PVC) and a nylon jacket with an overall abrasion, oil, chemical and flame-resistant polyvinyl chloride (PVC) or chlorinated polyethylene (CPE) jacket for use in utility substation or power generation facilities.

Recommended for indoor or outdoor applications in conduit, duct, cable tray or aerial installations and NEC-compliant for continuous operation at 90° C dry and 75° C wet.

Features

1. CONDUCTORS

Class B, soft drawn, bare copper per ASTM B3 and ASTM B8.

2. INSULATION

Heat, moisture and flame-resistant polyvinyl chloride (PVC) and nylon jacket meeting the requirements of NEMA WC57/ICEA S-73-532 and UL 66 & 1277. The insulation is suitable for use in wet locations at a conductor temperature not exceeding 75° C for normal operation and dry locations at a conductor temperature not exceeding 90° C for normal operation.

3. CIRCUIT IDENTIFICATION

One black and one white insulated single conductor in each pair with printed pair numbers (black/white/red for triads).

4. PAIR ASSEMBLY

Two insulated conductors twisted with a stranded tinned copper drain wire per ASTM B33 and wrapped with an aluminum foil/mylar shield and an isolation tape.

5. CABLING

MADE IN THE USA

Required number of pairs are cabled with non-hygroscopic fillers where necessary to form a round compact core.

6. OVERALL SHIELD/DRAIN WIRE

Helically applied aluminum foil/mylar tape. The drain is a stranded soft-drawn tinned copper per ASTM B33.

Optional constructions include:

Corrugated longitudinally-applied .005 or .008 copper shielding

Flat helically-applied .005 or .010 copper

Longitunidally-applied copper or aluminum copolymer-bonded shield

Copper braid (specify percentage of coverage for optimum EMI protection)

7. JACKET

Abrasion, oil and chemical resistant and highly flame retardant polyvinyl chloride (PVC), chlorinated polyethylene (CPE) or low smoke, zero halogen (LSZH/XLPO) jacket to meet UL Standard 1277.

Ratings

UL Sunlight Resistant

Oil resistant

Optional Constructions

Tinned copper conductors

Flexible stranded conductors

PVC/Nylon or EPR insulation

PVC, CPE, LSZH and XLPO jacket compounds

300 volt rating

Instrumentation Cable

PVC/nylon insulation / 18 & 16 AWG / PVC jacket / 600 volt

Conductor AWG	Pair/Triad Count	Conductor Strand Class/ Stranding	Nominal Insulation Thickness in (mm)	Nominal Jacket Thickness in (mm)	Nominal Cable O.D. in (mm)	Approximate Cable Weight Lbs/Mft (Kg/Km)
18 AWG	1 pair	B / 7	.015/.004 (.4/.1)	0.045 (1.1)	0.310 (7.9)	48 (71)
18 AWG	2 pair	B / 7	.015/.004 (.4/.1)	0.045 (1.1)	0.420 (10.7)	97 (144)
18 AWG	4 pair	B / 7	.015/.004 (.4/.1)	0.045 (1.1)	0.500 (12.7)	137 (204)
18 AWG	8 pair	B / 7	.015/.004 (.4/.1)	0.060 (1.5)	0.670 (17.0)	256 (381)
18 AWG	12 pair	B / 7	.015/.004 (.4/.1)	0.080 (2.0)	0.810 (20.7)	396 (589)
18 AWG	16 pair	B / 7	.015/.004 (.4/.1)	0.080 (2.0)	0.930 (23.7)	497 (740)
18 AWG	24 pair	B / 7	.015/.004 (.4/.1)	0.080 (2.0)	1.090 (27.8)	705 (1049)
18 AWG	36 pair	B / 7	.015/.004 (.4/.1)	0.080 (2.0)	1.280 (32.7)	982 (1461)
18 AWG	1 triad	B / 7	.015/.004 (.4/.1)	0.045 (1.1)	0.320 (8.2)	61 (91)
18 AWG	2 triad	B / 7	.015/.004 (.4/.1)	0.045 (1.1)	0.450 (11.5)	128 (190)
18 AWG	4 triad	B / 7	.015/.004 (.4/.1)	0.060 (1.5)	0.610 (15.6)	195 (290)
18 AWG	8 triad	B / 7	.015/.004 (.4/.1)	0.060 (1.5)	0.750 (19.1)	316 (470)
18 AWG	12 triad	B / 7	.015/.004 (.4/.1)	0.080 (2.0)	0.950 (24.2)	510 (759)
18 AWG	16 triad	B / 7	.015/.004 (.4/.1)	0.080 (2.0)	1.090 (27.8)	650 (967)
18 AWG	24 triad	B / 7	.015/.004 (.4/.1)	0.080 (2.0)	1.340 (34.2)	942 (1402)
18 AWG	36 triad	B / 7	.015/.004 (.4/.1)	0.080 (2.0)	1.530 (39.0)	1321 (1966)
16 AWG	1 pair	B / 7	.015/.004 (.4/.1)	0.045 (1.1)	0.330 (8.4)	63 (94)
16 AWG	2 pair	B / 7	.015/.004 (.4/.1)	0.045 (1.1)	0.440 (11.2)	115 (171)
16 AWG	4 pair	B / 7	.015/.004 (.4/.1)	0.600 (1.5)	0.580 (14.8)	197 (293)
16 AWG	8 pair	B / 7	.015/.004 (.4/.1)	0.600 (1.5)	0.720 (18.4)	336 (500)
16 AWG	12 pair	B / 7	.015/.004 (.4/.1)	0.080 (2.0)	0.940 (24.0)	518 (771)
16 AWG	16 pair	B / 7	.015/.004 (.4/.1)	0.080 (2.0)	1.040 (26.5)	652 (970)
16 AWG	24 pair	B / 7	.015/.004 (.4/.1)	0.080 (2.0)	1.190 (30.4)	928 (1381)
16 AWG	36 pair	B / 7	.015/.004 (.4/.1)	0.080 (2.0)	1.400 (35.7)	1305 (1942)
16 AWG	1 triad	B / 7	.015/.004 (.4/.1)	0.045 (1.1)	0.350 (8.9)	78 (116)
16 AWG	2 triad	B / 7	.015/.004 (.4/.1)	0.060 (1.5)	0.630 (16.1)	195 (290)
16 AWG	4 triad	B / 7	.015/.004 (.4/.1)	0.060 (1.5)	0.610 (15.6)	256 (381)
16 AWG	8 triad	B / 7	.015/.004 (.4/.1)	0.080 (2.0)	0.790 (20.2)	480 (714)
16 AWG	12 triad	B / 7	.015/.004 (.4/.1)	0.080 (2.0)	1.000 (25.5)	678 (1009)
16 AWG	16 triad	B / 7	.015/.004 (.4/.1)	0.080 (2.0)	1.120 (28.6)	862 (1283)
16 AWG	24 triad	B / 7	.015/.004 (.4/.1)	0.080 (2.0)	1.500 (38.3)	1255 (1867)
16 AWG	36 triad	B / 7	.015/.004 (.4/.1)	0.080 (2.0)	1.710 (43.6)	1767 (2629)

The data herein is approximate and subject to normal manufacturing tolerances. These specifications are subject to change without notice.
Consult factory for a variety of alternate constructions for specific applications.

Draka Engineered Specialties
22 Joseph E. Warner Blvd. | North Dighton, MA 02764 | Tel +1-508-822-5444
761 Joseph E. Warner Blvd. | Taunton, MA 02780 | Tel +1-508-822-5444
One Tamaqua Blvd. | Schuylkill Haven, PA 17972 | Tel +1-570-385-4381

For sales and technical information, contact:
Draka Engineered Specialties | 1-800-233-3190 | 1-570-385-4381 | 1-570-385-1092 fax | www.drakausa.com