

FR-EPR Instrumentation 600 Volt 90°C E-2

18 - 16 AWG • 600 Volts • 90°C Wet or Dry

Unshielded Pairs with an Overall Shield 18 AWG						
PART NUMBER	NO. OF PAIRS	NOMINAL JACKET THICK. (IN)	NOMINAL OUTSIDE DIAMETER (IN)	APPROX. WEIGHT 1000 FT. (POUNDS)	MINIMUM BEND RADIUS (IN)	MAXIMUM PULL TENSION (POUNDS)
02-1411	1	.045	.31	51	3.8	26
02-1413	2	.045	.47	88	5.7	52
02-1415	3	.045	.51	100	6.2	78
02-1417	4	.060	.58	153	7.0	104
02-1419	6	.060	.71	194	8.4	156
02-1421	8	.060	.73	254	8.8	208
02-1423	12	.080	.89	388	10.7	312
02-1425	16	.080	1.00	488	12.0	416
02-1427	24	.080	1.18	682	14.2	624
02-1429	36	.080	1.34	950	16.1	936
02-1431	50	.080	1.60	1278	19.2	1300

Unshielded Pairs with an Overall Shield 16 AWG						
PART NUMBER	NO. OF PAIRS	NOMINAL JACKET THICK. (IN)	NOMINAL OUTSIDE DIAMETER (IN)	APPROX. WEIGHT 1000 FT. (POUNDS)	MINIMUM BEND RADIUS (IN)	MAXIMUM PULL TENSION (POUNDS)
02-1433	1	.045	.34	62	4.1	41
02-1435	2	.045	.51	107	6.2	82
02-1437	3	.060	.59	141	7.1	124
02-1439	4	.060	.63	193	7.6	165
02-1441	6	.060	.767	248	9.2	247
02-1443	8	.060	.79	326	9.5	330
02-1445	12	.080	.97	498	11.7	494
02-1447	16	.080	1.09	631	13.1	659
02-1449	24	.080	1.29	891	15.5	989
02-1451	36	.080	1.47	1260	17.7	1483
02-1453	50	.110	1.81	1815	21.8	2060

**SCOPE:**

This specification covers the minimum construction requirements for paired cables (UL) listed Type TC consisting of Class B stranded annealed tinned copper, insulated with cross-linked polyethylene, cabled together and jacketed overall with a chlorinated polyethylene (CPE) jacket.

**APPLICATIONS:**

UL listed and OSHA acceptable. Recognized for use in Class 1 or 2, Division 2 hazardous locations. Suitable for use in cable trays, raceways, ducts and conduits, direct burial or supported by a messenger for use at temperature ratings not exceeding 90°C in wet or dry locations and outdoors where a sunlight resistant rating is required. These cables shall conform to (UL) Type TC Power and Control Tray Cables and National Electrical Code Articles 336, 392, 500 and 501. These cables pass the IEEE-383 70,000 BTU flame test, the IEEE 1202 flame test and the ICEA T-29-520 210,000 BTU flame test. Designed for control, power, lighting, telemetry, signals and relay or traffic control.

**CONSTRUCTION:**

**CONDUCTORS**

Class B (7 wires) annealed tinned copper.

**INSULATION:**

Flame retardant EPR shall be applied concentrically over each conductor and shall conform to (UL).

**DRAIN WIRE:**

Class B (7 wires) annealed tinned copper.

**OVERALL JACKET:**

A black, flame, moisture, oil and sunlight resistant chlorinated polyethylene (CPE) jacket meeting the requirements of UL-1277 shall be applied concentrically overall. The physical properties of the jacket comply with Table 50.28 of UL-1581. A high strength nylon yarn rip cord shall be placed under the jacket to facilitate stripping of the jacket.

**COLOR CODING:**

Method 1, Table E-2 using solid colors with longitudinal or spiral stripes. Refer to Color Code Conversion Chart 2 on page Z.15

**TESTING:**

These cables shall be tested physically and electrically in accordance with procedures as outlined by Underwriters' Laboratories, Inc. Standard 1277 for Type TC Power and Control Tray Cables.

**SHIELDING:**

The pairs have an overall shield consisting of a 1.35 mil thickness aluminum/polyester tape with a 100% coverage and drain wire.

» Information on this sheet is subject to change without notice.

All diameters are nominal values. All diameters and weights are subject to normal manufacturing tolerances.

> Maximum Pull Tension is based on using a pulling eye.

> Minimum Bend Radius is permanent.