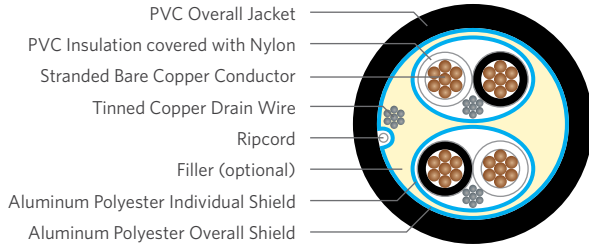


PVC/Nylon/PVC, 600V Instrumentation, Type TC-ER, Pairs and Triads

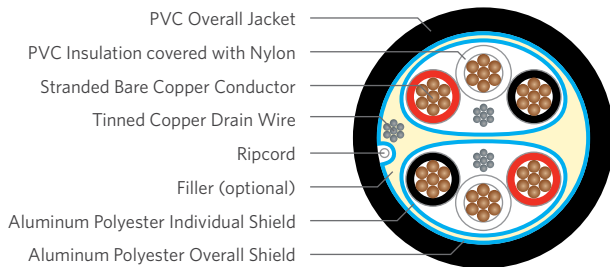
Series E1BE



Series E1BED - Pairs



Series E1BED - Triads



PRODUCT DESCRIPTION

The Superior Essex PVC/Nylon/PVC, 600V Instrumentation, Type TC-ER Cables consist of fully annealed bare copper Class B stranded conductors (in pairs or triads), covered with Polyvinyl Chloride (PVC) and clear Nylon insulation, overall and/or individually shielded and black PVC jacket. These cables are used in control systems, audio, intercom, alarm circuits and energy management.

APPLICATIONS

- In free air, ducts, cable trays, conduit, raceways and direct burial
- Approved for direct burial, Class 1 Div. 2 industrial hazardous locations per NEC
- Used as a non-power-limited fire alarm circuit cable (NPLF) per NEC Article 760
- Permitted for Exposed Run (ER) used in accordance with NEC for 3 or more conductors; two conductors without a ground wire are Type TC only

FEATURES

- Rated at 90°C dry
- Ripcord (for jackets 60-mils or less)
- Excellent sunlight resistance
- Meets cold bend test at -25°C

SPECIFICATIONS

Conductor Count	Available in 1-pair through 36-pairs, and 1-triad through 24-triads
Conductor	Fully annealed bare copper Class B compressed strand
Gauge Sizes	Available in 18 or 16 AWG
Insulation	Polyvinyl Chloride (PVC) covered with Nylon (TFN)
Color Coding	Per ICEA 5-58-679 Method 9, Table E-1 (black-white-red), plus one conductor per pair/triad printed for identification; additional color coding options available
Shield Options	<p>Overall (OS): Overall Aluminum polyester foil shield in contact with 20 AWG stranded tinned copper drain wire</p> <p>Individual (IS): Each pair or triad with Aluminum polyester foil shield in contact with 20 AWG stranded tinned copper drain wire</p> <p>Individual and Overall (IS/OS): Combination of both individual and overall with Aluminum polyester foil shield in contact with 20 AWG stranded tinned copper drain wire</p>
Jacket	Polyvinyl Chloride (PVC)
Jacket Marking	<p>1-pair: 00000 FT SUPERIOR ESSEX XXAWG 1/PR PVC/Nylon/PVC OS (or IS or IS/OS) 600V 75°C WET OR 90°C DRY TYPE TC (UL) SUN RES DIR BUR Made in the USA MMDDYYYY</p> <p>2-pair/1-triad and higher: 00000 FT SUPERIOR ESSEX XXAWG XX/PR (OR TR) PVC/Nylon/PVC OS (or IS or IS/OS) 600V 75°C WET OR 90°C DRY TYPE TC-ER (UL) SUN RES DIR BUR Made in the USA MMDDYYYY</p>
Packaging	Non-returnable wood reels in a variety of lengths and dimensions
Performance Compliances	ASTM B8 ASTM B33 UL 66 UL 83 UL 1277 ICEA 5-73-532/NEMA WC57 NEC
Other Compliances	EPA 40 CFR, Part 261 OSHA RoHS-compliant

PRODUCT KEY

Conductor	Stranding	Voltage	Insulation	Shielding Options	Jacket
Cu	B	600V	PVC Nylon	OS Alum Mylar or IS Alum Mylar or IS Alum Mylar OS	PVC

Overall Shielded Series E1BEB

PART NUMBERS AND PHYSICAL CHARACTERISTICS

Part Number	Pair Count	Triad Count	Conductor Size AWG	Insulation Thickness in (mm)	Jacket Thickness in (mm)	Overall Diameter in (mm)	Net Weight lbs/kft (kg/km)
E1BEB-181B01PJ00	1	-	18	0.020 (0.51)	0.045 (1.14)	0.281 (7.14)	41 (61)
E1BEB-181B01TJ00	-	1	18	0.020 (0.51)	0.045 (1.14)	0.302 (7.67)	49 (73)
E1BEB-181B02PJ00	2	-	18	0.020 (0.51)	0.045 (1.14)	0.439 (11.15)	72 (107)
E1BEB-181B03PJ00	3	-	18	0.020 (0.51)	0.045 (1.14)	0.464 (11.79)	90 (134)
E1BEB-181B04PJ00	4	-	18	0.020 (0.51)	0.045 (1.14)	0.506 (12.85)	110 (134)
E1BEB-181B05PJ00	5	-	18	0.020 (0.51)	0.060 (1.52)	0.571 (14.50)	124 (185)
E1BEB-181B07PJ00	7	-	18	0.020 (0.51)	0.060 (1.52)	0.586 (14.88)	177 (263)
E1BEB-181B12PJ00	12	-	18	0.020 (0.51)	0.060 (1.52)	0.769 (19.53)	277 (412)
E1BEB-181B16PJ00	16	-	18	0.020 (0.51)	0.080 (2.03)	0.826 (20.98)	355 (528)
E1BEB-181B20PJ00	20	-	18	0.020 (0.51)	0.080 (2.03)	0.991 (25.17)	455 (677)
E1BEB-181B24PJ00	24	-	18	0.020 (0.51)	0.080 (2.03)	1.021 (25.93)	544 (810)
E1BEB-181B36PJ00	36	-	18	0.020 (0.51)	0.080 (2.03)	1.152 (29.26)	763 (1135)
E1BEB-161B01PJ00	1	-	16	0.020 (0.51)	0.045 (1.14)	0.301 (7.65)	52 (77)
E1BEB-161B01TJ00	-	1	16	0.020 (0.51)	0.045 (1.14)	0.316 (8.03)	61 (91)
E1BEB-161B02PJ00	2	-	16	0.020 (0.51)	0.045 (1.14)	0.469 (11.91)	93 (138)
E1BEB-161B03PJ00	3	-	16	0.020 (0.51)	0.045 (1.14)	0.506 (12.85)	117 (174)
E1BEB-161B04PJ00	4	-	16	0.020 (0.51)	0.060 (1.52)	0.574 (14.58)	140 (209)
E1BEB-161B05PJ00	5	-	16	0.020 (0.51)	0.060 (1.52)	0.609 (15.47)	190 (283)
E1BEB-161B07PJ00	7	-	16	0.020 (0.51)	0.060 (1.52)	0.631 (16.03)	239 (356)
E1BEB-161B12PJ00	12	-	16	0.020 (0.51)	0.060 (1.52)	0.826 (20.98)	419 (625)
E1BEB-161B16PJ00	16	-	16	0.020 (0.51)	0.080 (2.03)	0.972 (24.69)	513 (763)
E1BEB-161B20PJ00	20	-	16	0.020 (0.51)	0.080 (2.03)	1.011 (25.68)	628 (935)
E1BEB-161B24PJ00	24	-	16	0.020 (0.51)	0.080 (2.03)	1.136 (28.85)	740 (1101)
E1BEB-161B36PJ00	36	-	16	0.020 (0.51)	0.080 (2.03)	1.374 (34.90)	1063 (1582)

The dimensions and weights shown are nominal and subject to industry standards. Other designs available upon request.

Individually and Overall Shielded Series E1BED

PART NUMBERS AND PHYSICAL CHARACTERISTICS

Part Number	Pair Count	Conductor Size AWG	Insulation Thickness in (mm)	Jacket Thickness in (mm)	Overall Diameter in (mm)	Net Weight lbs/kft (kg/km)
E1BED-181B02PJ00	2	18	0.020 (0.51)	0.045 (1.14)	0.446 (11.33)	84 (125)
E1BED-181B03PJ00	3	18	0.020 (0.51)	0.045 (1.14)	0.479 (12.17)	106 (158)
E1BED-181B04PJ00	4	18	0.020 (0.51)	0.045 (1.14)	0.556 (14.12)	145 (216)
E1BED-181B05PJ00	5	18	0.020 (0.51)	0.060 (1.52)	0.581 (14.76)	169 (252)
E1BED-181B07PJ00	7	18	0.020 (0.51)	0.060 (1.52)	0.652 (16.56)	219 (326)
E1BED-181B12PJ00	12	18	0.020 (0.51)	0.060 (1.52)	0.846 (21.49)	390 (506)
E1BED-181B16PJ00	16	18	0.020 (0.51)	0.080 (2.03)	0.961 (24.41)	473 (704)
E1BED-181B20PJ00	20	18	0.020 (0.51)	0.080 (2.03)	1.052 (26.72)	594 (884)
E1BED-181B24PJ00	24	18	0.020 (0.51)	0.080 (2.03)	1.174 (29.82)	689 (1025)
E1BED-181B36PJ00	36	18	0.020 (0.51)	0.080 (2.03)	1.381 (35.08)	979 (1457)
E1BED-161B02PJ00	2	16	0.020 (0.51)	0.045 (1.14)	0.496 (12.60)	105 (156)
E1BED-161B03PJ00	3	16	0.020 (0.51)	0.045 (1.14)	0.521 (13.23)	137 (204)
E1BED-161B04PJ00	4	16	0.020 (0.51)	0.045 (1.14)	0.601 (15.27)	188 (280)
E1BED-161B05PJ00	5	16	0.020 (0.51)	0.060 (1.52)	0.654 (16.61)	212 (316)
E1BED-161B07PJ00	7	16	0.020 (0.51)	0.060 (1.52)	0.712 (18.08)	290 (432)
E1BED-161B12PJ00	12	16	0.020 (0.51)	0.060 (1.52)	0.939 (23.85)	498 (7410)
E1BED-161B16PJ00	16	16	0.020 (0.51)	0.080 (2.03)	1.054 (26.77)	635 (945)
E1BED-161B20PJ00	20	16	0.020 (0.51)	0.080 (2.03)	1.176 (29.87)	768 (1143)
E1BED-161B24PJ00	24	16	0.020 (0.51)	0.080 (2.03)	1.351 (34.32)	903 (1344)
E1BED-161B36PJ00	36	16	0.020 (0.51)	0.080 (2.03)	1.482 (37.64)	1290 (1920)

The dimensions and weights shown are nominal and subject to industry standards. Other designs available upon request.