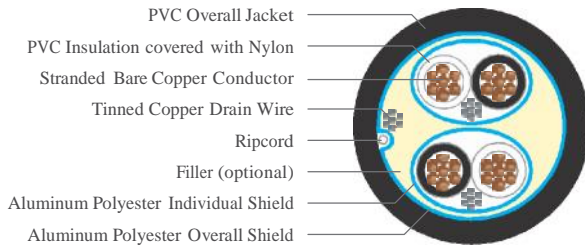


PVC/Nylon/PVC, 600V Instrumentation, Type TC-ER, Pairs and Triads

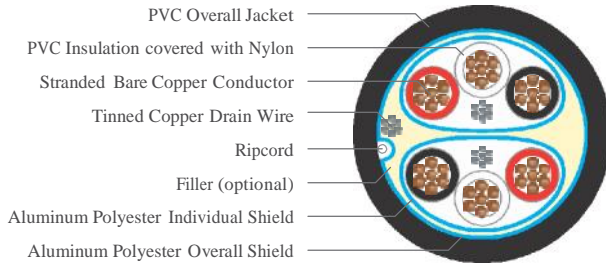
Series E1BE



Series E1BED - Pairs



Series E1BED - Triads



Product Description

The Grupo Matel 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 I Div. 2 industrial hazardous locations per NEC
- For used as a non-power-limited fire alarm circuit cable (NPLF) per NEC Article 760

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 50 pairs, and 1-triad through 24 triads
Conductor	Fully annealed bare copper Class B stranded
AWG	Available in 18 or 16 AWG
Insulation	Polyvinyl Chloride (PVC) covered with Nylon (TFN)
Color Coding	Per ICEA S-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	Overall (OS): Overall Aluminum polyester foil shield in contact with 20 AWG stranded tinned copper drain wire Individual (IS): Each pair or triad with Aluminum polyester foil shield in contact with 20 AWG stranded tinned copper drain wire 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
Jacket	Polyvinyl Chloride (PVC)
Jacket Marking	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 USA MMDDYYYY
Packaging	Non-returnable wood reels in a variety of lengths and dimensions
Performance Compliances	ASTM B8 ASTM B33 UL 66 UL 83 UL 1277 UL 1581 ICEA S-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)
1E1BEB-181B01PJ001	1	-	18	0.020 (0.51)	0.045 (1.14)	0.281 (7.14)	41 (61)
1E1BEB-181B01TJ001	-	1	18	0.020 (0.51)	0.045 (1.14)	0.302 (7.67)	49 (73)
1E1BEB-181B02PJ001	2	-	18	0.020 (0.51)	0.045 (1.14)	0.439 (11.15)	72 (107)
1E1BEB-181B03PJ001	3	-	18	0.020 (0.51)	0.045 (1.14)	0.464 (11.79)	90 (134)
1E1BEB-181B04PJ001	4	-	18	0.020 (0.51)	0.045 (1.14)	0.506 (12.85)	110 (134)
1E1BEB-181B05PJ001	5	-	18	0.020 (0.51)	0.060 (1.52)	0.571 (14.50)	124 (185)
1E1BEB-181B07PJ001	7	-	18	0.020 (0.51)	0.060 (1.52)	0.586 (14.88)	177 (263)
1E1BEB-181B12PJ001	12	-	18	0.020 (0.51)	0.060 (1.52)	0.769 (19.53)	277 (412)
1E1BEB-181B16PJ001	16	-	18	0.020 (0.51)	0.080 (2.03)	0.826 (20.98)	355 (528)
1E1BEB-181B20PJ001	20	-	18	0.020 (0.51)	0.080 (2.03)	0.991 (25.17)	455 (677)
1E1BEB-181B24PJ001	24	-	18	0.020 (0.51)	0.080 (2.03)	1.021 (25.93)	544 (810)
1E1BEB-181B36PJ001	36	-	18	0.020 (0.51)	0.080 (2.03)	1.152 (29.26)	763 (1135)
1E1BEB-181B50PJ001	50	-	18	0.020 (0.51)	0.080 (2.03)	1.404 (35.66)	1036 (1542)
1E1BEB-161B01PJ001	1	-	16	0.020 (0.51)	0.045 (1.14)	0.301 (7.65)	52 (77)
1E1BEB-161B01TJ001	-	1	16	0.020 (0.51)	0.045 (1.14)	0.316 (8.03)	61 (91)
1E1BEB-161B02PJ001	2	-	16	0.020 (0.51)	0.045 (1.14)	0.469 (11.91)	93 (138)
1E1BEB-161B03PJ001	3	-	16	0.020 (0.51)	0.045 (1.14)	0.506 (12.85)	117 (174)
1E1BEB-161B04PJ001	4	-	16	0.020 (0.51)	0.060 (1.52)	0.574 (14.58)	140 (209)
1E1BEB-161B05PJ001	5	-	16	0.020 (0.51)	0.060 (1.52)	0.609 (15.47)	190 (283)
1E1BEB-161B07PJ001	7	-	16	0.020 (0.51)	0.060 (1.52)	0.631 (16.03)	239 (356)
1E1BEB-161B12PJ001	12	-	16	0.020 (0.51)	0.060 (1.52)	0.826 (20.98)	419 (625)
1E1BEB-161B16PJ001	16	-	16	0.020 (0.51)	0.080 (2.03)	0.972 (24.69)	513 (763)
1E1BEB-161B20PJ001	20	-	16	0.020 (0.51)	0.080 (2.03)	1.011 (25.68)	628 (935)
1E1BEB-161B24PJ001	24	-	16	0.020 (0.51)	0.080 (2.03)	1.136 (28.85)	740 (1101)
1E1BEB-161B36PJ001	36	-	16	0.020 (0.51)	0.080 (2.03)	1.374 (34.90)	1063 (1582)
1E1BEB-161B50PJ001	50	-	16	0.020 (0.51)	0.080 (2.03)	1.572 (39.93)	1435 (2136)

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

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

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)
1E1BED-181B02PJ001	2	18	0.020 (0.51)	0.045 (1.14)	0.446 (11.33)	84 (125)
1E1BED-181B03PJ001	3	18	0.020 (0.51)	0.045 (1.14)	0.479 (12.17)	106 (158)
1E1BED-181B04PJ001	4	18	0.020 (0.51)	0.045 (1.14)	0.556 (14.12)	145 (216)
1E1BED-181B05PJ001	5	18	0.020 (0.51)	0.060 (1.52)	0.581 (14.76)	169 (252)
1E1BED-181B07PJ001	7	18	0.020 (0.51)	0.060 (1.52)	0.652 (16.56)	219 (326)
1E1BED-181B12PJ001	12	18	0.020 (0.51)	0.060 (1.52)	0.846 (21.49)	390 (506)
1E1BED-181B16PJ001	16	18	0.020 (0.51)	0.080 (2.03)	0.961 (24.41)	473 (704)
1E1BED-181B20PJ001	20	18	0.020 (0.51)	0.080 (2.03)	1.052 (26.72)	594 (884)
1E1BED-181B24PJ001	24	18	0.020 (0.51)	0.080 (2.03)	1.174 (29.82)	689 (1025)
1E1BED-181B36PJ001	36	18	0.020 (0.51)	0.080 (2.03)	1.381 (35.08)	979 (1457)
1E1BED-181B50PJ001	50	18	0.020 (0.51)	0.080 (2.03)	1.614 (41.00)	1371 (1960)
1E1BED-161B02PJ001	2	16	0.020 (0.51)	0.045 (1.14)	0.496 (12.60)	105 (156)
1E1BED-161B03PJ001	3	16	0.020 (0.51)	0.045 (1.14)	0.521 (13.23)	137 (204)
1E1BED-161B04PJ001	4	16	0.020 (0.51)	0.045 (1.14)	0.601 (15.27)	188 (280)
1E1BED-161B05PJ001	5	16	0.020 (0.51)	0.060 (1.52)	0.654 (16.61)	212 (316)
1E1BED-161B07PJ001	7	16	0.020 (0.51)	0.060 (1.52)	0.712 (18.08)	290 (432)
1E1BED-161B12PJ001	12	16	0.020 (0.51)	0.060 (1.52)	0.939 (23.85)	498 (7410)
1E1BED-161B16PJ001	16	16	0.020 (0.51)	0.080 (2.03)	1.054 (26.77)	635 (945)
1E1BED-161B20PJ001	20	16	0.020 (0.51)	0.080 (2.03)	1.176 (29.87)	768 (1143)
1E1BED-161B24PJ001	24	16	0.020 (0.51)	0.080 (2.03)	1.351 (34.32)	903 (1344)
1E1BED-161B36PJ001	36	16	0.020 (0.51)	0.080 (2.03)	1.482 (37.64)	1290 (1920)
1E1BED-161B50PJ001	50	16	0.020 (0.51)	0.080 (2.03)	1.809 (45.95)	1809 (2692)

STATION

LV CONTROL

LV POWER

MV-105 POWER