

CELFIL

BJBB, BJAB, BJMB and BJTB



SPECIFICATIONS

Conductor	Solid annealed copper
Insulation	Dual-extruded cellular inner layer and color coded solid polyolefin skin
Twisted Pairs	Insulated conductors twisted to form pairs with varying lays
≤ 25-Pair Core	Assembled in concentric layers to form a cylindrical core
≥ 50-Pair Core	Assembled from concentrically formed units with 25-pair per unit; these may be stranded into 50-pair or 100-pair groups, which are then cabled to form the complete cylindrical core assembly
≥ 1,200-Pair Core	Color code is Mirror Image design
Filling Compound	PEPJ compound applied to cable core which completely coats each insulated conductor and fills interstices between pairs and units
Core	Non-hygroscopic core wrap applied over assembled core
Flooding Compound	Applied to fill all voids under shield
Shield	Electrically continuous 8 mil flat aluminum shielding tape, with polyolefin film fused and chemically bonded to both sides, applied longitudinally over the core and bonded to the outer jacket
Rip cord	Placed parallel to core
Jacket	Black, medium-density polyethylene
Jacket Marking	Manufacturer's identification, date of jacketing, gauge, pair count, sequential length and cable type marked at 1 meter intervals
Standards Compliance	RoHS-compliant

PRODUCT DESCRIPTION

Superior Essex CELFIL Cable with foam skin insulation is a single jacketed design for use in duct or direct burial installations.

FEATURES

- Twisted pairs with varying lays
- Non-hygroscopic core wrap applied over assembled core
- Rip cord placed parallel to core
- Black, medium-density polyethylene jacket

BENEFITS

- Minimizes crosstalk and meets capacitance unbalance limitations
- Furnishes mechanical as well as high dielectric protection between shielding and individual conductors
- Facilitates easy jacket removal
- Provides a tough, flexible protective covering that withstands exposure to sunlight, atmospheric temperatures, ground chemicals and stresses expected in standard installations

ELECTRICAL SPECIFICATIONS

Number of Pairs	Average Mutual Capacitance @ 1000 Hz nF/mile (nF/km)	Capacitance Unbalance Pair to Pair @ 1 kHz		Capacitance Unbalance Pair to Ground @ 1 kHz	
		Maximum Individual pF @ 1 kft (pF @ 1 km)	Maximum RMS pF @ 1 kft (pF @ 1 km)	Maximum Individual pF @ 1 kft (pF @ 1 km)	Maximum Average pF @ 1 kft (pF @ 1 km)
12 or less	83 ± 7 (52 ± 4)	80 (145)	-	800 (2,625)	-
Over 12	83 ± 4 (52 ± 2)	80 (145)	25 (45)	800 (2,625)	175 (574)

Conductor Size AWG (mm)	Minimum Insulation Resistance 68°F (20°C) gigohm-mile (gigohm-km)	Maximum Average Attenuation 772 kHz @ 68°F (20°C) dB/kft (dB/km)	Maximum Conductor Resistance @ 68°F (20°C) Ohms/sheath kft (km)	DC Resistance Unbalance Maximum %		Dielectric Strength DC Potential - Volts Minimum	
				Average	Individual Pair	Conductor to Conductor	Conductor to Shield
19 (0.90)	1.0 (1.6)	3.2 (10.5)	8.5 (28.0)	1.5	5.0	4,500	10,000
22 (0.64)	1.0 (1.6)	4.5 (14.8)	17.3 (56.6)	1.5	5.0	3,600	10,000
24 (0.51)	1.0 (1.6)	5.6 (18.4)	26.1 (85.5)	1.5	5.0	3,000	10,000
26 (0.40)	1.0 (1.6)	7.0 (23.0)	44.0 (144.2)	1.5	5.0	2,400	10,000

	Minimum Near End Crosstalk (NEXT) dB/kft (dB/km)	
	@ 150 kHz	@ 772 kHz
PSWUNEXT Mean	58 (190)	47 (154)
PSWUNEXT Worst Pair	53 (174)	42 (138)

Conductor Size AWG (mm)	Minimum Far End Crosstalk dB/kft (dB/km)			
	PSELFEXT @ 150 kHz		PSELFEXT @ 772 kHz	
	Mean	Worst Pair	Mean	Worst Pair
19 (0.90)	65 (213)	59 (194)	51 (167)	45 (148)
22 (0.64)	63 (207)	57 (187)	49 (161)	43 (141)
24 (0.51)	63 (207)	57 (187)	49 (161)	43 (141)
26 (0.40)	61 (200)	57 (187)	47 (154)	43 (141)

PART NUMBERS AND PHYSICAL CHARACTERISTICS

Part Number	Product Code	Pair Count	AWG (mm)	Nominal Diameter in (mm)	Approx. Weight lbs/kft (kg/km)	Standard Length ft (m)	Approx. Shipping Weight lbs (kg)	Reel Size F x T x D in
85-026-13	BJBB	6	19 (0.90)	0.49 (12)	120 (180)	4,593 (1,400)	660 (300)	44 x 18 x 20
85-028-13	BJBB	12	19 (0.90)	0.58 (15)	190 (285)	4,593 (1,400)	1,040 (470)	46 x 25 x 20
85-031-13	BJBB	25	19 (0.90)	0.77 (20)	355 (530)	7,924 (2,415)	3,100 (1,410)	62 x 30 x 24
85-034-13	BJBB	50	19 (0.90)	1.03 (26)	655 (975)	4,593 (1,400)	3,295(1,500)	62 x 30 x 24
85-038-13	BJBB	100	19 (0.90)	1.37 (35)	1,225 (1,825)	3,002 (915)	3,965 (1,800)	62 x 30 x 24
85-042-13	BJBB	200	19 (0.90)	1.92 (49)	2,420 (3,600)	1,558 (475)	4,385 (1,990)	72 x 35 x 36
85-057-13	BJAB	6	22 (0.64)	0.38 (9.7)	70 (105)	9,186 (2,800)	750 (340)	44 x 18 x 20
85-059-13	BJAB	12	22 (0.64)	0.47 (12)	115 (170)	9,186 (2,800)	1,220 (555)	46 x 25 x 20
85-061-13	BJAB	18	22 (0.64)	0.53 (14)	155 (230)	4,593 (1,400)	820 (370)	44 x 18 x 20
85-062-13	BJAB	25	22 (0.64)	0.60 (15)	200 (300)	9,186 (2,800)	2,080 (945)	58 x 25 x 20
85-065-13	BJAB	50	22 (0.64)	0.76 (19)	350 (520)	6,004 (1,830)	2,345 (1,065)	58 x 25 x 20
85-069-13	BJAB	100	22 (0.64)	1.02 (26)	650 (965)	4,593 (1,400)	3,275 (1,485)	62 x 30 x 24
85-073-13	BJAB	200	22 (0.64)	1.37 (35)	1,225 (1,825)	2,608 (795)	3,565 (1,615)	65 x 30 x 32
85-075-13	BJAB	300	22 (0.64)	1.66 (42)	1,815 (2,700)	2,182 (665)	4,575 (2,075)	72 x 35 x 36
85-077-13	BJAB	400	22 (0.64)	1.88 (48)	2,375 (3,535)	1,952 (595)	5,335 (2,420)	78 x 40 x 39
85-081-13	BJAB	600	22 (0.64)	2.29 (58)	3,545 (5,275)	1,542 (470)	6,165 (2,795)	78 x 40 x 39
85-083-13	BJAB	900	22 (0.64)	2.75 (70)	5,225 (7,775)	854 (260)	5,075 (2,305)	72 x 35 x 36
85-085-13	BJAB	1,200	22 (0.64)	3.18 (81)	6,950 (10,364)	620 (190)	7,113 (3,226)	96 x 42 x 56
85-092-13	BJMB	6	24 (0.51)	0.35 (8.9)	60 (90)	4,593 (1,400)	320 (145)	30 x 18 x 12
85-094-13	BJMB	12	24 (0.51)	0.41 (10)	85 (125)	4,593 (1,400)	455 (205)	36 x 18 x 14
85-097-13	BJMB	25	24 (0.51)	0.52 (13)	140 (210)	4,593 (1,400)	750 (340)	44 x 18 x 20
85-100-13	BJMB	50	24 (0.51)	0.65 (17)	240 (355)	8,792 (2,680)	2,355 (1,070)	58 x 25 x 20
85-104-13	BJMB	100	24 (0.51)	0.84 (21)	430 (640)	6,578 (2,005)	3,115 (1,415)	62 x 30 x 24
85-108-13	BJMB	200	24 (0.51)	1.14 (29)	810 (1,205)	5,232 (1,595)	4,850 (2,205)	72 x 35 x 36
85-110-13	BJMB	300	24 (0.51)	1.36 (35)	1,180 (1,755)	3,724 (1,135)	5,010 (2,270)	72 x 35 x 36
85-112-13	BJMB	400	24 (0.51)	1.55 (39)	1,555 (2,315)	2,888 (880)	5,105 (2,320)	72 x 35 x 36
85-116-13	BJMB	600	24 (0.51)	1.88 (48)	2,305 (3,430)	1,838 (560)	4,850 (2,205)	72 x 35 x 36
85-118-13	BJMB	900	24 (0.51)	2.26 (57)	3,385 (5,040)	1,280 (390)	4,945 (2,250)	72 x 35 x 36
85-120-13	BJMB	1,200	24 (0.51)	2.57 (65)	4,450 (6,625)	1,280 (390)	6,395 (2,905)	78 x 40 x 39
85-121-13	BJMB	1,500	24 (0.51)	2.85 (72)	5,515 (8,210)	1,050 (320)	6,490 (2,950)	78 x 40 x 39
85-124-13	BJMB	1,800	24 (0.51)	3.11 (79)	6,575 (9,785)	688 (210)	5,225 (2,370)	78 x 40 x 39
85-132-13	BJTB	25	26 (0.40)	0.44 (11)	100 (150)	4,593 (1,400)	525 (235)	36 x 18 x 14
85-135-13	BJTB	50	26 (0.40)	0.55 (14)	165 (245)	4,593 (1,400)	865 (395)	44 x 18 x 20
85-139-13	BJTB	100	26 (0.40)	0.70 (18)	290 (430)	4,593 (1,400)	1,535 (695)	52 x 25 x 20
85-143-13	BJTB	200	26 (0.40)	0.94 (24)	535 (795)	4,593 (1,400)	2,745 (1,245)	62 x 30 x 24
85-145-13	BJTB	300	26 (0.40)	1.09 (28)	755 (1,125)	2,624 (800)	2,225 (1,010)	58 x 25 x 20
85-147-13	BJTB	400	26 (0.40)	1.25 (32)	995 (1,480)	2,624 (800)	2,855 (1,295)	58 x 25 x 20
85-151-13	BJTB	600	26 (0.40)	1.50 (38)	1,465 (2,180)	1,738 (530)	2,835 (1,285)	62 x 30 x 24
85-153-13	BJTB	900	26 (0.40)	1.79 (46)	2,145 (3,190)	1,722 (525)	3,980 (1,805)	62 x 30 x 24
85-155-13	BJTB	1,200	26 (0.40)	2.03 (52)	2,805 (4,175)	1,264 (385)	4,160 (1,885)	72 x 35 x 36
85-156-13	BJTB	1,500	26 (0.40)	2.29 (58)	3,515 (5,230)	1,246 (380)	4,995 (2,265)	72 x 35 x 36
85-157-13	BJTB	1,800	26 (0.40)	2.50 (64)	4,200 (6,250)	1,214 (370)	5,800 (2,630)	78 x 40 x 39
85-158-13	BJTB	2,100	26 (0.40)	2.69 (68)	4,885 (7,270)	1,182 (360)	6,475 (2,935)	78 x 40 x 39
85-159-13	BJTB	2,400	26 (0.40)	2.85 (72)	5,540 (8,245)	1,000 (305)	6,240 (2,830)	78 x 40 x 39
85-161-13	BJTB	2,700	26 (0.40)	3.01 (77)	6,200 (9,225)	1,000 (305)	6,900 (3,130)	78 x 40 x 39