

Reinforced Self-Support BHBP/BHAP/BKMP/BKTP



Product Description

- REINFORCED SELF-SUPPORT cable is a solid insulated, double-jacketed, armored, self-supporting aircore design intended for aerial installations where hazards from squirrel attack, tree limb abrasion or lightning exist. The undulated, shielded, jacketed core is covered with a flooded steel armor, laid parallel to a flooded steel support member and jacketed in an integral extrusion to form a "figure-8" configuration. The steel strand member is readily available for gripping, pulling and tensioning using standard methods and hardware.

Physical Description

- CONDUCTORS: Solid annealed copper in 19, 22, 24 and 26 AWG.
- INSULATION: Conductors are insulated with solid polyolefin in distinctive colors to facilitate pair identification.
- CORE ASSEMBLY: Individual conductor dimensions are tightly controlled to limit resistance unbalance of the paired conductors. Pair twist lays and the relative placement of the pairs are designed to minimize crosstalk and meet capacitance unbalance limits. In 25 pair cables, the pairs are combined into a cylindrical core. In cables of 50 pairs and more, multiples of 25 pair groups are assembled to form the final cable core. Each group is identified by color coded non-hygroscopic binders. To eliminate strain on the conductors, the core assembly is undulated to provide sufficient slack during installation.
- CORE WRAP: A complete covering of a non-hygroscopic dielectric material protects the core and helps provide core-to-shield dielectric strength.

- SHIELD & INNER JACKET: A corrugated, 8-mil aluminum tape is applied longitudinally over the core wrap. A linear low-density polyethylene inner jacket helps protect the core and shield against mechanical damage and ingress of moisture.
- ARMOR: A corrugated bare 6-mil steel tape is applied longitudinally over the inner jacket. The inner and outer surfaces of the steel are flooded.
- SUPPORT MEMBER: A 1/4 inch, 7-strand Extra High-Strength (EHS) galvanized steel member, fully flooded for corrosion protection, serves as the support member and is an integral part of the sheath.
- OUTER JACKET: A black, linear low-density polyethylene provides a tough, flexible, protective covering that withstands exposure to sunlight, atmospheric temperatures and stresses expected in standard installations.
- JACKET MARKINGS: Information such as manufacturer's identification, pair count AWG, product identification, sequential footage and a telephone handset is printed at 2 ft. intervals on the cable jacket.

Electrical Specifications

Average Mutual Capacitance at 1000 Hz

Total Number of Pairs	nF/mile	nF/km
12 or less	83 ± 7	52 ± 4
Over 12	83 + 4 - 5	52 ± 2

Conductor Size		Minimum Insulation Resistance @ 68°F		Max Average Attenuation* @ 68°F (20°C) 772 kHz		Max Conductor Resistance @ 68°F Ohms/sheath		Resistance Unbalance		Dielectric Strength DC Potential – Volts	
								Maximum	Individual Pair %	Minimum	Cdr. to Grnd.
AWG	mm	gigohm/mile	gigohm/km	dB/kft	dB/km	mile	km	Ave %	Individual Pair %	Cdr. to Cdr.	Cdr. to Grnd.
19	0.90	1.0	1.6	3.3	10.8	45	28.0	1.5	5.0	5,000	10,000
22	0.64	1.0	1.6	4.7	15.4	91	56.5	1.5	5.0	4,000	10,000
24	0.50	1.0	1.6	5.9	19.4	144	89.5	1.5	5.0	3,000	10,000
26	0.40	1.0	1.6	7.4	24.3	232	144.2	1.5	5.0	2,400	10,000

Minimum Near End Crosstalk (NEXT) at				Capacitance Unbalance Pair to Pair					
				Pairs		Maximum Individual		Maximum RMS	
						pF/kft		pF/km	
P.S. WUNEXT mean (dB)				58	47				
P.S. WUNEXT worst pair (dB)				53	42				
Minimum Far End Crosstalk at 150 kHz				12 or less		80	145	—	—
Conductor size (AWG)				more than 12		80	145	25	45
P.S. ELFEXT mean (dB/kft)				65	63				
P.S. ELFEXT worst pair (dB/kft)				59	57				
Minimum Far End Crosstalk at 772 kHz				12 or less		800	2625	—	—
Conductor size (AWG)				more than 12		800	2625	175	574
P.S. ELFEXT mean (dB/kft)				51	49				
P.S. ELFEXT worst pair (dB/kft)				45	43				

*For cables of 12 pairs or less, the maximum average attenuation may be increased by 10% over the values shown.

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Part Numbers and Physical Characteristics

Part #	Pair Count	Nom. Cable Only O.D. in (mm)	Nom. Overall O.D. in (mm)	Approx. Weight lbs/kft (kg/km)	Standard Length ft (m)	Approx. Shipping Weight lbs (kg)	Standard Reel Size Steel
BHBP – 19 AWG (0.90 mm)							
20-026-20	6	0.83 (21)	1.31 (33)	377 (562)	10000 (3050)	4552 (2067)	420
20-031-20	25	1.18 (30)	1.66 (42)	631 (940)	5000 (1530)	3937 (1787)	420
20-034-20	50	1.39 (35)	1.87 (47)	953 (1420)	3300 (1010)	3927 (1783)	420
BHAP – 22 AWG (0.64 mm)							
20-062-20	25	0.87 (22)	1.33 (34)	455 (675)	10000 (3050)	4200 (1905)	420
20-065-20	50	1.05 (27)	1.51 (38)	625 (930)	7500 (2290)	4465 (2025)	420
20-069-20	100	1.30 (33)	1.76 (45)	940 (1400)	5000 (1530)	4475 (2029)	420
BKMP – 24 AWG (0.50 mm)							
20-097-20	25	0.83 (21)	1.29 (33)	400 (595)	10000 (3050)	4345 (1971)	420
20-100-20	50	0.94 (24)	1.40 (36)	510 (760)	10000 (3050)	5445 (2469)	420
20-104-20	100	1.13 (29)	1.59 (40)	715 (1065)	5000 (1530)	4145 (1880)	420
20-108-20	200	1.42 (36)	1.88 (48)	1120 (1665)	4000 (1220)	4995 (2265)	420
BKTP – 26 AWG (0.40 mm)							
20-132-20	25	0.69 (18)	1.15 (29)	335 (500)	13300 (4060)	4850 (2200)	420
20-135-20	50	0.80 (20)	1.26 (32)	410 (610)	10000 (3050)	4645 (2107)	420
20-139-20	100	0.97 (25)	1.43 (36)	560 (835)	8000 (2440)	4955 (2247)	420
20-143-20	200	1.21 (31)	1.67 (42)	810 (1205)	5000 (1530)	4670 (2118)	420
20-145-20	300	1.35 (34)	1.81 (46)	1045 (1555)	3300 (1010)	4110 (1864)	420



TECH TIP

Sag and Tension guidelines for these products are available online:
<http://www.superioressex.com/techinfo/sag-tension.htm>

Standards Compliance:

Telcordia GR-421-CORE; ANSI/ICEA S-85-625-2002