CASPIC®-FSF

RDUP PE-89

PRODUCT DESCRIPTION

CASPIC®-FSF Cables are designed for direct burial applications. CASPIC-FSF cables are recommended for use in high-risk areas where additional mechanical or rodent protection is required. CASPIC-FSF may be used aerially, but must be attached to a support strand.

APPLICATIONS

- Direct burial where additional mechanical protection is required or desired
- Lashed aerial where additional mechanical protection is required or desired

FEATURES

- Twisted into pairs with varying lay lengths
- Core wrap
- Filled core
- Dual shield design
- Fully flooded shield interfaces
- Black, polyethylene jacket

BENEFITS

- Minimizes crosstalk
- Provides thermal protection
- Moisture resistant
- Rodent resistant
- Inhibits corrosion and water migration
- Provides a tough, protective covering designed to withstand exposure to direct sunlight, atmospheric temperature changes and stresses expected in standard installations

SPECIFICATIONS

Conductor	Solid Annealed Copper
Insulation	Dual insulation consisting of an inner layer of foamed, natural polyolefin over which is applied a solid (skin) layer of polyolefin colored in accordance with industry standards
Twisted Pairs	Individual insulated conductors; twisted into pairs with varying lay lengths; specific color combinations provide pair identification
≤ 25-Pair Core	Pairs are assembled into a cylindrical core
> 25-Pair Core	Cables larger than 25-pair are assembled into units, which are then used to assemble the core; units are identifiable using color-coded binders
Filling Compound	80°C ETPR compound, completely filling the interstices between the pairs and under the core wrap
Core Wrap	Non-hygroscopic, dielectric tape applied over the core
Inner Shield	Corrugated, copolymer coated, 8 mil aluminum tape applied directly over the core wrap; does not butt or overlap at any point along the length of the cable; flooded shield interface
Outer Shield	Rodent resistant, corrugated, copolymer coated, 6 mil steel tape applied directly over the aluminum and overlaps; flooded shield interface
Jacket	Black, polyethylene
Jacket Marking	Identifying information includes a telephone handset, cable code, pair count, AWG, date of manufacture and sequential length markings at 2 foot intervals
Standards Compliance	ANSI/ICEA S-84-608-2011 RDUP 7 CFR 1755.890 (PE-89) RoHS-compliant

ELECTRICAL SPECIFICATIONS

Number of Pairs	Average Mutual Capacitance @ 1,000 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 mile (km)	DC Resistance Unbalance Maximum %		Dielectric Strength DC Potential – Volts	
				Average	Individual Pair	Conductor to Conductor	Conductor to Shield
19 (0.90)	1.0 (1.6)	3.2 (10.5)	45.0 (28.0)	1.5	5.0	4,500	10,000
22 (0.64)	1.0 (1.6)	4.5 (14.8)	91.0 (56.5)	1.5	5.0	3,600	10,000
24 (0.51)	1.0 (1.6)	5.6 (18.4)	144.0 (89.5)	1.5	5.0	3,000	10,000

For cables with 12-pair or less, the maximum average attenuation may be increased by 10% over the values shown.

	Minimum Near End Crosstalk (NEXT) @ 772 kHz
PSWUNEXT Mean (dB)	47
PSWUNEXT Worst Pair (dB)	42

	Minimum Far End Crosstalk (FEXT) @ 772 kHz		
Conductor Size (AWG)	19	22	24
PSELFEXT Mean (dB/kft)	51	49	49
PSELFEXT Worst Pair (dB/kft)	45	43	43

PART NUMBERS AND PHYSICAL CHARACTERISTICS

Part Number	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
09-031-92	25	19 (0.90)	0.81 (21)	415 (620)	5,000 (1,524)	2,320 (1,050)	58 x 25 x 20
09-034-92	50	19 (0.90)	1.07 (27)	740 (1,100)	5,000 (1,524)	4,315 (1,955)	72 x 35 x 36
09-038-92	100	19 (0.90)	1.41 (36)	1,345 (2,000)	5,000 (1,524)	7,425 (3,370)	78 x 40 x 39
09-057-92	6	22 (0.64)	0.42 (11)	95 (140)	5,000 (1,524)	540 (245)	36 x 18 x 14
09-059-92	12	22 (0.64)	0.50 (13)	150 (225)	5,000 (1,524)	860 (390)	44 x 18 x 20
09-062-92	25	22 (0.64)	0.63 (16)	245 (365)	5,000 (1,524)	1,390 (630)	46 x 25 x 20
09-065-92	50	22 (0.64)	0.80 (20)	410 (610)	5,000 (1,524)	2,295 (1,040)	58 x 25 x 20
09-069-92	100	22 (0.64)	1.05 (27)	730 (1,085)	5,000 (1,524)	4,265 (1,935)	72 x 35 x 36
09-073-92	200	22 (0.64)	1.42 (36)	1,345 (2,000)	2,500 (762)	3,650 (1,655)	62 x 30 x 24
09-075-92	300	22 (0.64)	1.70 (43)	1,945 (2,895)	1,250 (381)	2,720 (1,235)	62 x 30 x 24
09-077-92	400	22 (0.64)	1.92 (49)	2,535 (3,775)	1,250 (381)	3,455 (1,570)	62 x 30 x 24
09-081-92	600	22 (0.64)	2.32 (59)	3,710 (5,520)	1,250 (381)	5,250 (2,380)	72 x 35 x 36
09-083-92	900	22 (0.64)	2.81 (71)	5,455 (8,120)	1,250 (381)	7,615 (3,455)	84 x 40 x 42
09-092-92	6	24 (0.51)	0.39 (9.9)	80 (120)	5,000 (1,524)	465 (210)	36 x 18 x 14
09-094-92	12	24 (0.51)	0.45 (11)	110 (165)	5,000 (1,524)	615 (280)	36 x 18 x 14
09-097-92	25	24 (0.51)	0.55 (14)	180 (270)	5,000 (1,524)	1,065 (485)	46 x 25 x 20
09-100-92	50	24 (0.51)	0.69 (18)	290 (430)	5,000 (1,524)	1,615 (735)	46 x 25 x 20
09-104-92	100	24 (0.51)	0.88 (22)	500 (745)	5,000 (1,524)	2,745 (1,245)	58 x 25 x 20
09-108-92	200	24 (0.51)	1.18 (30)	905 (1,345)	2,500 (762)	2,510 (1,135)	58 x 25 x 20
09-110-92	300	24 (0.51)	1.41 (36)	1,300 (1,935)	2,500 (762)	3,540 (1,605)	62 x 30 x 24
09-112-92	400	24 (0.51)	1.59 (40)	1,680 (2,500)	2,500 (762)	4,815 (2,185)	72 x 35 x 36
09-116-92	600	24 (0.51)	1.92 (49)	2,450 (3,645)	1,250 (381)	3,350 (1,520)	62 x 30 x 24
09-118-92	900	24 (0.51)	2.29 (58)	3,555 (5,290)	1,250 (381)	5,060 (2,295)	72 x 35 x 36
09-120-92	1,200	24 (0.51)	2.62 (67)	4,660 (6,935)	1,250 (381)	6,525 (2,960)	78 x 40 x 39
09-121-92	1,500	24 (0.51)	2.91 (74)	5,755 (8,565)	1,000 (305)	6,455 (2,930)	78 x 40 x 39
09-124-92	1,800	24 (0.51)	3.17 (81)	6,855 (10,200)	1,000 (305)	7,650 (3,470)	84 x 40 x 42
09-125-92	2,100	24 (0.51)	3.45 (88)	8,015 (11,930)	1,000 (305)	9,190 (4,170)	96 x 40 x 48
09-126-92	2,400	24 (0.51)	3.64 (93)	9,035 (13,445)	750 (229)	7,950 (3,605)	96 x 40 x 48

FOR EXTREME RISK ENVIRONMENTS

For extreme direct burial or lashed aerial installations, this cable is available with the +M feature. See the "Mechanical Protection (+M) for Extreme Risk Environments" in the "Technical Information" section for more information.