



Specifications

Conductor	Solid annealed copper
Insulation	Solid polyolefin; color coded 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
Shield	Corrugated, copolymer coated, 8 mil aluminum tape applied longitudinally with an overlap; flooded shield interfaces
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-84-608-2007 RDUP 7 CFR 1755.390 (PE-39) RoHS-compliant

Product Description

SEALPIC®-F Cables are designed for low risk direct burial or duct applications. SEALPIC-F may be used aerially, but must be attached to a support strand.

Applications

- Low risk direct burial
- Underground conduit
- Lashed aerial

Features

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

Benefits

- Minimizes crosstalk
- Provides thermal protection
- Moisture 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

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 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)	2.8 (9.2)	45.0 (28.0)	1.5	5.0	7,000	15,000
22 (0.64)	1.0 (1.6)	4.0 (13.1)	91.0 (56.5)	1.5	5.0	5,000	15,000
24 (0.51)	1.0 (1.6)	5.0 (16.4)	144.0 (89.5)	1.5	5.0	4,000	15,000

*For cables of 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
104-026-21	6	19 (0.90)	0.54 (14)	140 (210)	5,000 (1,524)	810 (365)	44 x 18 x 20
104-028-21	12	19 (0.90)	0.69 (18)	235 (350)	5,000 (1,524)	1,340 (610)	46 x 25 x 20
104-031-21	25	19 (0.90)	0.92 (23)	440 (655)	5,000 (1,524)	2,570 (1,165)	65 x 30 x 32
104-034-21	50	19 (0.90)	1.22 (31)	810 (1,205)	5,000 (1,524)	4,750 (2,155)	78 x 40 x 39
104-057-21	6	22 (0.64)	0.43 (11)	85 (125)	5,000 (1,524)	490 (220)	36 x 18 x 14
104-059-21	12	22 (0.64)	0.53 (14)	135 (200)	5,000 (1,524)	785 (355)	44 x 18 x 20
104-062-21	25	22 (0.64)	0.68 (17)	240 (355)	5,000 (1,524)	1,365 (620)	46 x 25 x 20
104-065-21	50	22 (0.64)	0.89 (23)	425 (630)	5,000 (1,524)	2,370 (1,075)	58 x 25 x 20
104-069-21	100	22 (0.64)	1.19 (30)	780 (1,160)	5,000 (1,524)	4,515 (2,050)	72 x 35 x 36
104-073-21	200	22 (0.64)	1.63 (41)	1,500 (2,230)	2,500 (762)	4,365 (1,980)	72 x 35 x 36
104-075-21	300	22 (0.64)	1.96 (50)	2,205 (3,280)	2,500 (762)	6,210 (2,820)	78 x 40 x 39
104-077-21	400	22 (0.64)	2.23 (57)	2,890 (4,300)	1,250 (381)	4,225 (1,915)	72 x 35 x 36
104-081-21	600	22 (0.64)	2.72 (69)	4,295 (6,390)	1,250 (381)	6,165 (2,795)	84 x 40 x 42
104-083-21	900	22 (0.64)	3.30 (84)	6,380 (9,495)	1,250 (381)	7,975 (3,615)	96 x 40 x 48
104-092-21	6	24 (0.51)	0.38 (9.7)	60 (90)	5,000 (1,524)	365 (165)	36 x 18 x 14
104-094-21	12	24 (0.51)	0.46 (12)	95 (140)	5,000 (1,524)	585 (265)	44 x 18 x 20
104-097-21	25	24 (0.51)	0.58 (15)	165 (245)	5,000 (1,524)	990 (450)	46 x 25 x 20
104-100-21	50	24 (0.51)	0.74 (19)	285 (425)	5,000 (1,524)	1,630 (740)	52 x 25 x 20
104-104-21	100	24 (0.51)	0.98 (25)	520 (775)	5,000 (1,524)	2,970 (1,345)	65 x 30 x 32
104-108-21	200	24 (0.51)	1.32 (34)	975 (1,450)	5,000 (1,524)	5,575 (2,530)	78 x 40 x 39
104-110-21	300	24 (0.51)	1.58 (40)	1,420 (2,115)	2,500 (762)	4,165 (1,890)	72 x 35 x 36
104-112-21	400	24 (0.51)	1.79 (46)	1,850 (2,755)	2,500 (762)	5,325 (2,415)	78 x 40 x 39
104-116-21	600	24 (0.51)	2.18 (55)	2,745 (4,085)	1,250 (381)	4,045 (1,835)	72 x 35 x 36
104-118-21	900	24 (0.51)	2.63 (67)	4,050 (6,025)	1,250 (381)	5,760 (2,615)	78 x 40 x 39
104-120-21	1,200	24 (0.51)	3.00 (76)	5,325 (7,925)	1,000 (305)	6,025 (2,730)	78 x 40 x 39
104-121-21	1,500	24 (0.51)	3.35 (85)	6,625 (9,860)	1,000 (305)	7,800 (3,540)	96 x 40 x 48
104-124-21	1,800	24 (0.51)	3.73 (95)	7,870 (11,710)	1,000 (305)	9,045 (4,105)	96 x 40 x 48