



## 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
Shield	Corrugated, copolymer coated, 8 mil aluminum tape applied longitudinally with an overlap; flooded shield interfaces
Support Member	0.25 inch, 7-strand Extra High Strength (EHS) galvanized steel messenger serves as support member and integral part of the sheath; messenger is flooded
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	SEALPIC-FSF-84 cables meet the physical and electrical requirements of RDUP specification 7 CFR 1755.890 (PE-89), except that the figure 8 sheath shall meet the requirements of ANSI/ICEA S-85-625-2007 Option A RoHS-compliant

## Product Description

SEALPIC®-FSF-84 Cables are suited for aerial applications where a filled cable design is preferred. The core and support member (messenger) lay parallel to each other forming a cross-sectional “figure 8.” The support messenger is an integral part of the cable sheath, yet readily available for gripping, pulling and tensioning.

## Applications

- Aerial

## Features

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

## Benefits

- Minimizes crosstalk
- Provides thermal protection
- Moisture resistant
- Inhibits corrosion and water migration
- Inhibits corrosion
- 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
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)	22	24
PSELFEXT Mean (dB/kft)	49	49
PSELFEXT Worst Pair (dB/kft)	43	43

Part Numbers and Physical Characteristics

Part Number	Pair Count	AWG (mm)	Nominal Diameter		Approx. Weight lbs/kft (kg/km)	Standard Length ft (m)	Approx. Shipping Weight lbs (kg)	Reel Size F x T x D in
			Cable only in (mm)	With Messenger in (mm)				
109-057-05	6	22 (0.64)	0.37 (9.4)	0.84 (22)	205 (305)	5,000 (1,524)	1,255 (569)	52 x 25 x 20
109-059-05	12	22 (0.64)	0.46 (12)	0.93 (24)	250 (370)	5,000 (1,524)	1,513 (687)	52 x 25 x 20
19-062-05	25	22 (0.64)	0.59 (15)	1.06 (27)	330 (490)	5,000 (1,524)	1,945 (882)	58 x 25 x 20
109-065-05	50	22 (0.64)	0.75 (19)	1.22 (31)	485 (720)	5,000 (1,524)	2,765 (1,254)	62 x 30 x 24
109-092-05	6	24 (0.51)	0.34 (8.6)	0.83 (21)	185 (275)	5,000 (1,524)	1,115 (506)	46 x 25 x 20
109-094-05	12	24 (0.51)	0.40 (10)	0.89 (23)	210 (315)	5,000 (1,524)	1,280 (580)	52 x 25 x 20
109-097-05	25	24 (0.51)	0.50 (13)	0.99 (25)	260 (385)	5,000 (1,524)	1,595 (723)	58 x 25 x 20
109-100-05	50	24 (0.51)	0.63 (16)	1.12 (28)	350 (520)	5,000 (1,524)	2,065 (937)	62 x 30 x 24
109-104-05	100	24 (0.51)	0.81 (21)	1.31 (33)	515 (765)	5,000 (1,524)	3,275 (1,485)	72 x 36 x 36
109-108-05	200	24 (0.51)	1.14 (29)	1.60 (41)	875 (1,300)	2,500 (762)	2,440 (1,107)	62 x 30 x 24
109-110-05	300	24 (0.51)	1.36 (35)	1.81 (46)	1,200 (1,785)	2,500 (762)	3,585 (1,626)	72 x 36 x 36