

Integrated Messenger Wire

IM/F, IM/H and IM/G



SPECIFICATIONS

Conductor	Solid annealed copper
Insulation	Polyolefin
Core Assembly	Individual conductor dimensions are tightly controlled to limit resistance unbalance of the twisted pairs; in multi-pair constructions, pair twist lays are varied to minimize crosstalk and meet capacitance limits; twisted pairs are formed into a firm, round core
Jacket	Fire retardant PVC
Performance Compliance	Telcordia GR-3163-CORE ANSI/ICEA S-89-648-2006 RoHS-compliant
NRTL Programs	UL Listed

PRODUCT DESCRIPTION

IM/F, IM/H and IM/G aerial service wire in 2, 3, 6 and 12-pair is self supporting. The conductors are laid parallel to an (F) 0.083 inch, (H) 0.109 inch, or (G) 0.095 inch solid extra-strength steel support wire. Both the conductors and support wire are jacketed in an integral “figure-8” configuration. This product permits fast, economical installation from aerial distribution cable terminals to building entrance protectors or network interface units on the subscriber’s premises. The fully color coded core expedites splicing and terminating procedures. A black, fire retardant, polyvinylchloride jacket provides a tough flexible protective covering that withstands exposure to sunlight, atmospheric temperatures and stresses encountered in standard installations. The steel support wire is jacketed in an integral extrusion with the core.



TECHNICAL GUIDELINE

Sag and Tension Guides for these products are available online:
SuperiorEssex.com/TechTip.aspx

ELECTRICAL SPECIFICATIONS

Number of Pairs		Average Mutual Capacitance @ 1000 Hz nF/mile (nF/km)			
Maximum Pair		94 (58)			
Maximum Average		90 (56)			

Conductor Size AWG (mm)	Minimum Insulation Resistance @ 68°F (20°C) megohm-mile (megohm-km)	Maximum Average Attenuation 772 kHz @ 68°F (20°C) dB/kft (dB/km)	Maximum Conductor Resistance @ 68°F (20°C) Ohms/mile (Ohms/km)	DC Resistance Unbalance Maximum % Individual Pair	Conductor to Conductor Dielectric Strength Minimum Volts DC 3 secs, no breakdown
19 (0.90)	1,000 (1,600)	3.6 (11.8)	45 (28.0)	5.0	-
22 (0.64)	1,000 (1,600)	5.1 (17.0)	91 (56.5)	5.0	4,000

Crosstalk Loss	dB/kft (dB/km)	Capacitance Unbalance @ 1000 Hz	pF @ 1 kft (pF @ 1 km)
Minimum NEXT @ 722 kHz	44 (144)	Maximum Individual Pair to Pair	80 (145)
		Maximum Individual Pair to Ground	800 (2,625)

PART NUMBERS AND PHYSICAL CHARACTERISTICS

Part Number	Support Size	Pair Count	AWG (mm)	Dimensions		Approx. Weight lbs/kft (kg/km)	Standard Length ft (m)	Package
				Minor in (mm)	Major in (mm)			
10-921-38	IM/G 0.095	2	19 (0.90)	0.27 (6.8)	0.51 (12.9)	73 (109)	656 (200)	Coil
10-923-38	IM/G 0.095	2	19 (0.90)	0.27 (6.8)	0.51 (12.9)	73 (109)	4,921 (1,500)	Reel
10-002-34	IM/F 0.083	2	22 (0.64)	0.22 (5.7)	0.46 (11.7)	55 (82)	600 (183)	Coil
10-102-34	IM/F 0.083	2	22 (0.64)	0.22 (5.7)	0.46 (11.7)	55 (82)	5,000 (1,524)	Reel
10-503-34	IM/F 0.083	3	22 (0.64)	0.24 (6.2)	0.48 (12.3)	72 (107)	1,000 (305)	Coil
10-106-34	IM/F 0.083	6	22 (0.64)	0.30 (7.6)	0.53 (13.6)	80 (119)	3,500 (1,067)	Reel
10-206-34	IM/F 0.083	6	22 (0.64)	0.30 (7.6)	0.53 (13.6)	80 (119)	1,000 (305)	Reel
10-306-34	IM/F 0.083	6	22 (0.64)	0.30 (7.6)	0.53 (13.6)	80 (119)	400 (122)	Coil
10-261-38	IM/G 0.095	6	22 (0.64)	0.30 (7.6)	0.55 (13.9)	80 (119)	492 (150)	Coil
10-262-38	IM/G 0.095	6	22 (0.64)	0.30 (7.6)	0.55 (13.9)	80 (119)	2,461 (750)	Reel
10-265-38	IM/G 0.095	6	22 (0.64)	0.30 (7.6)	0.55 (13.9)	80 (119)	5,000 (1,562)	Reel
10-281-38	IM/G 0.095	12	22 (0.64)	0.38 (7.6)	0.65 (16.6)	114 (170)	410 (125)	Coil
10-284-38	IM/G 0.095	12	22 (0.64)	0.38 (7.6)	0.65 (16.6)	114 (170)	2,460 (750)	Reel
10-285-38	IM/G 0.095	12	22 (0.64)	0.38 (7.6)	0.65 (16.6)	114 (170)	8,202 (2,500)	Reel
10-102-35	IM/H 0.109	12	22 (0.64)	0.38 (7.6)	0.66 (16.7)	130 (193)	1,000 (305)	Reel
10-012-35	IM/H 0.109	12	22 (0.64)	0.38 (7.6)	0.66 (16.7)	130 (193)	250 (76)	Coil
10-212-35	IM/H 0.109	12	22 (0.64)	0.38 (7.6)	0.66 (16.7)	130 (193)	5,000 (1,524)	Reel

Contact Superior Essex for additional configurations and AWG sizes.