



Copper/Fiber Composite Cable

Rugged easy to use composite cable consisting of flexible stranded Copper conductors and integrating communications links utilizing fiber optic technologies. The breakout design provides additional protection for both the copper and fiber channels by individually protecting each with insulated jackets and all-dielectric strength members. For applications requiring remote low-voltage power and high-speed communications, these designs provide an efficient single-installation option where space is of a premium and devices are not easily accessed.

Features

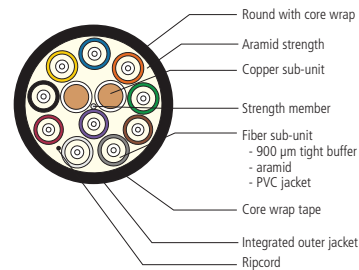
- Rugged Riser rated constructions
- Water-blocked fiber units and cable core
- Flexible, stranded Copper, max 6 conductors (12AWG, 14AWG, 16AWG and 18AWG options available)
- High-speed fiber optics

Applications

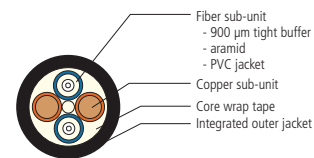
- Remote application of low-voltage power
- Security networks
- IP enable appliances
- Wireless Access Points

Cable Components

12 Fiber



4 Fiber



Fiber Specifications

CORE SIZE/FIBER TYPE	ISO/IEC	MAXIMUM ATTENUATION (dB/km)			OVERFILL LAUNCH MIN. BANDWIDTH (MHz•km)		EMBC (MHz•km)	GIGABIT ETHERNET MIN. LINK DISTANCE (meters)		10 GIGABIT ETHERNET MIN. LINK DISTANCE (meters)	
		850 nm	1300 nm	1550 nm	850 nm	1300 nm		850 nm	1300 nm	850 nm	1300 nm
(6) 62.5 Giga-Link™ 300	OM1	3.5	1.2	N/A	200	600	N/A	300	550	32	—
(5) 50 Giga-Link™ 600	OM2	3.5	1.5	N/A	500	500	N/A	600	600	82	—
(L) 50 Laser-Link 300	OM3	3.0	1.2	N/A	1,500	500	2,000	1,000	550	300	—
(C) 50 Laser-Link 550	OM4	3.0	1.2	N/A	3,500	500	4,700	1,040	550	550	—
(W) AFL Wideband Multimode	OM5	3.0	1.2	N/A	3,500	500	4,700	1,040	550	550	—
(9) Single-mode (ITU G.652.D/G.657.A1)	OS2	N/A	0.5	0.5	N/A	N/A	N/A	N/A	5,000	N/A	10,000

Qualifications

GOVERNING BODY	STANDARD CODE
Telcordia	GR-409-CORE
IECA	S-104-696
UL	13, 1666 rated, CL2R-OF Classified
MSHA	Approved
NEC	725 Classified

Temperature Specifications

TEMPERATURE RANGE	
INSTALLATION	-20°C to +70°C
OPERATING	-40°C to +70°C
STORAGE	-40°C to +70°C



Copper/Fiber Composite Cable

Mechanical Data

NO. OF POSITIONS	NO. OF FIBERS	NO. OF CONDUCTORS	CONDUCTOR SIZE	FIBER SUB-UNIT SIZE (mm)	AFL NO.	NOMINAL DIAMETER	WEIGHT lbs/1000 ft (kg/km)	TENSION lbs (N)		BENDING RADIUS inches (cm)	
						Inches (mm)		INSTALL.	LONG TERM	INSTALL.	LONG TERM
4	2	2	18	2.0	BR002*2018X1-2CU18	0.35 (8.8)	50 (75)	300 (1334)	90 (400)	5.2 (13.2)	3.5 (8.8)
			16	2.4	BR002*2418X1-2CU16	0.37 (9.4)	61 (91)			5.6 (14.1)	3.7 (9.4)
			14	3.0	BR002*3018X1-2CU14	0.41 (10.5)	77 (115)			6.2 (15.8)	4.1 (10.5)
			12	3.0	BR002*3018X1-2CU12	0.46 (11.6)	110 (160)			6.9 (17.4)	4.6 (11.6)
6	2	4	18	2.0	BR002*2018X1-4CU18	0.39 (9.9)	78 (116)	300 (1334)	90 (400)	5.8 (14.9)	3.9 (9.9)
			16	2.4	BR002*2418X1-4CU16	0.42 (10.7)	94 (140)			6.3 (16.1)	4.2 (10.7)
			14	3.0	BR002*3018X1-4CU14	0.46 (11.7)	114 (170)			6.9 (17.6)	4.6 (11.7)
			12	3.0	BR002*3018X1-4CU12	0.50 (12.6)	146 (218)			7.4 (18.9)	5.0 (12.6)
6	3	3	18	2.0	BR003*2018X1-3CU18	0.39 (9.9)	71 (106)	300 (1334)	90 (400)	5.8 (14.9)	3.9 (9.9)
			16	2.4	BR003*2418X1-3CU16	0.42 (10.7)	83 (124)			6.3 (16.1)	4.2 (10.7)
			14	3.0	BR003*3018X1-3CU14	0.46 (11.7)	98 (146)			6.9 (17.6)	4.6 (11.7)
			12	3.0	BR003*3018X1-3CU12	0.50 (12.6)	122 (182)			7.4 (18.9)	5.0 (12.6)
6	4	2	18	2.0	BR004*2018X1-2CU18	0.39 (9.9)	64 (95)	300 (1334)	90 (400)	5.8 (14.9)	3.9 (9.9)
			16	2.4	BR004*2418X1-2CU16	0.42 (10.7)	72 (107)			6.3 (16.1)	4.2 (10.7)
			14	3.0	BR004*3018X1-2CU14	0.46 (11.7)	82 (122)			6.9 (17.6)	4.6 (11.7)
			12	3.0	BR004*3018X1-2CU12	0.50 (12.6)	98 (146)			7.4 (18.9)	5.0 (12.6)
8	2	6	18	2.0	BR002*2018X1-6CU18	0.49 (12.4)	94 (140)	300 (1334)	90 (400)	7.3 (18.6)	4.9 (12.4)
			16	2.4	BR002*2418X1-6CU16	0.47 (11.9)	105 (150)			7.0 (17.9)	4.7 (11.9)
			14	3.0	BR002*3018X1-6CU14	0.61 (15.6)	175 (255)			9.2 (23.4)	6.1 (15.6)
			12	3.0	BR002*3018X1-6CU12	0.58 (14.7)	223 (332)			8.7 (22.1)	5.8 (14.7)
8	4	4	18	2.0	BR004*2018X1-4CU18	0.49 (12.4)	80 (119)	300 (1334)	90 (400)	7.3 (18.6)	4.9 (12.4)
			16	2.4	BR004*2418X1-4CU16	0.47 (11.9)	83 (124)			7.0 (17.9)	4.7 (11.9)
			14	3.0	BR004*3018X1-4CU14	0.61 (15.6)	143 (213)			9.2 (23.4)	6.1 (15.6)
			12	3.0	BR004*3018X1-4CU12	0.58 (14.7)	175 (261)			8.7 (22.1)	5.8 (14.7)
8	6	2	18	2.0	BR006*2018X1-2CU18	0.49 (12.4)	66 (98)	300 (1334)	90 (400)	7.3 (18.6)	4.9 (12.4)
			16	2.4	BR006*2418X1-2CU16	0.47 (11.9)	61 (91)			7.0 (17.9)	4.7 (11.9)
			14	3.0	BR006*3018X1-2CU14	0.61 (15.6)	111 (165)			9.2 (23.4)	6.1 (15.6)
			12	3.0	BR006*3018X1-2CU12	0.58 (14.7)	127 (189)			8.7 (22.1)	5.8 (14.7)
12	6	6	18	2.0	BR006*2018X1-6CU18	0.57 (14.4)	105 (150)	300 (1334)	90 (400)	8.5 (21.6)	5.7 (14.4)
			16	2.4	BR006*2418X1-6CU16	0.55 (13.9)	142 (211)			8.2 (20.9)	5.5 (13.9)
			14	3.0	BR006*3018X1-6CU14	0.65 (16.5)	185 (275)			9.7 (24.8)	6.5 (16.5)
			12	3.0	BR006*3018X1-6CU12	0.61 (15.4)	230 (335)			9.1 (23.1)	6.1 (15.4)
12	8	4	18	2.0	BR008*2018X1-4CU18	0.57 (14.4)	91 (136)	300 (1334)	90 (400)	8.5 (21.6)	5.7 (14.4)
			16	2.4	BR008*2418X1-4CU16	0.55 (13.9)	120 (179)			8.2 (20.9)	5.5 (13.9)
			14	3.0	BR008*3018X1-4CU14	0.65 (16.5)	153 (228)			9.7 (24.8)	6.5 (16.5)
			12	3.0	BR008*3018X1-4CU12	0.61 (15.4)	182 (271)			9.1 (23.1)	6.1 (15.4)
12	10	2	18	2.0	BR010*2018X1-2CU18	0.57 (14.4)	77 (115)	300 (1334)	90 (400)	8.5 (21.6)	5.7 (14.4)
			16	2.4	BR010*2418X1-2CU16	0.55 (13.9)	98 (146)			8.2 (20.9)	5.5 (13.9)
			14	3.0	BR010*3018X1-2CU14	0.65 (16.5)	121 (180)			9.7 (24.8)	6.5 (16.5)
			12	3.0	BR010*3018X1-2CU12	0.61 (15.4)	134 (200)			9.1 (23.1)	6.1 (15.4)

* Fiber Types – Replace asterisk (*) in AFL number with number in the Fiber Specifications table on previous page.
 AFL No. is specified with Black jacket and color coded sub-units. Other jacket colors available – please contact AFL for updated AFL No.

Contact AFL for further details.

Premise Cable