

Indoor/Outdoor Low Smoke Zero Halogen Breakout Cable

AFL's Indoor/Outdoor Low Smoke Zero Halogen (LSZH) Breakout Cables are perfectly suited for rugged applications and installations requiring increased performance. LSZH-rated I/O Breakout cables are available from 2-24 count with variable sub-cable dimensions to support specific termination and routing requirements. These cables feature a durable IEC-compliant, zero halogen, UV and fungal resistant outer jacket. Sub-cables can be specified at 2.0 mm, 2.4 mm or 2.9 mm diameters to fit the specific application. Additional strength member is applied to specifically support wedge-style industrial termination schemes. Tested and qualified to the most stringent safety and performance standards, Low Smoke Zero Halogen Breakout cables can be deployed with confidence in the most demanding of conditions.

Applications

- Harsh Environment
- Industrial
- Campus Environment



**Rodent-deterrent Jacket
Option Available**

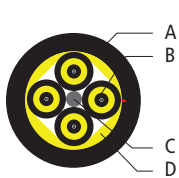
Features

- UL 1666 riser-rated with water-blocked sub-units
- Sub-units and tight buffer available in a variety of colors
- Tested to meet or exceed GR-409-CORE and ICEA-S-104-696
- Compliant to Directive 2002/95/EC (RoHS)

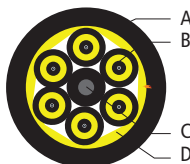
Typical Performance

Weathering	720 hrs	FOTP-89
Low/High Temp Bend	-20°C to 70°C	FOTP-37
External Freeze		FOTP-98
Cyclic Flex	2000 cycles	FOTP-104
Impact	1500 impacts	FOTP-25
Cold Impact	-20°C	FOTP-25
Crush Resistance	2200 N/cm	FOTP-41
Cable Twist		FOTP-85

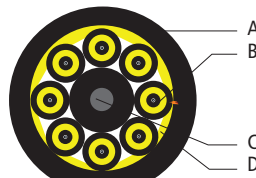
Cable Components



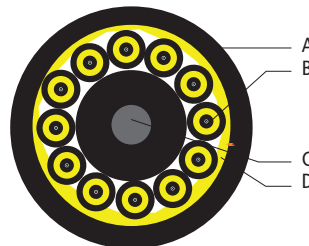
2 and 4 Fiber



6 Fiber



8 Fiber



12 Fiber

A = FRPE outer jacket
 B = FRPE sub-cable
 - 900 µm buffered fiber
 - water swellable aramid yarn strength members
 C = strength member
 D = aramid yarn

Fiber Specifications

CORE SIZE/ FIBER TYPE	ISO/ IEC	MAXIMUM ATTENUATION (DB/KM)			OVERFILL LAUNCH MIN. BANDWIDTH (MHZ•KM)		EMB _c (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	—
(A) 50 Laser-Link 150	OM2	3.0	1.2	N/A	700	500	950	800	550	150	—
(L) 50 Laser-Link 300	OM3	3.0	1.2	N/A	1500	500	2000	1000	550	300	—
(C) 50 Laser-Link 550	OM4	3.0	1.2	N/A	3500	550	4700	1040	550	550	—
(K) AFL G.657.A1 Single-mode	OS2	N/A	0.5	0.5	N/A	N/A	N/A	N/A	5000	N/A	10,000
(9) SM	OS2	N/A	0.5	0.5	N/A	N/A	N/A	N/A	5,000	N/A	10,000



Indoor/Outdoor Low Smoke Zero Halogen Breakout Cable (cont.)

Mechanical Data

AFL NO.	UNITS	NOMINAL DIAMETER	WEIGHT	TENSION LBS (N)		BENDING RADIUS INCHES (CM)	
		INCHES (MM)	LBS/1000 FT (KG/KM)	INSTALLATION	LONG TERM	INSTALLATION	LONG TERM
BE002★2010#E	2	.30(7.7)	42(62)	300(1334)	90(400)	4.5(11.4)	3.0(7.6)
BE004★2010#E	4	.30(7.7)	42(62)	300(1334)	90(400)	4.5(11.4)	3.0(7.6)
BE006★2010#E	6	.35(8.8)	54(81)	300(1334)	90(400)	5.2(13.2)	3.5(8.8)
BE012★2010#E	12	.50(12.7)	115(171)	600(2667)	180(800)	7.5(19.0)	5.0(12.7)
BE024★2010#E	24	.57(14.9)	140(208)	600(2667)	180(800)	8.8(22.4)	5.9(14.9)
BE002★2410#E	2	.34(8.6)	50(75)	300(1334)	90(400)	5.0(12.7)	3.4(8.6)
BE004★2410#E	4	.34(8.6)	50(75)	300(1334)	90(400)	5.0(12.7)	3.4(8.6)
BE006★2410#E	6	.40(10.2)	70(104)	300(1334)	90(400)	6.0(15.3)	4.0(10.2)
BE012★2410#E	12	.58(14.8)	154(230)	600(2667)	180(800)	8.7(22.2)	5.8(14.8)
BE024★2410#E	24	.66(16.8)	183(273)	600(2667)	180(800)	9.9(25.2)	6.6(16.8)
BE002★3010#E	2	.39(9.8)	62(93)	300(1334)	90(400)	5.8(14.7)	3.9(9.8)
BE004★3010#E	4	.39(9.8)	62(93)	300(1334)	90(400)	5.8(14.7)	3.9(9.8)
BE006★3010#E	6	.45(11.6)	87(130)	300(1334)	90(400)	6.8(17.3)	4.6(11.6)
BE012★3010#E	12	.71(18.0)	217(323)	600(2667)	180(800)	10.6(27.0)	7.1(18.0)
BE024★3010#E	24	.79(20.0)	245(365)	600(2667)	180(800)	11.8(30.0)	7.8(20.0)

★ Fiber Types – Replace asterisk (★) in AFL number with number in the Fiber Specifications table on previous page.

Outer Jacket Color – Replace hashtag (#) in AFL number with number in the Cable Jacket Color table below.

Cable Jacket Color Options

1 - Blue	8 - Black
2 - Orange	9 - Yellow
3 - Green	A - Violet
4 - Brown	B - Rose
5 - Slate	C - Aqua
6 - White	K - Erika Violet (RAL 4003)
7 - Red	

Temperature Specifications

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

Cable Length—Reel Size

ITEM	REEL F
Reel Height (inches)	42
Reel Outside Width (inches)	36
Drum Diameter (inches)	23
Reel Weight (lbs)	148
CAPACITY: Feet (meters)	
4 Position	5,000 (1,500)
6 Position	5,000 (1,500)
8 Position	5,000 (1,500)
12 Position	5,000 (1,500)

