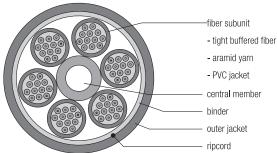# Indoor/Outdoor Multi-unit Riser Tight Buffered Cable

AFL now offers high fiber count Indoor/Outdoor Riser Cables. Waterblocked 12-fiber sub-units are helically stranded to provide sub-unitized cables ranging from 24 to 72 fiber counts. These cables are OFNR listed for indoor applications. Both the sub-unit jackets and outer sheath contain a UV stabilizer and anti-fungus protection for use in outdoor applications. Sub-units contain a water-swellable aramid and 12 tight buffered fibers.

Features

- Sub-units are water blocked and meet water penetration requirements of GR-20-CORE (this helps ensure that any damage to cable is restricted to a repairable length of several meters)
- Outer jacket is moisture-resistant, fungus-resistent and UV resistant for outdoor use
- With a Riser rating, this cable can be used in all environments: Riser, general inside plant and outside plant
- Sub-units are tested to meet or exceed EIA/TIA 568-A / GR-409-CORE and ICEA-S-104-696
- Compliant to Directive 2002/95/EC (RoHS)
- MSHA approved for mining applications

Cable Components

- fiber subunit
  - tight buffered fiber
  - aramid yarn
  - PVC jacket
- central member
- binder
- outer jacket
- ripcord

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

Temperature Specifications

TEMPERATURE RANGE	
INSTALLATION	-20ºC to +75ºC
OPERATING	-40ºC to +75ºC
STORAGE	-40ºC to +75ºC

MSHA U.S. Department of Labor, Mine Safety and Health Administration

Indoor/Outdoor Multi-unit Riser Tight Buffered Cable

Mechanical Data

CABLE TYPE	AFL NO. RISER	FIBER COUNT	NOMINAL DIAMETER INCHES (MM)	WEIGHT LBS/1000 FT (KG/KM)	TENSION LBS (N) INSTALLATION	LONG TERM	BENDING RADIUS INCHES (CM) INSTALLATION	LONG TERM
Indoor/Outdoor Tight Buffered Cable	KR024✷601##1	24	0.67 (16.9)	169 (252)	300 (1320)	90 (396)	10.0 (25.3)	6.7 (16.9)
	KR036✷601##1	36	0.67 (16.9)	178 (265)	300 (1320)	90 (396)	10.0 (25.3)	6.7 (16.9)
	KR048✷601##1	48	0.67 (16.9)	187 (278)	300 (1320)	90 (396)	10.0 (25.3)	6.7 (16.9)
	KR060✷601##1	60	0.76 (19.2)	197 (293)	300 (1320)	90 (396)	11.3 (28.8)	7.6 (19.2)
	KR072✷601##1	72	0.81 (20.7)	233 (346)	300 (1320)	90 (396)	12.2 (31.0)	8.1 (20.7)

✷ 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	

Cable Length - Reel Size

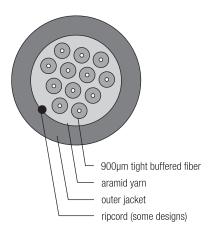| ITEM	REEL F	REEL G
Reel Height (inches)	42	60
Reel Outside Width (inches)	36	36
Drum Diameter (inches)	23	30
Reel Weight (lbs)	148	287
CAPACITY: METERS (FEET)		
18 Fibers	2,300 (7,546)	2,500 / (8,200)
24 Fibers	2,300 (7,546)	2,500 / (8,200)
36 Fibers	1,600 (5,250)	2,500 / (8,200)
48 Fibers	1,500 (4,921)	—
60 Fibers	1,250 (4,100)	1,500 / (4,921)
72 Fibers	1,000 (3,280)	1,500 / (4,921)

Indoor/Outdoor Plenum Distribution Cable

Indoor/Outdoor Plenum Distribution cables are specified for campus network cabling between buildings where interbuilding lengths are short enough that the installer can recognize savings from the lower costs of terminating tight buffered cables.

For indoor applications the cable is OFNP listed. For outdoor applications the cable is manufactured with an outer jacket that incorporates a UV stabilizer for protection against exposure to the sun plus an anti-fungus protection for use in underground applications.

Applications

- ICEA S-104-696
- Telcordia GR-409-Core Issue II Weatherized Cable
- EIA/TIA 568
- RoHS/REACH Compliant

Features

- Cables are water blocked and exceed water penetration requirements of ICEA S-104-696 and GR-20-CORE (this helps ensure that any damage to the cable and subsequent water ingress is restricted to a repairable length of several meters and minimizes overall replacement cost)
- Outer jacket is moisture-resistant, fungus-resistant and UV resistant suitable for outdoor use
- With an overall OFNP (Plenum) rating, this cable is suitable for installations in most spaces requiring UL flame ratings: Plenum, Riser, General Purpose and outside plant

Cable Components

900μm tight buffered fiber
aramid yarn
outer jacket
ripcord (some designs)

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

Temperature Specifications

TEMPERATURE RANGE	
INSTALLATION	-10°C to +70°C
OPERATING	-40°C to +70°C
STORAGE	-40°C to +70°C