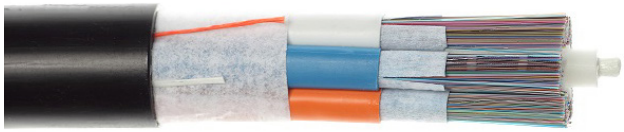
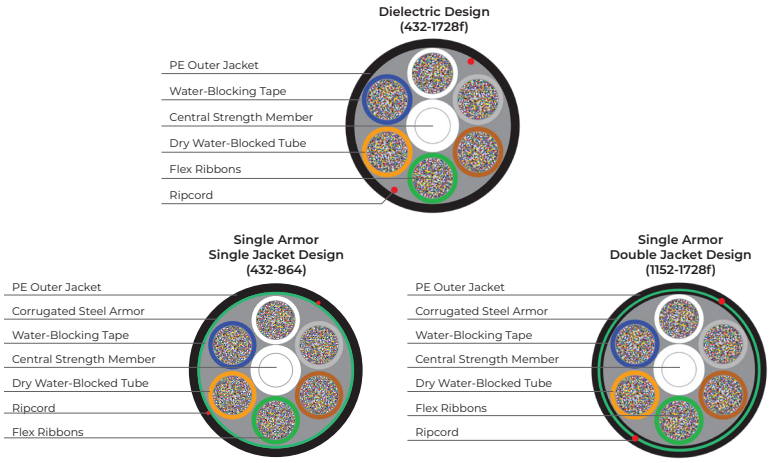
MassLink™ with 250µm Fiber FlexRibbon™ Technology

432 to 1728 Fiber Designs





OVERVIEW

MassLink™ with FlexRibbon™ Technology provides an ultracompact outside plant cable design that contains up to 1728 bend insensitive fibers. By using FlexRibbon technology, ribbons are rolled up and packed together in small diameter sub units. While FlexRibbon™ provides high packing density, these 250 µm fiber ribbons still provide the advantages of mass fusion splicing.

FEATURES AND BENEFITS

Ultra Compact Design

- FlexRibbons™ are rolled up into compact 72 to 288 fiber sub units for easier routing
- Significantly smaller diameter and lighter weight cables allow for easier installation and the use of smaller ducts
- With as much as 21% smaller diameter (38% volume reduction) over traditional ribbon designs, maximizing duct space utilization

FlexRibbon Technology

- Extremely flexible ribbons can be rolled up for high packing densities or laid flat for ribbon splicing
- 12 fiber ribbons are compatible with mass fusion heat strippers, cleavers, and splice machines
- Uses standard 250 um coated bend-insensitive fiber (ITU G657.A1)

Performance

- Uses full dry water blocking technology in the tubes and cable core for easy closure preparation and termination
- Tested in accordance with GR 20/ICEA 640 and with relevant EIA/TIA-455 series FOTPs for fiber optic cables

Registered Supplier

- ISO 9001, ISO 14001, TL 9000, and OHSAS 18001

PERFORMANCE SPECIFICATIONS		
Tensile Rating	N	lbf
Installation	2700	600
Residual	800	180
Crush Resistance	N/cm	lbf/in
Short/ Long Term	220/110	125/63
Temperature Ratings	°C	°F
Operation	-30 to +70	-22 to +158
Installation	-30 to +60	-22 to +140
Storage/Shipping	-40 to +70	-40 to +158

CABLE BENDING						
Fiber Count	432		576-864		1152-1728	
Jacket Design	Dielectrc	Armored	Dielectrc	Armored	Dielectrc	Armored
Minimum Bend Diameter (Diameter = Radius x 2)						
Installation: Wheel/Capstan	32 in (82 cm)	37 in (93 cm)	36 in (90 cm)	41 in (104 cm)	40 in (100 cm)	47 in (120 cm)
Long Term: Coil/Slack/Bend	17 in (43 cm)	19 in (49 cm)	19 in (48 cm)	22 in (55 cm)	20 in (50 cm)	25 in (63 cm)
Minimum Bend Radius (Diameter = Radius x 2)						
Installation: Wheel/Capstan	20 x Cable OD					
Long Term: Coil/Slack/Bend	10 x Cable OD					
Duct Size / % Fill	1"/ 80%	1¼"/ 73%	1¼"/ 71%	1¼"/ 81.5%	1¼"/ 78%	1½"/ 79%

Note: Vibratory Plowing is not recommended for these designs.

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TLS-DS-A-309-0725

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prysmian

RIBBON COLOR CODE			
Ribbon #	Marking	Ribbon #	Marking
1		13	
2		14	
3		15	
4		16	
5		17	
6		18	
7		19	
8		20	
9		21	
10		22	
11		23	
12		24	

Fiber Count Range	Recommended Fiber Count	Recommended Prysmian* Part Number	# of Tubes	# of Ribbons/ TubeTubes	# of Fibers/ Tube	Buffer Tube OD		Cable OD		Approx. Cable Weight		Max. Reel Length	
						Inches	mm	Inches	mm	lb/kft	kg/km	feet	meters
Dielectric													
432	432	RLF1JKT-12-AA-432-BB	6	6	72	0.23	5.8	0.80	20.4	160	238	31,814	9,697
576-864	864	RLF1JKT-12-AA-864-BB	6	12	144	0.26	6.6	0.89	22.5	210	312	26,155	7,972
1152-1728	1728	RLF1JKT-12-AA-1728-BB	6	24	288	0.29	7.4	0.98	24.9	254	379	18,206	5,731
Armored													
432	432	RLF1A1J-12-AA-432-BB	6	6	72	0.23	5.8	0.91	23.1	178	264	24,813	7,563
576-864	864	RLF1A1J-12-AA-864-BB	6	12	144	0.26	6.6	1.02	25.9	312	464	19,737	6,016
1152-1728	1728	RLF1A2J-12-AA-1728-BB	6	24	288	0.29	7.4	1.19	30.1	421	627	16,582	5,054

* Where AA equals glass type and BB equals attenuation

Ordering Guide

The Prysmian part number incorporates several significant attributes involving cable design and optical performance.
The appropriate part number can be configured using the process described below

1 LENGTH MARKINGS		2 PRODUCT FAMILY	3 CONSTRUCTION		4 FIBER GROUPING		5 FIBER TYPE		6 FIBER COUNT		7 FIBER GRADE
F	–	RLF	1JKT	–	12	–	B1	–	1728	–	E1

PART NUMBER CONSTRUCTION

1 LENGTH MARKINGS

F = Feet, M = Meters, or B = BABA Compliant in Feet

2 PRODUCT FAMILY

RLF = MassLink with FlexRibbon Technology

3 CONSTRUCTION

1JKT = All Dielectric Single Jacket (432-1728f)

1A1J = Single Corrugated Steel Armor Single Jacket (432-864f)

1A2J = Single Corrugated Steel Armor Double Jacket (1152-1728f)

4 FIBER GROUPING

12 = 12f per ribbon

FIBER INFORMATION

5 FIBER TYPE

SINGLE-MODE

B1 = 250µm Bend-Insensitive Single-Mode (ITU G.657.A1 & G.652.D)

6 FIBER COUNT

432 to 1728 fibers

7 FIBER GRADE

SINGLE-MODE Attenuation (dB/km)	Wavelength (nm)	Fiber Type
E1 = 0.40/0.40/0.30 *	1310/1383/1550	B1

* Typical Attenuation values for 1728f = 0.33/0.20 dB/km at 1310nm/1550nm

Notes: Please refer to the Fiber Code Addendum for additional fiber options, or contact us for help. Other cable constructions and fiber performance grades available on request.

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