MassLink™ with 200µm Fiber FlexRibbon® Technology
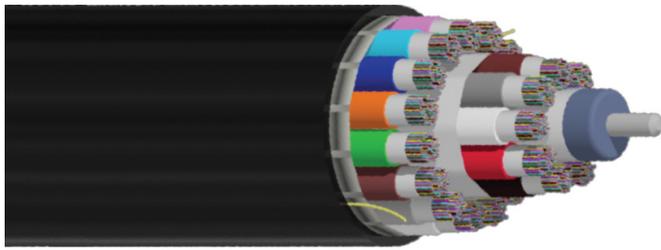
Ultra compact ribbon design for access or data center applications
576 to 6912 Fiber Designs

576-864 & 1152-1728
Fiber Design

- PE Outer Jacket
- Water-Blocking Tape
- Central Strength Member
- Dry Water-Blocked Tube
- FlexRibbons
- Ripcord

3456 & 6912 Fiber Design

- PE Outer Jacket
- Water-Blocking Tape
- Central Strength Member
- Dry Water-Blocked Tube
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OVERVIEW

MassLink™ with FlexRibbon® Technology provides an ultracompact outside plant cable design that contains up to 6912 bend insensitive fibers. By using FlexRibbon technology, ribbons are rolled up and packed together in small diameter 144 and 288 fiber sub units. While FlexRibbon provides high packing density, these 200 µm fiber ribbons still provide the advantages of mass fusion splicing.

FEATURES AND BENEFITS

Ultra Compact Design

- FlexRibbons are rolled up into compact 144 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

- These designs can be installed in smaller ducts than conventional flat ribbon which maximizes 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 200 µm coated bend-insensitive fiber (ITU G657.A2)

Tube Coil vs Sleeved Coil Ribbon Storage

- **Tube Coil Cables** – These cables are made with larger, more robust tubes so the cable can be used in ribbon storage without kinking. These tubes are able to to be coiled without the need for sleeves/furcation.

- **Sleeved Coil Cables** – These cables are designed with smaller, more condensed tubes to provide a more compact cable. Therefore, the ribbons will need sleeved/furcation tubing to be coiled for storage without kinking.

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**	
	Tube Coil	Sleeved Coil	Tube Coil	Sleeved Coil
Operation	-30 to +70	-20 to +70	-22 to +158	-4 to +158
Installation	-20 to +60		-4 to +140	
Storage/Shipping	-40 to +70		-40 to +158	

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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	██ ██ ██ █││││

CABLE BENDING - SLEEVED COIL DESIGNS

Fiber Count	576-864	1152-1728	3456	6912
Minimum Bend Diameter (Diameter = Radius x 2)				
Installation: Wheel/Capstan	27 in (68 cm)	36 in (90 cm)	49 in (124 cm)	50 in (127 cm)
Long Term: Coil/Slack/Bend	14 in (36 cm)	19 in (48 cm)	26 in (65 cm)	32 in (82 cm)
Minimum Bend Radius (Diameter = Radius x 2)				
Installation: Wheel/Capstan	20 x Cable OD			16 x Cable OD
Long Term: Coil/Slack/Bend	10 x Cable OD			
Duct Size / % Fill	1"/ 67%	1¼"/ 71%	1½"/ 81%	2"/ 77%

CABLE BENDING - TUBE COIL DESIGNS

Fiber Count	576-864	1152-1728
Minimum Bend Diameter (Diameter = Radius x 2)		
Installation: Wheel/Capstan	31 in (78 cm)	39 in (100 cm)
Long Term: Coil/Slack/Bend	16 in (41 cm)	21 in (52 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"/ 77%	1.25"/ 78%

Fiber Count Range	Recommended Fiber Count	Recommended Prysmian* Part Number	# of Tubes	# of Ribbons/ Tube	# of Fibers/ Tube	Buffer Tube OD		Cable OD		Approx. Cable Weight		Max. Reel Length	
						Inches	mm	Inches	mm	lb/kft	kg/km	feet	meters
Sleeved Coil Design													
576-864	864	RLF1JKT-12-AA-864-BB	6	12	144	0.19	4.7	0.67	17.0	134	199	33,792	10,300
1152-1728	1728	RLF1JKT-12-AA-1728-BB	6	24	288	0.26	6.6	0.89	22.5	210	312	26,155	7,972
3456	3456	RL2F1JKT-12-AA-3456-BB	24	12	144	0.18	4.5	1.22	30.9	422	628	11,631	3,545
6912	6912	RLF1JKT-12-AA-6912-BB	24	24	288	0.24	6.2	1.53	38.9	634	943	10,050	3,063
Tube Coil Design													
576-864	864	RLFW1JKT-12-AA-864-BB	6	12	144	0.22	5.5	0.77	19.5	164	245	31,824	9,700
1152-1728	1728	RLFW1JKT-12-AA-1728-BB	6	24	288	0.28	7.2	0.98	24.9	249	370	19,685	6,000

* Where AA equals glass type and BB equals attenuation

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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

Example: 6912 count all-dielectric MassLink with FlexRibbon Technology with G657.A2 bend insensitive fiber. (printed in feet)

1 LENGTH MARKINGS	**2** PRODUCT FAMILY	**3** CONSTRUCTION	**4** FIBER GROUPING	**5** FIBER TYPE	**6** FIBER COUNT	**7** FIBER GRADE
F	– RLF	1JKT	– 12	– 22	– 6912	– EA

PART NUMBER CONSTRUCTION

1 LENGTH MARKINGS

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

2 PRODUCT FAMILY

RLF = MassLink with FlexRibbon Technology (576-1728 & 6912 Non-Sleeved Coil Tubes)

RL2F = MassLink with FlexRibbon Technology (3456 Non-Sleeved Coil Tubes)

RLFW = MassLink with FlexRibbon Technology (576-1728 Sleeved Coil Tubes)

3 CONSTRUCTION

1JKT = Single Jacket

4 FIBER GROUPING

12 = 12f per ribbon

FIBER INFORMATION

5 FIBER TYPE

SINGLE-MODE

2X = BBXS™ Bend Insensitive 200 µm Single- Mode (ITU G.657.A2 & G.652.D)

22 = 200 µm Bend Insensitive Single-Mode (ITU G.657.A2 & G.652.D)

6 FIBER COUNT

576 to 6912 fibers

7 FIBER GRADE

SINGLE-MODE Attenuation (dB/km)	Wavelength (nm)	Fiber Type
Fiber Counts 576-864, 1152-1728, 3456 & 6912 EA = 0.5/0.5/0.5	1310/1383/1550	2X, 22
Fiber Counts 576-864 & 1152-1728 E7 = 0.4/0.4/0.3	1310/1383/1550	2X, 22

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.