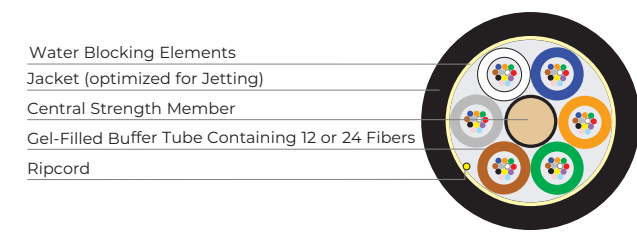


Sirocco™

Jetted Microduct Loose Tube Cable



OVERVIEW

Prysmian's Sirocco cables provide optimized jetting performance for underground microduct installations or jetting directly over existing cable. Prysmian offers solutions for microducts ranging from 8 mm to 14 mm, or larger, inside diameters. These small diameter cables combine high reliability with reduced size and weight for optimum blowing performance.

Prysmian's Sirocco^{HD} and Sirocco^{XT} cables leverage the capabilities of our industry-leading, 200µm and 180µm Bend-Insensitive Fiber to provide some of the highest fiber densities available.

With this approach, network operators can maximize duct utilization, defer capital expenditures to match revenue streams, maintain flexibility for future growth, and reduce installation and upgrade costs.

SPECIFICATIONS / RATINGS

Applications	Jetted microduct deployment, installed in microducts or partially filled duct
Constructions	Stranded dielectric loose tube/specialized jacket and construction
Fiber Count	12 to 864 fibers in color-coded buffer tubes
Fiber Types	Bend-insensitive SMF
Options	Tonewire
Standards	ANSI / ICEA 744, IEC 60794, RUS, GR-20
Performance	BABA Compliance available upon request
Registered Supplier	ISO 9001, ISO 14001, TL 9000, and OHSAS 18001



FEATURES AND BENEFITS

Optimal Jetting Performance

- Reduced size and weight for installation in microduct
- Up to 65% reduction in cross-section vs. conventional
- Demonstrated results of more than 1-1/4 miles (single) and 6 miles (cascaded)
- Simple and standard loose tube entry via ripcords, swellable binders, and flexible buffer tubes

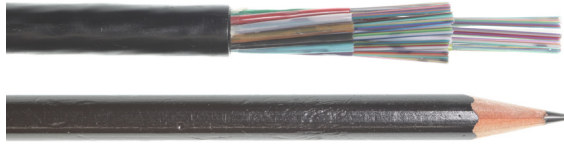
Industry-Leading Fiber Density

- Up to 864 fibers in a single, 14mm ID duct
- Smaller ducts, vaults and equipment
- Reduced carbon footprint

Reduced Total Installed Cost

- Reduce total Installed Cost
- Defer CAPEX by maximizing duct utilization
- Reduce installation and upgrade costs
- Minimize disruption to underground infrastructure
- Quick installation - long lengths and high speeds
- Allow use of ducts already containing cable
- Microduct options available with mid-span express buffer tube storage capabilities shown in the below table





A 432-count Sirocco^{HD} cable has a diameter similar to a pencil and will fit a 10mm ID microduct.

Minimum Microduct ID (mm)	Dielectric Fiber Count	Recommended Optical Fiber Count	Recommended All-Dielectric Part Number*	Tone Wire Option # Fibers (Gauge)	# Fibers Per Tube	Tube Size (mm)	SMF Max Express Tube Storage (ft)	Diameter		Approx. Cable Weight		Min. Bend Radius vs. Cable OD (Load)	Min. Bend Radius vs. Cable OD (No Load)	Tensile Max Limits lbf (N)	
								Inches	mm	lb/ft	kg/km			Install	Operation

Sirocco (250µm fiber)

8	12-72	12	MDM1JKT-12-AA-012-BB	20	12	1.55	6	0.22	5.7	20	30	20x	15x	156 (694)	52 (231)
		24	MDM1JKT-12-AA-024-BB											156 (694)	52 (231)
		48	MDM1JKT-12-AA-048-BB											156 (694)	52 (231)
		72	MDM1JKT-12-AA-072-BB											156 (694)	52 (231)
10	96	96	MDM1JKT-12-AA-096-BB	20	12	1.55	6	0.26	6.5	28	42	20x	15x	225 (1001)	75 (334)
10	120-144	144	MDM1JKT-24-AA-144-BB	19	24	2.2	6	0.30	7.7	36	50	20x	15x	300 (1334)	90 (400)
12	108-144	144	MDM1JKT-12-AA-144-BB	20	12	1.55	8	0.35	8.6	43	65	20x	15x	300 (1334)	90 (400)
13	156-288	288	MDM1JKT-12-AA-288-BB	20	12	1.55	8	0.41	10.1	61	92	20x	15x	300 (1334)	90 (400)

Sirocco^{HD} (200µm fiber)

7	96	8x12	MDH1JKT-12-AA-096-BB	--	12	1.1	16	0.19	4.7	13	20	20x	15x	112 (498)	34 (151)
8	144	12x12	MDH1JKT-12-AA-144-BB	--	12	1.1	16	0.23	5.9	20	30	20x	15x	112 (498)	34 (151)
8	192	8x24	MDH1JKT-24-AA-192-BB	--	24	1.4	16	0.24	6	23	35	20x	15x	112 (498)	34 (151)
10	288	24x12	MDH1JKT-12-AA-288-BB	--	12	1.1	16	0.31	7.9	36	53	20x	15x	112 (498)	34 (151)
10	288	12x24	MDH1JKT-24-AA-288-BB	20	24	1.4	16	0.31	8	42	57	20x	15x	112 (498)	34 (151)
10	432	18x24	MDH1JKT-24-AA-432-BB	--	24	1.4	16	0.31	8	40	60	20x	15x	112 (498)	34 (151)
12	576	24x24	MDH1JKT-24-AA-576-BB	--	24	1.4	16	0.37	9.5	55	81	20x	15x	112 (498)	34 (151)
14	864	24x36	MDH1JKT-36-AA-864-BB	--	36	1.7	16	0.43	11.0	72	107	20x	15x	112 (498)	34 (151)

Sirocco^{XT} (180µm fiber)

10	576	24x24	MDT1JKT-24-1X-576-E7	--	24	1.28	16	0.32	8	44	66	20x	15x	112 (498)	34 (151)
14	864	24x36	MDT1JKT-36-1X-864-E7	--	36	1.5	16	0.37	9.8	59	88	20x	15x	112 (498)	34 (151)

Part Number Family	Dielectric Fiber Count	Temperature Range		Compression	Impact	Tube Size (mm)	Mid-Span Access Tool	Maximum Reel Length	
		Operating °F (°C)	Installation °F (°C)					Feet	Meters

Sirocco (250µm fiber)

MDM1JKT-12-AA-012-BB	12-72	-22 to +158 (-30 to +70)	+5 to +122 (-15 to +50)	1000N/100mm	2J, R=300mm	1.55	CUS10003949	41,010	12,500
MDM1JKT-12-AA-024-BB		-22 to +158 (-30 to +70)	+5 to +122 (-15 to +50)	1000N/100mm	2J, R=300mm	1.55	CUS10003949	41,010	12,500
MDM1JKT-12-AA-048-BB		-22 to +158 (-30 to +70)	+5 to +122 (-15 to +50)	1000N/100mm	2J, R=300mm	1.55	CUS10003949	41,010	12,500
MDM1JKT-12-AA-072-BB		-22 to +158 (-30 to +70)	+5 to +122 (-15 to +50)	1000N/100mm	2J, R=300mm	1.55	CUS10003949	41,010	12,500
MDM1JKT-12-AA-096-BB	96	-22 to +158 (-30 to +70)	+5 to +122 (-15 to +50)	1000N/100mm	2J, R=300mm	1.55	CUS10003949	41,010	12,500
MDM1JKT-24-AA-144-BB	144	-22 to +158 (-30 to +70)	+14 to +122 (-10 to +50)	100N/cm	4.4 N/cm	2.2	CUS10003948	41,010	12,500
MDM1JKT-12-AA-144-BB	144	-22 to +158 (-30 to +70)	+5 to +122 (-15 to +50)	1000N/100mm	2J, R=300mm	1.55	CUS10003949	41,010	12,500

Sirocco^{HD} (200µm fiber)

MDH1JKT-12-AA-096-BB	96	-22 to +158 (-30 to +70)	+14 to +122 (-10 to +50)	1000N/100mm	2J, R=300mm	1.1	--	41,010	12,500
MDH1JKT-12-AA-144-BB	144	-22 to +158 (-30 to +70)	+14 to +122 (-10 to +50)	1000N/100mm	2J, R=300mm	1.1	--	41,010	12,500
MDH1JKT-24-AA-144-BB	192	-22 to +158 (-30 to +70)	+14 to +122 (-10 to +50)	1000N/100mm	2J, R=300mm	1.4	--	41,010	12,500
MDH1JKT-12-AA-288-BB	288	-22 to +158 (-30 to +70)	+14 to +122 (-10 to +50)	1000N/100mm	2J, R=300mm	1.1	--	41,010	12,500
MDH1JKT-24-AA-288-BB	288	-22 to +158 (-30 to +70)	+14 to +122 (-10 to +50)	1000N/100mm	2J, R=300mm	1.4	--	41,010	12,500
MDH1JKT-24-AA-432-BB	432	-22 to +158 (-30 to +70)	+14 to +122 (-10 to +50)	1000N/100mm	2J, R=300mm	1.4	--	41,010	12,500
MDH1JKT-24-AA-576-BB	576	-22 to +158 (-30 to +70)	+14 to +122 (-10 to +50)	1000N/100mm	2J, R=300mm	1.4	--	41,010	12,500
MDH1JKT-36-AA-864-BB	864	-22 to +158 (-30 to +70)	+14 to +122 (-10 to +50)	1000N/100mm	2J, R=300mm	1.7	--	41,010	12,500

Sirocco^{XT} (180µm fiber)

MDT1JKT-24-1X-576-E7	576	-22 to +158 (-30 to +70)	+14 to +122 (-10 to +50)	1000N/100mm	2J, R=300mm	1.28	--	41,010	12,500
MDT1JKT-36-1X-864-E7	864	-22 to +158 (-30 to +70)	+14 to +122 (-10 to +50)	1000N/100mm	2J, R=300mm	1.5	--	41,010	12,500

* Where AA equals glass type and BB equals attenuation

Sirocco™

Jetted Microduct Loose Tube Cable



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: Sirocco microduct cable, single jacket dielectric (12 fibers/tube) with 72 single-mode fibers (printed in feet)

1	LENGTH MARKINGS	2	PRODUCT FAMILY	3	CONSTRUCTION	4	FIBER GROUPING	5	FIBER TYPE	6	FIBER COUNT	7	FIBER GRADE	8	OPTIONAL TONE WIRE
	F		MDM		1JKT		12		B1		072		E3		BLANK

PART NUMBER CONSTRUCTION	
1	LENGTH MARKINGS
F = Feet, M = Meters or B = BABA Compliant in Feet	
2	PRODUCT FAMILY
MDM = Sirocco with 1.5 mm 12f tubes (Fiber Types B1 or B2 only)	
MDM = Sirocco with 2.2 mm 24f tubes (Fiber Types B1 or B2 only)	
MDH = Sirocco ^{HD} with 1.1mm 12f tubes (Fiber Types 22 or 2X only)	
MDH = Sirocco ^{HD} with 1.4mm 24f tubes (Fiber Types 22 or 2X only)	
MDH = Sirocco ^{HD} with 1.7mm 36f tubes (Fiber Type 2X only)	
MDT = Sirocco ^{XT} with 1.28mm 24f tubes (Fiber Type 1X only)	
MDT = Sirocco ^{XT} with 1.5mm 36f tubes (Fiber Type 1X only)	
3	CONSTRUCTION
1JKT = Single Jacket	
4	FIBER GROUPING
12 = 12f per tube	
24 = 24f per tube (the 2nd 12f grouping is band-marked for easy identification)	
36 = 36f per tube (the 2nd & 3rd 12f groupings are band-marked for easy identification)	

FIBER INFORMATION		
5	FIBER TYPE	
SINGLE-MODE		
B1 = Bend-Insensitive Single-Mode (ITU G.657.A1 & G.652.D)		
B2 = Bend-Insensitive Single-Mode (ITU G.657.A2 & G.652.D)		
22 = 200 um Bend-Insensitive Single-Mode (ITU G.657.A2 & G.652.D)		
2X = Draka BendBrightXS 200um Single-Mode (ITU G.657.A2 & G.652.D)		
1X = Draka BendBrightXS 180um Single-Mode (ITU G.657.A2 & G.652.D) (576f Sirocco ^{XT})		
6	FIBER COUNT	
012 to 864 fibers		
7	FIBER GRADE	
SINGLE-MODE		
Attenuation (dB/km)	Wavelength (nm)	Fiber Type
E1 <= 0.40/0.40/0.30 (Max) Typical: 0.34/0.34/0.19	1310/1383/1550	All types
E3 <= 0.35/0.35/0.25 (Max) Typical: 0.33/0.33/0.19	1310/1383/1550	B1 or B2 (250µm) 22 or 2X (200µm)
E7 <= 0.40/0.40/0.30	1310/1383/1550	1X (576f and 864f Sirocco ^{XT})
8	TONE WIRE OPTIONS (See table on page two)	
19AWG = one 19AWG tone wire		
20AWG = one 20AWG tone wire		

Other cable constructions and fiber performance grades available on request.