

Miniflex® Bulk Fiber Cable

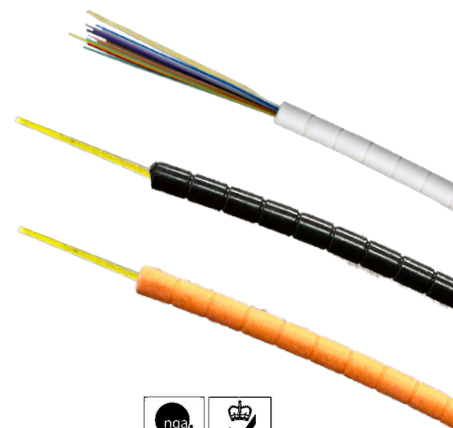


Features & Benefits

- Ruggedized indoor/outdoor microcable with Miniflex® grooving technology
- Optimal combination of size, crush resistance, flexibility & fiber density
- Best-in-class push/pull and blow-ability
- Small bend radius – down to 5x outside diameter
- Loose tube, gel free construction with 1-24 fibers
- Available in UL 1651 Riser (FT4) and Plenum (FT6)
- UV stable in all colors, with black offering the highest UV stability
- Tough enough for clipping, stapling, and gluing

Compatibility

- Field Splice and Lab Terminations
 - 900µ for MSOC and 250µ for splice tray applications
- QuikPush® (SC & LC), and most other industry standard pre-terminated connector configurations, including MPO and HFOC



- BABA compliant options available



Overview

Miniflex® bulk cable is an indoor/outdoor pushable/pullable/blowable cable that has exceptionally low weight for the level of strength and protection it provides. Because of the Miniflex grooving technology, this ruggedized cable is ultra flexible and won't easily kink like many fiber cables, which makes handling the optical fiber much safer. No special expertise or installation tools are required to push/pull the Miniflex cable through most raceways or microducts.

Applications

- FTTH/FTTX – Indoor & Outdoor
- MDU & Rural Broadband Single-Dwelling Units
- Telecoms, Data Infrastructure and Transportation

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Technical Data

	Cable Jacket O.D.	Nominal Weight	Tension Strength	Crush Resistance			Minimum Bend Radius	
				Recoverable Jacket Damage	<0.05 dB Attenuation	Optical Signal Loss	Installation	Operation
	mm	kg/km (lb/kft)	N (lbf)	N (lbf)	N (lbf)	N (lbf)	mm	mm
PBIO	2.2	6.0 (4.0)	100(23)	1500(337)	3000(674)	>3500(787)	22	11
	3	8.1 (5.4)	100(23)	1500(337)	2900(652)	>3400(764)	30	15
	4.3	14.5 (9.7)	200(45)	1500(337)	3200(719)	>4000(899)	43	22
Plenum	4	11.5 (7.9)	100(23)	290(65)	750(169)	2000(450)	41	21

Toneable cables use a 33 AWG Copper Clad Toning Wire.

	Installation Temperature Range	Operation Temperature Range
	°C (°F)	°C (°F)
PBIO	-20 to 60 (-4 to 140)	-40 to 70 (-40 to 158)
Plenum	-40 to 70 (-40 to 158)	-40 to 70 (-40 to 158)

Fiber Transmission Performance Specification

Item	Single-mode 250µm	Single-mode 900µm	Multi-mode	
Specification	G657 A1	G657 A2	OM3	OM4
Attenuation (850 / 1300 nm)	n/a	n/a	3.5/1.5 dB/km	3.5/1.5 dB/km
Attenuation (1310 / 1550 nm)	0.4/0.3 dB/km	0.4/0.3 dB/km	n/a	n/a
Attenuation at 1383nm	≤ 0.32 dB/km	n/a	n/a	n/a
Attenuation at 1625 nm	< 0.24 dB/km	< 0.24 dB/km	n/a	n/a
Refractive Index at 1310nm, 1550nm	1.467, 1.468	1.467, 1.468	n/a	n/a
Refractive Index at 850nm, 1300nm	n/a	n/a	1.482, 1.477	1.482, 1.477
Proof test	0.69 GPa (100 kpsi), 1% min.	0.69 GPa (100 kpsi), 1% min.	0.69 GPa (100 kpsi), 1% min.	0.69 GPa (100 kpsi), 1% min.
Cladding diameter	125 ± 0.7µm	125 ± 0.7µm	125 ± 1.0µm	125 ± 1.0µm
Coated diameter	235µm to 245µm	235µm to 245µm	237µm to 247µm	237µm to 247µm
Core/Cladding concentricity error	≤ 0.5µm	≤ 0.5µm	≤ 1.0µm	≤ 1.0µm
Coating concentricity error	≤ 12µm	≤ 12µm	≤ 6µm	≤ 6µm
Macro bend loss	(1550 nm)	(1550 nm)	(850 and 1300 nm)	(850 and 1300 nm)
10 turns at 50mm diameter	≤ 0.01 dB	n/a	≤ 0.2 dB	≤ 0.2 dB
10 turns at 15 mm diameter	≤ 0.2 dB	≤ 0.01 dB	n/a	n/a
1 turn at 10mm diameter	≤ 0.2 dB	≤ 0.50 dB	n/a	n/a
Temp. range (operation) -60°C to 85°C (-76°F to 185°F)	max attenuation change ≤ 0.05 dB/km	max attenuation change ≤ 0.05 dB/km	max attenuation change ≤ 0.05 dB/km	max attenuation change ≤ 0.05 dB/km
Coating Strip Force	1.3 to 8.9 N	1.3 to 8.9 N	1.3 to 8.9 N	1.3 to 8.9 N

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Ordering Information - 900μ | Best for MSOC Termination

Example		xx		-		xF		-		xxx		-		xxxx		-		xxx		xx		xxx		xx		xxxxx	
Character		1				2				3				4				5		6		7		8		9	

1. Product Type

MX = Miniflex
BMX = BABA Miniflex

2. Fiber Count

1 fiber

3. Jacket Size

3mm
4mm

4. Fiber Size

900μ

5. Fiber Type

A2
OM4
OM3

6. Jacket Material

PBIO = Indoor/Outdoor PBT
PVDF = Plenum*

**Plenum is currently only available in 4mm white jacket. Other colors available upon request*

7. Color

BLK = Black**
WHT = White***
ORG = Orange

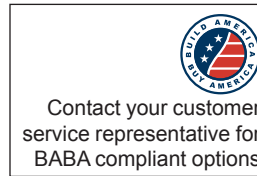
** Black is UV stable for outdoor use
*** White is Riser Rated

8. Tone Wire

BLANK = No tonewire
TW = Tone wire

9. Length

1KM
2KM
6500FT
3280FT
1000FT
1500FT
2000FT



Ordering Information - 250μ | Best for Splice Tray Applications

Example		xx		-		xxF		-		xxx		-		xxxx		-		xxx		xx		xxx		xx		xxxxx	
Character		1				2				3				4				5		6		7		8		9	

1. Product Type

MX = Miniflex
BMX = BABA Miniflex

2. Fiber Count

1-24 fiber(s)

3. Jacket Size

2.2mm (up to 4 fiber)
3mm (up to 12 fiber)
4mm (up to 24 fiber)
4.3mm* (24 fiber)
**(Riser Only)*

4. Fiber Size

250μ

5. Fiber Type

A1
OM4
OM3

6. Jacket Material

PBIO = Indoor/Outdoor PBT
PVDF = Plenum*

**Plenum is currently only available in 4mm white jacket. Other colors available upon request*

7. Color

BLK = Black**
WHT = White***
ORG = Orange

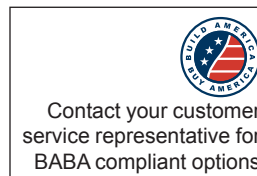
** Black is UV stable for outdoor use
*** White is Riser Rated

8. Tone Wire

BLANK = No tonewire
TW = Tone wire

9. Length

1KM
2KM
6500FT
3280FT
1000FT
1500FT
2000FT



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