

Miniflex® Standard Cable



Features & Benefits

- Fire Retardant
- UV Stabilized
- Features Miniflex® technology
- Lightweight/small diameter
- Grooving increases flexibility/bend radius
- Very high crush resistance
- Uses industry-standard fiber
- Ultra tough
- Class-leading combination of size, crush resistance, flexibility & fiber density

Compatibility

- ITU-T G.657 & G.651
- UL 2024 Optical Fiber Raceway
- Field splice and lab terminations
- Microduct – indoor, riser, plenum, outdoor, aerial & direct bury
- QuikPush® pre-terminated connector (SC & LC)



Overview

Miniflex® standard fiber cable is a flexible, pushable fiber optic cable made from a crush resistant, durable polymer. It has exceptionally low weight for the level of strength and protection it provides. Miniflex standard fiber cable is available with many different counts & types of fiber, including G.657A1 singlemode and G.651 OM3 multimode.

Applications

- FTTH/FTTX – Indoor & Outdoor
- Data Infrastructure
- Military
- Telecoms
- Rural Broadband
- Transportation
- DAS / FTTA

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Technical Data

Cable Material

Fiber Count	Weight	O.D.	Sheath Thickness	Tension Strength	Minimum Bend Radius		Crush
					Installation	Operation	
250µm	kg/km (lbs/kft)	mm (in)	mm (in)	n	mm (in)	mm (in)	n
1, 2, 4, 6, 8 & 12	8.1 (5.4)	3.0 (.1)	0.8 (.03)	100	15 (.6)	30 (1.2)	950
1 (900 µm)	8.1 (5.4)	3.0 (.1)	0.8 (.03)	100	15 (.6)	30 (1.2)	950
24	9.2 (6.1)	4.0 (.15)	0.7 (.027)	100	20 (.8)	40 (1.6)	650
Material	Properties				Best for		Color
PBT	Hardest & toughest outdoor material, some UV resistance				Indoor – (FR) & Outdoor – (UV stable)		Black*
Tone-able cables use a 33 AWG Copper Clad Toning Wire. *Other colors available upon request							
Operating Temp			Installation Temp				
°C (°F)			°C (°F)				
-40 to 70 (-40 to 158)			-20 to 60 (-4 to 140)				

Fiber Transmission Performance Specification

Item	Single-mode	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 ± 0.7 µm	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	≤ 0.5 µm	≤ 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	≤ 0.03 dB	n/a	n/a
1 turn at 10mm diameter	≤ 0.2 dB	≤ 0.10 dB	n/a	n/a
1 turn at 7.5mm diameter	n/a	≤ 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 ≤ 0.1 dB/km	max attenuation change ≤ 0.1 dB/km
Coating Strip Force	1.3 to 8.9 N		1.3 to 8.9 N	1.3 to 8.9 N

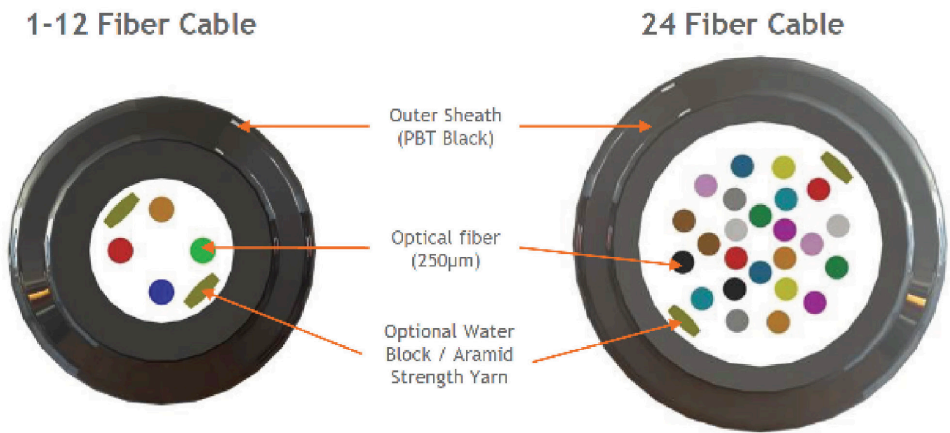
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Standard Cable



Technical Data

Fiber Cable Design



Ordering Information: Code Builder

Example	TNCA	-	2	-	4.0-24-PBT	-	BLK	-	1000	G657A1	TW
Character	1		2		3		4		5	6	7

1. Product Type
TNCA = Fiber Cable

2. Fiber Size
2 = 250µm
9 = 900µm

3. Unique Product Code
3.0-01-PBT = 1 fiber
3.0-02-PBT = 2 fibers
3.0-04-PBT = 4 fibers
3.0-08-PBT = 8 fibers
3.0-12-PBT = 12 fibers
4.0-24-PBT = 24 fibers

4. Color
BLK = Black
(check availability)

5. Length
1000 = 1000 ft / 305 m
6500 = 6500 ft / 2 km

6. Fiber Type
G657A1
G657A2
OM3
OM4

7. Length
BLANK = Standard
TW = Add toning wire