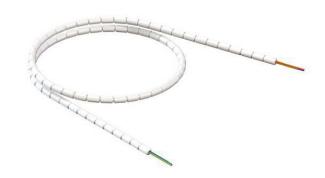
# Miniflex® 2mm Fiber Cable



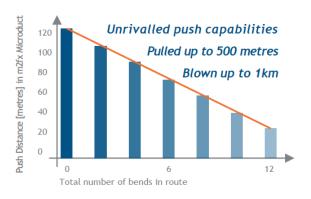
The 2mm Miniflex® fiber cable is a strong, rugged, flexible optical cable that's suitable in a wide variety of FTTx applications.

Made from a crush resistant and flame retardant polymer, 2mm Miniflex® combines ultra-light weight, strength and flexibility to maximize the security and versatility of single-mode and multimode optical fiber.



## **Install Performance**

Method	Without Bends (metres)	With < 8 x °90 Bends (metres)		
Push	125	60		
Push +Air	250	125		
Pull	500	250		
Blown	1000	500		



#### **Advantages**

- Small diameter installs into >Ø3.5mm I.D. microducts
- Push, pull or blow up to 1km
- Ultra-tough, flame retardant polymer
- Features Miniflex® grooved technology for high flexibility
- Light-weight loose-tube construction
- Single mode or multimode 1 to 4 fibers
- Easy to strip and splice
- Can be pre-terminated (SC, LC)

#### **Compatibility List**

- ITU-T G.657A1 single-mode & G.651 multimode
- Fusion and mechanical splice
- Pre-terminated including QuikPush®
- PPC & 3rd party microduct and drop tube







### **Applications**

- FTTx blown fiber
- MDU pushable fiber
- Rural broadband and SDU deployments
- •Data infrastructure & campus networks

Suitable for pre-termination or field splicing, the 2mm Miniflex® fiber cable is easy to handle and requires no special fiber training. It can still be blown using more traditional fiber deployment techniques, or for shorter distances, can be pushed and pulled using straightforward handheld methods.

For blown installations, the 2mm Miniflex® cable can be installed using pushing machines at relatively low floatation pressure (5 Bar), or using more traditional high pressure blowing equipment at 15 Bar. Installed without air-assistance, the 2mm Miniflex® cable is industry-leading at being pushed or pulled through microducts and conduits.

By virtue of the high crush resistance and bend radius protection, the 2mm Miniflex® cable also suits direct fixing applications using standard cable management hardware and practice.

# Miniflex® 2mm Fiber Cable



Transmission Performance Specification							
Item	Single mode	Multimode					
Specification	G657 A1	G.651 OM3					
Attenuation (850 / 1300 nm)	n/a	3.5/1.5 dB/km					
Attenuation (1310 / 1550 nm)	0.4/0.3 dB/km	n/a					
Refractive Index at 1310nm, 1550nm	1.467, 1.468	n/a					
Refractive Index at 850nm, 1300nm	n/a	1.482, 1.477					
Proof test	0.69 GPa (100 kpsi), 1% min.	0.69 GPa (100 kpsi), 1% min.					
Cladding diameter	$125 \pm 0.7 \mu m$	125 ± 1.0μm					
Coated diameter	235μm to 245μm	237μm to 247μm					
Core/Cladding concentricity error	≤ 0.5µm	≤ 1.0µm					
Coating concentricity error  Macro bend loss	≤ 12μm (1550 nm)	≤ 6µm (850 and 1300 nm)					
10 turns at 50mm diameter	≤ 0.01 dB	≤ 0.2 dB					
10 turns at 30mm diameter	≤ 0.2 dB	n/a					
1 turn at 20mm diameter	≤ 0.2 dB	n/a					
Temp. range (operation) -60°C to +85°C	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					

Cable Material Information								
Fiber Count	Weight	OD	Max, Tension Load	Minimum Bend Radius	Crush	Impact Resistance		
250μm	(kg/km)	(mm)	(n)	(mm)	(n)	(N/m)		
1, 2, 4,	4.0	2.2	100	22	650	1		
Material	Properties		Best for	Color	Operating Temp	Installation Temp		
PBT	Hardest & toughest indoor material, flame retardant		Indoor	White*	-20°C to +65°C	-20°C to +50°C		

<sup>\*</sup> Other colors available upon request

# Fiber Cable Design

