

# Miniflex<sup>®</sup> Fiber Cable - QuikPush<sup>®</sup>



The Miniflex<sup>®</sup> QuikPush<sup>®</sup> cable is a flexible, pushable pre-terminated fiber optic drop solution for fast and reliable FTTx deployments. At just 3mm outer diameter [ $<1/8$  inch], the Miniflex<sup>®</sup> drop cable is also one of the smallest cables in the industry.

Manufactured using the patented Miniflex<sup>®</sup> grooving process and utilizing the Balistix pushable connector technology, the Miniflex<sup>®</sup> QuikPush<sup>®</sup> cable has a number of advantages over alternative last-drop solutions.

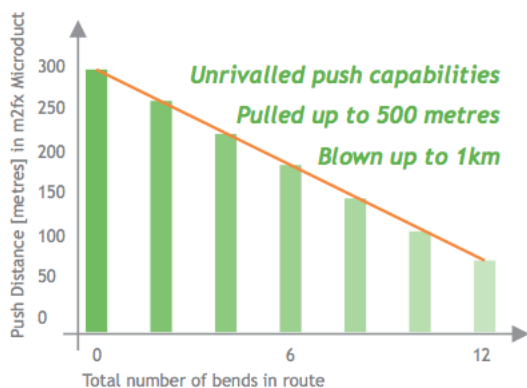


## Applications

- FTTH/FTTX – Indoor & outdoor drops
- Single dwelling and MDU
- FTTP and campus networks
- Telecoms
- Rural broadband
- DAS / FTTA

## Specifications

- ITU-T: G.657, & G.651
- NEC: UL 1651 – Field assembled cable
- IEC: 60794-1-2, 60332-2-2
- REACH & RoHS compliant



## Advantages

- Pre-terminated – so no field splicing/mechanical termination
- Guaranteed Insertion loss/return loss with certification
- Installs inside microducts with  $>\text{Ø}5.5\text{mm}$  I.D
- Industry standard SC connector format
- Single-mode UPC, APC or multimode options
- Fire resistant and LSZH materials available
- Features Miniflex<sup>®</sup> bend limiting technology
- Ultra light-weight
- High crush resistance
- Low friction outer sheath
- Inherent kink resistance
- Small round concentric design



Reducing the industry standard SC connector diameter from more than  $\text{Ø}11\text{mm}$  to less than  $\text{Ø}5\text{mm}$  means the QuikPush<sup>®</sup> cable is optimized for installing through the small spaces that are typical of most FTTx scenarios. QuikPush<sup>®</sup> can be installed without using large conduits or drilling big holes through the customer's wall. At the other end of the drop cable, the connector options are unlimited; including SC, LC, FC, Balistix SC [QuikPush<sup>®</sup>] and even no connector.

QuikPush<sup>®</sup> can be successfully pushed through  $\text{Ø}5\text{mm}$  holes and microduct bores as small as  $\text{Ø}5.5\text{mm}$ . Hand push distances vary according to bend frequency and duct quality; e.x. Miniflex<sup>®</sup> QuikPush<sup>®</sup> combined with microduct exceeds 100 meters in a route with 8 x 90° bends. With air assistance, the route can be extended to 12 x bends and up to 1km.

The rugged nature of the Miniflex<sup>®</sup> cable, in tandem with the QuikPush<sup>®</sup> pre-terminated connector, reduces the cost of fiber deployments as well as the intrinsic skill and difficulty of handling and connecting customer drop cables.

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### Cable Material Information

Fiber Count	Weight	OD	Sheath Thickness	Tension Strength	Impact Resistance	Minimum Bend Radius	
						Installation	Operation
250µm	(kg/km)	(mm)	(mm)	(n)	(J)	(mm)	(mm)
1, 2, 4, 6, 8 & 12*	7-8	3.0	0.8	100	2	15	30

\* only the first fiber is terminated, all other fibers remain dark

Material	Applications	Fire Rating	Color	Operating Temp	Crush
PBT	Indoor - Outdoor	UL 1651 OFNG General Use & OFNR* Riser IEC 60332-2-2	Black**	-40°C to +80°C	950N
PA12	Indoor	Indoor - (LSZH)	White**	-30°C to +70°C	650N

\* Other colors available upon request \*\*Other colors available upon request

### Transmission Performance Specification

Item	Single mode	Multi-mode
Specification	G657A1	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
Attenuation at 1625 nm	< 0.24 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 ± 0.7µm	125 ± 1.0µm
Coated diameter	235µm to 245µm	237µm to 247µm
Core/Cladding concentricity error	≤ 0.5µm	≤ 1.0µm
Coating concentricity error	≤ 12µm	≤ 6µm
Macro bend loss	(1550 nm)	(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 ≤ 0.05 dB/km	max attenuation change ≤ 0.1 dB/km
Coating Strip Force	1.3 to 8.9 N	1.3 to 8.9 N

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## QuikPush<sup>®</sup> Cable Design

