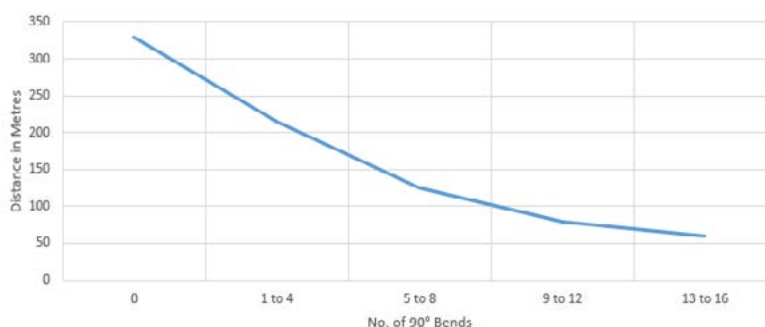# QuikPush® Cable Assembly LC Balistix™ Connector

## Features & Benefits

- ITU-T: G657A1 & A2
- UL Riser rated and CPR certified
- Complies with IEC 60794-1-2
- REACH & RoHS compliant
- Pre-terminated – so no field splicing/mechanical termination
- Guaranteed Insertion loss/return loss with certification
- Installs inside microducts with bores as small as 3.5 mm (0.14 in) I.D.
- Industry-standard LC Balistix™ connector (SC also available)
- Single-mode UPC, APC or multi-mode options
- Features Miniflex® bend limiting technology
- Ultra light-weight
- High crush resistance
- Low friction outer sheath
- Inherent kink resistance
- Small round concentric design

## Overview

PPC's QuikPush® cable assembly is a flexible, pushable pre-terminated fiber optic drop solution that utilizes our Miniflex fiber cable and allows for connectorization on one or both ends. QuikPush has a number of advantages over alternative last-drop solutions for fast and reliable FTTX deployments: Miniflex fiber cable and Balistix connectors. At just 2.2 mm outer diameter, the Miniflex fiber cable is one of the smallest cables in the industry. Miniflex cable can be installed easily and quickly by pushing, pulling or blowing. PPC's Balistix pushable connectors enable the pre-connectorized fiber cable to be installed through microducts and small holes that are typical of most FTTX scenarios. PPC's connector options are unlimited, including SC; LC; FC; Balistix LC and SC; and no connector.



QuikPush cable assemblies can be successfully pushed through 4 mm (0.16 in) holes and microduct bores as small as 3.5 mm (0.14 in). Hand push distances vary according to bend frequency and duct quality. For example, QuikPush, combined with PPC microduct, exceeds 100 m (328 ft) in a route with 8 x 90° bends. With air assistance, the route can extend to 12 x bends and up to 1 km (3,280 ft). The rugged nature of the QuikPush cable assembly reduces the cost of fiber deployments as well as the skill and difficulty of handling and connecting customer drop cables.

## Applications

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

This product may be protected by one or more patents • For further information, please visit: www.ppc-online.com/patents

## Technical Data

### Mechanical Performance

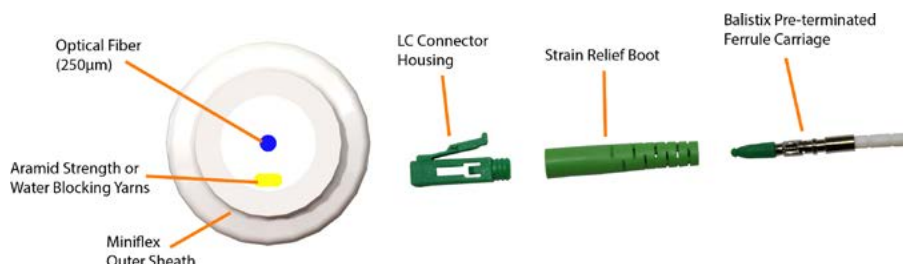| Fiber Count | Weight | O.D. | Sheath Thickness | Tension Strength | Crush | Minimum Bend Radius | |
|---|---|---|---|---|---|---|---|
| | | | | | | Installation | Operation |
| *250µm* | *kg/km (lbs/km)* | *mm (in)* | *mm (in)* | *N (lb)* | *N (lb)* | *mm (in)* | *mm (in)* |
| 1, 2 & 4* | ~4 (~8.8) | 2.2 (.09) | 0.5 (.02) | 100 (22) | 1500 (337) | 11 (.4) | 22 (0.9) |

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

| Material | Applications | Fire Rating | Color | Operating Temp |
|---|---|---|---|---|
| | | EN / UL | | *°C (°F)* |
| PBIO | Indoor-Outdoor | Cca / Riser | White | -30 to 70 (-22 to 158) |

### Transmission Performance Specification

| Item | Single-mode | Single-mode 900µm |
|---|---|---|
| Specification | G657 A1 | G657 A2 |
| Attenuation (850 / 1300 nm) | n/a | n/a |
| Attenuation (1310 / 1550 nm) | 0.4/0.3 dB/km | 0.4/0.3 dB/km |
| Attenuation at 1383nm | ≤ 0.32 dB/km | n/a |
| Attenuation at 1625 nm | < 0.24 dB/km | < 0.24 dB/km |
| Refractive Index at 1310nm, 1550nm | 1.467, 1.468 | 1.467, 1.468 |
| Refractive Index at 850nm, 1300nm | n/a | n/a |
| Proof test | 0.69 GPa (100 kpsi), 1% min. | 0.69 GPa (100 kpsi), 1% min. |
| Cladding diameter | 125 ± 0.7µm | 125 ± 0.7 µm |
| Coated diameter | 235µm to 245µm | 235µm to 245µm |
| Core/Cladding concentricity error | ≤ 0.5µm | ≤ 0.5 µm |
| Coating concentricity error | ≤ 12µm | ≤ 12µm |
| Macro bend loss | (1550 nm) | (1550 nm) |
| 10 turns at 50mm diameter | ≤ 0.01 dB | n/a |
| 10 turns at 15 mm diameter | ≤ 0.2 dB | ≤ 0.03 dB |
| 1 turn at 10mm diameter | ≤ 0.2 dB | ≤ 0.10 dB |
| 1 turn at 7.5mm diameter | n/a | ≤ 0.50 dB |
| Temp. range (operation) -60°C to 85°C (-76°F to 185°F) | max attenuation change ≤ 0.05 dB/km | |
| Coating Strip Force | 1.3 to 8.9 N | |

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# QuikPush® Cable Assembly LC Balistix™ Connector



Optical Fiber (250µm)
Aramid Strength or Water Blocking Yarns
Miniflex Outer Sheath
LC Connector Housing
Strain Relief Boot
Balistix Pre-terminated Ferrule Carriage

## Ordering Information

### Example: QP12RIW22V5L550F (North America)

| QP | 1 | 2 | RI | W | 2 | 2 | V5 | L5 | 50 | F |
|---|---|---|---|---|---|---|---|---|---|---|
| QuikPush® | Number of Fibers | Cable Diameter | Material | Color | Fiber Diameter | Fiber Type | Outside Connector | Inside Connector | Length | Unit of Measure |
| QP | 1, 2, or 4* | 2 - 2mm | RI - Riser | W - white | 2 - 250um | 1 - G.657.A1 | V3 - LC Balistix™ UPC | XXX | F - Feet |
| | | | | | | 2 - G.657.A2 | V5 - LC Balistix APC | | M - Meters |
| | | | | | | | L3 - LC UPC | | |
| | | | | | | | L5 - LC APC | | |
| | | | | | | | NC - no connector | | |
| | | | | | | | S3 - SC UPC | | |
| | | | | | | | S5 - SC APC | | |
| | | | | | | | B3 - SC Balistix UPC | | |
| | | | | | | | B5 - SC Balistix APC | | |

*only first fiber is terminated

### Example: QP-013-PBIO-V5-WHT-LC5-A1-250-15M (Europe & ROW)

| QP | 01 | 2 | PBIO | V5 | WHT | LC5 | A1 | 250 | 15 | M |
|---|---|---|---|---|---|---|---|---|---|---|
| QuikPush | Number of Fibers | Cable Diameter | Material | Connector A | Color | Connector B | Fiber Type | Fiber Diameter | Length | Unit of Measure |
| QP | 1, 2, or 4* | 2 - 2.2 mm | PBIO - Cca | V3 - LC Balistix UPC | WHT - White | V3 - LC Balistix UPC | A1 - G.657.A1 | 250 - 250µm | XXX | M - Metres |
| | | | | V5 - LC Balistix APC | | V5 - LC Balistix APC | A2 - G.657.A2 | | | |
| | | | | SC3 - SC UPC | | SC3 - SC UPC | | | | |
| | | | | SC5 - SC APC | | SC5 - SC APC | | | | |
| | | | | LC3 - LC UPC | | LC3 - LC UPC | | | | |
| | | | | LC5 - LC APC | | LC5 - LC APC | | | | |
| | | | | NC - No Connector | | NC - No Connector | | | | |
| | | | | BC3 - SC Balistix UPC | | BC3 - SC Balistix UPC | | | | |
| | | | | BC5 - SC Balistix APC | | BC5 - SC Balistix APC | | | | |

*only first fiber is terminated



Connector A (On Top)
Connector B (Behind Floating Flange)