FTTH LC
Cable Assemblies

PPC®
A **BELDEN** BRAND

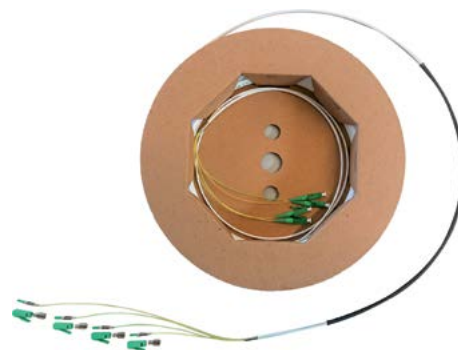## Features & Benefits

- Fast and simple last-drop FTTX deployments
- Push, pull or blow connector through micro-ducts
- Low skill-set required to install the product
- Uses stiffened cable for increased strength and rigidity
- High-performance ceramic ferrule and housing
- Available with up to 4 x connectors per cable
- Easy connector housing assembly with visible locking identification
- Low-loss optical performance

Overview

The FTTH Cable Assembly has been specifically designed to simplify and speed up the installation of fiber optic cables within SDU (Single Dwelling Units) and MDU's (Multi-Dwelling Units). By using this solution, operators can lower the required skill-set of their field technicians and reduce the amount of time it takes to connect a subscriber to the network.

The innovative aspect of this solution is that the outer-housing of the connector can be assembled to the ceramic ferrule after the connector has been blown, pushed or pulled through the micro-duct. This allows the connector to occupy less space inside the duct and subsequently improves the complete installation process. The traditional installation process requires a connectorized pigtail to be fusion-spliced to a cable with special fusion splicing machines. This costly and timely because FTTx operators generally only have a small percentage of their workforce with sufficient skills or tooling to do this.

Up to four connectors can be terminated on a single cable, allowing FTTx operators to provide spare fibers for other operator or for SMART applications in the future.

Applications

The blow-in connector system has been developed to avoid splicing work on cables with a small number of fibres. This will be the case in building networks, whether FTTH networks or LAN. Depending on the existing infrastructure, the LC blow-in cable system can also be pulled in or pushed in. The LC blow-in cable system increases the effectiveness of the installation in buildings.

Technical Data

Cable structure

Fiber Standard, Fibertyp	Fiber core diameter	Attenuation range		Cable diameter
		@1310 nm	@1550 nm	
	μm	db/km		mm
IEC 60793-2-10, G.657.A2	9/125/250	≤ 0,35	≤ 0,25	2,0 x 2,4

Temperature range during installation	Sheath color	Sheath material (inside/outside)	Fire protection class
°C			
-20 ~ +60	white	LSOH	$B2_{ca}$-S1,d0,a1

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Number of fibers	Bending radius		Permissible tensile force		Permissible pressure load	
	Operation	Max.	Operation	Installation	Longterm	Shortterm
	mm		N		N/dm	
2 or 4 (other variants on request)	10	40	100	250	1000	2000

Blow-In-Connector

Connector type	Ferrule Drilling-Ø	Ferrule OD / Material	Mating cycles	Temperature range	
				Operation	Storage
	µm	mm		°C	
LC/APC, LC/UPC (IEC 61754-20, TIA604-10-A)	125,5	Ø 1,25 / Ceramics SM	500	-40 to +75	-40 to +75

Ordering Information

Example   BABC- 0 4 -BC A - L C A -2L- 0 5 0 M
                 1   **2** **3** **4**   **5**   **6**

1 **Number of connectors (per side)**

01 = 1 connector
...
04 = 4 connector

2 **Blow-In Connector end face type**

U = UPC

A = APC

3 **Variable connector**

00 = No connector/open end

SC = SC simplex connector

LC = LC simplex connector

4 **Variable connector end face type**

0 = No connector/open end

U = UPC

A = APC

5 **Total length**

001 = 1 m

...

999 = 999 m

6 **Version**

without = Blow-In Version

-P = Pull-in version with towing eye