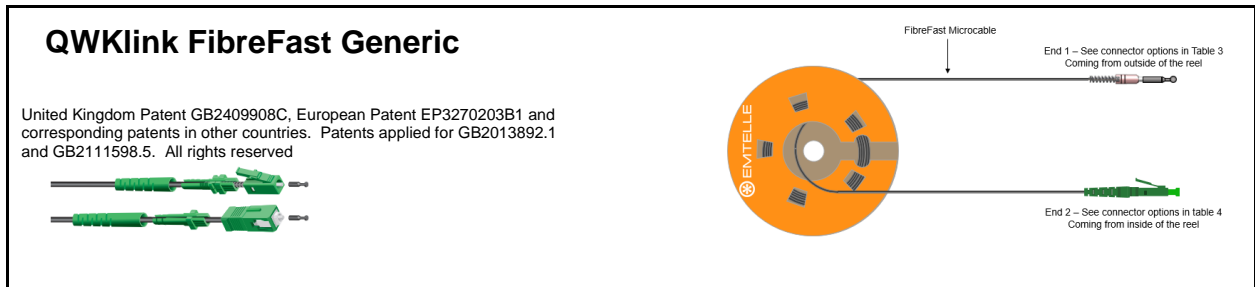


# Specification

## UK\_DS\_QWKlink FibreFast Generic

Issue 1 17th Sept 2024  
John McDevitt  
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### Product Description

QWKlink is a pre-connectorised FibreFast bundle which allows for fibre connectors on both ends, eliminating the need for any splicing for FttX connections.

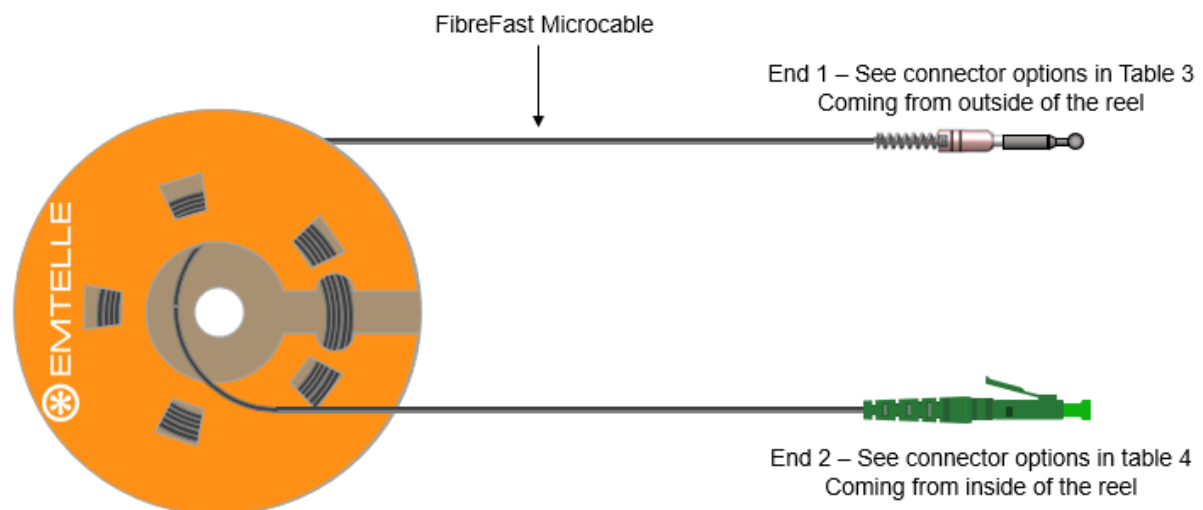
### Application

The fibre bundle can have either a 'blowable' LC APC or 'blowable' SC APC ferrule on the end of the fibre bundle, which can be blown through a 3.5mm bore microduct or larger. Installation distances by means of blowing can reach up to 700m (depending on compressor spec), so the QWKlink solution is ideally suited for Urban and Rural FttX applications. Once the LC or SC ferrule has been blown, the field fitted connector components can be easily and quickly assembled.

The 'non-blown end' of the fibre bundle can be terminated with an LC APC or SC APC connector as per requirements. The Ø1.05mm diameter of the fibre bundle allows for storage of any excess fibre bundle at the customer connection point.

Emtelle's fibre bundle is renowned for its excellent blowing performance and adding a blowable pre-terminated connector is the 'ultimate' next stage for reducing FttX costs.

### Product Details



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# Specification

## UK\_DS\_QWKlink FibreFast Generic

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1. Fibre Count Options (Note that only one fibre is connectorized)	
2f	4f

2. Fibre Type Options ITU-T		
G.652.D	G.657.A1	G.657.A2

3. Connector End 1 Options	
SCv/APC	SCv/UPC
LCv/APC	LCv/UPC
BARE	-

4. Connector End 2 Options	
SC/APC	SC/UPC
SCv/APC	SCv/UPC
LC/APC	LC/UPC
LCv/APC	LCv/UPC

### Notes

'v' denotes ferrule is blowable type and field assembled.

For alternative lengths, fibre, and connector types please check with your Emtelle representative for availability.

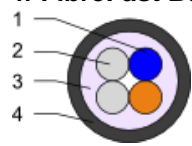
1. Fibre Length Options							
25m	50m	75m	100m	125m	150m	175m	200m
225m	250m	275m	300m	350m	400m	450m	500m

Below is an example of how to build the product description required for pricing and product code selection by Emtelle representative.

**[1. Fibre Count] - [2. Fibre Type] - [3. Connector End 1] to [4. Connector End 2] – [5. Fibre Length]**

**2f - G.657.A1 - LCv/APC to LC/APC – 175m**

### FibreFast Bundle Technical Data

<p><b>Construction</b></p> <p>1: Optical Fibre 2: Filler (mechanical fibre) 3: Encapsulation 4: Low friction sheath</p>	<p><b>2f or 4f FibreFast Bundle</b></p> 
Outer diameter (nominal)	1.05 mm
Mass (nominal)	1.0 g/m
Specification	Refer to MHT2811

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### LCv Field

#### Terminated Connector Technical Data

LC Venturi Simplex Connector	Specification
Standards	TIA/EIA 604-10A & IEC 61754-20
Mechanical Latching	Latching [Pull Proof]
Applications	Telecom, OEM, FTTH
Ferrule	Zirconia 1.25mm
Ferrule Carriage	Stainless Steel
Ferrule Size	Singlemode ID 125.5um
LC Connector Body	PBT UL94 V0 Materials
Spring	Stainless Steel
Fibre Sizes	125um Cladding
Fibre Coatings	250um, 0.6mm, 0.9mm, 1.1mm
Connector Length	36mm
Mean Insertion Loss (random mating)	≤0.12dB (>97%)
Max Insertion Loss	≤0.25dB (against master core)
Return Loss	UPC >50dB, APC >60dB
Operating Temperature	-40°C to +80°C
Durability [Matings]	>500 [0.2db change]
Fibre/Cable Retention	20N

#### SCv Field Terminated Connector Technical Data

SC Venturi Simplex Connector	Specification
Standards	IEC 6087 4-1 4-9
Mechanical Latching	Latching
Applications	Telecom, OEM, FTTH
Ferrule	Zirconia 2.5mm
Ferrule Carriage	Stainless Steel MIM
Ferrule Size	Singlemode ID 125.5um
SC Connector Body	PBT and PEI [UL94 V0]
Spring	Stainless Steel
Fibre Sizes	125um Cladding
Fibre Coatings	250um, 0.6mm, 0.9mm, 1.1mm
Connector Length	36mm
Mean Insertion Loss	<0.12dB
Max Insertion Loss	0.25dB
Typical Return Loss	UPC >50dB, APC >60dB
Operating Temperature	-20°C to +70°C
Durability [Matings]	>500 [0.2db change]
Fibre/Cable Retention	10N

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### Standard Connector Technical Data

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Parameter	Requirement			
	SC/UPC	SC/APC 8°	LC/UPC	LC/APC 8°
Specification	IEC 60874	IEC 60874	IEC 61754	IEC 61754
Test Methods	IEC 61300	IEC 61300	IEC 61300	IEC 61300
Connector Body Colour	Blue	Green	Blue	Green
Connector Boot Colour	Blue	Green	Blue	Green
Insertion Loss, mean (dB)	<0.12	<0.12	<0.12	<0.12
Insertion Loss, maximum (dB)	0.25	0.25	0.25	0.25
Return Loss, typical (dB)	52	62	52	62
Return Loss, minimum (dB)	50	60	50	60
Temperature, in operation (°C)	-40 ~ +75			
Temperature, storage (°C)	-55 ~ +85			
Fibre/Cable Retention	10N			

### Installation and Handling

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Installation instructions will be specific to the type of termination point used. The user must Store the pre-connected reels in supplied containers/bags under dry and damp free conditions, until time of deployment.

Designed for installation into microducts with internal diameters from 3.5mm (LC) 4.0mm (SC) and upwards. Standard installation equipment may be used (eg Emtelle GS150, Fusion, Plummett EM25, PRM-196, and BT 2A), or other.

Follow up-to-date installation and handling recommendations as defined by the manufacturer.

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### Packaging and

#### Labelling

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QWKlink will be supplied on cardboard reels in lengths of up to 500m.

Each reel shall provide the following information:

- Product Code
- Description of the item within
- Product/batch tracking number
- Link Insertion loss figures

Cardboard Reels:

- Diameter (mm) - Ø235mm
- Storage compartment to provide protection for the connector and field terminated connector components.

### Change documentation

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JM