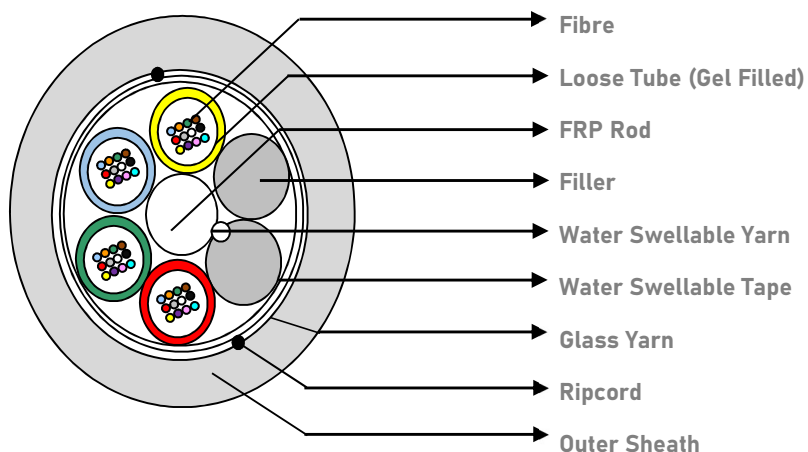


## Technical Specifications

### 48F Multitube Unarmoured OFC – Eca U-DQ(ZN)BH



#### Product Details

Optical Fibre containing elements laid up around central strength member
Water blocked loose tubes
Water blocked core interstices
Glass yarn as peripheral strength member
Polyethylene sheath as outer protection

#### Cable Construction

Parameter	Structure/Layout/Material
Fiber Count	48
Number of fibers per tube	12
Number of loose tubes - PBT	4
Number of fillers - HDPE - Black	2
Central Strength Member - FRP Rod	2.1 ± 0.1 mm
Moisture Barrier	Water Swellable yarn & Water Swellable tape
Peripheral Strength Member	Glass Yarn
Outer Sheath - LSZH - Black	---
Number of Ripcords - Polyester	2
Cable Diameter	10.0 ± 0.5 mm
Cable Weight	95 ± 10 kg/km

## Colour Coding

Fibre Colour DIN VDE 0888	Rd	Gr	Bl	Yl	Wh	Sl	Br	Vi	Aq	Bk	Or	Pk
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Tube Colour DIN VDE 0888	Rd	Gr	Bl	Yl
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## Cable & Fibre Characteristics

<b>Tensile Strength</b>	2400 N	IEC-60794-1-21-E1
<b>Crush Resistance</b>	1000 N	IEC-60794-1-21-E3
<b>Impact Strength</b>	10 N.m	IEC-60794-1-21-E4
<b>Torsion</b>	± 360 °	IEC-60794-1-21-E7
<b>Minimum Bend Radius</b>	20 x D	IEC-60794-1-21-E11
<b>Water Penetration Test</b>	1 m water head, 3m sample, 24 hours	IEC-60794-1-21-F5
<b>Environmental Performance</b>	Installation	-20 °C to + 70 °C
	Operation	-30 °C to + 70 °C
	Storage	-30 °C to + 70 °C
		IEC-60794-1-22-F5

<b>Fiber Type</b>	G.652D	
<b>Attenuation</b>	1310 nm	≤ 0.36 dB/km
	1550 nm	≤ 0.23 dB/km
<b>Chromatic Dispersion</b>	1285-1330 nm	≤ 3.5 ps/nm.km
	1550 nm	≤ 18 ps/nm.km
<b>PMD</b>	≤ 0.2 ps/√km	
<b>Cable cut off wavelength <math>\lambda_{cc}</math></b>	≤ 1260 nm	
<b>MFD</b>	1310 nm	9.2 ± 0.4 μm
	1550 nm	10.4 ± 0.5 μm
<b>Core-Cladding Concentricity Error</b>	≤ 0.5 μm	
<b>Cladding Diameter</b>	125 ± 0.7 μm	
<b>Cladding Non Circularity</b>	≤ 0.7 %	
<b>Primary Coating Diameter (Uncoloured)</b>	242 ± 5 μm	

#### Cable Marking

HFCL Ltd, 48F SM G.652D DUCT *Year of manufacture, Length Code, Meter Marking*

#### Cable Length

4.0 km ± 10 %

#### Packaging

Wooden drums or reels

Cable end sealed

*Drum marking: Drum number, User name, HFCL Limited, Fiber count, Cable Length, Date of manufacture, Net weight, Gross weight*

#### Cable Performance Standards

IEC 60793, ANSI/ICEA S-87-640, Telcordia GR-20, ITU-T, RoHS, REACH.