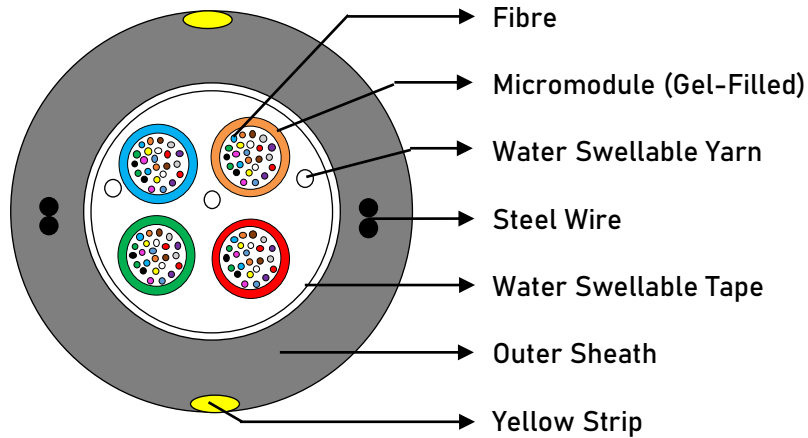


Technical Specifications
96F SM OVERHEAD OPTICAL FIBRE CABLE
Product Code 281094-96



Product
Details

Optical Fibre containing elements laid up freely
Gel filled micromodules
Water blocked core interstices
Embedded Steel rod strength members
HDPE sheath
PIA Approved and as a Cable & Clamp combination -PLP & OPT Clamps

Cable Construction

Parameter	Structure/Layout/Material
Fibre Count	96F
Number of fibres per module	24
Number of Module	4
Embedded Strength Member	Braided Steel Wire
Moisture Barrier	Water swellable yarn & Water Swellable Tape
Strip Marking Width -HDPE-Yellow	1.25 mm (Nominal)
Outer Sheath- HDPE- Black UV	1.3 mm (Nominal)
Cable Diameter	7.0 ± 0.2mm
Nominal Cable Weight	35.0 Kg/km (Nominal)

Colour Coding

Fibre Colour	Bl	Or	Gr	Rd	Sl	Yl	Br	Vi	Bk	Wh	Pk	Aq
	Bl*	Or*	Gr*	Rd*	Sl*	Yl*	Br*	Vi*	Nt*	Wh*	Pk*	Aq*

* Single ring marking on fibres from 13 to 24th fibre, natural ring marked fibre instead of black fibre

Sl No.	1	2	3	4
Micro Module Colour	Bl	Or	Gr	Rd

Cable & Fibre Characteristics

Breaking Load	<2000 N		IEC-60794-1-21-E1
Maximum Environmental Load	950 N @< 0.6% fibre strain		IEC-60794-1-21-E1
Water Penetration Test	1 m water head, 3m sample, 24 hours		IEC-60794-1-22-F5
Crush Resistance	2000 N		IEC-60794-1-21-E3
Minimum Bend Radius	70mm		IEC-60794-1-21-E11
Voltage Test	11 Kv	If installed along power line minimum vertical distance of 1.8 M should be maintained	
Resistance to wind /ice	Cable shall withstand 97 kph wind, no ice. 80 kph wind + 5mm ice. 0 kph wind, + 10mm ice. without appreciable sag		
Environmental Performance	Installation	- 10 °C to +60°C	IEC-60794-1-22-F1
	Operation	- 20 °C to +85°C	
	Storage	- 20 °C to +85°C	

Span	68 m (80m in exceptional circumstances)
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Fibre Type	G.657A1 (200 µm)	
Attenuation	1310 nm	≤ 0.35 dB/km
	1550 nm	≤ 0.21 dB/km
	1625 nm	≤ 0.23 dB/km
Chromatic Dispersion	1285 – 1330 nm	≤ 3.5 ps/nm.km
	1550 nm	≤ 18.0 ps/nm.km
	1565 – 1625 nm	≤ 22.0 ps/nm.km
Zero Dispersion Wavelength		1300 – 1324 nm
Zero Dispersion Slope		≤ 0.090ps/nm ² x km
Polarization mode dispersion	Fibre	≤ 0.1 ps / km
	Link Design Value	≤ 0.06ps / km
Proof Stress Level		≥(100 kpsi)1.0 % strain
	Geometrical	
Cable cut off wavelength λ _{cc}		≤ 1250 nm
MFD	1310 nm	8.8 ± 0.4 µm
	1550 nm	10.3 ± 0.5 µm
Core-Cladding Concentricity Error		≤ 0.5 µm
Cladding Diameter		125 ± 0.7 µm
Cladding Non-Circularity		≤ 0.7 %
Primary Coating Diameter		190 ± 10 µm (uncoloured) 200 ± 10 µm (coloured)
Fibre Curl	Radius	≥ 4 m

Cable Marking

As per customer requirement

Cable Length

2.0 km ± 5 %

Packaging

Wooden drums or reels

Cable end sealed

Drum marking: Drum number, User-name, HTL Limited, Fibre 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.