

Please be advised

ARTIC FIBER and NEATEL as one great unit manufacturer from China is a leading global supplier of fiber optical components and systems for connectivity solution. Our customers in communication, industry and transportation appreciate that we are specialists with detailed knowledge of practical applications.

DATASHEET

OptiTap SC Harden Fiber Optic Jumper

- For FTTx Solution



Product Description

This kind of OptiTap jumpers produced by ARTIC company has been more than 10 years so far. We have those patents for control the marketing, which we are the only one directly source fiber optic manufacturer in China. This cable assembly for processing by ARTIC in China and we service for the globally international marketing. This factory pre-terminated flat drop jumper is the industry standard for existing FTTx installations, it provides a quick and easy "plug and play" connection from the pedestal or hand holes to the network terminals (ONTs) and can be installed in aerial, direct-buried or duct installations, reducing the cost and time of drop cable deployment simplifying installation and maintenance. These factory-based assemblies are machine polished to ensure excellence in performance intermateability and durability. All jumpers are video inspected to ensure connector end-faces are free of defects and contamination. Insertion loss is tested using standard-based testing procedures since it is environmentally sealed.

Keyed Characteristics

- ✓ Hardened connectors are factory-terminated and environmentally sealed for use in optical drop cable deployments;
- ✓ Hardened drop cables incorporate hardened connector technology that is designed to withstand the rugged outside plant environment;
- ✓ Hardened drop cables simplify installation and maintenance by reducing splicing requirements in the distribution portion of the network;
- ✓ Low insertion loss and added loss;
- ✓ Easy connection to hardened adapters on terminals or closures;
- ✓ Guide mechanism, can be blinded with one hand, simple and quick, connect and install;
- ✓ Seal design: It is waterproof, dust-proof, anti-corrosion and so on;
- ✓ Cost effective solution for in house termination.

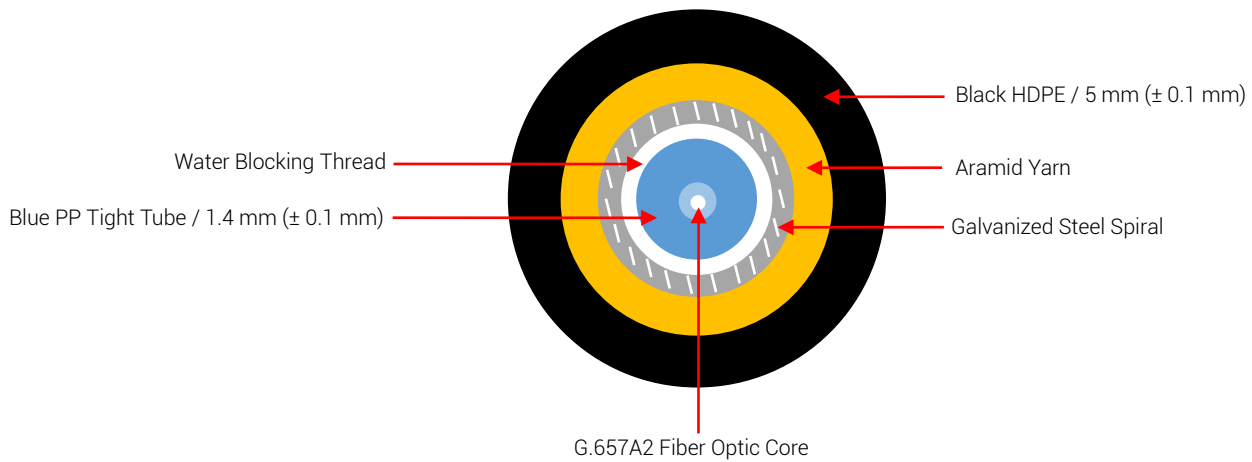
Application

- ✓ FTTH Application;
- ✓ Fiber optic communications in harsh outdoor environments;
- ✓ Outdoor communication equipment connection;
- ✓ Waterproof fiber equipment SC port;
- ✓ Remote wireless base station;
- ✓ FTTx FTTA wiring project.

STANDARDS

- ✓ RoHS;
- ✓ IP68 / NEMA 6P;
- ✓ ANSI/ TIA-568-C.3;
- ✓ ANSI/ TIA-598-C.

Cable Structure (5.0mm Armored Round Drop Cable)



Cable Parameter

Fiber Count	1	
Reinforcement Elements	Aramid Yarn	Galvanized Steel Spiral
Tight Tube (Color/Material/Diameter)	Blue / PP / 950 μ m ($\pm 50\mu$ m)	
Outer Cover (Material / Diameter / Thickness)	HDPE / 5mm (± 0.1 mm) / 1.4mm (± 0.1 mm)	
Crush Resistance	1000 N/10 cm (Long-term)	3000 N/10 cm (Short-term)
Maximum Tensile Load	450 N (Long term)	2000 N (Short term)
Minimum radius of Curvature	10 OD (Static)	20 OD (Dynamic)
Operating Temp. ($^{\circ}$ C)	0 $^{\circ}$ C ~ +70 $^{\circ}$ C	
Transport / Storage Temp. ($^{\circ}$ C)	-10 $^{\circ}$ C ~ +70 $^{\circ}$ C	
Installation Temp. ($^{\circ}$ C)	0 $^{\circ}$ C ~ +70 $^{\circ}$ C	
Span	100 - 200m	

Optical Parameter

Optical Fiber	G.657A2
Cladding Diameter	125.0 \pm 0.7 μ m
Coating Diameter (μ m)	Φ 245 \pm 5 μ m
Optical Wavelength (nm)	1310 / 1550
Maximum Attenuation 1310 / 1550	0.35 / 0.21 dB/km
Modal Field Diameter 1310 / 1550 nm	8.6 \pm 0.4 μ m / 9.4 - 10.4 μ m
Coating Concentricity Error	\leq 0.5 μ m
Cut-off Wavelength	\leq 1258nm
Waveoptics Series	E

Microbend Losses

1 twist X 10mm Radius @1550nm	≤0.1dB
1 twist X 10mm Radius @1625nm	≤0.2dB
1 twist X 7.5mm Radius @1550nm	≤0.5dB
1 twist X 7.5mm Radius @1625nm	≤1.0dB

Connector Parameter

Polish Type	APC
Insertion Loss	≤ 0.30 dB (Max)
Reflection Loss	≤ -65 dB
IP Raring	IP68
Maximum Allowable Traction	215N

End-Face Geometry

Item	UPC (Ref: IEC 61755-3-1)	APC (Ref: IEC 61755-3-2)
Radius of Curvature (mm)	10 to 25	5 to 12
Fiber Height (nm)	-100 to +100	-100 to +100
Apex Offset (μm)	0 to 50	0 to 50
APC angle (°)	/	8° ±0.2°
Key error (°)	/	0.2° Max

End-Face Quality (Single-mode)

Zone	Range (μm)	Scratches	Defects	Reference
A: Core	0 to 25	None	None	IEC 61300-3-35:2015
B: Cladding	25 to 115	None	None	
C: Adhesive	115 to 135	None	None	
D: Contact	135 to 250	None	None	
E: Rest of ferrule		None	None	

End-Face Quality (Multimode)

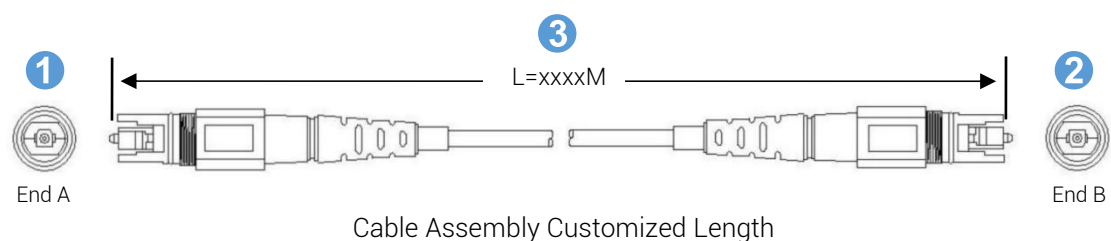
Zone	Range (μm)	Scratches	Defects	Reference
A: Core	0 to 65	None	None	IEC 61300-3-35:2015
B: Cladding	65 to 115	None	None	
C: Adhesive	115 to 135	None	None	
D: Contact	135 to 250	None	None	
E: Rest of ferrule		None	None	



OptiTap Harden Connector

Dimension Diagram

OptiTap Compatible SC Outer Cable Assemblies



1	OptiTap Compatible Hardened Connector (Side A)
2	OptiTap Compatible Hardened Connector (Side B)
3	5.0mm Armored Optical Cable

Note: All measurements are in mm unless otherwise specified.

The tolerances for this assembly are:

$L < 1 \text{ m} +5 \text{ cm} / -0 \text{ cm}$

$1 \text{ m} > L < 10 \text{ m} +15 \text{ cm} / -0 \text{ cm}$

$10 \text{ m} > L < 50 \text{ m} +30 \text{ cm} / -0 \text{ cm}$

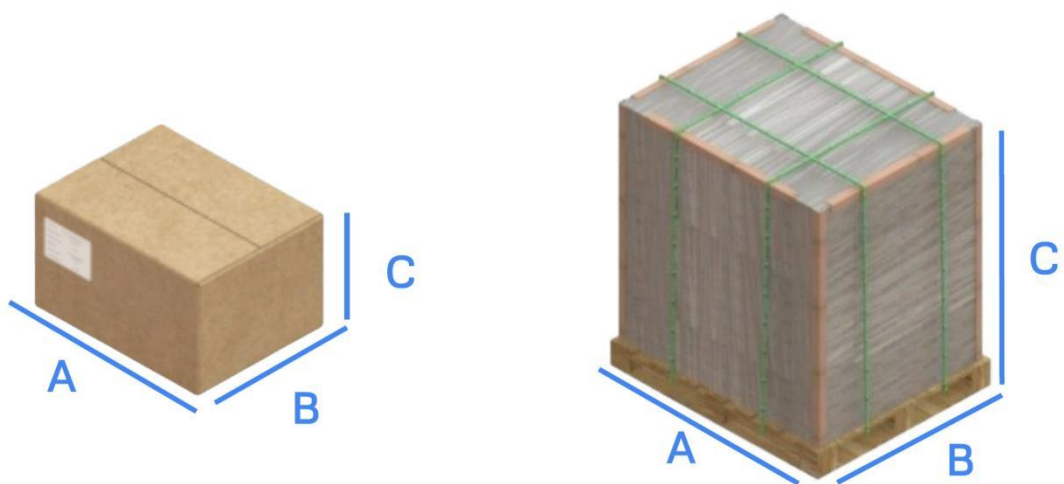
$L > 50 \text{ m} +1\% / -0 \text{ cm}$

Factory Workshop Overview



Packing List for your reference

Pieces Per box	Box Weight (Kg)	Box Dimensions (A x B x C cm)	Boxes Per Pallet	Pallet Dimensions (A x B x C cm)
25 Meters				
30	42	45 X 45 X 25	40	100 X 100 X 260
50 Meters				
20	55	45 X 45 X 25	32	100 X 100 X 260
75 Meters				
20	82.5	45 X 45 X 50	20	100 X 100 X 260
100 Meters				
15	82.5	45 X 45 X 50	20	100 X 100 X 260
150 Meters				
10	82.5	45 X 45 X 50	20	100 X 100 X 260
200 Meters				
8	88	45 X 45 X 50	20	100 X 100 X 260
300 Meters				
5	82.5	45 X 45 X 50	20	100 X 100 X 260



Related OptiTap Family



ARTap/SCX



ARTap/LCX



ARTap/MPOX



Multi-ports Terminal Service