

THE FUTURE OF CONNECTIVITY



OPTICAL FIBRE CABLES

PRODUCT CATALOGUE

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APAR EMPOWERING A SMARTER WORLD SINCE 1958



Presence in

140+

Countries

9

Manufacturing Units



#1

Largest global aluminium & alloy conductor manufacturer



#3

Largest global manufacturer of Transformer oils



#1

Largest manufacturer of Renewable & Speciality Cables in India



Manufacturer of OFC & Hybrid Cables

65

YEARS

of Manufacturing Experience

\$1.8

BILLION

FY23 Consolidated Revenue

19.3%

CAGR

Last 5 years

49% EXPORT REVENUES

TELECOM SOLUTIONS OVERVIEW

APAR is a leading Global Telecom Solutions company focusing on innovative solutions for global markets. The uniqueness lies in its design and manufacturing capabilities supported by backward integration. The wide range of tele-communication Optical Fibre Cable and Hybrid Cable products have been carved out from its rich experience across Telecom, Defense, Power and Transport industries over the years. APAR Telecom services has capability and potential to create digital networks, passive infrastructure gateways and network densification for Urban (Mobility Networks and FTTx, broadband Networks), Rural (Middle Mile and Last mile connectivity), Defense MHA (Border & Cantonment Fortification) and Enterprise Connectivity (across multiple Industries).

APAR's Telecom Solutions is driven by Innovation, customer-centricity and sustainability.

WORLD CLASS PRODUCTION FACILITIES

APAR offers an extensive range of fibre optic cables for outdoor, indoor and speciality applications, ranging from 1F to 864F, and up to 1152F in ribbon design, with an installed capacity of 200,000 km of cable per annum.

We are also capable of manufacturing and delivering customised cables for special applications, such as specific diameter micro cables for FTTX, drop cables with G 657 bend insensitive fibre for last-mile connectivity, and long span ADSS (All Dielectric Self-supporting) aerial cables designed to be strung alongside power lines.

Our state-of-the-art machinery enables us to manufacture all types of fibre optic cables along with highly equipped quality system, accredited with ISO 9001:2015, ISO 14001:2015, ISO 45001:2018, ISO 27001:2013 & TL9000 from BSI and IRCLASS. Over the past 25 years, we have supplied wide range of Fibre Optic Cables across various sectors.



World Class Fibre Optic Cable Manufacturing Facilities.



APAR TELECOM SOLUTIONS

OFC - OPTICAL FIBRE CABLES

APAR Telecom tailors high-capacity cable solutions for data centers, ISPs, telcos, and worldwide internet companies. APAR Fibre optic cables surpass copper lines in both capacity and transmission distance, enhancing internet speed upto 100 Gbps. APAR offers a comprehensive range of fibre optic cables for different communication needs, including aerial, underground, microduct, ribbon, IO, and indoor cables meeting international standards in a contemporary manufacturing facility certified with ISO, OHSAS, and TL9000. APAR's commitment to quality ensures that cables are manufactured to global standards and customer specifications.

APAR Telecom, a Global Telecom Solutions Leader, offers innovative connectivity solutions for:

Urbanisation: Mobility Networks across 4G/5G/6G and FTTx broadband Networks.

Rural Connectivity: Bridging the digital gap of fibre across rural regions.

Border Fortefication: Defence & MHA with border communication solutions.

Enterprise: Data centers, Railways & Metro's, Airports, Power Utilities, Renewable Solar & Wind Solutions, Oil & Gas, Mining, Space and many more.

HYBRID CABLES - GIGAVOLT

The Giga-Volt hybrid solution incorporates both fibre and copper conductors in one cable that deliver power and data to a remote device through copper and fibre medium. As the connectivity needs converges, APAR hybrid cables will assist builders to meet their demand with this unique cable designs across multiple use cases across 5G, Wi-fi, DAS, IOT & M2M

Reduced Environmental Impact: Giga-Volt combines power and data transmission into a single cable, eliminating the need for separate cables and reducing overall material usage.

Cost-Effective Installation: By deploying a single Giga-Volt cable instead of separate power and data cables, service providers save time, space, and capital during installation.

Faster Network Rollout: Giga-Volt acts as a unified solution, streamlining network infrastructure and facilitating faster deployment of advanced networks like 5G.

Simplified Cable Management: Using a single Giga-Volt cable reduces complexity by eliminating the need to manage multiple cables at the field level.

Lower Total Cost of Ownership (TCO): Giga-Volt offers a slim design and supports all network topologies, potentially leading to a lower overall cost of ownership for the network.

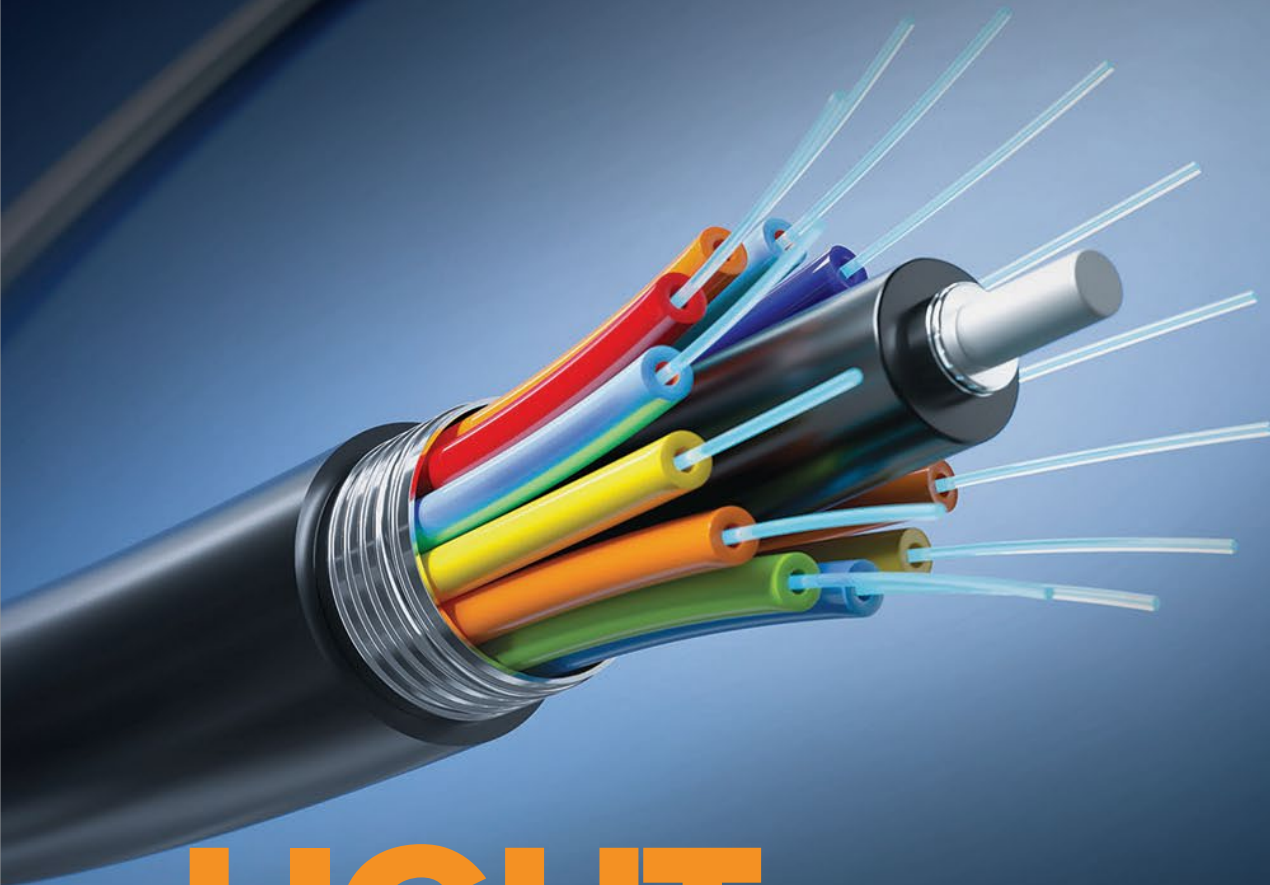
LAN CABLES - TARANG SHAKTI

High-performance connectivity meets personalized solutions at APAR While known for superior materials and global standards (ANSI/TIA, ISO/IEC, EN, UL/ETL/TUV), APAR goes beyond LAN cables. We distinguish ourselves by:

Customised Solutions: Avoid off-the-shelf. Our skilled team creates LAN cable and optical fibre solutions for your specific needs, maximizing efficiency and exceeding expectations.

Engine of Innovation: We invest extensively in R&D, pushing technology forward. Access innovative solutions to meet rising bandwidth, speed, and reliability needs. We set industry standards, not merely meet them.

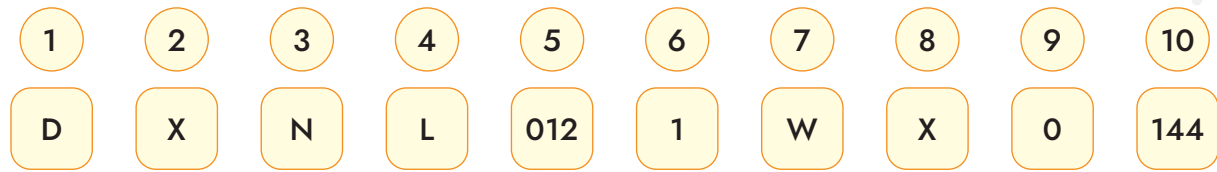
Devoted Partnerships: We value long-term connections over transactions. Our attentive crew ensures a smooth and worry-free experience from initial consultations to post-installation support.



LIGHT WEIGHT AND COMPACT

Optical fibre cables offer a hassle-free alternative to traditional copper cables. Their sleek and slim design, combined with their lightweight and compact construction, make them a breeze to install and manage.

CATALOGUE CABLE CODING SYSTEM



1 | Installation

- A = Aerial Self Support
- B = Direct Buried
- D = Duct
- M = Figure8
- P = Drop/Rise

2 | Fire Rating

- R = Flame Retardant
- S = Fire Survival
- X = No Fire Rating

3 | Construction

- M = Metallic
- N = Non-metallic

4 | Buffer Type

- L = Loose Tube
- R = Ribbon Tube
- T = Tight Buffer
- M = Micro Module

5 | Fibre/Tube Or Buffer

001 to 144

6 | Number Of Jackets

- 0 = No Jacket
- 1 = Single Jacket
- 2 = Double Jacket
- 3 = Triple Jacket

7 | Water Protect Type

- W = Wet Tube - Wet Core
- R = Wet Tube - Dry Core
- Y = Dry Tube - Dry Core

8 | Type Of Armour

- C = Glass Yarn
- F = Steel Tape
- W = Steel Wire
- P = FRP
- A = Aluminum Tape
- X = No Armour
- B = Wire Braided
- U = ACSR Wire
- M = Copper Wire

9 | Fibre Type

- 0 = G652D
- 1 = G654
- 2 = G655
- 3 = G656
- 4 = G657A1
- 5 = G657A2
- 6 = G657B1
- 7 = G657B2
- 9 = G657B3
- 10 = OM1
- 11 = OM2
- 12 = OM3
- 13 = OM4












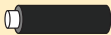



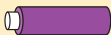




10 | Fibre Count

0001 to 1152











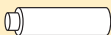



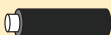
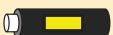








**Example:
Standard 44F Duct cable**

Code = DXNL0121YX0144

OPTICAL FIBRE COLOUR CODING

FIBRE OPTIC COLOUR CODING AS PER EIA/TIA 598 INTERNATIONAL STANDARD					
1	Blue		13	Blue with Black Ring	
2	Orange		14	Orange- with Black Ring	
3	Green		15	Green- with Black Ring	
4	Brown		16	Brown- with Black Ring	
5	Grey		17	Grey- with Black Ring	
6	White		18	White- with Black Ring	
7	Red		19	Red- with Black Ring	
8	Black		20	Natural with Black Ring	
9	Yellow		21	Yellow- with Black Ring	
10	Violet		22	Violet- with Black Ring	
11	Pink		23	Pink- with Black Ring	
12	Aqua		24	Aqua- with Black Ring	

* "-" Marked are ring marked fibre.

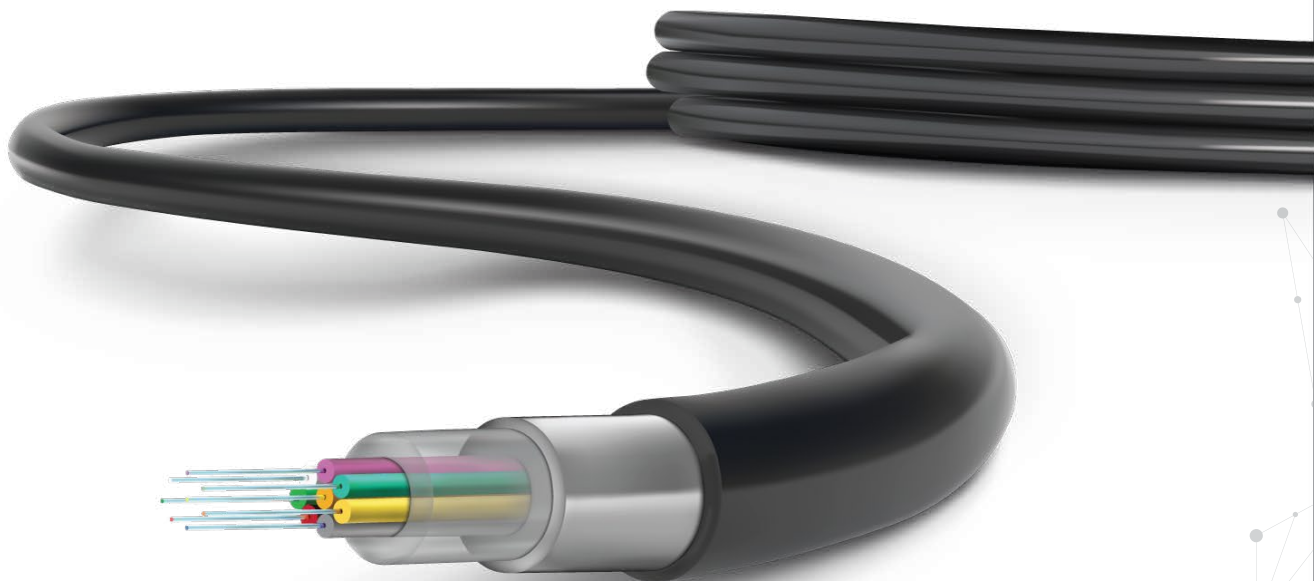
FIBRE OPTIC BUFFER COLOUR CODING AS PER EIA/TIA 598 INTERNATIONAL STANDARD					
1	Blue		13	Blue with Black Strip	
2	Orange		14	Orange- with Black Strip	
3	Green		15	Green- with Black Strip	
4	Brown		16	Brown- with Black Strip	
5	Grey		17	Grey- with Black Strip	
6	White		18	White- with Black Strip	
7	Red		19	Red- with Black Strip	
8	Black		20	Black with Yellow Strip	
9	Yellow		21	Yellow- with Black Strip	
10	Violet		22	Violet- with Black Strip	
11	Pink		23	Pink- with Black Strip	
12	Aqua		24	Aqua- with Black Strip	

FIBRE OPTIC CABLE PRODUCT VARIETY

AerioFib

Product: Aerial Fibre Optic Cables : Application: Over Head Aerial

SR. NO.	PRODUCT DESCRIPTION	FIBRE RANGE	CABLE CODE
01	Uni Tube Single Jacket ADSS Cable	1F-24F	AXNL###1#X0###
02	Uni Tube Double Jacket ADSS Cable	1F-24F	AXNL###2#X0###
03	Loose Tube Single Jacket ADSS Cable	1F-288F	AXNL###1#X0###
04	Loose Tube Double Jacket ADSS Cable	1F-288F	AXNL###2#X0###
05	Loose Tube Ribbon Fibre Single Jacket ADSS Cable	48F-288F	AXNR###1#X0###
06	Uni Tube Single Jacket Figure-8 Cable	1F-48F	AXML###1#W0###
07	Uni Tube Ribbon Fibre Single Jacket Figure- 8 Cable	48F-144F	AXMR###1#W0###
08	Loose Tube Single Jacket Figure-8 Cable	1F-144F	AXML###1#W0###



UNI TUBE SINGLE JACKET ADSS CABLE

AXNL###1#X0###
1F-48F



PRODUCT INFORMATION

APAR's single jacket ADSS cable is suitable for aerial application. The cable is unitube design consisting of optical fibres in jelly-filled loose tube. The loose tube is peripherally covered by aramid yarn reinforcement. Two FRP rods are embedded in jacket to give cable extra tensile strength. This core is covered by a strong thermoplastic material which gives cable a strong and smooth finish. This product is available in 1-48F

PRODUCT APPLICATION

- ◆ Long/Medium/Short span aerial installations
- ◆ Last mile communication system
- ◆ Installation with high voltage power lines (ADSS)
- ◆ Subscriber network system

PRODUCT FEATURES

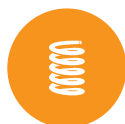
- ◆ Available in wide range of 1F-48F, in both single-mode and multi-mode fibre variants.
- ◆ Available for light, medium and high loading conditions
- ◆ Lightweight, flexible and easy to install
- ◆ Available with Anti-tracking material for installation along high tension lines
- ◆ Operational Temperature -40°C to +70°C

COMPLIANCE STANDARDS

IEC 60793, IEC 60794, EIA/TIA, ITU-T, Telcordia GR-20, EN187000



Aerial Cable



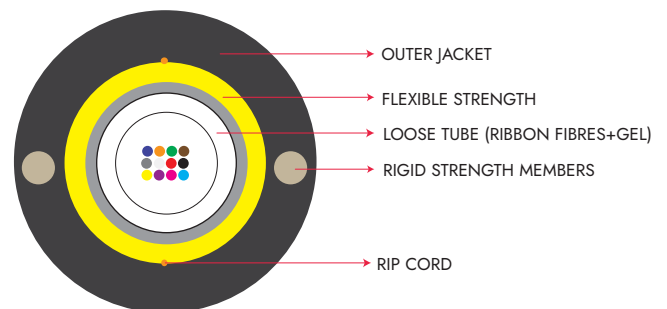
Best Flexibility



Water Resistant



UV Protected



Note: Customized specifications can be made available upon specific request.

PHYSICAL PROPERTIES

FIBRE COUNT	FIBRE/TUBE	NOMINAL CABLE DIAMETER (MM)	NOMINAL CABLE WEIGHT (KG/KM)	MAXIMUM TENSILE STRENGTH (N)	SPAN LENGTH (#)
2F	2	7.3	45±10%	1500	50 METER
4F	4	7.3	45±10%	1500	50 METER
6F	6	7.3	45±10%	1500	50 METER
12F	12	7.3	45±10%	1500	50 METER
24F	24	7.6	45±10%	1500	50 METER

MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

NAME OF TEST	REFERENCE STANDARD	OFFERED VALUES
Cable Bending Radius	IEC-60794-1-21-E11	Long term = 20D, Short term = 10D
Crush Resistance (N/10 cm)	IEC-60794-1-21-E3	1500N
Impact strength (N.m)	IEC-60794-1-21-E4	10
Torsion	IEC-60794-1-21-E7	± 180°
Temperature Cycling	IEC-60794-1-22-F1	Installation -20°C to +70°C Operation -20°C to +70°C Storage -20°C to +70°C
Drip Test	IEC-60794-1-21-E14	30 cm, 70°C, 24 hours
Water Penetration	IEC-60794-1-22-F5B	1m water head, 3m samples, 24 hours no water leakage

COLOUR CODING

FIBRE STANDARD COLOUR CODE



- ◆ If there are more 12 fibres per tube then single or double stripes marking will be offered in compliance to EIA/TIA

FIBRE STANDARD COLOUR CODE



- ◆ If there are more than 12 tubes per cable then single or double stripes marking will be offered in compliance to EIA/TIA 598.

PRINTING DETAILS

- ◆ APAR INDIA ~Fibre Count~ Fibre Type~ OFC ~Laser Symbol~ Telephone Symbol~ Year of Manufacturing~ Cable ID~ Meter Marking
- ◆ Customized marking available on request.

PACKING DETAILS

- ◆ Packing Length- 2Km, 4Km, 6Km (tolerance +/- 5%)
- ◆ Packing Material- Wooden Drum
- ◆ Customized drum lengths are available on request.

UNI TUBE DOUBLE JACKET ADSS CABLE [AEROFIB]

AXNL###2#X0###
1F-48F



PRODUCT INFORMATION

APAR's double jacket ADSS cable is suitable for aerial application. The cable is unitube design consisting of optical fibres in jelly-filled loose tube. Two FRP rods are embedded in inner sheath to give cable extra tensile strength. The inner sheath is peripherally covered by aramid yarn reinforcement. The strong thermoplastic material jacket is provided over the aramid yarn layer which gives cable a strong and smooth finish. This product is available in 1-48F.

PRODUCT APPLICATION

- ◆ Long/Medium/Short span aerial installations
- ◆ Last mile communication system
- ◆ Installation with high voltage power lines (ADSS)
- ◆ Subscriber network system.



PRODUCT FEATURES

- ◆ Available in wide range of 1F-48F, in both single-mode and multi-mode fibre variants.
- ◆ Available for light, medium and high loading conditions.
- ◆ Lightweight, flexible and easy to install.
- ◆ Available with Anti-tracking material for installation along high tension lines.
- ◆ Operational Temperature -40°C to +70°C.

COMPLIANCE STANDARDS

IEC 60793, IEC 60794, EIA/TIA, ITU-T, Telcordia GR-20, EN187000.



Aerial Cable



Best Flexibility



Water Resistant



UV Protected



Note: Customized specifications can be made available upon specific request.

PHYSICAL PROPERTIES

FIBRE COUNT	FIBRE/TUBE	NOMINAL CABLE DIAMETER (MM)	NOMINAL CABLE WEIGHT (KG/KM)	MAXIMUM TENSILE STRENGTH (N)	SPAN LENGTH
2F	2	10.0	75±10%	2000	80 METER
4F	4	10.0	75±10%	2000	80 METER
6F	6	10.0	75±10%	2000	80 METER
12F	12	10.0	75±10%	2000	80 METER
24F	24	10.3	82±10%	2000	80 METER

MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

NAME OF TEST	REFERENCE STANDARD	OFFERED VALUES
Cable Bending Radius	IEC-60794-1-21-E11	Long term = 20D, Short term = 10D
Crush Resistance (N/10 cm)	IEC-60794-1-21-E3	2000N
Impact strength (N.m)	IEC-60794-1-21-E4	10
Torsion	IEC-60794-1-21-E7	± 180°
Temperature Cycling	IEC-60794-1-22-F1	Installation -20°C to +70°C Operation -20°C to +70°C Storage -20°C to +70°C
Drip Test	IEC-60794-1-21-E14	30 cm, 70°C, 24 hours
Water Penetration	IEC-60794-1-22-F5B	1m water head, 3m samples, 24 hours no water leakage

COLOUR CODING

FIBRE STANDARD COLOUR CODE



- ◆ If there are more 12 fibres per tube then single or double stripes marking will be offered in compliance to EIA/TIA

FIBRE STANDARD COLOUR CODE



- ◆ If there are more than 12 tubes per cable then single or double stripes marking will be offered in compliance to EIA/TIA 598.

PRINTING DETAILS

- ◆ APAR INDIA ~Fibre Count~ Fibre Type~ OFC ~Laser Symbol~ Telephone Symbol~ Year of Manufacturing~ Cable ID~ Meter Marking
- ◆ Customized marking available on request.

PACKING DETAILS

- ◆ Packing Length- 2Km, 4Km, 6Km (tolerance +/- 5%)
- ◆ Packing Material- Wooden Drum
- ◆ Customized drum lengths are available on request.

LOOSE TUBE SINGLE JACKET ADSS CABLE [AEROFIB]

AXNL###1#X0###
1F-288F



PRODUCT INFORMATION

APAR's single jacket ADSS cable is suitable for aerial application. The cable consists of optical fibres in jelly-filled loose tubes, which are stranded over FRP (fibre-reinforced plastic rod), an excellent central strength member. The stranded core is filled with water blocking compound surrounded with suitable tape to avoid water penetration. This core is covered by evenly distributed aramid yarns which fulfil the high tensile requirement for aerial application. The layer of strong thermoplastic material is covered as a jacket over aramid yarns which gives cable a strong and smooth finish. This product is available in 1-288F.

PRODUCT APPLICATION

- ◆ Long/Medium/Short span aerial installations
- ◆ Last mile communication system
- ◆ Installation with high voltage power lines (ADSS)
- ◆ Subscriber network system.

PRODUCT FEATURES

- ◆ Available in wide range of 1F-288F, in both single-mode and multi-mode fibre variants.
- ◆ Available for light, medium and high loading conditions.
- ◆ Lightweight, flexible and easy to install.
- ◆ Available with Anti-tracking material for installation along high tension lines.
- ◆ Operational Temperature -40°C to +70°C.

COMPLIANCE STANDARDS

IEC 60793, IEC 60794, EIA/TIA, ITU-T, Telcordia GR-20, EN187000.



Aerial Cable



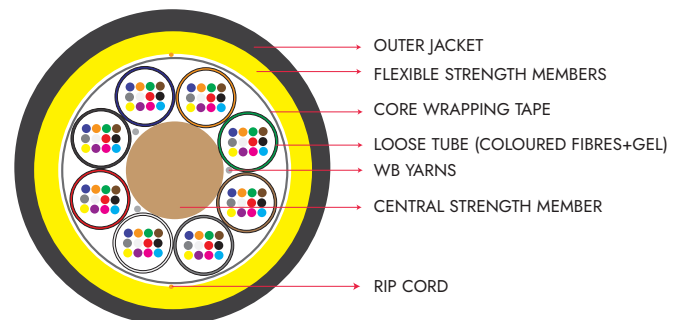
Best Flexibility



Water Resistant



UV Protected



Note: Customized specifications can be made available upon specific request.

PHYSICAL PROPERTIES

FIBRE COUNT	FIBRE/TUBE	NUMBER OF TUBE'S	NOMINAL CABLE DIAMETER (MM)	NOMINAL CABLE WEIGHT (KG/KM)	MAXIMUM TENSILE STRENGTH (N)	SPAN LENGTH #
6F-72F	6F~12F	1~6	9.5	75 ± 10%	3000	100 Meter
96F	12	8	11.5	105 ± 15%	3000	100 Meter
144F	12	12	14.0	150 ± 15%	3000	100 Meter
288F	12	24	16	200 ± 20%	3500	100 Meter

MULTIPLE SPAN OPTIONS AVAILABLE ON REQUEST.

MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

NAME OF TEST	REFERENCE STANDARD	OFFERED VALUES
Cable Bending Radius	IEC-60794-1-21-E11	Long term = 20D, Short term = 10D
Crush Resistance (N/10 cm)	IEC-60794-1-21-E3	2000N
Impact strength (N.m)	IEC-60794-1-21-E4	10
Torsion	IEC-60794-1-21-E7	± 180°
Temperature Cycling	IEC-60794-1-22-F1	Installation -20°C to +70°C Operation -20°C to +70°C Storage -20°C to +70°C
Drip Test	IEC-60794-1-21-E14	30 cm, 70°C, 24 hours
Water Penetration	IEC-60794-1-22-F5B	1m water head, 3m samples, 24 hours no water leakage

COLOUR CODING

FIBRE STANDARD COLOUR CODE



◆ If there are more 12 fibres per tube then single or double stripes marking will be offered in compliance to EIA/TIA

FIBRE STANDARD COLOUR CODE



◆ If there are more than 12 tubes per cable then single or double stripes marking will be offered in compliance to EIA/TIA 598.

PRINTING DETAILS

- ◆ APAR INDIA ~Fibre Count~ Fibre Type~ OFC~ Laser Symbol~ Telephone Symbol~ Year of Manufacturing~ Cable ID~ Meter Marking
- ◆ Customized marking available on request.

PACKING DETAILS

- ◆ Packing Length- 2Km, 4Km, 6Km (tolerance +/- 5%)
- ◆ Packing Material- Wooden Drum
- ◆ Customized drum lengths are available on request.

LOOSE TUBE DOUBLE JACKET ADSS CABLE [AEROFIB]

AXNL###1#XO###
1F-288F



PRODUCT INFORMATION

APAR's double jacket ADSS cable is suitable for aerial application. The cable consists of optical fibres in jelly-filled loose tubes, which are stranded over FRP (fibre-reinforced plastic rod), an excellent central strength member. The stranded core is filled with water blocking compound surrounded with suitable tape to avoid water penetration. This core is covered by a strong thermoplastic material as an inner sheath. This core is covered by evenly distributed aramid yarns which fulfil the high tensile requirement for aerial application. The layer of strong thermoplastic material is covered as a jacket over aramid yarns which gives cable a strong and smooth finish. This product is available in 1-288F

PRODUCT APPLICATION

- ◆ Long/Medium/Short span aerial installations
- ◆ Last mile communication system
- ◆ Installation with high voltage power lines (ADSS)
- ◆ Subscriber network system.

PRODUCT FEATURES

- ◆ Available in wide range of 1F-288F, in both single-mode and multi-mode fibre variants..
- ◆ Available for light, medium and high loading conditions
- ◆ Lightweight, flexible and easy to install
- ◆ Available with Anti-tracking material for installation along high tension lines
- ◆ Operational Temperature -40°C to +70°C

COMPLIANCE STANDARDS

IEC 60793, IEC 60794, EIA/TIA, ITU-T, Telcordia GR-20, EN187000



Aerial Cable



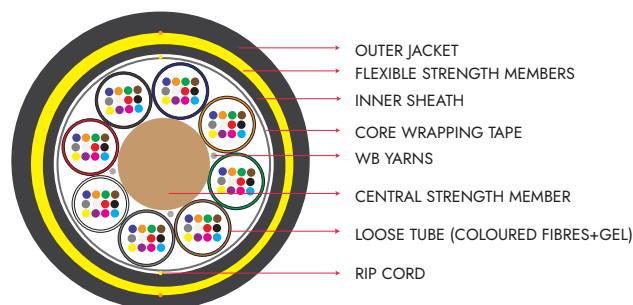
Best Flexibility



Water Resistant



UV Protected



Note: Customized specifications can be made available upon specific request.

PHYSICAL PROPERTIES

FIBRE COUNT	FIBRE/TUBE	NUMBER OF TUBE'S	NOMINAL CABLE DIAMETER (MM)	NOMINAL CABLE WEIGHT (KG/KM)	MAXIMUM TENSILE STRENGTH (N)	SPAN LENGTH #
6F-72F	6F~12F	1~6	12.0	110±10%	3000	100 Meter
96F	12	8	13.5	140±10%	3000	100 Meter
144F	12	12	16.0	188±10%	3000	100 Meter
288F	12	24	18.0	250±10%	3500	100 Meter

MULTIPLE SPAN OPTIONS AVAILABLE ON REQUEST.

MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

NAME OF TEST	REFERENCE STANDARD	OFFERED VALUES			
Cable Bending Radius	IEC-60794-1-21-E11	Long term = 20D, Short term = 10D			
Crush Resistance (N/10 cm)	IEC-60794-1-21-E3	3000N			
Impact strength (N.m)	IEC-60794-1-21-E4	25			
Torsion	IEC-60794-1-21-E7	± 180°			
Temperature Cycling	IEC-60794-1-22-F1	<table border="1"> <tr> <td>Installation -20°C to +70°C</td> <td>Operation -20°C to +70°C</td> <td>Storage -20°C to +70°C</td> </tr> </table>	Installation -20°C to +70°C	Operation -20°C to +70°C	Storage -20°C to +70°C
Installation -20°C to +70°C	Operation -20°C to +70°C	Storage -20°C to +70°C			
Drip Test	IEC-60794-1-21-E14	30 cm, 70°C, 24 hours			
Water Penetration	IEC-60794-1-22-F5B	1m water head, 3m samples, 24 hours no water leakage			

COLOUR CODING

FIBRE STANDARD COLOUR CODE



- ◆ If there are more 12 fibres per tube then single or double stripes marking will be offered in compliance to EIA/TIA

FIBRE STANDARD COLOUR CODE



- ◆ If there are more than 12 tubes per cable then single or double stripes marking will be offered in compliance to EIA/TIA 598.

PRINTING DETAILS

- ◆ APAR INDIA ~Fibre Count~ Fibre Type~ OFC~ Laser Symbol~ Telephone Symbol~ Year of Manufacturing~ Cable ID~ Meter Marking
- ◆ Customized marking available on request.

PACKING DETAILS

- ◆ Packing Length- 2Km, 4Km, 6Km (tolerance +/- 5%)
- ◆ Packing Material- Wooden Drum
- ◆ Customized drum lengths are available on request.

LOOSE TUBE RIBBON FIBRE SINGLE JACKET ADSS CABLE [AEROFIB]

AXNR###1#X0###
48F-288F



PRODUCT INFORMATION

APAR's single jacket ribbon ADSS cable is suitable for aerial application. The cable consists of optical fibre ribbons in jelly-filled loose tubes, which are stranded over FRP (fibre-reinforced plastic rod), is an excellent central strength member. The stranded core is filled with water blocking compound surrounded with suitable tape to avoid water penetration. This core is covered by evenly distributed aramid yarns which fulfil the high tensile requirement for aerial application. The layer of strong thermoplastic material is covered as a jacket over aramid yarns. The jacket gives cable a strong and smooth finish. This product is available in 48-288F

PRODUCT APPLICATION

- ◆ Long/Medium/Short span aerial installations
- ◆ Last mile communication system
- ◆ Installation with high voltage power lines (ADSS)
- ◆ Subscriber network system.

PRODUCT FEATURES

- ◆ Available in wide range of 1F-288F, in both single-mode and multi-mode fibre variants.
- ◆ Available for light, medium and high loading conditions.
- ◆ Lightweight, flexible and easy to install.
- ◆ Available with Anti-tracking material for installation along high tension lines.
- ◆ Operational Temperature -40°C to +70°C.

COMPLIANCE STANDARDS

IEC 60793, IEC 60794, EIA/TIA, ITU-T, Telcordia GR-20, EN187000.



Aerial Cable



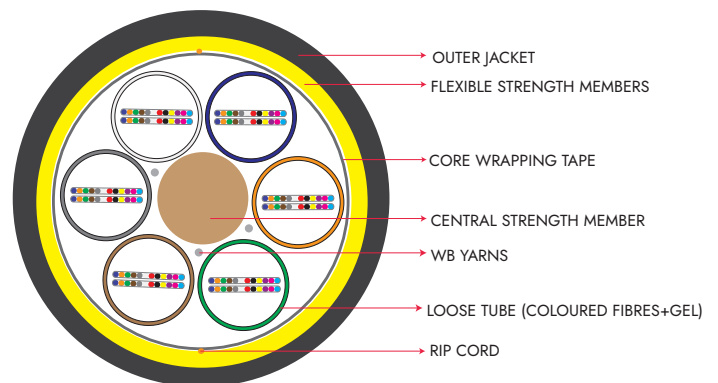
Best Flexibility



Water Resistant



UV Protected



Note: Customized specifications can be made available upon specific request.

PHYSICAL PROPERTIES

FIBRE COUNT	FIBRE/RIBBON (12F)	NO OF TUBES	FIBRES/TUBE	NOMINAL CABLE DIAMETER (MM)	NOMINAL CABLE WEIGHT (KG/KM)	MAXIMUM TENSILE STRENGTH (N)	SPAN LENGTH#
48F	2	2	24	17.5	336 ±10%	3500	100 Meter
72F	2	3	24	17.5	343 ±10%	3500	100 Meter
96F	2	4	24	17.5	350 ±10%	3500	100 Meter
144F	2	6	24	20.3	448 ±10%	3500	100 Meter
288F	4	6	48	21.0	503 ±10%	3500	100 Meter

MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

NAME OF TEST	REFERENCE STANDARD	OFFERED VALUES
Cable Bending Radius	IEC-60794-1-21-E11	Long term = 20D, Short term = 10D
Crush Resistance (N/10 cm)	IEC-60794-1-21-E3	3000N
Impact strength (N.m)	IEC-60794-1-21-E4	10
Torsion	IEC-60794-1-21-E7	± 180°
Temperature Cycling	IEC-60794-1-22-F1	Installation Operation Storage -20°C to +70°C -20°C to +70°C -20°C to +70°C
Drip Test	IEC-60794-1-21-E14	30 cm, 70°C, 24 hours
Water Penetration	IEC-60794-1-22-F5B	1m water head, 3m samples, 24 hours no water leakage

COLOUR CODING

FIBRE STANDARD COLOUR CODE



- ◆ If there are more 12 fibres per tube then single or double stripes marking will be offered in compliance to EIA/TIA

FIBRE STANDARD COLOUR CODE



- ◆ If there are more than 12 tubes per cable then single or double stripes marking will be offered in compliance to EIA/TIA 598.

PRINTING DETAILS

- ◆ APAR INDIA ~Fibre Count~ Fibre Type~ OFC ~Laser Symbol~ Telephone Symbol~ Year of Manufacturing~ Cable ID~ Meter Marking
- ◆ Customized marking available on request.

PACKING DETAILS

- ◆ Packing Length- 2Km, 4Km, 6Km (tolerance +/- 5%)
- ◆ Packing Material- Wooden Drum
- ◆ Customized drum lengths are available on request.

UNI TUBE SINGLE JACKET FIGURE-8 CABLE [AEROFIB]

AXML###1#W0###
1F-48F



PRODUCT INFORMATION

APAR's single jacket figure-8 cable is suitable for aerial application. The cable is unitube design consisting of optical fibres in jelly-filled tube. This tube is peripherally covered by glass yarn reinforcement. The layer of strong thermoplastic material is covered as a jacket over core, along with stranded steel messenger wire. The messenger stranded steel wire is arranged in a way that gives the cable a figure-8 layout. This robust aerial product is available in 1-48F

PRODUCT APPLICATION

- ◆ Long/Medium/Short span aerial installations
- ◆ Last mile communication system
- ◆ Subscriber network system.

PRODUCT FEATURES

- ◆ Available in wide range of 1-48F, in both single-mode and multi-mode fibre variants
- ◆ Available for light, medium and heavy loading conditions
- ◆ Lightweight, flexible and easy to install
- ◆ Fig - 8 cable facilitates longer & reliable installation in non-dielectric conditions
- ◆ Operational Temperature -40°C to +70°C

COMPLIANCE STANDARDS

IEC 60793, IEC 60794, EIA/TIA, ITU-T, Telcordia GR-20, EN187000



Aerial Cable



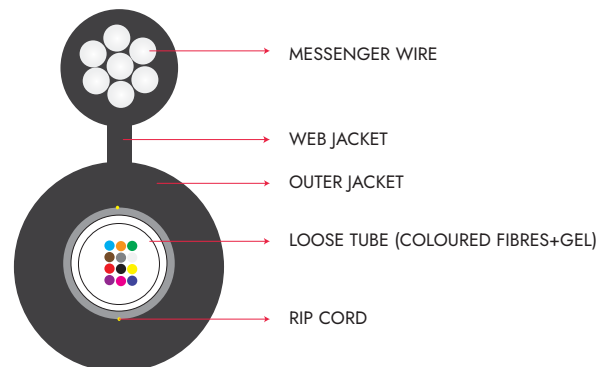
Best Flexibility



Water Resistant



UV Protected



Note: Customized specifications can be made available upon specific request.

PHYSICAL PROPERTIES

FIBRE COUNT	FIBRE/TUBE	NOMINAL CABLE DIAMETER (MM)	NOMINAL CABLE WEIGHT (KG/KM)	MAXIMUM TENSILE STRENGTH (N)	SPAN LENGTH
2F	2	7.0 X 13.0	82±10%	1500	70 Meter
4F	4	7.0 X 13.0	82±10%	1500	70 Meter
6F	6	7.0 X 13.0	82±10%	1500	70 Meter
12F	12	7.0 X 13.0	82±10%	1500	70 Meter
24F	24	7.0 X 13.0	86±10%	1500	70 Meter
48F	48	8.0 X 14.5	90±10%	1500	70 Meter

MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

NAME OF TEST	REFERENCE STANDARD	OFFERED VALUES
Cable Bending Radius	IEC-60794-1-21-E11	Long term = 20D, Short term = 10D
Crush Resistance (N/10 cm)	IEC-60794-1-21-E3	2000N
Impact strength (N.m)	IEC-60794-1-21-E4	10
Torsion	IEC-60794-1-21-E7	± 180°
Temperature Cycling	IEC-60794-1-22-F1	Installation -20°C to +70°C Operation -20°C to +70°C Storage -20°C to +70°C
Drip Test	IEC-60794-1-21-E14	30 cm, 70°C, 24 hours
Water Penetration	IEC-60794-1-22-F5B	1m water head, 3m samples, 24 hours no water leakage

COLOUR CODING

FIBRE STANDARD COLOUR CODE



- ◆ If there are more 12 fibres per tube then single or double stripes marking will be offered in compliance to EIA/TIA

FIBRE STANDARD COLOUR CODE



- ◆ If there are more than 12 tubes per cable then single or double stripes marking will be offered in compliance to EIA/TIA 598.

PRINTING DETAILS

- ◆ APAR INDIA ~Fibre Count~ Fibre Type~ OFC ~Laser Symbol~ Telephone Symbol~ Year of Manufacturing~ Cable ID~ Meter Marking
- ◆ Customized marking available on request.

PACKING DETAILS

- ◆ Packing Length- 2Km, 4Km, 6Km (tolerance +/- 5%)
- ◆ Packing Material- Wooden Drum
- ◆ Customized drum lengths are available on request.

UNI TUBE RIBBON FIBRE SINGLE JACKET FIGURE- 8 CABLE [AEROFIB]

AXMR###1#W0###
48F-144F



PRODUCT INFORMATION

APAR's single jacket ribbon figure-8 cable is suitable for aerial application. The cable is unitube design consisting of optical fibre ribbons in jelly-filled loose tube. The layer of strong thermoplastic material is covered as a jacket over the core, along with messenger stranded steel wire. The messenger stranded steel wire is arranged in a way that gives the cable a figure-8 layout. The jacket gives the cable a strong and smooth finish. This product is available in 48-144F

PRODUCT APPLICATION

- ◆ Long/Medium/Short span aerial installations
- ◆ Last mile communication system
- ◆ Subscriber network system.

PRODUCT FEATURES

- ◆ Available in wide range of 1-48F, in both single-mode and multi-mode fibre variants.
- ◆ Available for light, medium and heavy loading conditions.
- ◆ Lightweight, flexible and easy to install.
- ◆ Fig - 8 cable facilitates longer & reliable installation in non-dielectric conditions.
- ◆ Operational Temperature -40°C to +70°C.

COMPLIANCE STANDARDS

IEC 60793, IEC 60794, EIA/TIA, ITU-T, Telcordia GR-20, EN187000 .



Aerial Cable



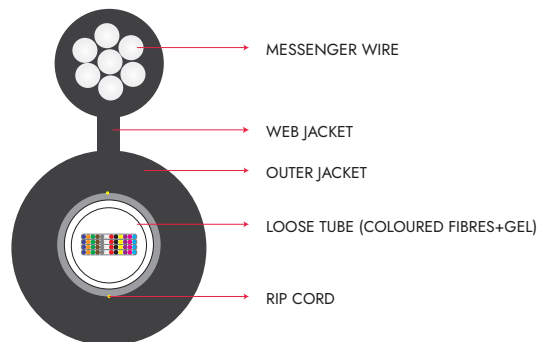
Best Flexibility



Water Resistant



UV Protected



Note: Customized specifications can be made available upon specific request.

PHYSICAL PROPERTIES

FIBRE COUNT	RIBBON FIBRE/TUBE (12F/RIBBON)	NOMINAL CABLE DIAMETER (MM)	NOMINAL CABLE WEIGHT (KG/KM)	MAXIMUM TENSILE STRENGTH (N)	SPAN LENGTH
48F	4	9.3 X 15.3	128±10%	1500	70 Meter
72F	6	9.3 X 15.3	136±10%	1500	70 Meter
96F	8	10.7 X 16.7	165±10%	1500	70 Meter
144F	12	10.7 X 16.7	181±10%	1500	70 Meter

MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

NAME OF TEST	REFERENCE STANDARD	OFFERED VALUES
Cable Bending Radius	IEC-60794-1-21-E11	Long term = 20D, Short term = 10D
Crush Resistance (N/10 cm)	IEC-60794-1-21-E3	2000N
Impact strength (N.m)	IEC-60794-1-21-E4	10
Torsion	IEC-60794-1-21-E7	± 180°
Temperature Cycling	IEC-60794-1-22-F1	Installation -20°C to +70°C Operation -20°C to +70°C Storage -20°C to +70°C
Drip Test	IEC-60794-1-21-E14	30 cm, 70°C, 24 hours
Water Penetration	IEC-60794-1-22-F5B	1m water head, 3m samples, 24 hours no water leakage

COLOUR CODING

FIBRE STANDARD COLOUR CODE



◆ If there are more 12 fibres per tube then single or double stripes marking will be offered in compliance to EIA/TIA

FIBRE STANDARD COLOUR CODE



◆ If there are more than 12 tubes per cable then single or double stripes marking will be offered in compliance to EIA/TIA 598.

PRINTING DETAILS

- ◆ APAR INDIA ~Fibre Count~ Fibre Type~ OFC ~Laser Symbol~ Telephone Symbol~ Year of Manufacturing~ Cable ID~ Meter Marking
- ◆ Customized marking available on request.

PACKING DETAILS

- ◆ Packing Length- 2Km, 4Km, 6Km (tolerance +/- 5%)
- ◆ Packing Material- Wooden Drum
- ◆ Customized drum lengths are available on request.

UNI TUBE RIBBON FIBRE SINGLE JACKET FIGURE- 8 CABLE [AEROFIB]

AXMR###1#W0###
1F-288F



PRODUCT INFORMATION

APAR's single jacket figure-8 cable is suitable for aerial application. The cable consists of optical fibres in jelly-filled loose tubes, which are stranded over FRP (fibre-reinforced plastic rod), an excellent central strength member. The stranded core is filled with water blocking compound surrounded with suitable tape to avoid water penetration. The layer of strong thermoplastic material is covered as a jacket over the core, along with messenger stranded steel wire. The messenger stranded steel wire is arranged in a way that gives the cable a figure-8 layout. The jacket gives the cable a strong and smooth finish. This aerial robust product is available in 1-288F.

PRODUCT APPLICATION

- ◆ Long/Medium/Short span aerial installations.
- ◆ Last mile communication system.
- ◆ Subscriber network system.

PRODUCT FEATURES

- ◆ Available in wide range of 1-48F, in both single-mode and multi-mode fibre variants.
- ◆ Available for light, medium and heavy loading conditions.
- ◆ Lightweight, flexible and easy to install.
- ◆ Fig - 8 cable facilitates longer & reliable installation in non-dielectric conditions.
- ◆ Operational Temperature -40°C to +70°C.

COMPLIANCE STANDARDS

IEC 60793, IEC 60794, EIA/TIA, ITU-T, Telcordia GR-20, EN187000 and Customer specifications



Aerial Cable



Best Flexibility



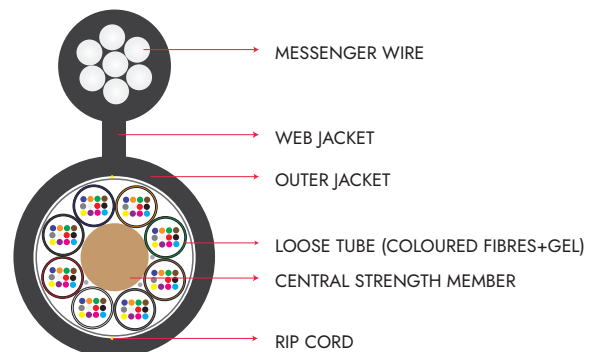
Water Resistant



UV Protected



RoHS
COMPLIANT



Note: Customized specifications can be made available upon specific request.

PHYSICAL PROPERTIES

FIBRE COUNT	FIBRE/TUBE	NUMBER OF TUBE'S	NOMINAL CABLE DIAMETER (MM)	NOMINAL CABLE WEIGHT (KG/KM)	MAXIMUM TENSILE STRENGTH (N)	SPAN LENGTH #
48F	6F~12F	1~6	10.0 X 16.3	115±10%	2500	80 Meter
72F	12	8	11.1 X 17.5	140±10%	2500	80 Meter
96F	12	12	13.8 X 20.2	193±10%	2500	80 Meter
144F	12	24	17.9 X 24.3	300±15%	2500	80 Meter

MULTIPLE SPAN OPTIONS AVAILABLE ON REQUEST

MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

NAME OF TEST	REFERENCE STANDARD	OFFERED VALUES
Cable Bending Radius	IEC-60794-1-21-E11	Long term = 20D, Short term = 10D
Crush Resistance (N/10 cm)	IEC-60794-1-21-E3	2000N
Impact strength (N.m)	IEC-60794-1-21-E4	10
Torsion	IEC-60794-1-21-E7	± 180°
Temperature Cycling	IEC-60794-1-22-F1	Installation: -20°C to +70°C Operation: -20°C to +70°C Storage: -20°C to +70°C
Drip Test	IEC-60794-1-21-E14	30 cm, 70°C, 24 hours
Water Penetration	IEC-60794-1-22-F5B	1m water head, 3m samples, 24 hours no water leakage

COLOUR CODING

FIBRE STANDARD COLOUR CODE



◆ If there are more 12 fibres per tube then single or double stripes marking will be offered in compliance to EIA/TIA

FIBRE STANDARD COLOUR CODE



◆ If there are more than 12 tubes per cable then single or double stripes marking will be offered in compliance to EIA/TIA 598.

PRINTING DETAILS

- ◆ APAR INDIA ~Fibre Count~ Fibre Type~ OFC~ Laser Symbol~ Telephone Symbol~ Year of Manufacturing~ Cable ID~ Meter Marking
- ◆ Customized marking available on request.

PACKING DETAILS

- ◆ Packing Length- 2Km, 4Km, 6Km (tolerance +/- 5%)
- ◆ Packing Material- Wooden Drum
- ◆ Customized drum lengths are available on request.



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