

# **OptoPull**

Pullable Field Installed SC/APC Connectorized Drop Cable G.657.A2 Single Mode Optical Fiber



## **Product Details**

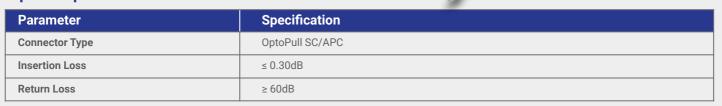
STL OptoPull factory terminated single fiber drop cables are designed to significantly reduce cable installation time required for subscriber connection, thereby reducing the total cost to connect.

# **Applications**

Suitable for

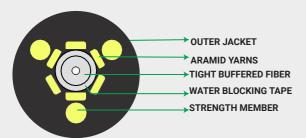
- Underground in Duct
- · Aerial Self Supporting Drop
- Direct Buried

# **Optical Specifications**



Ordering Information						
Series Name	Connector at End 1 (Inner Side)	Type of Cable	Cable Length	Connector at End 2 (Outer Side)	Special Character	Cable Printing
OptoPull	P - OptoPull SCA S - OptoBolt SCA N - No Connector 1 - Standard SCA	RD - Round (5mm) R3 - Round (3mm)	XXXX M XXXX F	P - OptoPull SCA S - OptoBolt SCA N - No Connector 1 - Standard SCA	B - BABA compliant, Standard Packaging 1- Standard Packaging	STL

# **Round Drop Cable (5mm)**



\* Typical Construction Diagram - Not to Scale

### **Product Details**

The OptoPull with 5mm Round drop cable jacket has three integral aramid rods for excellent crush resistance and bend management and can provide additional support when deployed into conduits. In this round cable design, we overcome the preferential bending of oval/flat cables to ease installation and slack management.

These cable assemblies are available in multiple lengths and can be supplied with a single connector and a cable stub end or with a connector on both ends.

## **Features**

- GR-20 for the drop cable
- · Manufactured with UV stabilized jacket & designed for superior crush resistance
- IEC and ITU-T standard complaint
- RoHS Compliant

## **Cable Performance Standards**

Cable complies to the standards: GR 20/ ICEA-110-717,IEC, ITU-T, and RoHS.

	Physical Characteristics	
Fiber Count	1F	
Fiber Type	STL Fiber ITU-T G657A2	
Maximum Cabled Attenuation (dB/km)	1310nm: 0.4 & 1550nm: 0.3	
Fiber Color	White	
Semi-Tight Buffer	Semi-Tight LSZH Buffer (20mm single strip, <10N Strip Force)	
Tight Buffer Color	White	
Tight Buffer Size	0.90 ± 0.05 mm	
Water blocking elements	Water Swellable Tape	
Peripheral Strength Elements	Aramid Yarns	
Embedded Strength Members	3 ARP (Aramid Reinforced Plastic) embedded in the outer sheath	
Outer Sheath Material	UV Stabilized, Black Polyethylene	
Nominal Sheath Thickness (mm)	1.3mm	
Cable Diameter [mm]	4.9 ± 0.3	
Cable Weight [kg/km]	16±2	

Mechanical & Environmental Characteristics <sup>1</sup>				
Cable Characteristics	Testing Standards	Cable Performance		
Tensile Strength (Max allowable) (N)	440N at <1.20%	GR 20/ICEA_S-110-717		
Maximum Breaking Load (N)	1350 ~ 2450 N	GR 20/ICEA_S-110-717		
Crush Resistance (N/100 mm)	1000N	GR 20/ICEA_S-110-717		
Impact Strength(Nm)	2.9Nm	GR 20/ICEA_S-110-717		
Torsion	±180°	GR 20/ICEA_S-110-717		
Min. Bend Radius	10 x D			
Water Penetration Test	1m waterhead, 3m samples, 24 h	GR 20/ICEA_S-110-717		
Temperature Performance		GR 20/ICEA_S-110-717		
Installation	-10°C to +75°C			
Operation	-40°C to +70°C			
Storage/Transport	-40°C to +70°C			

Note 1. All tests shall be carried out as per GR 20 standard, change in attenuation shall be </= 0.4 dB at 1550 nm

Loading Conditions - Maximum Span Distance				
Installation Sag	NESC Light ft (m)	NESC Medium ft (m)	NESC Heavy ft (m)	
1%	197 (60)	82 (25)	33 (10)	
1.5%	213 (65)	89 (27)	39 (12)	
3%	256 (78)	98 (30)	49 (15)	

## Round Drop Cable (3mm)



\* Typical Construction Diagram - Not to Scale

#### **Product Details**

The construction of OptoPull with 3mm round drop cable features an FR TPU sheath, ensuring it meets higher fire safety requirements. It is equipped with an easily removable, rugged thermoplastic jacket that offers UV protection. The cable is flexible, lightweight, and easy to handle and install, making it highly user-friendly. Additionally, the 850  $\pm$  50  $\mu$ m tight-buffered fibers support fast field installations, enhancing its practicality for various applications.

### **Features**

- Easily strip and splice, simplify the installation and maintenance
- · The construction with FR TPU sheath makes cable suitable for higher fire safety requirement
- Easily removable rugged thermoplastic jacket, with UV protection
- Flexible, light weight, easy to handle and install
- 850  $\pm$  50  $\mu$ m Tight buffered fibers support fast field installations
- · IEC and ITU-T standard complaint
- · RoHS Compliant

### **Cable Performance Standards**

Cable complies to the standards: IEC 60793,IEC 60794, IEC 60794-2-50, ITU-T, RoHS, REACH.

	Physical Characteristics	
Fiber Count	1F	
Fiber Type	STL Fiber ITU-T G657A2	
Maximum Cabled Attenuation (dB/km)	1310nm: 0.4 & 1550nm: 0.3	
Fiber Color	White	
Tight Buffer Material	Low Smoke Zero Halogen (LSZH)	
Semi Tight Buffer Color	Natural	
Semi Tight Buffer Diameter	0.9 ± 0.05 mm	
Strength Members	Water blocking type aramid yarns distributed over and around tight buffer	
Outer Sheath Material	UV Proof Thermoplastic Polyurethane (TPU), Black	
Cable Diameter (mm)	3 ± 0.2	
Cable Weight (kg/km)	8 ±10%	

Mechanical & Environmental Characteristics <sup>2</sup>			
Cable Characteristics	Testing Standards	Cable Performance	
Tensile Strength (Max allowable) (N)	Short term: 500 Long term: 150	IEC-60794-1-21-E1	
Crush Resistance (N/100 mm)	2000	IEC-60794-1-21-E3	
Impact Strength(Nm)	5	IEC-60794-1-21-E4	
Torsion	±360°	IEC-60794-1-21-E7	
Kink Diameter (mm)	15	IEC-60794-21-E10	
Min. Bend Radius (During Installation)	20 x D	IEC-60794-1-21-E11	
Min. Bend Radius (After Installation)	12 x D	IEC-60794-1-21-E11	
Water Penetration Test	1m waterhead, 3m samples, 24 h	IEC-60794-1-22 F5B	
Temperature Performance		IEC-60794-1-22-F1	
Installation	-20°C to +60°C		
Operation	-40°C to +60°C		
Storage/Transport	-40°C to +60°C		

Note 2. All tests shall be carried out as per IEC 60794 standard.

Loading Conditions - Maximum Span Distance				
Installation Sag	NESC Light ft (m)	NESC Medium ft (m)	NESC Heavy ft (m)	
1%	348 (106)	141 (43)	66 (20)	
1.5%	377 (115)	148 (45)	69 (21)	
3%	466 (142)	174 (53)	79 (24)	

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