



### OVERVIEW

Factory pre-terminated flat drop cable assemblies are designed for rapid and reliable FTTH deployment in outdoor access networks. Each assembly is terminated with a hardened fiber optic connector (HFOC) featuring SC/APC polishing and is designed to be OptiTap®\*\* compatible for quick plug-and-play installation with compatible hardened adapters and terminals. The connector sealing performance is designed to meet IP68 protection requirements for outdoor use.

Each cable assembly is 100% factory tested for optical and mechanical performance before shipment. The product is designed to meet the relevant requirements of Telcordia GR-3120-CORE and GR-326-CORE, with verification including insertion loss, return loss, connector durability, tensile performance, environmental resistance, and sealing reliability.

A wide range of cable options is available to suit different installation needs, including toneable flat drop cable, non-toneable flat drop cable, micro flat drop cable, and round drop cable, making the assembly suitable for aerial, duct, direct burial, and other last-mile fiber access applications.

\*\*OptiTap® is a registered trademark of Corning Incorporated.

### FEATURES

#### Plug-and-Play

- Available with standard SC/APC or Hardened SC/APC connectors
- Eliminate field splicing
- Reduces installation time and labor cost

#### Various Cable and Fiber Options

- Toneable Flat Drop Cable, 4.5 × 9.8 mm
- Dielectric Flat Drop Cable, 4.5 × 8.1 mm
- Micro Flat Drop Cable with Tone Wire, 6.6 × 3.0 mm
- Available with Singlemode G.657.A1 or G.657.A2 Fiber

#### Rugged Outdoor Design

- Integral pulling eye and connector cap designed for a maximum pulling tension of 100 lbf
- Optional pulling eye on the standard SC/APC side for a maximum pulling tension of 100 lbf
- IP68-rated ingress protection for outdoor applications

#### Flexible Packaging Options

- Default packaging: coiled spool for 20 – 2000 ft lengths
- Eco-friendly cardboard reels are also available, typically for lengths of 300 ft and above

### APPLICATION

- Aerial Self-Support
- Direct Buried
- Duct

### STANDARDS

- GR-3120-Core and GR-326-Core for Connectors
- GR-20-Core for Cables

### OPTICAL SPECIFICATION

Connector Type	Insertion Loss (dB)	Return Loss (dB)
Hardened SCAPC	Typical <0.15, Max.<0.3	>65
Standard SCAPC	Typical <0.15, Max.<0.3	>65

### HARDENED CONNECTOR

### ENVIRONMENTAL PERFORMANCE

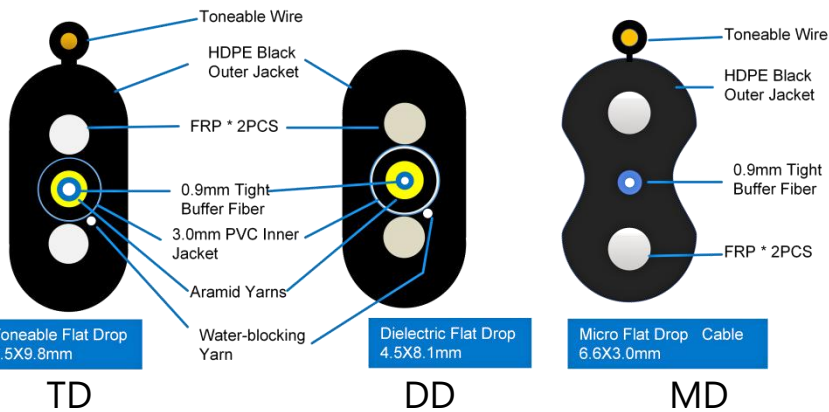
Thermal Age Test	Temperature: 85°C Humidity: 85% RH Duration: 168 hours (7 days)
Thermal Cycle Test	-40°C to +75°C, 7 days, 21 cycles, 168 hours Dwell time – 1hour
Water Resistance	90 days, 1.5m water head @23°C No Water Intrusion

### HARDENED CONNECTOR MECHANICAL PERFORMANCE

Plug/Cap Straight pull(0°)	100lbf (450N)
Plug/Adapter Straight pull(0°)	25lbf(113N)
Plug/Adapter Side pull(90°)	15lbf(68N)
Transmission With Applied Tensile Load	30 minutes @ 10lbf: 23°C at 0°, 90°, 135° degree angles



### FLAT DROP CABLE SINGMODE SPECIFICATION




Max.Tensile Strength Short-Term (TD,DD)	1350N
Max.Tensile Strength Short-Term (MD)	1335N
Max.Tensile Strength Long-Term (TD, DD,MD)	400N
Temperature Range, Installation	-30°C to 60°C
Temperature Range, Operation	-40°C to 75°C
Temperature Range, Storage	-40°C to 75°C

### ORDERING GUIDE

## HFOD-AA-BB-CC-DDDD-EE-FF

<b>A</b>	<p>Connector at top end (inside end) of cable coiled:</p> <p>SA: Standard SCAPC          SU: Standard SCUPC          LA: Standard LCAPC          LU: Standard LCUPC          HSA: Hardened SCAPC          00: No Connector/ Open</p>	<b>B</b>	<p>Connector at bottom end (Outside end) of cable coiled:</p> <p>SA: Standard SCAPC          SU: Standard SCUPC          LA: Standard LCAPC          LU: Standard LCUPC          HSA: Hardened SCAPC          00: No Connector/ Open</p>
<b>C</b>	<p>Cable Types:</p> <p>TD: Toneable Flat Drop 4.5X9.8mm          DD: Dielectric Flat Drop 4.5X8.1mm          MD: Micro Toneable Flat Drop 6.6X3.0mm</p>	<b>D</b>	<p>Length:</p> <p>0020: 20 Feet          0050: 50 Feet          0100: 100 Feet          ...          2000: 2000 Feet</p>
<b>E</b>	<p>Pulling Eye:</p> <p>PE: with Pulling Eye          00: No Pulling Eye          Note: By default, the pulling eye is installed on the non-hardened connector end.</p>	<b>F</b>	<p>Cardboard Reel:</p> <p>CR: Cardboard Reel          00: No cardboard reel, coiled spool</p>

### EXAMPLE

Part Number	Product Description	Image
HFOD-SA-HSA-TD-1000-PE-00	<p>Hardened Fiber Optic Drop            Top End: SCAPC with Pulling Eye,            Bottom End: Hardened SCAPC            Toneable 4.5*9.8mm 1 Count G657A1            Dry HDPE 1000FT Coiled Spool</p>	

Part Number	Product Description	Image
HFOD-00-HSA-DD-0500-PE-00	<p>Hardened Fiber Optic Drop            Top End: Open/no connector, Bottom End: Hardened SCAPC            Dielectric 4.5*8.1mm 1 Count G657A1            Dry HDPE 500FT Coiled Spool</p>	
HFOD-HSA-SA-MD-0500-00-CR	<p>Hardened Fiber Optic Drop            Top End: Hardened SCAPC ,            Bottom End: SCAPC            Micro Flat Drop 6.6*3.0mm 1 Count            G657A1 HDPE 500FT Cardboard Reel</p>	
HFOD-HSA-SA-DD-0300-PE-CR	<p>Hardened Fiber Optic Drop            Top End: Hardened SCAPC ,            Bottom End: SCAPC With Pulling Eye            Dielectric Flat Drop 4.5*8.1mm 1 Count            G657A1 HDPE 300FT Cardboard Reel</p>	