# MHD-MODH



# Hardened Multifiber Optical Connector (HMFOC) cable assembly, HMFOC jack to stub, 12-fiber

- 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
- \*Product complies with the Build America, Buy America Act (BABAA) requirements of the Infrastructure Investment and Jobs Act of 2021 (Pub. L. 117-58, §§ 70901-70953), or is the subject of a waiver approved by the Secretary of Commerce or designee. Compliance requirements and waiver applicability vary based on government funding program. Check the laws and regulations for your specific program.

#### Product Classification

Regional Availability Asia | Latin America | North America

**Product Type** Fiber drop cable assembly

Product Series MHD

**Government Requirements**Build America Buy America (BABA) compliant\*

# General Specifications

Cable Type Toneable - Flat

Connector A, quantity

Color, boot A Black
Color, connector A Black

Interface, Connector A Hardened multi-fiber (HMFOC) jack

 Interface Feature, connector A
 Male | Pinned

 Interface, Connector B
 Unterminated

Jacket Color Black

**Location of Manufacturing**Catawba, North Carolina

Total Fibers, quantity 12

Dimensions

Cable Assembly Length Range (m) 8 - 915
Cable Assembly Length Range (ft) 25 - 3000

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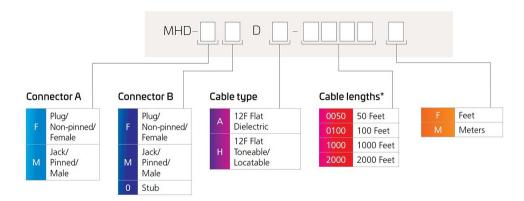


# MHD-MODH

#### **Cable Outer Diameter**

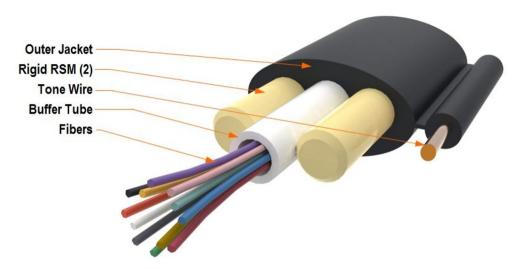
4.3 x 9.9 mm (0.17 x 0.39 in)

# Ordering Tree



<sup>\*</sup> Cable Length shown as an example, additional cable lengths available upon request up to 2,000 ft. (600 m).

# Representative Image



## Mechanical Specifications

Minimum Bend Radius, loaded86 mm | 3.386 inMinimum Bend Radius, unloaded81 mm | 3.189 inTensile Load, long term, maximum400 N | 89.924 lbfTensile Load, short term, maximum1334 N | 299.895 lbf

**Optical Specifications** 



# MHD-MODH

Fiber Mode Singlemode

**Fiber Type** G.657.A2, TeraSPEED®

Insertion Loss, maximum, connector A 0.45 dB

Return Loss, minimum, connector A 65 dB

# **Environmental Specifications**

Installation temperature  $-30 \,^{\circ}\text{C to} + 70 \,^{\circ}\text{C (-22 °F to} + 158 °F)$ Operating Temperature  $-40 \,^{\circ}\text{C to} + 70 \,^{\circ}\text{C (-40 °F to} + 158 °F)$ Storage Temperature  $-40 \,^{\circ}\text{C to} + 75 \,^{\circ}\text{C (-40 °F to} + 167 °F)$ 

Environmental Space Outdoor, buried

Jacket UV Resistance UV stabilized

**Qualification Standards** IEC 61753-1, category A and G | IP68 | Per GR-3152

Packaging and Weights

Packaging quantity

## Regulatory Compliance/Certifications

#### Agency Classification

CHINA-ROHS Below maximum concentration value

REACH-SVHC Compliant as per SVHC revision on www.commscope.com/ProductCompliance

ROHS Compliant UK-ROHS Compliant



#### Included Products

810009374/DB O-012-DF-HY-F12NS/30T Tone Wire Outdoor Drop Cable, 12 fiber Arid Core construction, central loose tube



# 810009374/DB | 0-012-DF-HY-F12NS/30T /8G1012/1X24AWG



Tone Wire Outdoor Drop Cable, 12 fiber Arid Core construction, central loose tube

#### **Product Classification**

Regional Availability

Asia | Australia/New Zealand | EMEA | Latin America | North America

Portfolio CommScope®

Product Type Hybrid cable, fiber and tone-wire

General Specifications

Cable Type Central loose tube

Construction Type Non-armored

**Fiber Short Description** O-012-DF-HY-F12NS/20G/1X24AWG

**Subunit Type** Gel-filled

Jacket Color Black

Subunit, quantity

Fibers per Subunit, quantity 12

Tone Wire, quantity 1

**Total Fiber Count** 12

#### **Dimensions**

Height Over Jacket 4.572 mm | 0.18 in

Buffer Tube/Subunit Diameter 3.048 mm | 0.12 in

Diameter Over Jacket 9.906 mm | 0.39 in

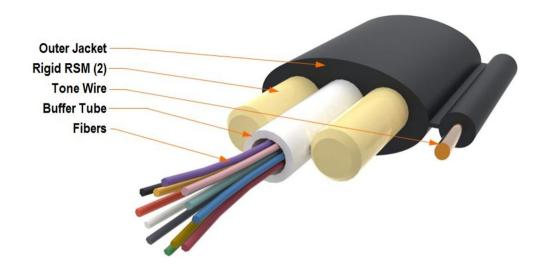
Diameter Over Messenger Jacket 2.032 mm | 0.08 in

**Tone Wire Gauge** 24 AWG

## Representative Image



# 810009374/DB | 0-012-DF-HY-F12NS/30T /8G1012/1X24AWG



## Mechanical Specifications

Minimum Bend Radius, loaded86.36 mm3.4 inMinimum Bend Radius, unloaded63.5 mm2.5 in

**Tensile Load, long term, maximum** 400.34 N | 90 lbf

**Tensile Load, short term, maximum** 1,334.466 N | 300 lbf

**Compression** 1.018 kg/mm | 57 lb/in

**Compression Test Method** FOTP-41 | IEC 60794-1 E3

Flex 35 cycles

Flex Test Method FOTP-104 | IEC 60794-1 E6

**Impact** 2.17 ft lb | 2.942 N-m

Impact Test Method FOTP-25 | IEC 60794-1 E4

**Strain** See long and short term tensile loads

Strain Test Method FOTP-33 | IEC 60794-1 E1

Twist 10 cycles

Twist Test Method FOTP-85 | IEC 60794-1 E7

Vertical Rise, maximum 889.102 m | 2917 ft

Optical Specifications

**Fiber Type** G.657.A2 | G.657.A2, TeraSPEED®

## **Environmental Specifications**



# 810009374/DB | 0-012-DF-HY-F12NS/30T /8G1012/1X24AWG

Installation temperature  $-30 \,^{\circ}\text{C}$  to  $+70 \,^{\circ}\text{C}$  (-22  $^{\circ}\text{F}$  to  $+158 \,^{\circ}\text{F}$ )

Operating Temperature  $-40 \,^{\circ}\text{C}$  to  $+70 \,^{\circ}\text{C}$  (-40  $^{\circ}\text{F}$  to  $+158 \,^{\circ}\text{F}$ )

Storage Temperature  $-40 \,^{\circ}\text{C}$  to  $+75 \,^{\circ}\text{C}$  (-40  $^{\circ}\text{F}$  to  $+167 \,^{\circ}\text{F}$ )

Cable Qualification StandardsANSI/ICEA S-110-717Environmental SpaceAerial, lashed | Buried

Jacket UV Resistance UV stabilized

Water Penentration 24 h

**Water Penentration Test Method** FOTP-82 | IEC 60794-1 F5

**Environmental Test Specifications** 

**Cable Freeze** -2 °C | 28.4 °F

**Cable Freeze Test Method** FOTP-98 | IEC 60794-1 F15

**Drip** 70 °C | 158 °F

**Drip Test Method** FOTP-81 | IEC 60794-1 E14

**Heat Age** -40 °C to +85 °C (-40 °F to +185 °F)

**Heat Age Test Method** IEC 60794-1 F9

**Low High Bend**  $-30 \,^{\circ}\text{C} \text{ to } +60 \,^{\circ}\text{C} \, (-22 \,^{\circ}\text{F to } +140 \,^{\circ}\text{F})$ 

**Low High Bend Test Method** FOTP-37 | IEC 60794-1 E11

**Temperature Cycle**  $-40 \,^{\circ}\text{C}$  to  $+70 \,^{\circ}\text{C}$  ( $-40 \,^{\circ}\text{F}$  to  $+158 \,^{\circ}\text{F}$ )

**Temperature Cycle Test Method** FOTP-3 | IEC 60794-1 F1

Packaging and Weights

**Cable weight** 36.906 kg/km | 24.8 lb/kft

## Regulatory Compliance/Certifications

#### Agency Classification

CHINA-ROHS Below maximum concentration value

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system

REACH-SVHC Compliant as per SVHC revision on www.commscope.com/ProductCompliance

ROHS Compliant UK-ROHS Compliant



\* Footnotes



# 810009374/DB | 0-012-DF-HY-F12NS/30T /8G1012/1X24AWG

**Operating Temperature** Specification applicable to non-terminated bulk fiber cable

