760255005 | P-016-HY-8G1-F30YL/8X16AWG/CTX



Constellation® Plenum Hybrid Fault Managed Power Cable, 16 Fiber Loose Tube, 8 Conductor 16 AWG Twisted Pairs

Product Classification

Regional AvailabilityNorth AmericaPortfolioCommScope®

Product Type Hybrid cable, copper and fiber

Product Brand Constellation™

General Specifications

Cable Type Fault managed power cable | Hybrid | MPO trunk cable | U/UTP

(unshielded)

Conductor Type, singles Stranded

Conductors, quantity 8

Construction TypeNon-armoredFiber Short DescriptionP-016-MP30

Subunit TypeGel-freeJacket ColorYellowSubunit Jacket ColorYellow

Subunit, quantity 2
Fibers per Subunit, quantity 16
Total Fiber Count 16

Dimensions

Buffer Tube/Subunit Diameter2.997 mm | 0.118 inInsulation Thickness, singles4.064 mm | 0.16 inJacket Thickness0.838 mm | 0.033 in

Conductor Gauge 16 AWG

Electrical Specifications

Capacitance 82.021 pF/m | 25 pF/ft

Conductor dc Resistance 13.615 ohms/km | 4.15 ohms/kft

Page 1 of 3

760255005 | P-016-HY-8G1-F30YL/8X16AWG/CTX

Dielectric Strength, conductor to shield 6000 Vdc

Material Specifications

Conductor Material Bare copper | Stranded copper wire

Insulation Material, singles PVC

Jacket Material Fire retardant PVC

Inner Jacket Material PVC

Ripcord Material Polyester

Mechanical Specifications

Minimum Bend Radius, loaded200.66 mm | 7.9 inMinimum Bend Radius, unloaded134.62 mm | 5.3 inTensile Load, long term, maximum444.822 N | 100 lbf

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

Compression 1.018 kg/mm | 57 lb/in

Compression Test MethodFOTP-41Flex25 cyclesFlex Test MethodFOTP-104

Impact 2.17 ft lb | 2.942 N-m

Impact Test Method FOTP-25

Strain See long and short term tensile loads

Strain Test MethodFOTP-33Twist10 cyclesTwist Test MethodFOTP-85

Optical Specifications

Fiber Type G.657.A2/B2

Environmental Specifications

Installation temperature $0 \, ^{\circ}\text{C} \, \text{to} +70 \, ^{\circ}\text{C} \, (-32 \, ^{\circ}\text{F} \, \text{to} +158 \, ^{\circ}\text{F})$ Operating Temperature $0 \, ^{\circ}\text{C} \, \text{to} +75 \, ^{\circ}\text{C} \, (+32 \, ^{\circ}\text{F} \, \text{to} +167 \, ^{\circ}\text{F})$ Storage Temperature $-40 \, ^{\circ}\text{C} \, \text{to} +75 \, ^{\circ}\text{C} \, (-40 \, ^{\circ}\text{F} \, \text{to} +167 \, ^{\circ}\text{F})$

Cable Qualification Standards ANSI/ICEA S-83-596 | Telcordia GR-409 | UL 1400-2 | UL 444

COMMSCOPE®

760255005 | P-016-HY-8G1-F30YL/8X16AWG/CTX

Environmental Space Indoor | Plenum

Flame Test Listing

NEC CL4P-OF (ETL) and c(ETL) | NEC CMP-OF (ETL) and c(ETL)

Flame Test Method NFPA 262

Environmental Test Specifications

Low High Bend 0 °C to +70 °C (+32 °F to +158 °F)

Low High Bend Test Method FOTP-37

Temperature Cycle $0 \,^{\circ}\text{C}$ to +70 $^{\circ}\text{C}$ (+32 $^{\circ}\text{F}$ to +158 $^{\circ}\text{F}$)

Temperature Cycle Test Method FOTP-3

Packaging and Weights

Cable weight 261.917 kg/km | 176 lb/kft

Included Products

CS-8G1-MP – Enhanced Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Fiber (ITU-T

G.657.A2, B2)

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

