



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

Product Classification

Regional Availability	North America
Portfolio	CommScope®
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 Type	Non-armored
Fiber Short Description	P-016-MP30
Subunit Type	Gel-free
Jacket Color	Yellow
Subunit Jacket Color	Yellow
Subunit, quantity	1
Fibers per Subunit, quantity	16
Total Fiber Count	16

Dimensions

Buffer Tube/Subunit Diameter	2.997 mm 0.118 in
Diameter Over Jacket, nominal	12.167 mm 0.479 in
Insulation Thickness, singles	4.064 mm 0.16 in
Jacket Thickness	0.838 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
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, loaded	482.6 mm 19 in
Minimum Bend Radius, unloaded	243.84 mm 9.6 in
Tensile Load, long term, maximum	444.822 N 100 lbf
Tensile Load, short term, maximum	1,334.466 N 300 lbf
Compression	1.018 kg/mm 57 lb/in
Compression Test Method	FOTP-41
Flex	25 cycles
Flex Test Method	FOTP-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 Method	FOTP-33
Twist	10 cycles
Twist Test Method	FOTP-85

Optical Specifications

Fiber Type	G.657.A2/B2
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Environmental Specifications

Installation temperature	0 °C to +70 °C (-32 °F to +158 °F)
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Operating Temperature	0 °C to +75 °C (+32 °F to +167 °F)
Storage Temperature	-40 °C to +75 °C (-40 °F to +167 °F)
Cable Qualification Standards	ANSI/ICEA S-83-596 Telcordia GR-409 UL 1400-2 UL 444
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 °C to +70 °C (+32 °F to +158 °F)
Temperature Cycle Test Method	FOTP-3

Packaging and Weights

Cable weight	203.878 kg/km 137 lb/kft
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Included Products

CS-8G1-MP	-	Enhanced Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Fiber (ITU-T G.657.A2, B2)
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* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable