

PFC-S12012



Powered Fiber Cable, OS2, 12 Fibers, Outdoor, 12AWG Conductor, meter, feet

- Easy peel, stranded conductors for maximum cable flexibility and rapid access
- Polarization indentation along one side of the cable for polarity identification
- No special tools or mounting hardware required - usage of a standard "FTTH" pressure clamp for aerial installation
- Easy split of cable into three separate sections for separate routing in closures, as needed for installation
- Polyethylene jacket for outdoor duct or direct buried applications

Product Classification

| | |
|------------------------------|---------------------------------------------------------------------|
| Regional Availability | Asia Australia/New Zealand EMEA Latin America North America |
| Product Type | Hybrid cable, fiber and power |
| Ordering Note | Minimum order quantity is 500 meter |

General Specifications

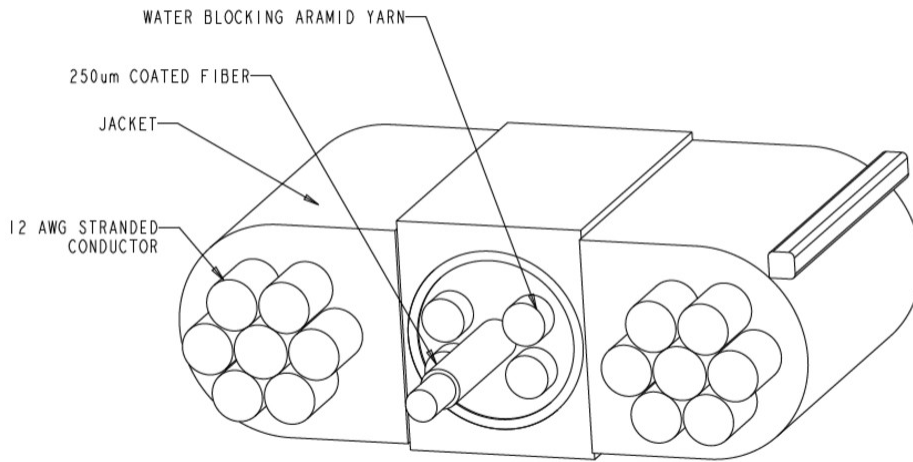
| | |
|--------------------------------|------------------|
| Cable Type | Stranded outdoor |
| Fiber Short Description | PFC-012 |
| Jacket Color | Black |
| Total Fiber Count | 12 |

Dimensions

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|---------------------------|--------------------|
| Height Over Jacket | 4.318 mm 0.17 in |
| Width Over Jacket | 11.43 mm 0.45 in |
| Conductor Gauge | 12 AWG |

Outline Drawing

PFC-S12012



Mechanical Specifications

| | |
|------------------------------------------|----------------------|
| Minimum Bend Radius, loaded | 50.8 mm 2 in |
| Minimum Bend Radius, unloaded | 30.48 mm 1.2 in |
| Tensile Load, long term, maximum | 133.447 N 30 lbf |
| Tensile Load, short term, maximum | 440.374 N 99 lbf |
| Vertical Rise, maximum | 122.011 m 400.3 ft |

Optical Specifications

| | |
|-------------------|----------------------------|
| Fiber Type | G.657.A2, TeraSPEED® OS2 |
|-------------------|----------------------------|

Environmental Specifications

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|--------------------------------------|--------------------------------------|
| Installation temperature | -10 °C to +60 °C (+14 °F to +140 °F) |
| Operating Temperature | -40 °C to +70 °C (-40 °F to +158 °F) |
| Storage Temperature | -40 °C to +70 °C (-40 °F to +158 °F) |
| Cable Qualification Standards | Telcordia GR-20-CORE Issue 4 |
| Environmental Space | Outdoor |
| Jacket UV Resistance | UV stabilized |

Packaging and Weights

| | |
|---------------------|-----------------------------|
| Cable weight | 109.975 kg/km 73.9 lb/kft |
|---------------------|-----------------------------|

PFC-S12012

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

| | | |
|-----------|---|--------------------------------------------------------------------------------------------------------|
| CS-8G-PFC | - | Enhanced Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Fiber (ITU-T G.657.A2, B2) |
|-----------|---|--------------------------------------------------------------------------------------------------------|

CS-8G-PFC

Enhanced Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Fiber (ITU-T G.657.A2, B2)

Product Classification

| | |
|---------------------|---------------|
| Portfolio | CommScope® |
| Product Type | Optical fiber |

General Specifications

| | |
|------------------------------------------------------|----------------------------------------|
| Cladding Diameter | 125 µm |
| Cladding Diameter Tolerance | ±0.7 µm |
| Cladding Non-Circularity, maximum | 0.7 % |
| Coating Diameter (Colored) | 254 µm |
| Coating Diameter (Uncolored) | 240 µm |
| Coating Diameter Tolerance (Colored) | ±7 µm |
| Coating Diameter Tolerance (Uncolored) | ±5 µm |
| Coating/Cladding Concentricity Error, maximum | 12 µm |
| Core/Clad Offset, maximum | 0.5 µm |
| Proof Test | 689.476 N/mm ² 100000 psi |

Dimensions

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|----------------------------|-----------------|
| Fiber Curl, minimum | 4 m 13.123 ft |
|----------------------------|-----------------|

Mechanical Specifications

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|------------------------------------------------|-----------------------------------------|
| Macrobending, 15 mm Ø mandrel, 1 turn | 0.50 dB @ 1,550 nm 1.00 dB @ 1,625 nm |
| Macrobending, 20 mm Ø mandrel, 1 turn | 0.10 dB @ 1,550 nm 0.20 dB @ 1,625 nm |
| Macrobending, 30 mm Ø mandrel, 10 turns | 0.03 dB @ 1,550 nm 0.10 dB @ 1,625 nm |
| Coating Strip Force, maximum | 8.9 N 2.001 lbf |
| Coating Strip Force, minimum | 1.3 N 0.292 lbf |
| Dynamic Fatigue Parameter, minimum | 20 |

Optical Specifications

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|------------------------------------------|---------|
| Cabled Cutoff Wavelength, maximum | 1260 nm |
| Point Defects, maximum | 0.1 dB |

CS-8G-PFC

| | |
|--------------------------------------------|---------------------|
| Zero Dispersion Slope, maximum | 0.092 ps/[km-nm-nm] |
| Zero Dispersion Wavelength, maximum | 1322 nm |
| Zero Dispersion Wavelength, minimum | 1302 nm |

Optical Specifications, Wavelength Specific

| | |
|----------------------------------------------------------------|----------------------------------------------------------------------------|
| Attenuation, maximum | 0.30 dB/km @ 1,550 nm 0.40 dB/km @ 1,310 nm |
| Dispersion, maximum | 18 ps(nm-km) at 1550 nm 3.5 ps(nm-km) from 1285 nm to 1330 nm at 1310 nm |
| Index of Refraction | 1.467 @ 1,310 nm 1.467 @ 1,385 nm 1.468 @ 1,550 nm |
| Mode Field Diameter | 8.8 μm @ 1,310 nm 9.9 μm @ 1,550 nm |
| Mode Field Diameter Tolerance | $\pm 0.4 \mu\text{m}$ @ 1310 nm $\pm 0.5 \mu\text{m}$ @ 1550 nm |
| Polarization Mode Dispersion Link Design Value, maximum | 0.06 ps/sqrt(km) |
| Standards Compliance | ITU-T G.657.A2 ITU-T G.657.B2 |

Environmental Specifications

| | |
|----------------------------------------------|--------------------|
| Heat Aging, maximum | 0.05 dB/km @ 85 °C |
| Temperature Dependence, maximum | 0.05 dB/km |
| Temperature Humidity Cycling, maximum | 0.05 dB/km |
| Water Immersion, maximum | 0.05 dB/km @ 23 °C |

Regulatory Compliance/Certifications

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

* Footnotes

| | |
|----------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Temperature Dependence, maximum | Temperature dependence is conducted at -60 °C to +85 °C (-76 °F to +185 °F) |
| Temperature Humidity Cycling, maximum | Temperature humidity cycling is conducted at -10 °C to +85 °C (+14 °F to +185 °F) up to 95% relative humidity |