

Data sheet

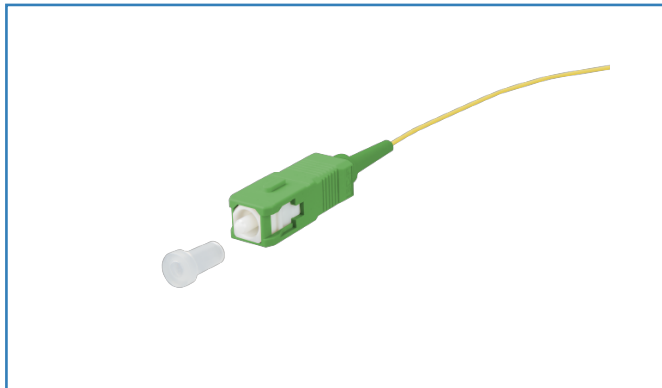
OpDAT pigtail SC-APC, OS2, yellow

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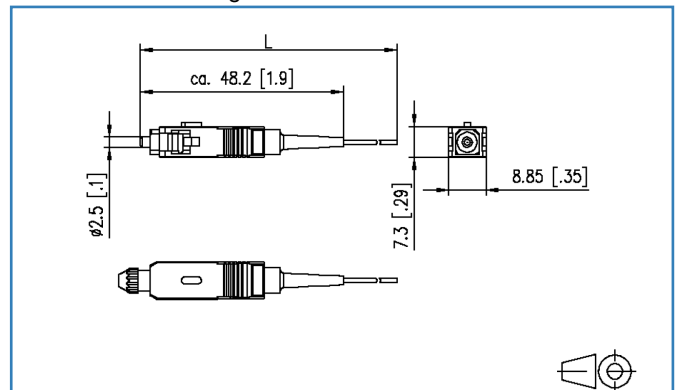
P/N
150Q1CA0020S
EAN 4250184188988

2018-09-01

Illustrations



Dimensional drawing



See enlarged drawings at the end of document

Product specification

- SC plug according to IEC 61754-4
- Single mode fiber OS2, E9/125 μm , bend insensitive according to IEC 60793-2-50 type B6_a and B6_b and G.657.A2 and B2, compatible to G.652.D
- Compact loose tube fiber with dia. 0.9 mm, length 2.0 m
- Color sequence in sets according to IEC 60304: red, green, blue, yellow, white, gray, brown, violet, turquoise, black, orange, pink. Secondary and primary coating same color
- Plug connector mounted on one side
- With test report, insertion loss and return loss tested at 100 %
- all available variants can be created with the cable configurator

Technical Data

General Data

| | |
|-----------------------------------|---|
| Fields of application | Office Data center |
| Design | pigtail |
| Transmission technology | Fiber optic |
| Color | green |
| Dimensions | |
| Dimension (L x W x H) | 48.20 x 8.85 x 7.30 mm |
| Dimension (L x W x H) | 1.898 x 0.348 x 0.287 in. |
| Mode type of the fiber | Single mode |
| Fiber class | OS2 (IEC 60793-2-50 B6_a, B6_b & ITU-T G.657.A2, G.657.B2, G.652.D) |
| Cable Type | pigtail(s) |
| Number of cables/ cores | 1 |
| Number of fibres each cable/ wire | 1 |
| Shape | APC (Angled Physical Contact) |
| Fiber construction | 9/125 µm |
| Cable length (m) | 2.00 m |
| Cable length (ft) | 6.56 ft |

Connections/interfaces

| | |
|----------------------------------|---------------|
| Connector technology interface 1 | Free line end |
| Connector technology interface 2 | SC APC |
| Primary coating diameter | 0.25 mm |
| Primary coating diameter | 0.01 in. |
| Secondary coating diameter | 0.90 mm |
| Secondary coating diameter | 0.035 in. |
| Ferrule diameter | 2.50 mm |
| Ferrule diameter | 0.098 in. |

Optical characteristics

| | |
|----------------|-------------|
| Insertion loss | max. 0.3 dB |
| Return loss | min. 65 dB |

Technical Data

Mechanical characteristics

| | |
|--------------------------------|-----------|
| Insertion and withdrawal force | min. 5 N |
| Minimum bending radius | 7.50 mm |
| Minimum bending radius | 0.295 in. |

Materials and material properties

| | |
|--------------------|-----|
| Bend insensitivity | yes |
|--------------------|-----|

Environmental conditions

| | |
|----------------------------|-------------|
| Temperature (min. - max.) | |
| Temperature - Storage °C | -20 - 60 °C |
| Temperature - Storage °F | -4 - 140 °F |
| Temperature - Operating °C | -20 - 60 °C |
| Temperature - Operating °F | -4 - 140 °F |

Approvals

| | |
|------|-----------|
| RoHS | compliant |
|------|-----------|

The product meets the following standards

| | |
|--|--|
| Generic cabling systems | |
| General requirements | ISO/IEC 11801 |
| Fibre optic connector interfaces | IEC 61754-4 |
| Optical fibers: Indoor optical cables | |
| Sectional specification for class B single-mode fibres | ISO/IEC 60793-2-50 type B6_a/B6_b |
| Optical fibers - Interconnecting devices and passive components - basic test and measuring methods | |
| Fibre optic interconnecting devices and passive components | IEC 61300-3-4 IEC 61300-3-6 |
| ITU-T standard | ITU-T G.657.A2 and G.657.B2, compatible with ITU-T G.652.D |

Classifications

| | |
|----------|----------|
| ETIM 5.0 | EC000748 |
| ETIM 6.0 | EC000748 |



Technical Data

Packing details

| | |
|---------------------------------|-----------------------------|
| Type of packaging | 1 pc(s) / plastic bag |
| Packaging dimension (W x H x D) | 160.00 x 100.00 x 380.00 mm |
| Packaging dimension (W x H x D) | 6.299 x 3.937 x 14.961 in. |



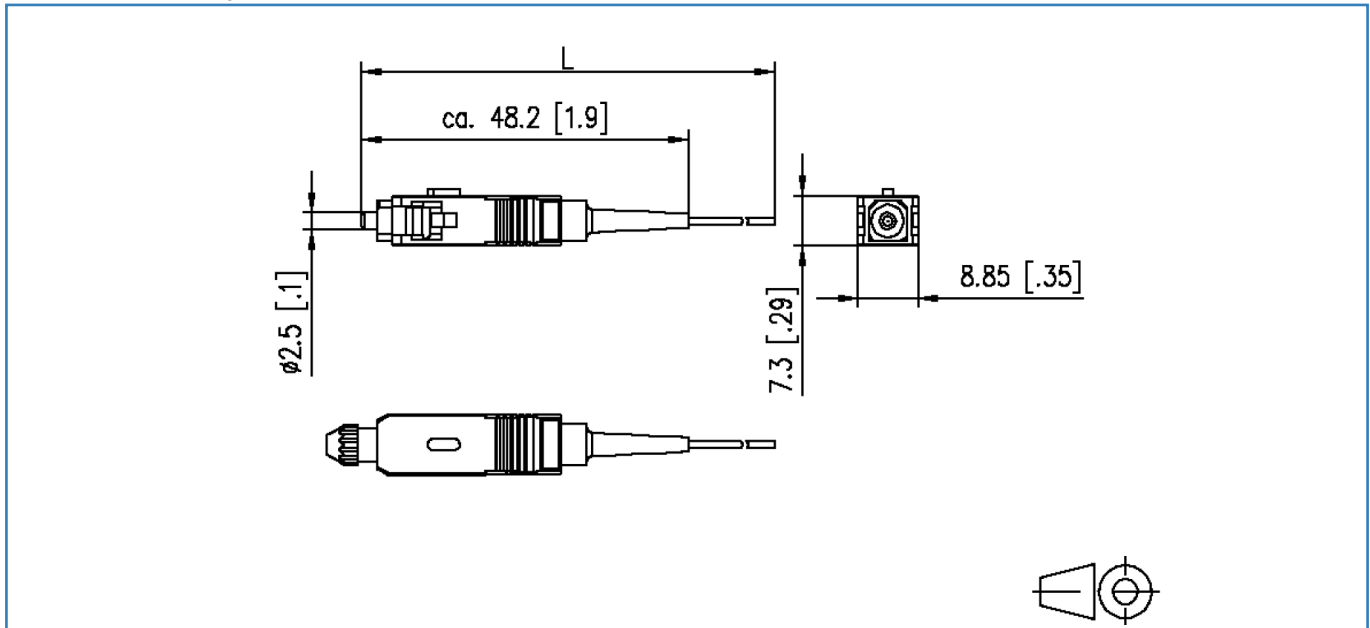
Accessories

| P/N | Designation |
|------------|---|
| 15090401-I | OpDAT crimp splice protection (150 pcs) |
| 15090402-I | OpDAT shrink splice protection |
| 15090401-E | OpDAT crimp splice protection (12 pcs) |



Illustrations

Dimensional drawing



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Technical Data

General Data

| | |
|-------------------------|--|
| Transmission technology | Fiber optic |
| Mode type of the fiber | Single mode |
| Fiber class | OS2 (IEC 60793-2-50 B.1.3, B6_b & ITU-T G.657.A2, G.657.B2, G.652.D) |
| Fiber construction | 9/125 µm |

Transmission characteristics

| | |
|---|---------------------------------|
| Chromatic dispersion coefficient | |
| Chromatic dispersion coefficient - In the interval 1285 nm - 1330 nm (max.) | max. 3.7 ps/km * nm |
| Chromatic dispersion coefficient - At 1550 nm (max.) | max. 18.5 ps/km * nm |
| Chromatic dispersion coefficient - At 1625 nm (max.) | max. 23.0 ps/km * nm |
| Dispersionsnulldurchgang, λ_{D0} | 1300-1324 nm |
| Zero dispersion slope (max.) | 0.092 ps/(nm ² * km) |
| Polarisation mode dispersion (PMD) coefficient, cabled (min.) | 0.1 |
| PMDQ Link Design Value (min.) | 0.06 ps/vkm |
| Threshold wavelength (max.) | 1260 |

Connections/interfaces

| | |
|------------------------------------|----------------|
| Connector technology interface 1 | Free line end |
| Connector technology interface 2 | Free line end |
| Core-/ Fiber cladding diameter | 125.0 ± 0.7 µm |
| Primary coating diameter - colored | 242 ± 7 µm |

Optical characteristics

| | |
|--|-----------------|
| Attenuation of the fiber | |
| Attenuation of the fiber in the cable at 1310 nm | max. 0.38 dB/km |
| Attenuation of the fiber in the cable at 1383 nm | max. 0.38 dB/km |
| Attenuation of the fiber in the cable at 1550 nm | max. 0.23 dB/km |
| Attenuation of the fiber in the cable at 1625 nm | max. 0.25 dB/km |

Mechanical characteristics

| | |
|---|---------------------------------------|
| Proof stress level | min. 0.7 (~ 1 %) GPa |
| Strip force (peak) | 1.2 ≤ F _{peak.strip} ≤ 8.9 N |
| 10 turns on a mandrel R= 15 mm, @ 1550 nm | 0.03 dB |

Technical Data

Mechanical characteristics

| | |
|---|----------------|
| 10 turns on a mandrel R= 15 mm, @ 1625 nm | 0.1 dB |
| 1 turn on a mandrel R= 10 mm, @ 1550 nm | 0.1 dB |
| 1 turn on a mandrel R= 10 mm, @ 1625 nm | 0.2 dB |
| 1 turn on a mandrel R= 7.5 mm, @ 1550 nm | 0.5 dB |
| 1 turn on a mandrel R= 7.5 mm, @ 1625 nm | 1.0 dB |
| Fiber cladding non-circularity | max. 0.7 % |
| Core (MDF)-cladding concentricity error | max. 0.5 µm |
| Primary coating concentricity error | max. 5 % |
| Primary coating-cladding concentricity error | max. 12 |
| Inhomogeneity of OTDR measurement report at 1310 nm und 1550 nm | max. 0.1 dB/km |
| Group refractive index | |
| Group refractive index at 1310 nm | 1.467 |
| Group refractive index at 1550 nm and 1625 nm | 1.468 |

The product meets the following standards

| | |
|--|--|
| Generic cabling systems | |
| General requirements | ISO/IEC 11801 DIN EN 50173-1 : 2007 cat. OS2 |
| Optical fibers: Measuring methods and test procedures | |
| Fibre geometry | ISO/IEC 60793-1-20 |
| Coating geometry | ISO/IEC 60793-1-21 |
| Length measurement | ISO/IEC 60793-1-22 |
| Fibre proof test | ISO/IEC 60793-1-30 |
| Coating strippability | ISO/IEC 60793-1-32 |
| Attenuation | ISO/IEC 60793-1-40 |
| Chromatic dispersion | ISO/IEC 60793-1-42 |
| Threshold wavelength | ISO/IEC 60793-1-44 |
| Mode field diameter | ISO/IEC 60793-1-45 |
| Macrobending loss | ISO/IEC 60793-1-47 |
| Polarization mode dispersion | ISO/IEC 60793-1-48 |
| Optical fibers: Indoor optical cables | |
| Sectional specification for class B single-mode fibres | ISO/IEC 60793-2-50 type B6_a/B6_b |



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Technical Data

The product meets the following standards

Optical fibers: Outdoor optical fibre cables

Outdoor cables ISO/IEC 60794-3

ITU-T standard G.657.A2, G.652.B2, G.652.A, B, C, D

Packing details

Type of packaging 0

Packaging dimension (W x H x D) 0.00 x 0.00 x 0.00 mm

