

Data sheet

OpDAT pigtail SC-UPC, OS2, 12 colors

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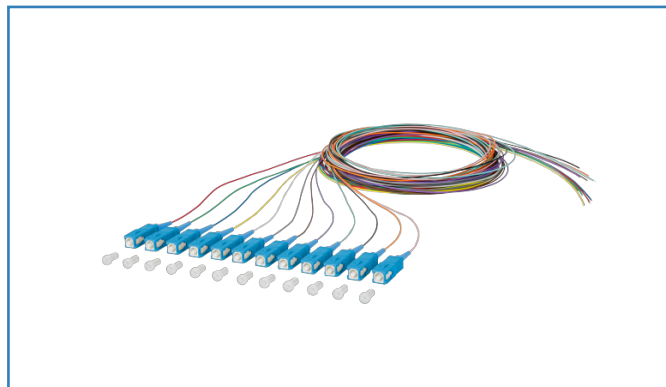
P/N

150Q1CO0020E

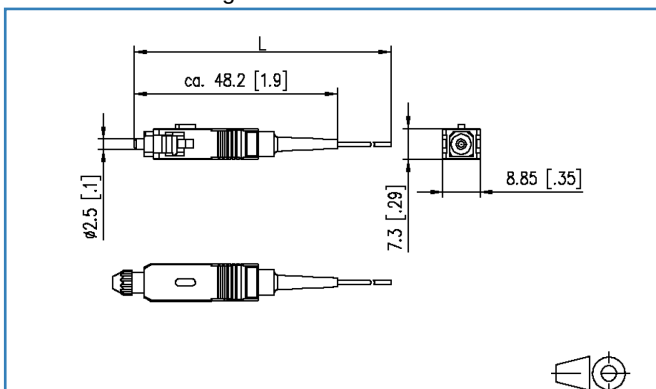
EAN 4250184149743

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



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Technical Data

General Data

Fields of application

Office
Data center

Design pigtail

Transmission technology Fiber optic

Color blue

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 12

Number of fibres each cable/ wire 1

Shape UPC (Ultra 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 UPC

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. 50 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
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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
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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
Standard colours for insulation for low-frequency cables & wires	IEC 60304
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



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Technical Data

Packing details

Type of packaging	12 pc(s) / blister packaging
Packaging unit - Weight (gram)	728 g
Packaging unit - Weight (pound)	1.60 lb
Packaging dimension (W x H x D)	300.00 x 200.00 x 20.00 mm
Packaging dimension (W x H x D)	11.811 x 7.874 x 0.787 in.



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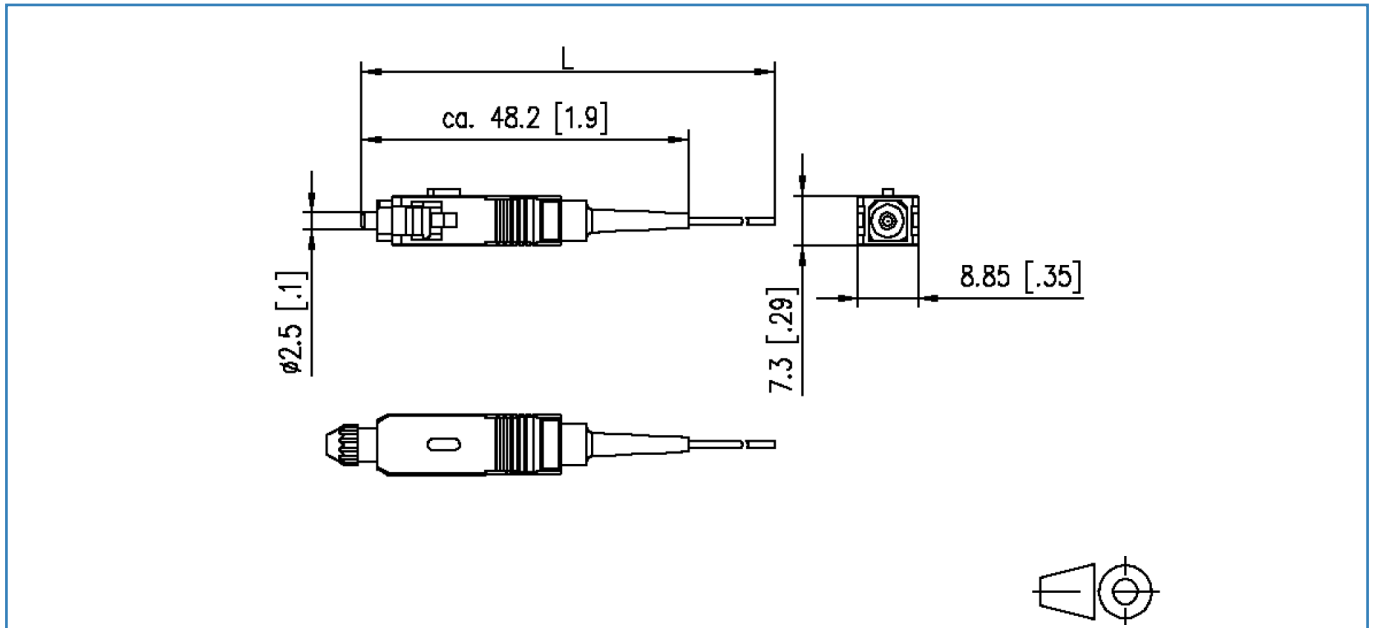
Accessories

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
Dispersion null wavelength, 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 $\pm$ 0.7 μm
Primary coating diameter - colored	242 $\pm$ 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 ($\sim$ 1 %) GPa
Strip force (peak)	1.2 $\leq$ F _{peak.strip} $\leq$ 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

