

## Data sheet

### OpDAT pigtail LC-UPC, OS2, yellow

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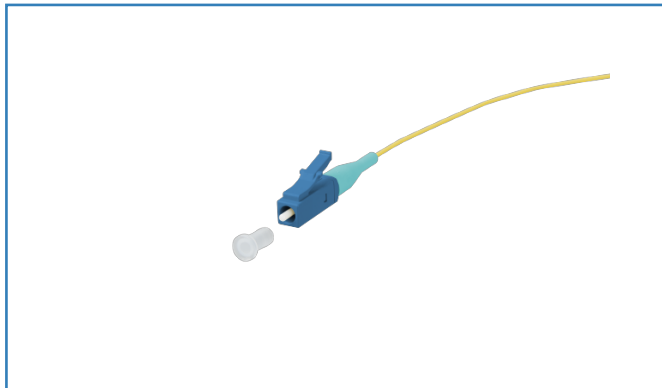
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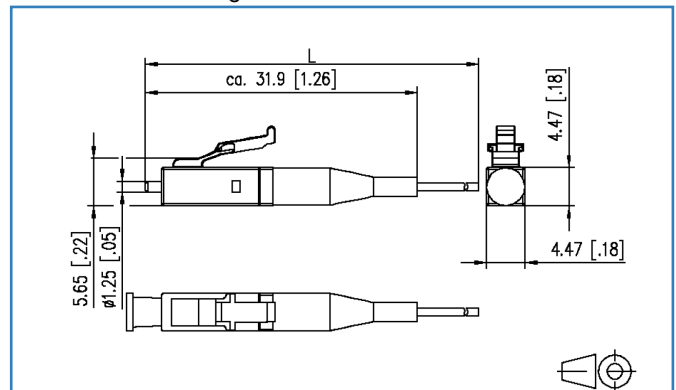
EAN 4250184164661

2018-09-01

## Illustrations



Dimensional drawing



See enlarged drawings at the end of document

## Product specification

- LC plug according to IEC 61754-20
- Single mode fiber OS2, E9/125  $\mu\text{m}$ , 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	blue
Dimensions	
Dimension (L x W x H)	31.90 x 4.47 x 4.47 mm
Dimension (L x W x H)	1.256 x 0.176 x 0.176 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	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	LC 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	1.25 mm
Ferrule diameter	0.049 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 61754-20
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	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)



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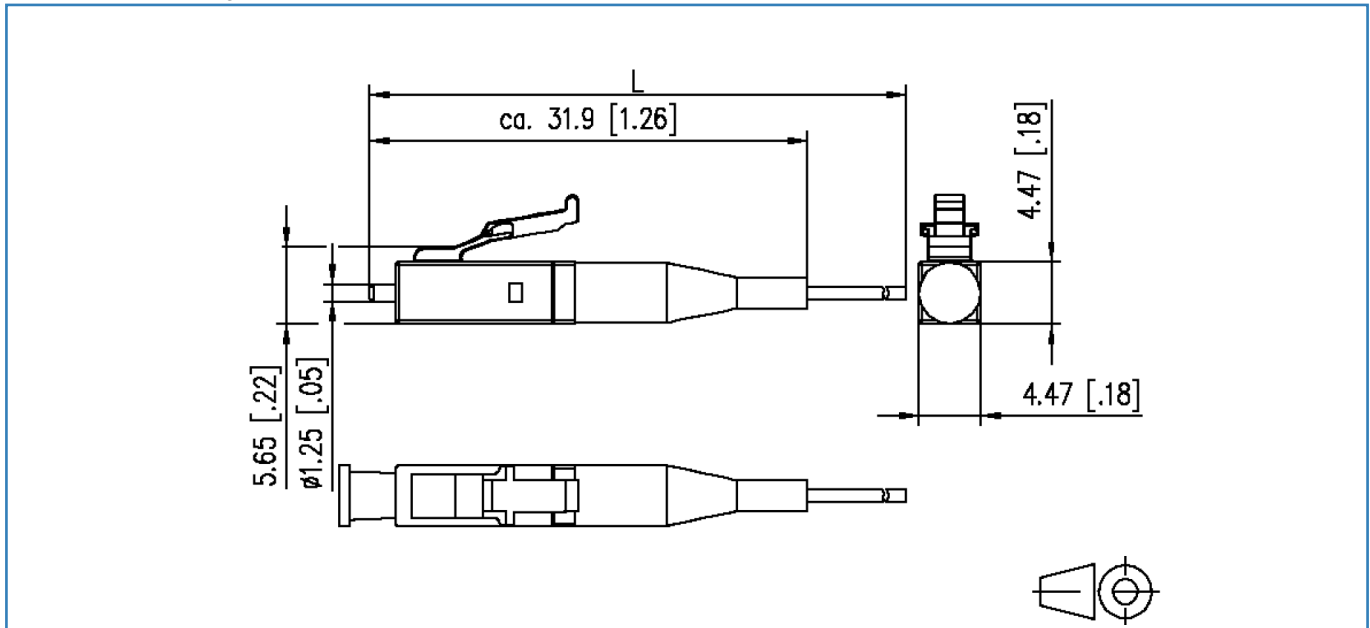
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**Illustrations**

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, $\lambda_{0}$	1300-1324 nm
Zero dispersion slope (max.)	0.092 ps/(nm <sup>2</sup> * 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 <sub>peak.strip</sub> ≤ 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

