

Data sheet

OpDAT pigtail ST-PC, OM4, 12 colors

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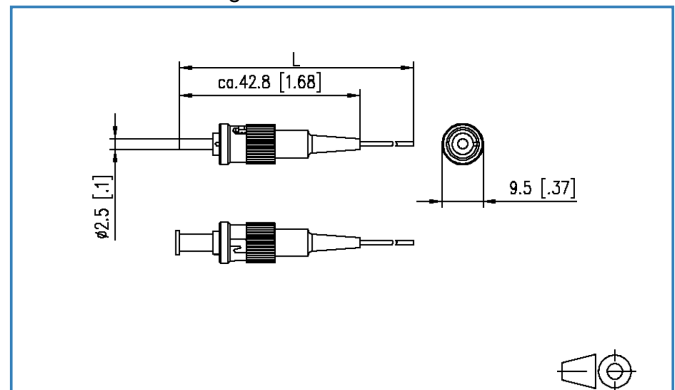
P/N
150N1AO0020E
EAN 4250184149798

2015-08-07

Illustrations



Dimensional drawing



See enlarged drawings at the end of document

Product specification

- Multi mode fiber OM4, G50/125 μm according to IEC 60793-2-10 type A1a.3
- Compact conductor with dia. 0.9 mm
- Length 2.0 m
- Plug connector mounted on one side, all types according to IEC 61754
- With test report, insertion loss and return loss tested at 100 %
- Packing unit: 12 pieces
- Order quantity refers to 1 piece and has always to be a multiple of 12
- Example: 24 x 150N1CO0020E = 2 packing units with 12 pieces each
- Variants with PC polishing: LC, SC, ST, E2000 and other plug types available on demand

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Technical Data

General Data

Fields of application	Office Data center
Design	pigtail
Transmission technology	Fiber optic
Color	metallike
Mode type of the fiber	Multimode
Fiber class	OM4 (ISO/IEC 11801/EN 50173 & IEC 60793-2-10/EN 60793-2-10 A1.a.3)
Cable Type	pigtail(s)
Number of cables/ cores	1
Shape	PC (Physical Contact)
Fiber construction	50/125 µm
Cable length (m)	2.00 m
Cable length (ft)	6.56 ft

Transmission characteristics

Reach	
Reach 100BASE	2000 m
Reach 1000BASE LX	550 m
Reach 1000BASE SX	1000 m
Reach 10GBASE LX4	300 m
Reach 10GBASE SW/SR	550 m
Reach 40GBASE SR4	150 m
Overfilled (OFL) modal bandwidth at 850 nm (min.)	3500 MHz * km
Overfilled (OFL) modal bandwidth at 1300 nm (min.)	500 MHz * km
Effective modal bandwidth (EMB) at 850 nm (min.)	4700 MHz * km

Connections/interfaces

Connector technology interface 1	Free line end
Connector technology interface 2	ST
Primary coating diameter	0.25 mm
Primary coating diameter	0.01 in.
Secondary coating diameter	0.90 mm
Secondary coating diameter	0.04 in.
Ferrule diameter	1.25 mm

Technical Data

Connections/interfaces

Ferrule diameter	0.05 in.
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Electrical characteristics

Insertion loss	max. 0.5 dB
Return loss	min. 20 dB

Mechanical characteristics

Cut-out interface 2	ST
Insertion and withdrawal force	min. 5 N
Minimum bending radius	15.00 mm
Minimum bending radius	0.59 in.

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

Fibre optic connector interfaces	IEC 61754-2
Optical fibers: Product specifications	
Sectional specification for category A1 multimode fibres	ISO/IEC 60793-2-10 (A1a.3)
Optical fibers - Interconnecting devices and passive components - basic test and measuring methods	
Fibre optic interconnecting devices and passive components	ISO/IEC 61300-3-6 ISO/IEC 61300-3-34
Standard colours for insulation for low-frequency cables & wires	IEC 60304
TIA/ANSI-492	AAAD



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Technical Data**Classifications**

ETIM 5.0 EC000748

Packing details

Type of packaging 12 pc(s) / plastic bag

Packaging unit - Weight (gram) 968.00 g

Packaging unit - Weight (pound) 2.13 lb



Accessories

P/N	Designation
15090401-I	OpDAT crimp splice protection
15090402-I	OpDAT shrink splice protection
15090401-E	OpDAT crimp splice protection



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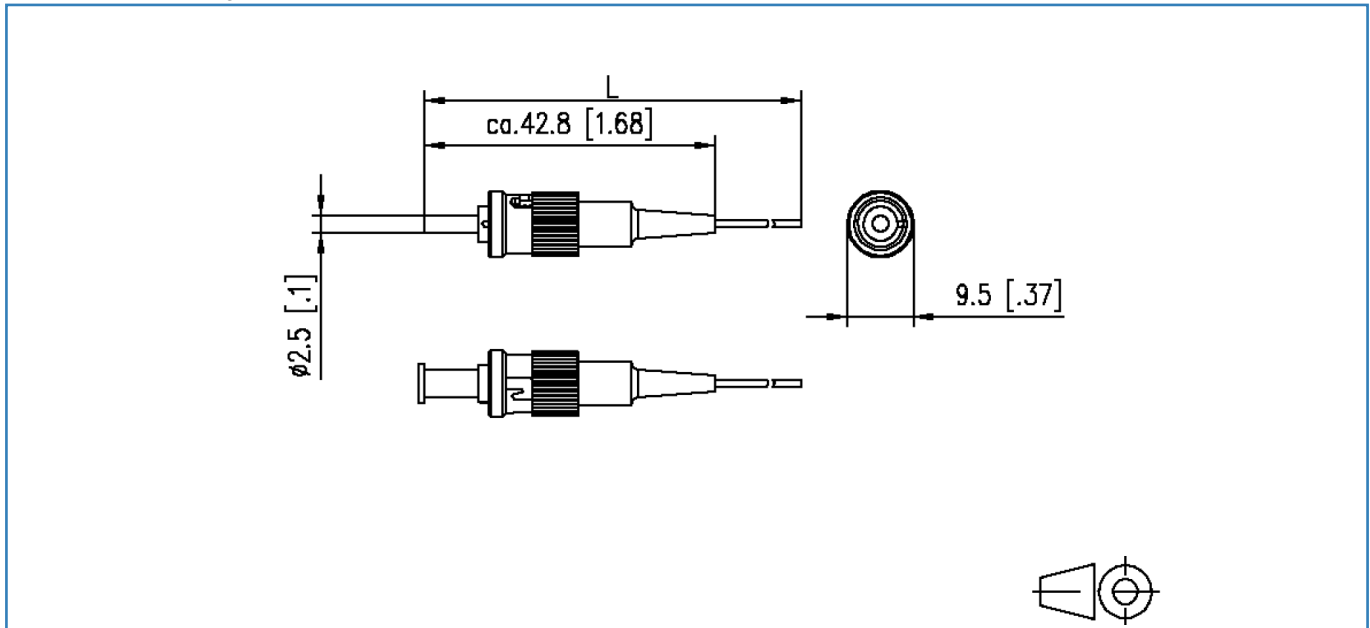
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Illustrations

Dimensional drawing



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OpDAT fiber OM4 BR

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P/N
150XXX7

2015-08-07

Technical Data

General Data

Transmission technology	Fiber optic
Mode type of the fiber	Multimode
Fiber class	OM4 (ISO/IEC 11801/EN 50173 & IEC 60793-2-10/EN 60793-2-10 A1.a.3)
Fiber construction	50/125 µm

Transmission characteristics

Transmission rate up to 100 GBit	IEEE 802.3ba
Reach	
Reach 100BASE	2000 m
Reach 1000BASE LX	550 m
Reach 1000BASE SX	1000 m
Reach 10GBASE LX4	300 m
Reach 10GBASE SW/SR	550 m
Reach 40GBASE SR4	150 m
Overfilled (OFL) modal bandwidth at 850 nm (min.)	3500 MHz * km
Overfilled (OFL) modal bandwidth at 1300 nm (min.)	500 MHz * km
Effective modal bandwidth (EMB) at 850 nm (min.)	4700 MHz * km

Connections/interfaces

Connector technology interface 1	Free line end
Connector technology interface 2	Free line end
Fiber core diameter	50 ± 2.0 µm
Fiber cladding diameter	125.0 ± 1.0 µm
Primary coating diameter - colored	242 ± 0.5 µm
Primary coating diameter - uncolored	250 ± 15 µm

Electrical characteristics

Maximum value of cable attenuation at 850 nm	3.0 dB/km
Maximum value of cable attenuation at 1300 nm	1.0 dB/km

Mechanical characteristics

Proof stress level	min. 0.7 (~ 1 %) GPa
Strip force (peak)	1.3 = F _{peak.strip} max. 8.9 N
Fiber bending loss R=7.5 mm 850/1300 nm	max. 0.2 / = 0.5 dB
Fiber bending loss R=15 mm 850/1300 nm	max. 0.1 / = 0.3 dB

Technical Data

Mechanical characteristics

Fiber cladding non-circularity	max. 0.7 %
Core non-circularity	max. 5 %
Core (MDF)-cladding concentricity error	max. 1.5 µm
Primary coating concentricity error	max. 5 %
Primary coating-cladding concentricity error	max. 6
Inhomogeneity of OTDR trace for any two 1000 metre fiber length	max. 0.1 dB/km
Group refractive index at 1310 and 1550 nm	1.482
Group refractive index at 1625 nm	1.477
Numerical aperture	0.200 ± 0.015

Materials and material properties

Bend insensitivity	Ja
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The product meets the following standards

Generic cabling systems	
General requirements	ISO/IEC 11801 DIN EN 50173-1
Optical fibers: Generic specification - basic test procedures for optical cables	
General and definitions	ISO/IEC 60794-1-20
Mechanical Tests Methods	ISO/IEC 60794-1-21
Optical fibers: Measuring methods and test procedures	
Fibre proof test	ISO/IEC 60793-1-30
Coating strippability	ISO/IEC 60793-1-32
Numerical aperture	ISO/IEC 60793-1-43
Optical fibers: Indoor optical cables	
Family specification for simplex and duplex cables	ISO/IEC 60793-2-10 (A1a.3)
TIA/ANSI-492	AAAD