

Data sheet

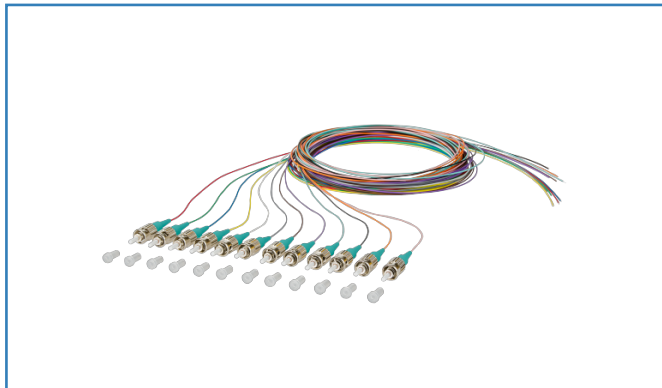
OpDAT pigtail ST-PC, OM3, 12 colors

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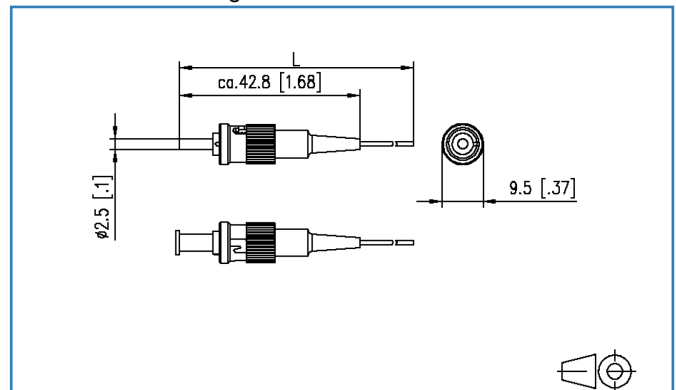
P/N
150M1AO0020E
EAN 4250184116301

2018-13-03

Illustrations



Dimensional drawing



See enlarged drawings at the end of document

Product specification

- ST plug according to IEC 61754-2
- Multi mode fiber OM3, G50/125 μm according to IEC 60793-2-10 type A1a.2
- 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	metallike
Dimensions	
Dimension (L x W x H)	42.80 x 9.50 x 9.50 mm
Dimension (L x W x H)	1.685 x 0.374 x 0.374 in.
Mode type of the fiber	Multimode
Fiber class	OM3 (ISO/IEC 11801/EN 50173 & IEC 60793-2-10/EN 60793-2-10 A1.a.2)
Cable Type	pigtail(s)
Number of cables/ cores	12
Shape	PC (Physical Contact)
Fiber construction	50/125 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	ST PC
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. 0.4 dB
Return loss	min. 35 dB



Technical Data

Mechanical characteristics

Insertion and withdrawal force	min. 5 N
Minimum bending radius	15.00 mm
Minimum bending radius	0.591 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

Generic cabling systems	
General requirements	ISO/IEC 11801
Fibre optic connector interfaces	IEC 61754-2
Optical fibers: Product specifications	
Sectional specification for category A1 multimode fibres	ISO/IEC 60793-2-10 (A1a.2)
Optical fibers - Interconnecting devices and passive components - basic test and measuring methods	
Fibre optic interconnecting devices and passive components	IEC 61300-3-6
Standard colours for insulation for low-frequency cables & wires	IEC 60304
ITU-T standard	G.651.1

Classifications

ETIM 5.0	EC000748
ETIM 6.0	EC000748



Technical Data

Packing details

Type of packaging	12 pc(s) / blister packaging
Packaging unit - Weight (gram)	728.00 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.



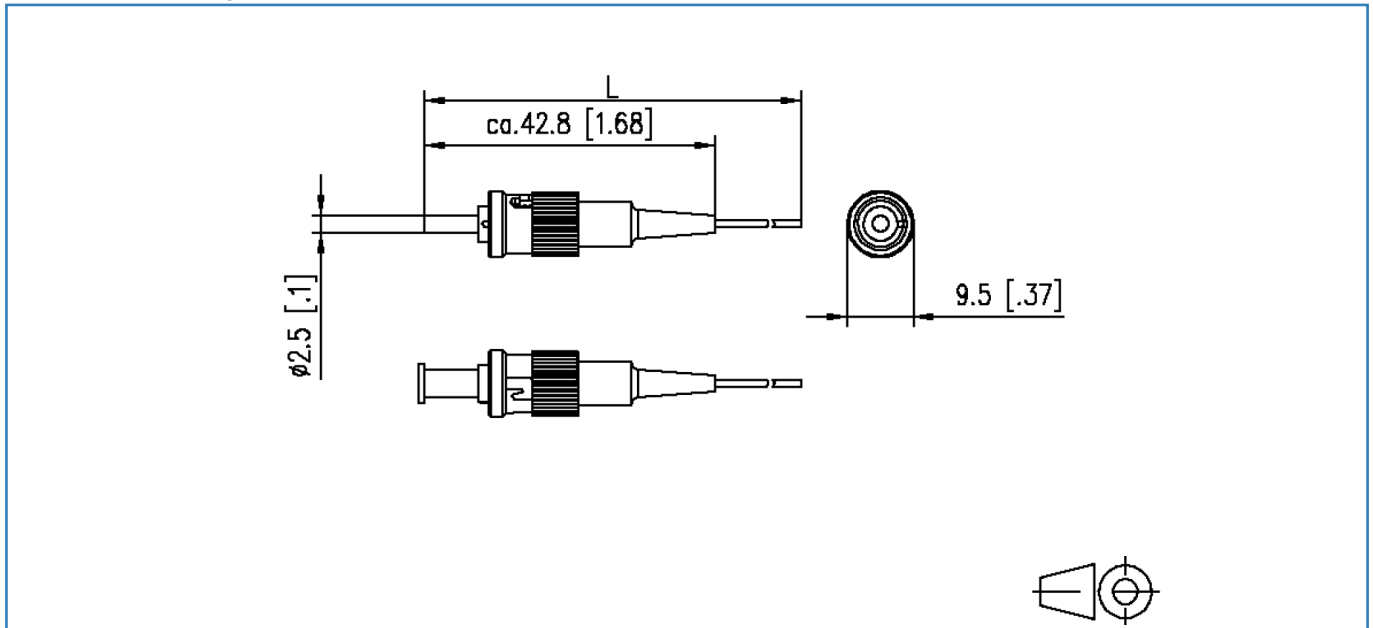
Accessories

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)
150M1AO0020S	OpDAT pigtail ST-PC, OM3, aqua



Illustrations

Dimensional drawing



Technical Data

General Data

Transmission technology	Fiber optic
Mode type of the fiber	Multimode
Fiber class	OM3 (ISO/IEC 11801/EN 50173 & IEC 60793-2-10/EN 60793-2-10 A1.a.2)
Fiber construction	50/125 µm

Transmission characteristics

Transmission rate up to 10 GBit (Gigabit-Ethernet)	IEEE 802.3an
Transmission rate up to 100 GBit	IEEE 802.3ba
Reach	
Reach 1000BASE SX	1000 m
Reichweite 10GBASE SR	300 m
Reach 40GBASE SR4	140 m
Reichweite 100GBASE SR4	70 m
Reichweite 100GBASE SR10	140 m
Overfilled (OFL) modal bandwidth at 850 nm (min.)	1500 MHz * km
Overfilled (OFL) modal bandwidth at 1300 nm (min.)	500 MHz * km
Effective modal bandwidth (EMB) at 850 nm (min.)	2000 MHz * km

Connections/interfaces

Connector technology interface 1	Free line end
Connector technology interface 2	Free line end
Fiber core diameter	50 ± 2.5 µm
Core-/ Fiber cladding diameter	125.0 ± 1.0 µm
Primary coating diameter - colored	250 ± 15 µm
Primary coating diameter - uncolored	242 ± 7 µm

Optical characteristics

Attenuation of the fiber	
Attenuation of the fiber in the cable at 850 nm	max. 2.5 dB/km
Attenuation of the fiber in the cable at 1300 nm	max. 0.7 dB/km
Maximum value of cable attenuation at 850 nm	3.0 dB/km
Maximum value of cable attenuation at 1300 nm	1.0 dB/km



Technical Data

Mechanical characteristics

Proof stress level	min. 0.7 (~ 1 %) GPa
Typische durchschnittliche Abziehkraft	min. 1.0 max. 3.0 N
Strip force (peak)	min. 1.3 max. 8.9 N
Biegeverlust	
Dornradius = 7.5 mm, 2 Umdrehungen bei 850/1300 nm	min. 0.2 - max 0.5 dB
Dornradius = 15 mm, 2 Umdrehungen bei 850/1300 nm	min. 0.1 - max 0.3 dB
Fiber cladding non-circularity	max. 0.7 %
Core non-circularity	max. 5 %
Core (MDF)-cladding concentricity error	max. 1 µm
Primary coating concentricity error	max. 5 %
Primary coating-cladding concentricity error	max. 6
Inhomogeneity of OTDR measurement report at 1310 nm und 1550 nm	max. 0.1 dB/km
Group refractive index	
Gruppen-Brechungsindex bei 850 nm	1.482
Gruppen-Brechungsindex bei 1300 nm	1.477
Numerical aperture	0.200 ± 0.015

Materials and material properties

Bend insensitivity	yes
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The product meets the following standards

Generic cabling systems	
General requirements	ISO/IEC 11801 cat. OM3 TIA/EIA 568-C
Data centers	ISO/IEC 24764
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
Bandbreite	ISO/IEC 60793-1-41
Numerical aperture	ISO/IEC 60793-1-43
Gruppenlaufzeitdifferenz	ISO/IEC 60793-1-49

Technical Data

The product meets the following standards

Optical fibers: Product specifications

Sectional specification for category A1 multimode fibres	ISO/IEC 60793-2-10 (A1a.2)
ITU-T standard	G.651.1
TIA/ANSI-492	AAAC

