

## Data sheet

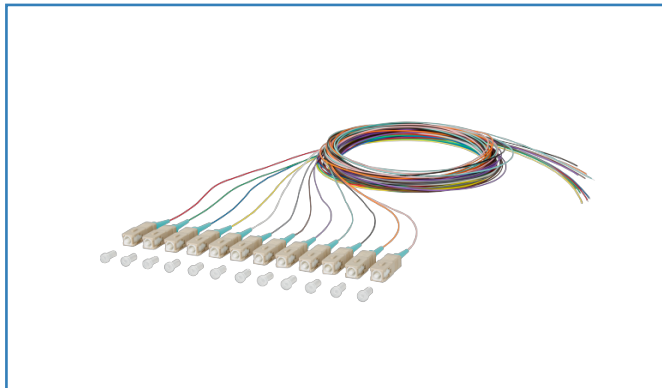
### OpDAT pigtail SC-PC, OM3, 12 colors

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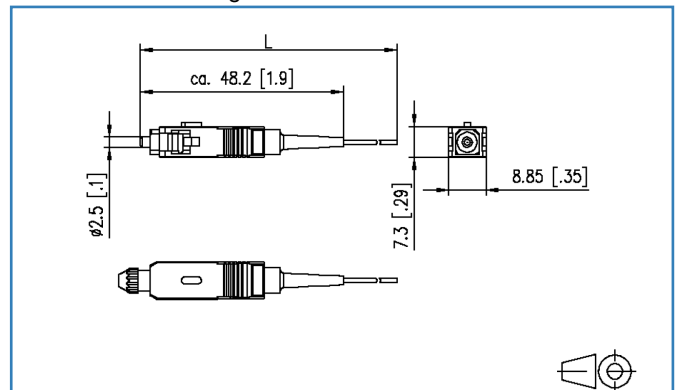
P/N  
150M1CO0020E  
EAN 4250184118169

2018-13-03

## Illustrations



Dimensional drawing



See enlarged drawings at the end of document

## Product specification

- SC plug according to IEC 61754-4
- Multi mode fiber OM3, G50/125  $\mu\text{m}$ , bend insensitive 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	beige
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	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
Number of fibres each cable/ wire	1
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	SC 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	2.50 mm
Ferrule diameter	0.098 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 61754-4
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)	368.00 g
Packaging unit - Weight (pound)	0.81 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.



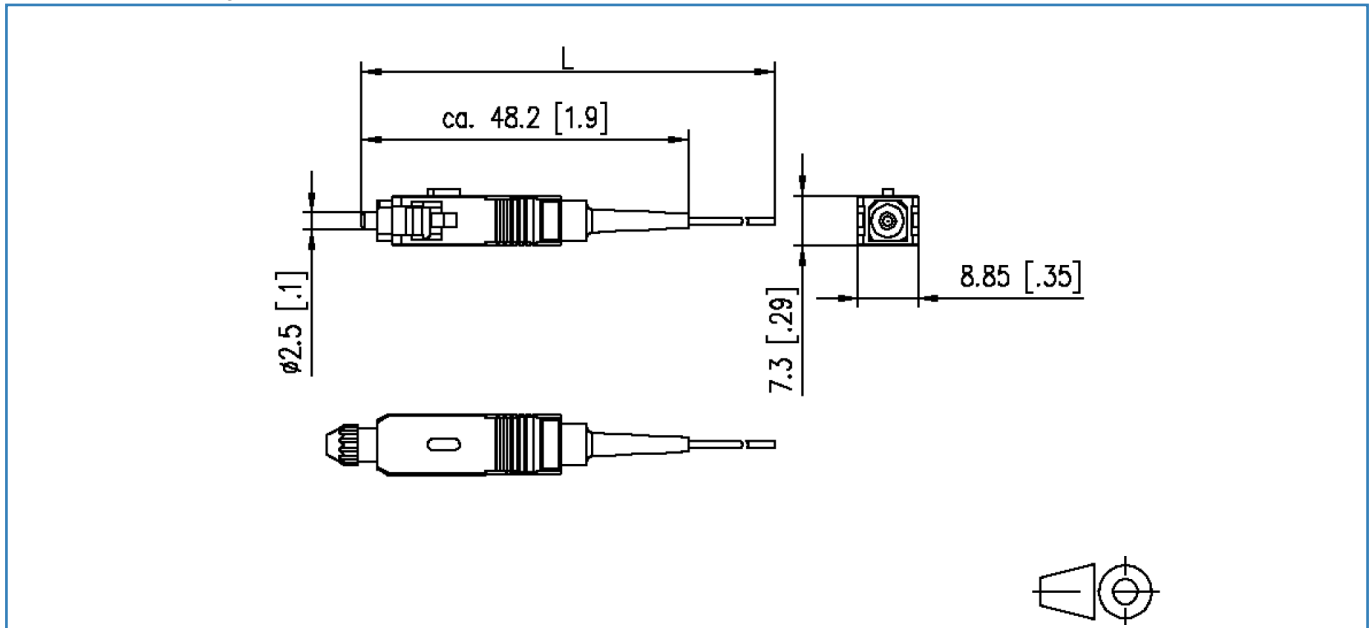
### Accessories

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)



**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

