

# **Fiber Pigtails and Pigtail Kits**

### APPLICATION

Standard and low loss Fiber Optic Pigtails and Pigtail Kits are ideal for fusion splicing the required fiber connectivity for structured cabling systems. They are ideal for including data centers, Broadband CATV, Passive Optical Network PON, WDM or DWDM multiplexing, FTTh, and voice services in ATM and SONET metropolitan and access networks. Common pigtails and pigtail kits are stocked, while nonstandard connector types and lengths are Make-to-Order. Contact customer service for details.



### **SPECIFICATION**

Multimode and single-mode pigtails and pigtail kits shall be compliant with ANSI/TIA-568.3-D. Standard insertion loss shall be a maximum of 0.25 dB for multimode and singlemode. Low loss shall be a maximum of 0.15 dB for multimode and single-mode with ultra-low loss a maximum of 0.10 dB for multimode LC and SC connectors. Multimode return loss shall be greater than 26 dB and greater than 50 dB for singlemode connectors. Single-mode angle polished connectors (APC) shall have a minimum of 60 dB return loss. Pigtails shall have a pull force of 5 N ± 0.5 (1.12 lb.) per IEC 61300-2-44. Connector durability of greater than 500 matings for both multimode and single-mode. Pigtails and pigtail kits shall be available with 900-micron easy strip LSZH coating and 250-micron coated fiber. Pigtails or kits of pigtails shall be individually packaged with part numbers, descriptions, optical performance, code 39 barcode part number printed on each package, and QR code to access supporting documentation. Individual pigtails shall have flag labels including fiber type and serial number providing traceability to factory collected test data.

### FEATURES

- LC, LC/APC, SC, SC/APC, ST, FC, and FC/APC connector options
- Pigtails kits of 6, 8, 12 pigtails follow TIA color sequence
- Nonstandard color pigtails available in packs of 12
- TIA color-coded LC and SC connectors with white 900-micron boots
- · Fiber options: OS2, OM1, OM3, and OM4
- · 100% tested for insertion loss, and single-mode return loss
- Pigtails include a Limited Lifetime Warranty when used with other Leviton cabling and installed by a Leviton certified contractor
- · Ship from Stock or Make-to-Order
- Custom configurations via Levitonemea.com/mto

### **DESIGN CONSIDERATIONS**

- · 900-micron coating is easy to strip and LSZH rated
- All connectors have precision pre-radiused or pre-angled zirconia ferrules supporting consistent End Face Geometry (EFG)
- · Single-mode UPC and APC polish
- · FC and ST connectors have metal bodies
- · Bend-insensitive glass (OS2, OM3, and OM4)

### **STANDARDS & REGULATIONS**

- ANSI/TIA-568.3-D
- ISO/IEC 11801-1
- ANSI/TIA-598-D
- Fiber Optic Connector Intermatability Standards (FOCIS)
  - TIA-604-10B (LC)
  - TIA-604-3B (SC)
  - TIA-604-2B (ST)
  - TIA-604-4B (FC)
- · End face geometry:
  - IEC 61755-3-1 (UPC/PC)
  - IEC 61755-3-2 (APC)
- · Fiber compliance:
  - OS2: IEC 60793-2-50, ITU-T G.657.A1
  - OM1: IEC 60793-2-10
  - OM3: IEC 60793-2-10, ITU-T G.651.1
  - OM4: IEC 60793-2-10, ITU-T G.651.1
- Jacket flame rating:
  - LSZH / HFFR-LS
  - IEC 60332-3-24
- RoHS

Page 1 of 3

## COUNTRY OF ORIGIN

CHINA

### WARRANTY INFORMATION

For Leviton product warranties, go to leviton.com/warranty

### **PHYSICAL SPECIFICATIONS**

Connector Durability:	> 500 Matings
Connector Cable Retention:	5 N ± 0.5
Storage:	-40 C to +75 C
Operational:	-20 C to +70 C

Fiber Type	Maximum Attenuation (dB/km)			Bandwidth (MHz'km)		Transmission Distance (meters)					
	850 nm	1300 nm	1310 nm	1550 nm	850 nm	1300 nm	100 Mb	1 GbE	10 GbE	40 GbE	100 GbE
8.2/125 μm Single-mode (OS2)	N/A	N/A	0.4	0.3	N/A	N/A	>5000 @	) 1310 nm	>10000 @ 1310 nm	N/A	N/A
62.5/125 μm MM (OM1)	3.5	1.0	N/A	N/A	200	500		300/600@ 850/1300 nm	36/300 @ 850/1300 nm	N/A	N/A
50/125 μm LO (10G-300m) MM (OM3)	3.0	1.0	N/A	N/A	2,000 <sup>1</sup>	500 <sup>2</sup>	300/300 @ 850/1300 nm	1,000/600 @ 850/1300 nm	300/300 @ 850/1300 nm	100 @850 nm	100 @850 nm
50/125 μm LO (10G-550m) MM (OM4)	3.0	1.0	N/A	N/A	4,700 <sup>1</sup>	500 ²		1,040/600 @ 850/1300 nm	550/300 @ 850/1300 nm	150 @850 nm	150 @850 nm

1 The effective modal bandwidth is determined based on an overfill launch (OFL) per ANSI/TIA-455-204, except on laser-optimized fiber types.

2 10GbE transmission @ 1,300 nm only applies to 10GBASE-LX4 (CWDM).

Part number	Fiber Type	Туре	Connectors	Colors(s)	Length (Meters)
VPS-S29LC0100-01	SM OS2	900 µm Single	LC	YELLOW	1.0
VPS-S29SC0100-01	SM OS2	900 µm Single	SC	YELLOW	1.0
VPS-S29AL0100-01	SM OS2	900 µm Single	LC/APC	YELLOW	1.0
VPS-S29AC0100-01	SM OS2	900 µm Single	SC/APC	YELLOW	1.0
VPK-S29LC1200-01	SM OS2	900 µm Kit	LC	TIA COLORS 1 - 12	1.0
VPS-M49LC0100-01	MM OM4	900 µm Single	LC	HEATHER VIOLET	1.0
VPS-M49SC0100-01	MM OM4	900 µm Single	SC	HEATHER VIOLET	1.0
VPK-M49LC1200-01	MM OM4	900 µm Kit	LC KIT	TIA COLORS 1 - 12	1.0
VPS-M39LC0100-01	MM OM3	900 µm Single	LC	AQUA	1.0
VPS-M39SC0100-01	MM OM3	900 µm Single	SC	AQUA	1.0
VPS-M39ST0100-01	MM OM3	900 µm Single	ST	AQUA	1.0
VPK-M39LC1200-01	MM OM3	900 µm Kit	LC KIT	TIA COLORS 1 - 12	1.0



## PRODUCT SPECIFICATIONS Fiber Pigtails and Pigtail Kits



OPTICAL SPECIFICATIONS							
	Insertion Loss: St	andard Performance	Insertion Loss: Low L	oss & Ultra Low Loss	Return Loss		
Connector Family	Multimode	Single-mode	Multimode	Single-mode	Multimode	Single-mode (UPC/APC)	
LC	≤ 0.25 dB	≤ 0.25 dB	≤ 0.10 dB *	≤ 0.15 dB	≥ 26 dB	≥ 50 dB / ≥ 60 dB	
SC	≤ 0.25 dB	≤ 0.25 dB	≤ 0.10v dB *	≤ 0.15 dB	≥ 26 dB	≥ 50 dB / ≥ 60 dB	
ST	≤ 0.25 dB	≤ 0.25 dB	≤ 0.15 dB	≤ 0.15 dB	≥ 26 dB	≥ 50 dB / ≥ 60 dB	
FC	≤ 0.25 dB	≤ 0.25 dB	≤ 0.15 dB	≤ 0.15 dB	≥ 26 dB	≥ 50 dB / ≥ 60 dB	

\* Ultra Low Loss available in multimode LC and SC connectors only.

MAKE-TO-ORDE	R!	FIBER PIGTAILS AND PIGTAIL KITS						
AAA-	BB	С	DD	EE	FF	-GG		
Product Type	Fiber Type	Fiber Coating	Connector	Kit or Singles	Colors	Length		
<ul> <li>VPK = STANDARD LOSS PIGTAIL KIT</li> <li>VPS = STANDARD SINGLE PIGTAIL</li> <li>LPK = PIGTAIL KIT LOW LOSS</li> <li>LPS = SINGLE PIGTAIL LOW LOSS</li> </ul>	<ul> <li>S2 = OS2 SINGLE MODE</li> <li>M1 = OM1 MULTIMODE</li> <li>M3 = OM3 MULTIMODE</li> <li>M4 = OM4 MULTIMODE</li> </ul>	<ul> <li>9 = 900 MICRON LSZH</li> <li>2 = 250 MICRON</li> </ul>	<ul> <li>LC = LC/UPC</li> <li>L9 = LC/9APC</li> <li>AL = LC/APC</li> <li>SC = SC/UPC</li> <li>AC = SC/APC</li> <li>C9 = SC/9APC</li> <li>ST = ST/UPC</li> <li>FC = FC/UPC</li> <li>AF = FC/APC</li> </ul>	<ul> <li>01 = SINGLE PIGTAIL DEFAULT FIBER COLOR</li> <li>06 = TIA COLORS 1-6</li> <li>08 = TIA COLORS 1-8</li> <li>12 = TIA COLORS 1-12</li> <li>00 = KIT OF 12 OF COLOR SELECTED</li> </ul>	<ul> <li>00 = DEFAULT</li> <li>01 = BLUE</li> <li>02 = ORANGE</li> <li>03 = GREEN</li> <li>04 = BROWN</li> <li>06 = SLATE</li> <li>06 = WHITE</li> <li>07 = RED</li> <li>08 = BLACK</li> <li>09 = YELLOW</li> <li>10 = VIOLET</li> <li>11 = ROSE</li> <li>12 = AQUA</li> </ul>	<ul> <li>01 = 1 M</li> <li>02 = 2 M</li> <li>03 = 3 M</li> <li>04 = 4 M</li> <li>05 = 5 M</li> <li>06 = 6 M</li> <li>07 = 7 M</li> <li>08 = 8 M</li> <li>09 = 9 M</li> <li>10 = 10 M</li> </ul>		

For assistance customizing your fiber pigtails, please visit levitonemea.com/mto or call Tech Support +44 (0) 1592 778494.

For further support information, visit leviton.com/ns/support

Page 3 of 3

#### NETWORK SOLUTIONS GLOBAL HEADQUARTERS

Bothell, WA, USA | leviton.com/ns (800) 824 3005 / +1 (425) 486 2222 | appeng@leviton.com

#### NETWORK SOLUTIONS EUROPEAN HEADQUARTERS

Glenrothes, UK | leviton.com/ns/emea +44 (0) 1592 772124 | customerserviceeu@leviton.com

Leviton is dedicated to designing, developing and manufacturing sustainable high-performance structured cabling and speciality cabling solutions. Network Solutions products are available worldwide in over 100 countries. Visit us online to learn more.