



UFP920S3X-XX
UFP920S2X-XX
UFP920S0X-XX

UFP520S3X-XX
UFP520S2X-XX
UFP520S0X-XX

UFP420S3X-XX
UFP420S2X-XX
UFP420S0X-XX

UFP320S3X-XX
UFP320S2X-XX
UFP320S0X-XX

UFP220S3X-XX
UFP220S2X-XX
UFP220S0X-XX

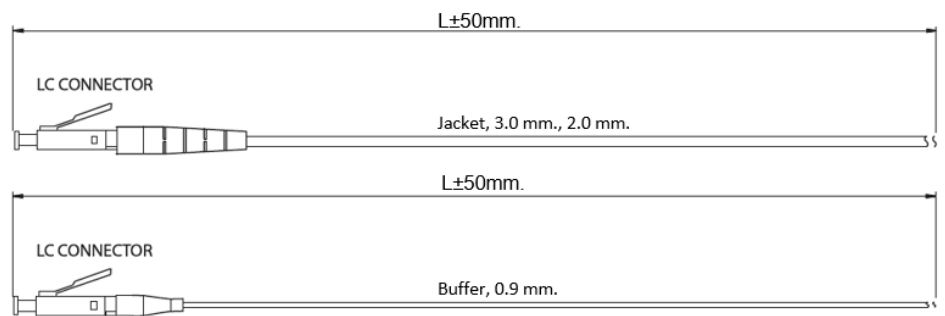


Scope of Application

This specification covers the general requirements for fiber optic pigtail. The cables are high grade simplex cable available FR-LSZH. The pigtails are low insertion loss and high return loss. Good in repeatability and exchangeability. The pigtail shall be factory assembled with high quality control and 100% test. Provide label for easily to identify. Cables are available on 900 μm (0.9 mm.) buffered fiber, and 2.0 mm., 3.0 mm. cordage connectorized on one end. The cord shall be available length in 1.5, 3, and 5 meters or other.

LINK fiber optic pigtail support application such as 25/40/50/100/200/400Gbps Ethernet, IEEE802.3ae 10G Ethernet, IEEE802.3z Gigabit Ethernet, IEEE802.3u Fast Ethernet, 52/155/622Mbps, 1.2Gbps ATM, FDDI, Fiber channel, FTTx, CATV, CCTV and others.

Drawing



Technical Standard

- ANSI/TIA-568.3-D
- ANSI/TIA-568-C.3
- ANSI/ICEA 596
- FOTP EIA/TIA-455
- ITU-T G.652D, G.657A1 (Singlemode)
- ITU-T G.651 (Multimode)
- GR 326 CORE (Singlemode)
- ISO/IEC 11801:2017
- ISO/IEC 11801:2011 (Ed.2.2)
- EC 60793, IEC 60794, IEC 61755
- IEC 61300-2, IEC 61300-3
- TIA/EIA-604, FOCIS 10
- RoHS Compliant, EN 50173-1
- UL, FR-LSZH, OFNR



OPTICAL FIBER

| Items | | Specifications |
|--------------------------------------|--------------------------|---|
| Fiber Type | | 9/125 μm (OS2) |
| Max. / Typ. Attenuation | 1310 nm | $\leq 0.35/0.33$ dB/km |
| | 1383 nm | $\leq 0.35/0.31$ dB/km |
| | 1550 nm | $\leq 0.21/0.19$ dB/km |
| | 1625 nm | $\leq 0.23/0.20$ dB/km |
| Core | Mode Field Diameter | 9.2 \pm 0.4 μm @ 1310 nm 10.4 \pm 0.5 μm @ 1550 nm |
| Cladding Diameter | | 125 \pm 0.7 μm |
| Coating Diameter, Primary | | 242 \pm 5 μm |
| Coating Diameter, Secondary | | 250 \pm 5 μm |
| Cladding Non-circularity | | ≤ 0.7 % |
| Core/Cladding Concentricity error | | ≤ 0.5 μm |
| Coating/Cladding Concentricity error | | ≤ 12 μm |
| Attenuation (Homogeneity) | | Max 0.1 dB/km |
| Zero Dispersion Wavelength | | 1300 ~ 1324 nm |
| Zero Dispersion Slope | | ≤ 0.092 ps/(nm ² .km) |
| Cut-off Wavelength | λ_0 (Fiber) | 1150 ~ 1330 nm |
| | λ_∞ (Cable) | ≤ 1260 nm |
| Proof Test Stress | | 100 Kpsi |
| Chromatic Dispersion | λ ; 1285~1340 nm | ≤ 3.5 ps/nm.km |
| | $\lambda = 1550$ nm | ≤ 18 ps/nm.km |
| | $\lambda = 1625$ nm | ≤ 22 ps/nm.km |
| Polarization mode dispersion (PMD) | | ≤ 0.20 ps/ $\sqrt{\text{km}}$ |
| Fiber Curl | | $\geq 4\text{M}$ |
| Numerical Aperture | | 0.130 \pm 0.010 |
| Group refractive index | 1310 nm | 1.4676 |
| | 1550 nm | 1.4682 |

Table 1 The Optical, Geometrical Performance of the Singlemode Fiber (The specification conforms to the requirement of ISO/IEC11801, ANSI/TIA-568.3-D, IEC 60793-2B1.3, ITU-T G.652D)



OPTICAL FIBER

| Items | | Specifications | | | |
|--|--------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | | 50/125 μ m (OM2) | 50/125 μ m (OM3) | 50/125 μ m (OM4) | 50/125 μ m (OM5) |
| Fiber Type | 850 nm | $\leq 2.7 / \leq 2.5$ | $\leq 2.7 / \leq 2.3$ | $\leq 2.7 / \leq 2.3$ | $\leq 2.7 / \leq 2.3$ |
| | 1300 nm | $\leq 0.8 / \leq 0.7$ | $\leq 0.8 / \leq 0.6$ | $\leq 0.8 / \leq 0.6$ | $\leq 0.8 / \leq 0.6$ |
| | 953 nm | N.A | N.A | N.A | $\leq 2.3 / \leq 2.0$ |
| Max./ Typ. Attenuation (dB/km) | 850 nm | ≥ 500 | ≥ 1500 | ≥ 3500 | ≥ 3500 |
| | 1300 nm | ≥ 500 | ≥ 500 | ≥ 500 | ≥ 500 |
| | 953 nm | N.A | N.A | N.A | ≥ 1850 |
| Bandwidth (MHz/km) | 850nm Laser Bandwidth (MHz/km) | N.A | ≥ 2000 | ≥ 4700 | ≥ 4700 |
| | 953nm Laser Bandwidth (MHz/km) | N.A | N.A | N.A | ≥ 2470 |
| | Core Diameter (μ m) | 50.0 ± 2.5 | 50.0 ± 2.5 | 50.0 ± 2.5 | 50.0 ± 2.5 |
| Cladding Diameter (μ m) | 125 ± 1 | 125 ± 1 | 125 ± 1 | 125 ± 1 | |
| Core Non-circularity (%) | ≤ 5 | ≤ 5 | ≤ 5 | ≤ 5 | |
| Cladding Non-circularity (%) | ≤ 1.0 | ≤ 1.0 | ≤ 1.0 | ≤ 1.0 | |
| Core/Cladding Concentricity error (μ m) | ≤ 1.5 | ≤ 1.5 | ≤ 1.5 | ≤ 1.5 | |
| Coating Diameter, Primary (μ m) | 242 ± 5 | 242 ± 5 | 242 ± 5 | 242 ± 5 | |
| Coating Diameter, Secondary (μ m) | 250 ± 5 | 250 ± 5 | 250 ± 5 | 250 ± 5 | |
| Coating Non-Circularity (%) | ≤ 5 | ≤ 5 | ≤ 5 | ≤ 5 | |
| Coating/Cladding Concentricity error (μ m) | ≤ 12 | ≤ 12 | ≤ 12 | ≤ 12 | |
| Attenuation (Homogeneity) | Max 0.1 dB/km | Max 0.1 dB/km | Max 0.1 dB/km | Max 0.1 dB/km | |
| Proof Test Stress (kpsi) | 100 | 100 | 100 | 100 | |
| Bending Loss @ 850 & 1300 nm (100 turns, | ≤ 0.5 dB | ≤ 0.5 dB | ≤ 0.5 dB | ≤ 0.5 dB | |
| Zero-Dispersion Wavelength | 1295~1315nm | 1295~1315nm | 1295~1315nm | 1295~1315nm | |
| Zero-Dispersion Slope (ps/(nm ² .km)) | ≤ 0.101 | ≤ 0.101 | ≤ 0.101 | ≤ 0.101 | |
| Numerical Aperture | 0.200 ± 0.015 | 0.200 ± 0.015 | 0.200 ± 0.015 | 0.200 ± 0.015 | |
| Group refractive index | 850 nm | 1.482 | 1.482 | 1.482 | |
| | 1300 nm | 1.477 | 1.477 | 1.477 | |

Table 2 The optical, Geometrical Performance of the Multimode Fiber (The specification conforms to the requirement of ISO/IEC11801, ANSI/TIA-568.3-D, IEC 60793-2A1a, IEC 60793-2A1b, ITU -T G.651)



PIGTAIL CONSTRUCTIONS AND MECHANICAL

The construction of the cable shall be in accordance with Table 3 below.

| Items | Specifications |
|--------------------------|--------------------------------|
| Ferrule | Zirconia ceramic, Pre-radiused |
| Boot | Thermoplastic, UL 94V-0 |
| LC Housing | PBT, Thermoplastic, UL 94V-0 |
| Jacket | FR-LSZH and OFNR (UL-1666) |
| Cable Diameter (Approx.) | 3.0 mm., 2.0 mm and 0.9 mm |
| Pulling Force | 200 N |
| Minimum Bending Radius | 30 mm. |

Table 3 Construction and Mechanical of fiber optic pigtail.

PERFORMANCE

| Items | | SINGLEMODE | MULTIMODE |
|-------------------------|------|-------------|----------------------|
| | | (OS2) | (OM2, OM3, OM4, OM5) |
| Insertion Loss | Typ. | ≤ 0.15 dB | ≤ 0.15 dB |
| | Max. | ≤ 0.30 dB | ≤ 0.30 dB |
| Return Loss | UPC | ≥ 50 dB | ≥ 26 dB |
| | APC | ≥ 60 dB | - |
| Durability/Mating Cycle | | ≥ 500 Cycle | ≥ 500 Cycle |

ORDER INFORMATION

LC FIBER OPTIC PIGTAIL, SIMPLEX, FR-LSZH AND OFNR

| Descriptions | Part Number | | | | |
|------------------------------|-------------------|--------------------|--------------------|--------------------|--------------------|
| | 9/125 μm (OS2) | 50/125 μm (OM2) | 50/125 μm (OM3) | 50/125 μm (OM4) | 50/125 μm (OM5) |
| LC Pigtail, Simplex, 3.0 mm. | UFP920S3X-XX | UFP520S3X-XX | UFP420S3X-XX | UFP320S3X-XX | UFP220S3X-XX |
| LC Pigtail, Simplex, 2.0 mm. | UFP920S2X-XX | UFP520S2X-XX | UFP420S2X-XX | UFP320S2X-XX | UFP220S2X-XX |
| LC Pigtail, Simplex, 0.9 mm. | UFP920S0X-XX | UFP520S0X-XX | UFP420S0X-XX | UFP320S0X-XX | UFP220S0X-XX |

X = Polish Contact, 0 : PC, 1 : UPC, 2 : APC

XX = Length, 1.5 : 1.5 meters, 03 : 3 meters, or available on request.

Specifications subject to change without notice.

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