Keyed LC Opti-Core™ Patch Cords and Pigtails – Low Smoke Zero Halogen (LSZH) Rated

PANDUIT™

SPECIFICATION SHEET

specifications

Keyed LC fibre optic patch cords include simplex or duplex keyed LC connectors on both ends, or on one end with non-keyed LC or SC connectors on the other end. Keyed LC fibre optic pigtails shall include simplex or duplex keyed LC connectors on one end and open (un-terminated) on the other end. Keyed LC connectors are mechanically keyed with colour-specific positive and negative keying features to prevent unintentional mating with unlike keyed or non-keyed adapters. Patch cords and pigtails include laser optimised OM3 fibre, OM2, OM1 and OS1/OS2 fibre inside 900µm tight-buffered fibre or 1.6mm simplex or duplex zipcord jacketed cable. Jacketed cable is compliant with IEC-60332 (LSZH) flame ratings. Patch cords and pigtails are RoHS compliant and meet or exceed requirements of ISO/IEC 11801 and TIA/EIA – 568-B.3. The fibre connectors exceed the requirements of TIA/EIA-455-21A or 500 mating cycles.

technical information

Standards requirements		
Fibre optic connectors:	Exceed ISO/IEC 11801 and TIA/EIA – 568-B.3 Exceed IEC-61754-7 (International)	
Patch cords and pigtails:	Compliant with TIA/EIA-568-B.3, IEC-61754-7 (International), and IEC-60332(LSZH) flame ratings	
Insertion loss:	Per connection:	0.10dB typical, 0.30dB max. (multimode) 0.25dB typical, 0.35dB max. (LC singlemode) 0.25dB typical, 0.75dB max. (SC singlemode)
Return loss:	20dB min. (multimode); 26dB min. (10Gig™ multimode); 55dB min. (singlemode)	

key features and benefits

Colour-specific keys with positive and negative keying features	Mechanically and visually distinguish connections to prevent unintentional insertion into unlike keyed or non-keyed ports, allow network design flexibility and versatility, and accommodate more discrete networks
Factory terminated and 100% tested for insertion loss (all) and return loss (10Gig™ and SM)	Assures high performance for increased up-time and lower cost of ownership
Low smoke zero halogen	Meets IEC-60332 (LSZH) flame rating for standard compliant safety
Singlemode endfaces UPC polished (55dB min. return loss)	Ensure a high quality endface for higher return loss to meet application requirements
Singlemode endface geometry 100% factory inspected	Every singlemode endface is inspected in compliance with Telcordia GR-326-CORE, Issue 3 requirements to assure high performance
Certified 10 GbE performance	Keyed LC 10Gig™ Patch Cords and Pigtails are tested per IEEE 802.3ae 10 GbE to support network transmission speeds up to 10 Gb/s for link lengths up to 300 meters at 850nm to assure high performance and reliability
Test data supplied with each patch cord and pigtail	Establishes a performance reference to streamline maintenance and troubleshooting

applications

Keyed LC Opti-Core™ Fibre Optic Patch Cords and Pigtails enable fibre to the desk (FTTD), interconnect and cross-connect of applications for the specialised infrastructure design that is required for secure networks. The primary application for Keyed LC Opti-Core™ Fibre Optic Patch Cords and Pigtails is FTTD deployments that require a level of visual and mechanical differentiation, and physical layer security that conventional connector solutions cannot provide. These low smoke zero halogen (LSZH) rated patch cords and pigtails support installations that require flame ratings in specific environments. Keyed LC Opti-Core™ Fibre Optic Patch Cords and Pigtails are available in OM1, OM2, OM3 and OS1/OS2 fibre types to meet the demand of Gigabit Ethernet, 10 Gigabit Ethernet and high speed Fibre Channel systems while maintaining compatibility with Ethernet, Fast Ethernet, FDDI and ATM.

Keyed LC Opti-Core™ Duplex LSZH Patch Cords (Keyed LC to Keyed LC)	
Keyed A (black):	F^LE10A-10AM‡
Keyed B (red):	F^LE10B-10BM‡
Keyed C (green):	F^LE10C-10CM‡
Keyed D (yellow):	F^LE10D-10DM‡
Keyed E (orange):	F^LE10E-10EM‡
Keyed F (dark blue):	F^LE10F-10FM‡
Keyed LC Opti-Core™ Simplex Pigtails – 900µm Buffered Fibre*	
Keyed A (black):	F^B10A-NM‡
Keyed B (red):	F^B10B-NM‡
Keyed C (green):	F^B10C-NM‡
Keyed D (yellow):	F^B10D-NM‡
Keyed E (orange):	F^B10E-NM‡
Keyed F (dark blue):	F^B10F-NM‡
Keyed LC Opti-Core™ Duplex LSZH Pigtails – 1.6mm Jacketed Cable*	
Keyed A (black):	F^LE10A-NM‡
Keyed B (red):	F^LE10B-NM‡
Keyed C (green):	F^LE10C-NM‡
Keyed D (yellow):	F^LE10D-NM‡
Keyed E (orange):	F^LE10E-NM‡
Keyed F (dark blue):	F^LE10F-NM‡
Keyed LC Opti-Core™ Hybrid Duplex LSZH Patch Cords (Keyed LC to LC)	
Keyed A (black):	F^LE10A-10M‡
Keyed B (red):	F^LE10B-10M‡
Keyed C (green):	F^LE10C-10M‡
Keyed D (yellow):	F^LE10D-10M‡
Keyed E (orange):	F^LE10E-10M‡
Keyed F (dark blue):	F^LE10F-10M‡
Keyed LC Opti-Core™ Hybrid Duplex LSZH Patch Cords (SC to Keyed LC)	
Keyed A (black):	F^LE3-10AM‡
Keyed B (red):	F^LE3-10BM‡
Keyed C (green):	F^LE3-10CM‡
Keyed D (yellow):	F^LE3-10DM‡
Keyed E (orange):	F^LE3-10EM‡
Keyed F (dark blue):	F^LE3-10FM‡
Keyed LC Mini-Com™ Duplex Adapter Modules (Ceramic Split Sleeves)	
Keyed A (black):	CMDABLLCZ**
Keyed B (red):	CMDBRDLCZ**
Keyed C (green):	CMDCGRLCZ**
Keyed D (yellow):	CMDDYLLCZ**
Keyed E (orange):	CMDEORLCZ**
Keyed F (dark blue):	CMDFDBLCZ**
Keyed LC Opticom™ Fibre Adapter Panels (Ceramic Split Sleeves)	
Keyed A (black):	FAP6WABLDLCZ
Keyed B (red):	FAP6WBRDDLCZ
Keyed C (green):	FAP6WCGRDLCZ
Keyed D (yellow):	FAP6WDYLDLCZ
Keyed E (orange):	FAP6WEORDLCZ
Keyed F (dark blue):	FAP6WFDBDLCZ

^Substitute for fibre type:
X = (OM3 – 10 Gig™ 50/125µm)
5 = (OM2 – 62.5/125µm)
6 = (OM1 – 62.5/125µm)
9 = (OS1 – 9/125µm)

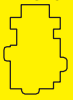
‡Substitute for length in metres: 1 — 10, 15, 20 or 30. Contact Customer Service for other available lengths or universal reference patch cords.

*900µm buffered fibre pigtails are not flame rated.

Additional keyed colours include the following: (G) Violet, (H) Aqua, (J) Rose, (K) Slate, (L) Brown, (P) White, (Q) Charcoal, (R) Lavender, (S) Peach, (T) Steel Blue, (V) Maroon, (W) Mint.

Keyed LC Opti-Core™ Patch Cords and Pigtails – Low Smoke Zero Halogen (LSZH) Rated

ordering information

Key Type and Color (Adapter Key Shown)	Fibre Type	Keyed LC to Keyed LC Duplex LSZH Patch Cords	Keyed LC Simplex Pigtails	Keyed LC Duplex LSZH Pigtails	Keyed LC to LC Duplex LSZH Patch Cords	Keyed LC to SC Duplex LSZH Patch Cords
A - Black	10Gig™ 50/125µm OM3	FXLE10A-10AM*	FXB10A-NM*	FXLE10A-NM*	FXLE10A-10M*	FXLE3-10AM*
	50/125µm OM2	F5LE10A-10AM*	F5B10A-NM*	F5LE10A-NM*	F5LE10A-10M*	F5LE3-10AM*
	62.5/125µm OM1	F6LE10A-10AM*	F6B10A-NM*	F6LE10A-NM*	F6LE10A-10M*	F6LE3-10AM*
	9/125µm OS1/OS2	F9LE10A-10AM*	F9B10A-NM*	F9LE10A-NM*	F9LE10A-10M*	F9LE3-10AM*
B - Red	10Gig™ 50/125µm OM3	FXLE10B-10BM*	FXB10B-NM*	FXLE10B-NM*	FXLE10B-10M*	FXLE3-10BM*
	50/125µm OM2	F5LE10B-10BM*	F5B10B-NM*	F5LE10B-NM*	F5LE10B-10M*	F5LE3-10BM*
	62.5/125µm OM1	F6LE10B-10BM*	F6B10B-NM*	F6LE10B-NM*	F6LE10B-10M*	F6LE3-10BM*
	9/125µm OS1/OS2	F9LE10B-10BM*	F9B10B-NM*	F9LE10B-NM*	F9LE10B-10M*	F9LE3-10BM*
C - Green	10Gig™ 50/125µm OM3	FXLE10C-10CM*	FXB10C-NM*	FXLE10C-NM*	FXLE10C-10M*	FXLE3-10CM*
	50/125µm OM2	F5LE10C-10CM*	F5B10C-NM*	F5LE10C-NM*	F5LE10C-10M*	F5LE3-10CM*
	62.5/125µm OM1	F6LE10C-10CM*	F6B10C-NM*	F6LE10C-NM*	F6LE10C-10M*	F6LE3-10CM*
	9/125µm OS1/OS2	F9LE10C-10CM*	F9B10C-NM*	F9LE10C-NM*	F9LE10C-10M*	F9LE3-10CM*
D - Yellow 	10Gig™ 50/125µm OM3	FXLE10D-10DM*	FXB10D-NM*	FXLE10D-NM*	FXLE10D-10M*	FXLE3-10DM*
	50/125µm OM2	F5LE10D-10DM*	F5B10D-NM*	F5LE10D-NM*	F5LE10D-10M*	F5LE3-10DM*
	62.5/125µm OM1	F6LE10D-10DM*	F6B10D-NM*	FL6E10D-NM*	F6LE10D-10M*	F6LE3-10DM*
	9/125µm OS1/OS2	F9LE10D-10DM*	F9B10D-NM*	F9LE10D-NM*	F9LE10D-10M*	F9LE3-10DM*
E - Orange	10Gig™ 50/125µm OM3	FXLE10E-10EM*	FXB10E-NM*	FXLE10E-NM*	FXLE10E-10M*	FXLE3-10EM*
	50/125µm OM2	F5LE10E-10EM*	F5B10E-NM*	F5LE10E-NM*	F5LE10E-10M*	F5LE3-10EM*
	62.5/125µm OM1	F6LE10E-10EM*	F6B10E-NM*	F6LE10E-NM*	F6LE10E-10M*	F6LE3-10EM*
	9/125µm OS1/OS2	F9LE10E-10EM*	F9B10E-NM*	F9LE10E-NM*	F9LE10E-10M*	F9LE3-10EM*
F - Dark Blue	10Gig™ 50/125µm OM3	FXLE10F-10FM*	FXB10F-NM*	FXLE10F-NM*	FXLE10F-10M*	FXLE3-10FM*
	50/125µm OM2	F5LE10F-10FM*	F5B10F-NM*	F5LE10F-NM*	F5LE10F-10M*	F5LE3-10FM*
	62.5/125µm OM1	F6LE10F-10FM*	F6B10F-NM*	F6LE10F-NM*	F6LE10F-10M*	F6LE3-10FM*
	9/125µm OS1/OS2	F9LE10F-10FM*	F9B10F-NM*	F9LE10F-NM*	F9LE10F-10M*	F9LE3-10FM*
G - Violet	10Gig™ 50/125µm OM3	FXLE10G-10GM*	FXB10G-NM*	FXLE10G-NM*	FXLE10G-10M*	FXLE3-10GM*
	50/125µm OM2	F5LE10G-10GM*	F5B10G-NM*	F5LE10G-NM*	F5LE10G-10M*	F5LE3-10GM*
	62.5/125µm OM1	F6LE10G-10GM*	F6B10G-NM*	F6LE10G-NM*	F6LE10G-10M*	F6LE3-10GM*
	9/125µm OS1/OS2	F9LE10G-10GM*	F9B10G-NM*	F9LE10G-NM*	F9LE10G-10M*	F9LE3-10GM*
H - Aqua	10Gig™ 50/125µm OM3	FXLE10H-10HM*	FXB10H-NM*	FXLE10H-NM*	FXLE10H-10M*	FXLE3-10HM*
	50/125µm OM2	F5LE10H-10HM*	F5B10H-NM*	F5LE10H-NM*	F5LE10H-10M*	F5LE3-10HM*
	62.5/125µm OM1	F6LE10H-10HM*	F6B10H-NM*	F6LE10H-NM*	F6LE10H-10M*	F6LE3-10HM*
	9/125µm OS1/OS2	F9LE10H-10HM*	F9B10H-NM*	F9LE10H-NM*	F9LE10H-10M*	F9LE3-10HM*
J - Rose	10Gig™ 50/125µm OM3	FXLE10J-10JM*	FXB10J-NM*	FXLE10J-NM*	FXLE10J-10M*	FXLE3-10JM*
	50/125µm OM2	F5LE10J-10JM*	F5B10J-NM*	F5LE10J-NM*	F5LE10J-10M*	F5LE3-10JM*
	62.5/125µm OM1	F6LE10J-10JM*	F6B10J-NM*	F6LE10J-NM*	F6LE10J-10M*	F6LE3-10JM*
	9/125µm OS1/OS2	F9LE10J-10JM*	F9B10J-NM*	F9LE10J-NM*	F9LE10J-10M*	F9LE3-10JM*
K - Slate	10Gig™ 50/125µm OM3	FXLE10K-10KM*	FXB10K-NM*	FXLE10K-NM*	FXLE10K-10M*	FXLE3-10KM*
	50/125µm OM2	F5LE10K-10KM*	F5B10K-NM*	F5LE10K-NM*	F5LE10K-10M*	F5LE3-10KM*
	62.5/125µm OM1	F6LE10K-10KM*	F6B10K-NM*	F6LE10K-NM*	F6LE10K-10M*	F6LE3-10KM*
	9/125µm OS1/OS2	F9LE10K-10KM*	F9B10K-NM*	F9LE10K-NM*	F9LE10K-10M*	F9LE3-10KM*
L - Brown	10Gig™ 50/125µm OM3	FXLE10L-10LM*	FXB10L-NM*	FXLE10L-NM*	FXLE10L-10M*	FXLE3-10LM*
	50/125µm OM2	F5LE10L-10LM*	F5B10L-NM*	F5LE10L-NM*	F5LE10L-10M*	F5LE3-10LM*
	62.5/125µm OM1	F6LE10L-10LM*	F6B10L-NM*	F6LE10L-NM*	F6LE10L-10M*	F6LE3-10LM*
	9/125µm OS1/OS2	F9LE10L-10LM*	F9B10L-NM*	F9LE10L-NM*	F9LE10L-10M*	F9LE3-10LM*

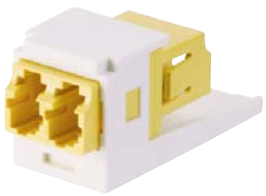
*Substitute for length in metres: 1 – 10, 15, 20 or 30.
‡ Standard cable jacket colours are: Aqua - OM3, Orange - OM2/OM1, Yellow - OS2/OS1.
Custom colours available available upon request. Contact factory.

ordering information (continued)

Key Type and Color (Adapter Key Shown)	Fibre Type	Keyed LC to Keyed LC Duplex LSZH Patch Cords‡	Keyed LC Simplex Pigtails	Keyed LC Duplex LSZH Pigtails	Keyed LC to LC Duplex LSZH Patch Cords‡	Keyed LC to SC Duplex LSZH Patch Cords‡
P - White	10Gig™50/125µm OM3	FXLE10P-10PM*	FXB10P-NM*	FXLE10P-NM*	FXLE10P-10M*	FXLE3-10PM*
	50/125µm OM2	F5LE10P-10PM*	F5B10P-NM*	F5LE10P-NM*	F5LE10P-10M*	F5LE3-10PM*
	62.5/125µm OM1	F6LE10P-10PM*	F6B10P-NM*	F6LE10P-NM*	F6LE10P-10M*	F6LE3-10PM*
	9/125µm OS1/OS2	F9LE10P-10PM*	F9B10P-NM*	F9LE10P-NM*	F9LE10P-10M*	F9LE3-10PM*
Q - Charcoal	10Gig™50/125µm OM3	FXLE10Q-10QM*	FXB10Q-NM*	FXLE10Q-NM*	FXLE10Q-10M*	FXLE3-10QM*
	50/125µm OM2	F5LE10Q-10QM*	F5B10Q-NM*	F5LE10Q-NM*	F5LE10Q-10M*	F5LE3-10QM*
	62.5/125µm OM1	F6LE10Q-10QM*	F6B10Q-NM*	F6LE10Q-NM*	F6LE10Q-10M*	F6LE3-10QM*
	9/125µm OS1/OS2	F9LE10Q-10QM*	F9B10Q-NM*	F9LE10Q-NM*	F9LE10Q-10M*	F9LE3-10QM*
R - Lavender	10Gig™50/125µm OM3	FXLE10R-10RM*	FXB10R-NM*	FXLE10R-NM*	FXLE10R-10M*	FXLE3-10RM*
	50/125µm OM2	F5LE10R-10RM*	F5B10R-NM*	F5LE10R-NM*	F5LE10R-10M*	F5LE3-10RM*
	62.5/125µm OM1	F6LE10R-10RM*	F6B10R-NM*	F6LE10R-NM*	F6LE10R-10M*	F6LE3-10RM*
	9/125µm OS1/OS2	F9LE10R-10RM*	F9B10R-NM*	F9LE10R-NM*	F9LE10R-10M*	F9LE3-10RM*
S - Peach	10Gig™50/125µm OM3	FXLE10S-10SM*	FXB10S-NM*	FXLE10S-NM*	FXLE10S-10M*	FXLE3-10SM*
	50/125µm OM2	F5LE10S-10SM*	F5B10S-NM*	F5LE10S-NM*	F5LE10S-10M*	F5LE3-10SM*
	62.5/125µm OM1	F6LE10S-10SM*	F6B10S-NM*	F6LE10S-NM*	F6LE10S-10M*	F6LE3-10SM*
	9/125µm OS1/OS2	F9LE10S-10SM*	F9B10S-NM*	F9LE10S-NM*	F9LE10S-10M*	F9LE3-10SM*
T - Steel Blue	10Gig™50/125µm OM3	FXLE10T-10TM*	FXB10T-NM*	FXLE10T-NM*	FXLE10T-10M*	FXLE3-10TM*
	50/125µm OM2	F5LE10T-10TM*	F5B10T-NM*	F5LE10T-NM*	F5LE10T-10M*	F5LE3-10TM*
	62.5/125µm OM1	F6LE10T-10TM*	F6B10T-NM*	F6LE10T-NM*	F6LE10T-10M*	F6LE3-10TM*
	9/125µm OS1/OS2	F9LE10T-10TM*	F9B10T-NM*	F9LE10T-NM*	F9LE10T-10M*	F9LE3-10TM*
V – Maroon	10Gig™50/125µm OM3	FXLE10V-10VM*	FXB10V-NM*	FXLE10V-NM*	FXLE10V-10M*	FXLE3-10VM*
	50/125µm OM2	F5LE10V-10VM*	F5B10V-NM*	F5LE10V-NM*	F5LE10V-10M*	F5LE3-10VM*
	62.5/125µm OM1	F6LE10V-10VM*	F6B10V-NM*	F6LE10V-NM*	F6LE10V-10M*	F6LE3-10VM*
	9/125µm OS1/OS2	F9LE10V-10VM*	F9B10V-NM*	F9LE10V-NM*	F9LE10V-10M*	F9LE3-10VM*
W - Mint	10Gig™50/125µm OM3	FXLE10W-10WM*	FXB10W-NM*	FXLE10W-NM*	FXLE10W-10M*	FXLE3-10WM*
	50/125µm OM2	F5LE10W-10WM*	F5B10W-NM*	F5LE10W-NM*	F5LE10W-10M*	F5LE3-10WM*
	62.5/125µm OM1	F6LE10W-10WM*	F6B10W-NM*	F6LE10W-NM*	F6LE10W-10M*	F6LE3-10WM*
	9/125µm OS1/OS2	F9LE10W-10WM*	F9B10W-NM*	F9LE10W-NM*	F9LE10W-10M*	F9LE3-10WM*

*Substitute for length in metres: 1 – 10, 15, 20 or 30.
‡ Standard cable jacket colours are: Aqua - OM3, Orange - OM2/OM1, Yellow - OS2/OS1.
Custom colours available available upon request. Contact factory.

Keyed LC Mini-Com™ Fibre Optic Adapter Modules



CMD***LCZIW

Keyed LC Opticom™ Fibre Adapter Panels (FAPs)

FAP6W***DLCZ

Keyed LC OptiCam™ Pre-Polished Fibre Connectors

FLCSMC^***

***For Adapter Modules, substitute for key type and colour: ABL for A – Black, BRD for B – Red, CGR for C – Green, DYL for D – Yellow, EOR for E – Orange, or FDB for F – Dark Blue, GVL for G - Violet, HAQ for H - Aqua, JRO for J - Rose, KIG for K - Slate, LLB for L - Brown, PWT for P - White, QCG for Q - Charcoal, RLV for R - Lavender, SPE for S - Peach, TSB for T - Steel Blue, VMA for V - Maroon, WMI for W - Mint.
^Substitute for fibre type: 6 = 62.5/125µm OM1, 5 = 50/125µm OM2, X = 10Gig™ 50/125µm OM3 or 9 = 9/125µm OS1/OS2.

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