FiberRunner[®] 6x4 Routing System



specifications

The 6x4 routing system shall be a system of channel, fittings, and brackets designed to segregate, route, and protect fiber optic and high performance copper cabling. Channel and fittings shall be assembled using pre-assembled couplers. A selection of spillout options shall be available that easily attach using the vertical tee. Fittings maintain a minimum 2" bend radius to protect against signal loss due to excessive cable bends. Available system colors shall be yellow and black. A full complement of brackets shall be available for attaching system components to ladder rack, threaded rod, auxiliary framing, strut, equipment racks, cabinets, and raised floor pedestals.

technical information

Open channel Cable No. of Cables 50% fill capacity: 1.6mm 3,819 (4" pile up) 2.0mm 2,444 3.0mm 1,086 Fiber Optic Ribbon 5.20mm 361 Category 6 6.35mm 242 Category 6A 7.57mm 171 Material: PVC (Channel), PC/ABS (Fittings) Flammability: 94V-0 Approvals: UL Listed to 2024 Optical Fiber Cable Routing Assemblies CSI Spec Form: LP-CSISPEC-FR	Dimensions are in inc (Dimensions in parentheses		4.44 (112.8) ▲ = 23.6 in ² (15,354mm ²) ▲ = 23.6 in ² (15,354mm ²) ▲ = 23.6 in ² (15,354mm ²)		
(4" pile up) 2.0mm 2,444 3.0mm 1,086 Fiber Optic Ribbon 1,086 Interconnect 5.20mm 361 Category 6 6.35mm 242 Category 6A 7.57mm 171 Material: PVC (Channel), PC/ABS (Fittings) Flammability: 94V-0 Approvals: UL Listed to 2024 Optical Fiber Cable Routing Assemblies	Open channel	Cable	No. of Cables		
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	Flammability:	94V-0			
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	CSI Spec Form:	LP-CSISPEC-FR			

key features and benefits

Fastest installations	No bolts need to be tightened and no tools are required when installing the	
	QuikLock [™] Coupler; QuikLock [™] Couplers and Brackets take less than five seconds to make a mechanically secure connection	
Easy to maintain	Hinged channel cover installs easily and fully encloses the channel for cable protection; split hinged channel cover creates radiused 3/4" (19mm) opening for easy access to add or remove cables; the 6x4 hinged and split hinged channel covers will stay open between 30° and 90° to allow cable access even in height restricted areas	
	Split fitting covers allow cable to be laid in without removing the fitting cover; the covers are also designed to prevent cables from coming out of the channel as cable is pulled through	
System strength	Hinged channel covers and split fitting covers protect cabling and provide fast and easy access for future cabling moves, adds, and changes	
	Robust system of channel, covers, fittings, and other non-metallic system components, protect cable from physical damage; system includes full range of directional and spillout fittings	
Versatility	Multiple spillout options include spill-over fittings and the vertical tee which accepts a three-sided trumpet, transition to corrugated tubing and Panduit [®] FiberRunner [™] System	
Cable protection	A minimum 2" bend radius maintained throughout all fittings prevents excessive bends in fiber optic cabling	

applications

The FiberRunner® 6x4 Routing System is a system of channel, fittings, and brackets designed to segregate, route, and protect fiber optic and high performance copper cabling. It is suited for data center applications where cable is routed from distribution areas to equipment cabinets or racks. It is used in Telco Central Offices to route fiber optic jumper cables between fiber distribution frames and equipment bays. It can be deployed over the racks or in approved underfloor applications. Channel and fittings are assembled using timesaving Panduit® QuikLock[™] Couplers.

A selection of spillout options is available that easily attach using differentiate various types of cabling. A full complement of QuikLock[™] Brackets is available to attach system components to support structures found in all applications. The FiberRunner® 6x4 Routing System is part of the Panduit® complete fiber distribution system, which includes the FiberRunner® 24x4, 12x4, 4x4, and 2x2 Routing Systems, Wyr-Grid[™] Overhead Cable Tray System, cable management, and racks.

Channel and Cover			
6x4 channel (6'):	FR6X4**6		
6x4 hinged cover (6'): 6x4 split hinged cover (6'):	FRHC6**6 FRSHC6**6		
Cable retainer:	FRCR6LBL-X		
Fittings, Split Covers, and Spillouts			
QuikLock [™] Coupler:	FRBC6X4L**		
Horizontal right angle: Horizontal right angle cover:	FRRA6X4L** FRRASC6L**		
Horizontal 45°:	FRH456X4L**		
Horizontal 45° cover:	FRH45SC6L**		
Horizontal tee:	FRT6X4L**		
Horizontal tee cover:	FRTSC6L** FRFWC6X4L**		
4-way cross: 4-way cross cover:	FRFWC0X4L		
End cap:	FREC6X4L**		
Inside vertical 90°	FRIVRA6X4L**		
Inside vertical 45°: Outside vertical 45°:	FRIV456X4L** FROV456X4L**		
Outside vertical 45° cover:	FROV45SC6**		
Outside vertical 90°:	FROVRA6X4L**		
Outside vertical 90° cover:	FROVRASC6L**		
6x4 to 4x4 FiberRunner [®] Reducer Fitting:	FRRF6FR4L**		
6x4 to 4x4 FiberRunner®			
Reducer Fitting Cover:	FRRF6FR4SCL**		
6x4 FiberRunner [®] System to 4x4 Fiber-Duct [™] Reducer Fitting:	FRRF64**		
Adapter to CommScope 6x4	FRADC6X4L**		
FiberGuide ¹ :			
Adapter to Tyton 8x4 Lightguide ² : Adapter to Warren & Brown	FRTYT68		
8x4 Lightpaths ³ :	FRWBS68		
QuikLock [™] Vertical Tee:	FRVT6X4L**		
Three-sided vertical tee trumpet spillout:	FTR4X4L**		
2-port spillout to 1.5" I.D.			
corrugated tubing:	FIDT4X4LBL		
4x4 hinged duct vertical cable manager kit:	FRHD4KT**		
Bend radius control trumpet:	TRC4HDBL		
Low profile reducer 4x4 to 2x2	FRLPR42LBL		
for vertical tee: Spill-over with 2x2 exit:	FRSPJ2X2L**		
Spill-over cover with 2x2 exit			
for 6x4 system:	FRSPJC26L**		
2x2 three-sided trumpet: 1-port spillout to 1.5" I.D.	FTR2X2L**		
corrugated tubing:	FIDT2X2L**		
2x2 hinged duct vertical cable manager kit:	FRHD2KT**		
2x2 FiberRunner [®] Bend	THIDZRI		
Radius Control Trumpet:	TRC2HDLBL		
Spill-over with 4x4 exit:	FRSPJ4X4L**		
Spill-over cover with 4x4 exit for 6x4 system:	FRSPJC46L**		
Dual downspout:	FRDDS6X4L**		
Dual downspout cover: 4x4 three-sided trumpet:	FRDDSHC6L** FRTR4X4L**		
2-port spillout to 1.5" I.D.	FRIR4A4L		
corrugated tubing:	FRIDT4X4L**		
Three-sided BRC trumpet spillout for 6x4 exit:	FRTR6X4L**		
6x4 up spout:	FRUPS6X4L**		
Innerduct transition fitting:	FITF6X4		
Corrugated tubing spillout:	FRIDT6X4L**		
QuikLock [™] Mounting Brackets QL existing 1/2" thr rod bracket:	FR6TRBE12		
QL existing 5/8" thr rod bracket:	FR6TRBE58		
QL new 1/2" thr rod bracket:	FR6TRBN12		
QL new 5/8" thr rod bracket: QL underfloor bracket:	FR6TRBN58 FR6USB		
QL adjust ladder rack bracket:	FR6ALB		
QL center support bracket 1/2":	FR6CS12		
QL center support bracket 5/8":	FR6CS58		
QL adjust C-bracket 1/2": QL adjust C-bracket 5/8":	FR6ACB12 FR6ACB58		
QL trapeze 3/8" bracket:	FR6TB38		
QL trapeze 1/2" bracket:	FR6TB12		
Two-piece ladder rack bracket 1/2" thr rod:	F2PCLB12		
	121 ULD12		
Two-piece ladder rack bracket 5/8" thr rod:	F2PCLB58		
QL ladder rack bracket:	FR6LRB		
QL "L" wall mount bracket: QL NetFrame [™] Rack Mount Bracket:	FR6LB FRRMBNF58		
QL adjust cabinet mount bracket:	FR6ACAB		
Two-piece framing clip 5/8"			
thr rod to 9/16" C-channel aux. framing bars:	FRAFC58		
4 post rack bracket:	FR4PRB58		

FiberGuide is a registered trademark of CommScope Telecommunications, Inc.

Lightguide Fiber Optic Protection System is a product of the Hellerman Tyton Corporation

³ Lightpaths is a trademark of Warren & Brown Technologies Pty Ltd.

** Substitute: YL= Yellow, BL= Black

www.panduit.com

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