# FiberRunner<sup>®</sup> 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

Dimensions are in inches (Dimensions in parenthese are metric).	s	6.58 (167.3mm) A = 23.6 in. <sup>2</sup> (15354mm <sup>2</sup> )
Open channel	Cable	No. of Cables
50% fill capacity:	1.6mm	3819
(4"pile up)	2.0mm	2444
	3.0mm	1086
Fiber Optic		
Ribbon Interconnect	5.20mm	361
Category 6	6.35mm	242
Category 6A	7.57mm	171
Material:	Rigid PVC (Channel), ABS (Fittings)	
Flammability:	94V-0	
Approvals:	UL Listed to 2024A Optical Fiber Cable Routing Assemblies Compliant with the applicable tests in Telcordia GR-63-CORE Network Equipment Building Systems Level 3	
CSI spec form:	LP-CSISF	PEC-FR

### key features and benefits

Fastest installations	No bolts need to be tightened and no tools are required when installing the QuikLock <sup>™</sup> Coupler; QuikLock <sup>™</sup> 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		
	Hinged channel covers and split fitting covers protect cabling and provide fast and easy access for future cabling moves, adds, and changes		
System strength	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 <sup>®</sup> FiberRunner <sup>®</sup> and Fiber-Duct <sup>™</sup> Systems		
Cable protection	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<sup>™</sup> Couplers. A selection of spillout options is available that easily attach using

the vertical tee. Fittings maintain a 2" bend radius to protect against signal loss due to excessive cable bends. Available system colors are Yellow and Black to differentiate various types of cabling. A full complement of QuikLock <sup>™</sup> 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, the Fiber-Duct<sup>™</sup> 4x4 and 2x2 Routing Systems, Wyr-Grid<sup>™</sup> Overhead Cable Tray System, cable management, and racks.



#### Channel and Cover 6x4 channel (6'): 6x4 hinged cover (6'): 6x4 split hinged cover (6'): Cable retainer: FR6X4\*\*6 FRHC6\*\*6 FRSHC6\*\*6 FRCR6BL-X Fittings, Split Covers, and Spillouts QuikLock<sup>®</sup> Coupler: Horizontal right angle: Horizontal right angle cover: Horizontal 45°: FRBC6X4\*\* FRRA6X4\*\* FRRASC6\*\* FRH456X4\*\* Horizontal 45° cover: Horizontal tee: FRH45SC6\*\* FRT6X4\*\* FRT6X4\*\* FRTSC6\*\* FRFWC6X4\*\* FRFWCSC6\*\* Horizontal tee cover: 4-way cross: 4-way cross cover: End cap: Inside Vertical 90° FREC6X4\*\* FRIVRA6X4\*\* Inside vertical 45°: Outside vertical 45°: Outside vertical 45° cover: FRIV456X4\*\* FROV456X4\*\* FROV45SC6\* Outside vertical 90°: Outside vertical 90° cover: 6x4 to 4x4 FiberRunner® FROVBA6X4\*\* FROVRASC6\* 6x4 to 4x4 FiberRunner® Reducer fitting: 6x4 to 4x4 FiberRunner® Reducer Fitting cover: 6x4 FiberRunner® System to 4x4 FiberDuct" Reducer Fitting: Adapter to ADC 6x4 FiberGuide': Adapter to Tyton 8x4 Lightguide': Adapter to Warren & Brown 8x4 Lightpaths<sup>3</sup>: QuikLock" vertical tee: 3-sided vertical tee: total tee: Second the spillong FRRF6FR4\*\* FBBE6EB4SC\*\* FBBE64\* FRADC6X4\*' FRTYT68 FRWBS68 FRVT6X4\* FTR4X4\*\* 3-sided vertical tee trumpet spillout: 2-port spillout to 1.5" I.D. corrugated tubing: 4x4 hinged duct vertical FIDT4X4BI FRHD4KT\*\* cable manager kit: 4x4 hinged duct bend radius control trumpet: TRC4HDBL Low profile reducer 4x4 to 2x2 for vertical tee: Spill-over with 2x2 exit: FRLPR42BL FRSPJ2X2\* Spill-over with 2x2 exit: Spill-over cover with 2x2 exit for 6x4 system: 2x2 three-sided trumpet: 1-port spillout to 1.5" I.D. corrugated tubing: FRSPJC26\*\* FTR2X2\* FIDT2X2\*\* 2x2 hinged duct vertical cable manager kit: 2x2 FiberRunner<sup>®</sup> Bend FRHD2KT\*\* Radius Control Trumpet: Spill-over with 4x4 exit: TRC2HDBL FRSPJ4X4\*\* Spill-over cover with 4x4 exit for 6x4 system: Dual downspout: FRSPJC46\*\* FRDDS6X4\*\* Dual downspout: Dual downspout cover: 4x4 3-sided trumpet: 2-port spillout to 1.5" I.D. corrugated tubing: 1-port spillout to 1.5" I.D. FRDDSHC6\* FRTR4X4\*\* FRIDT4X4\*\* corrugated tubing: 3-sided BRC trumpet FR1.5IDE\*\* FRTR6X4\*\* FRUPS6X4\*\* spillout for 6x4 exit: 6x4 up spout: Innerduct transition fitting: FITF6X4 FRIDT6X4\*\* Corrugated tubing spillout: QuikLock<sup>™</sup> Mounting Brackets QL existing 1/2" thr rod brkt: QL existing 5/8" thr rod brkt: QL new 1/2" thr rod brkt: QL new 5/8" thr rod brkt: QL under floor brkt: QL adjust ladder rack brkt: FR6TRBE12 FR6TRBE58 FR6TRBN12 FR6TRBN58 FR6USB FR6ALB QL adjust ladder rack brkt: FR6ALB QL center support brkt 5/8": FR6CS12 QL catier support brkt 5/8": FR6CS12 QL adjust C-brkt 1/2": FR6ACB12 QL adjust C-brkt 5/8": FR6ACB12 QL adjust C-brkt 5/8": FR6ACB12 QL trapeze 3/8" brkt: FR6TB38 QL trapeze 1/2" brkt: FR6TB38 Two-piece ladder rack brkt 1/2" thr rod: F2PCLB12 Two-piece ladder rack brkt 5/8" thr rod: F2PCLB12 Wo-piece ladder rack brkt 5/8" thr rod: F2PCLB12 F2PCLB12 Wo-piece ladder rack brkt 5/8" thr QL ladder rack brkt: QL "L" wall mount brkt: QL NetFrame<sup>™</sup> Rack Mount Brkt: QL adjust cabinet mount brkt: FR6LRB FR6LB FRRMBNF58 FR6ACAB Two-piece framing clip 5/8' thr rod to 9/16" C-channel aux. framing bars: 4 post rack brkt: FRAFC58 FR4PRB58

<sup>1</sup>FiberGuide is a registered trademark of ADC Telecommunications, Inc.

<sup>2</sup>Lightguide Fiber Optic Protection System is a product

of the Hellerman Tyton Corporation. <sup>3</sup>Lightpaths is a trademark of Warren & Brown

Technologies Pty Ltd. \*Substitute: YL = Yellow, BL = Black

#### www.panduit.com

## FiberRunner® 6x4 Routing System



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