

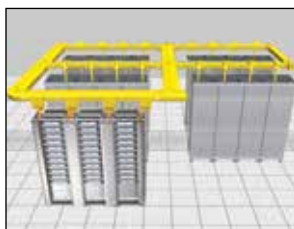
# FiberRunner® 6x4 Routing System

# PANDUIT®

## SPECIFICATION SHEET

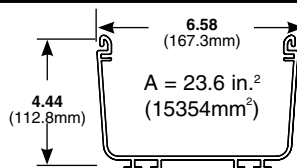
### specifications

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, orange, 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 parentheses  
are metric).



Open channel 50% fill capacity: (4" pile up)	Cable	No. of Cables
	1.6mm	3819
	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-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

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® FiberRunner® and Fiber-Duct™ 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™ 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, orange, and black to 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, the Fiber-Duct™ 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'):	FRHC6**6
6x4 split hinged cover (6'):	FRSHC6**6
Cable retainer:	FRCR6BL-X

#### Fittings, Split Covers, and Spillouts

QuikLock™ Coupler:	FRBC6X4**
Horizontal right angle:	FRRA6X4**
Horizontal right angle cover:	FRASC6**
Horizontal 45°:	FRH456X4**
Horizontal 45° cover:	FRH45SC6**
Horizontal tee:	FRT6X4**
Horizontal tee cover:	FRTSC6**
4-way cross:	FRFWC6X4**
4-way cross cover:	FRFWCSC6**
End cap:	FREC6X4**
Inside Vertical 90°:	FRIVRA6X4**
Inside vertical 45°:	FRIV456X4**
Outside vertical 45°:	FROV456X4**
Outside vertical 45° cover:	FROV45SC6**
Outside vertical 90°:	FROVRA6X4**
Outside vertical 90° cover:	FROVRA6X4**
6x4 to 4x4 FiberRunner® Reducer fitting:	FRRF6FR4**
6x4 to 4x4 FiberRunner® Reducer Fitting cover:	FRRF6FR4SC**
6x4 Fiber-Duct™ Reducer Fitting:	FRRF64**
Adapter to ADC 6x4 LightGuide®:	FRADC6X4**
Adapter to Tyton 8x4 Lightguide®:	FRTYT68
Adapter to Warren & Brown 8x4 Lightpaths®:	FRWBS68
QuikLock™ vertical tee:	FRVT6X4**
3-sided vertical tee trumpet spillout:	FTR4X4**
2-port spillout to 1.5" I.D. corrugated tubing:	FIDT4X4BL
4x4 hinged duct vertical cable manager kit:	FRHD4KT**
4x4 hinged duct bend radius control trumpet:	TRC4HDBL
Low profile reducer 4x4 to 2x2 for vertical tee:	FRLPR42BL
Spill-over with 2x2 exit:	FRSPJ2X2**
Spill-over cover with 2x2 exit for 6x4 system:	FRSPJC26**
2x2 three-sided trumpet:	FTR2X2**
1-port spillout to 1.5" I.D. corrugated tubing:	FIDT2X2**
2x2 hinged duct vertical cable manager kit:	FRHD2KT**
2x2 FiberRunner® Bend Radius Control Trumpet:	TRC2HDBL
Spill-over with 4x4 exit:	FRSPJ4X4**
Spill-over cover with 4x4 exit for 6x4 system:	FRSPJC46**
Dual downspout:	FRDSD6X4**
Dual downspout cover:	FRDSDHC6**
4x4 3-sided trumpet:	FRTR4X4**
2-port spillout to 1.5" I.D. corrugated tubing:	FRIDT4X4**
1-port spillout to 1.5" I.D. corrugated tubing:	FR1.5IDE**
3-sided BRC trumpet spillout for 6x4 exit:	FRTR6X4**
6x4 up spout:	FRUPS6X4**
Innerduct transition fitting:	FITF6X4
Corrugated tubing spillout:	FRIDT6X4**

#### QuikLock™ Mounting Brackets

QL existing 1/2" thr rod brkt:	FR6TRBE12
QL existing 5/8" thr rod brkt:	FR6TRBE58
QL new 1/2" thr rod brkt:	FR6TRBN12
QL new 5/8" thr rod brkt:	FR6TRBN58
QL under floor brkt:	FR6USB
QL adjust ladder rack brkt:	FR6ALB
QL center support brkt 1/2":	FR6CS12
QL center support brkt 5/8":	FR6CS58
QL adjust C-brkt 1/2":	FR6ACB12
QL adjust C-brkt 5/8":	FR6ACB58
QL trapeze 3/8" brkt:	FR6TB38
QL trapeze 1/2" brkt:	FR6TB12
Two-piece ladder rack brkt 1/2" thr rod:	F2PCLB12
Two-piece ladder rack brkt 5/8" thr rod:	F2PCLB58
QL ladder rack brkt:	FR6LRB
QL "L" wall mount brkt:	FR6LB
QL NetFrame™ Rack Mount Brkt:	FRMBNFB58
QL adjust cabinet mount brkt:	FR6ACAB
Two-piece framing clip 5/8" thr rod to 9/16" C-channel	
aux. framing bars:	FR AFC58
4 post rack brkt:	FR4PRB58

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

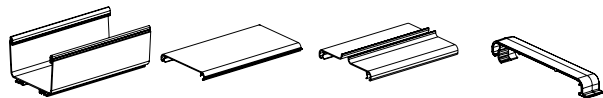
<sup>2</sup>Lightguide Fiber Optic Protection System is a product of the Hellerman Tyton Corporation.

<sup>3</sup>Lightpaths is a trademark of Warren & Brown Technologies Pty Ltd.

\*\*Substitute: YL = Yellow, OR = Orange, BL = Black

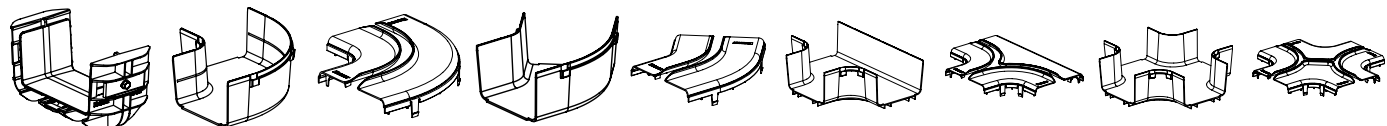
# FiberRunner® 6x4 Routing System

## channel and cover

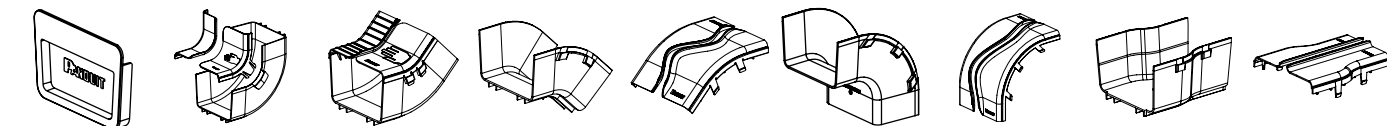


**FR6X4\*\*6 FRHC6\*\*6 FRSHC6\*\*6 FRCR6BL-X**

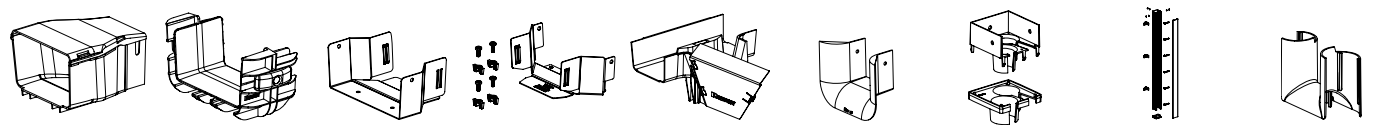
## fittings, split covers, and spillouts



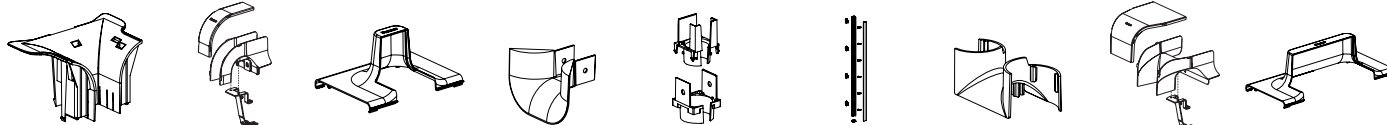
**FRBC6X4\*\* FRRA6X4\*\* FRRASC6\*\* FRH456X4\*\* FRH45SC6\*\* FRT6X4\*\* FRTSC6\*\* FRFWC6X4\*\* FRFWCSC6\*\***



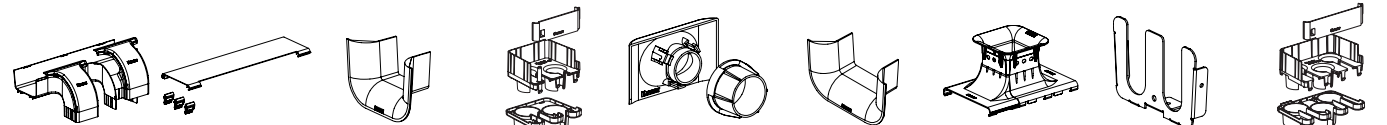
**FREC6X4\*\* FRIVRA6X4\*\* FRIV456X4\*\* FROV456x4\*\* FROV45SC6\*\* FROVRA6X4\*\* FROVRASC6\*\* FRRF6FR4\*\* FRRF6FR4SC\*\***



**FRRF64\*\* FRADC6X4\*\* FRTYT68 FRWBS68 FRVT6X4\*\* FTR4X4\*\* FIDT4X4BL FRHD4KT\*\* TRC4HDBL**

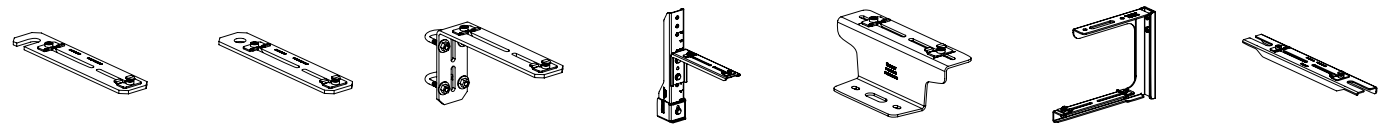


**FRLPR42BL FRSPJ2X2\*\* FRSPJC26\*\* FTR2X2\*\* FIDT2X2\*\* FRHD2KT\*\* TRC2HDBL FRSPJ4X4\*\* FRSPJC46\*\***

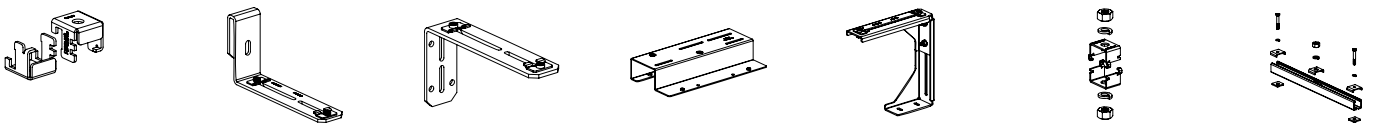


**FRDDS6X4\*\* FRDDSHC6\*\* FRTR4X4\*\* FRIDT4X4\*\* FR1.5IDE\*\* FRTR6X4\*\* FRUPS6X4\*\* FITF6X4 FRIDT6X4\*\***

## QuikLock™ Mounting Brackets



**FR6TRBE12 FR6TRBE58 FR6TRBN12 FR6TRBN58 FR6USB FR6ALB FR6CS12 FR6CS58 FR6ACB12 FR6ACB58 FR6TB38 FR6TB12**



**F2PCLB12 F2PCLB58 FR6LRB FR6LB FRRMBNF58 FR6ACAB FRAFCS8 FR4PRB58**

\*\*Substitute: YL = Yellow, OR = Orange, BL = Black

### WORLDWIDE SUBSIDIARIES AND SALES OFFICES

PANDUIT CANADA  
Markham, Ontario  
cs-cdn@panduit.com  
Phone: 800.777.3300

PANDUIT EUROPE LTD.  
London, UK  
cs-emea@panduit.com  
Phone: 44.20.8601.7200

PANDUIT SINGAPORE PTE. LTD.  
Republic of Singapore  
cs-ap@panduit.com  
Phone: 65.6305.7575

PANDUIT JAPAN  
Tokyo, Japan  
cs-japan@panduit.com  
Phone: 81.3.6863.6000

PANDUIT LATIN AMERICA  
Guadalajara, Mexico  
cs-la@panduit.com  
Phone: 52.33.3777.6000

PANDUIT AUSTRALIA PTY. LTD.  
Victoria, Australia  
cs-aus@panduit.com  
Phone: 61.3.9794.9020

For a copy of Panduit product warranties, log on to [www.panduit.com/warranty](http://www.panduit.com/warranty)

For more information

Visit us at [www.panduit.com](http://www.panduit.com)

Contact Customer Service by email: [cs@panduit.com](mailto:cs@panduit.com)  
or by phone: 800.777.3300

**PANDUIT®**

©2014 Panduit Corp.  
ALL RIGHTS RESERVED.  
FRSP18--WW-ENG  
Replaces WW-FRSP05  
11/2014