

Fiber Runway System

Optimized Cable Management Solutions for Modern Networks

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Version 11-2024



Efficiently Organize, Protect,
and Maintain Your Cable Infrastructure
with Our Comprehensive Range
of Runway Systems

Overhead Runway Fiber Management System Overview

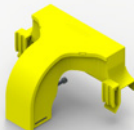
Belden Fiber Runway System is an overhead fiber management runway, designed to protect and route into optical fiber distribution frames such as our super high density [DCX system](#), and our passive and active equipment [E-series](#) and [X-series cabinets](#) for aisle lineup and containment applications in Data Center and Central Office deployments maintaining throughout the system minimum bend radius, covering portfolios for low- and high-density applications featuring reduced amount of installation time.

Self-extinguishing Halogen Free Plastic Material	Specifications
Runway Product Statement	
100mm (4"), 220mm (8") and 300mm (12") Runway System	UL94V-0 certified
50mm (2") Runway System	UL94V-1 certified
Quality Compliance	ISO9001 - UL2024A standard
Requirements Compliance	EEU ROHS
Earthquake Test Compliance	GR-63 Core

Patch Cord Density	1.6 mm Patch Cords (per cm2)	2 mm Patch Cords (per cm2)	3 mm Patch Cords (per cm2)
Trough Pileup & Recommended/Maximum Density			
Simplex/Duplex pieces	120/60 per cm2	90/45 per cm2	40/20 per cm2
System recommendation	2" - 50mm system		
Pile-up 2-inch	480/240	360/180	160/80
System recommendation	4" - 100mm system		
Pile-up 2-inch	960/480	720/360	320/160
Pile-up 3-inch	1440/720	1080/540	480/240
Pile-up 4-inch	1920/960	1440/720	640/320
System recommendation	8" - 220mm system		
Pile-up 2-inch	2160/1080	1620/810	720/360
Pile-up 3-inch	3240/1620	2420/1210	1080/540
Pile-up 4-inch	4320/2160	3240/1620	1440/720
System recommendation	12" - 300mm system		
Pile-up 2-inch	2880/1440	2160/1080	960/480
Pile-up 3-inch	4320/2160	3240/1620	1440/720
Pile-up 4-inch	5760/2880	4320/2160	1920/960

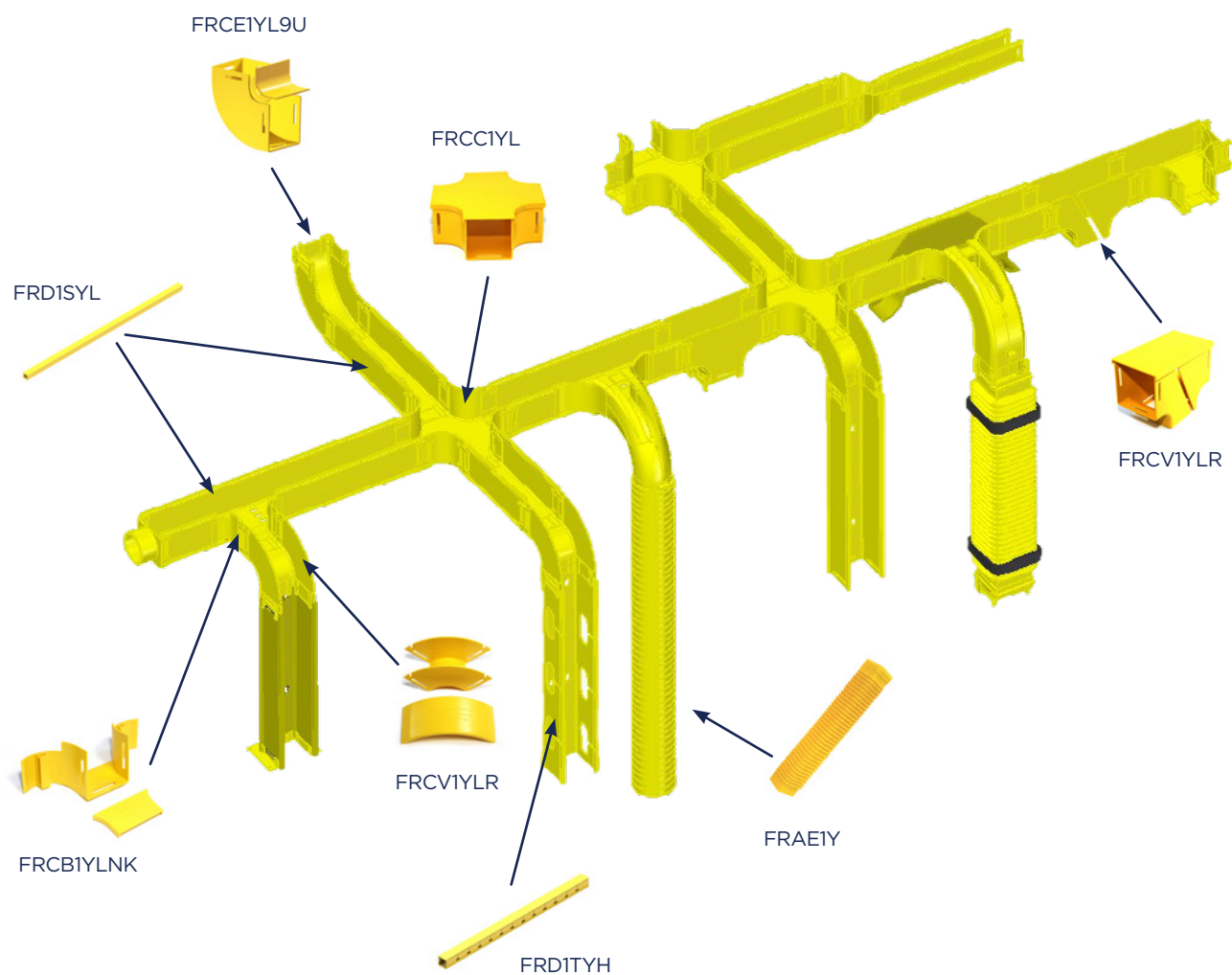
Warranty	Period	Coverage
Runway Product Warranty		
Product	2-Years	Product
Belden Fiber Runway Certified System Installations	10-Years	Product & Labor
The repair or replacement of a defective component under the Belden Fiber Runway Certified System Installations warranty includes the reasonable costs of labor required to repair or replace the defective component. The decision of repair or replacement of components, and the selection of labor services to perform the repair or replacement are at the sole discretion of Belden.		



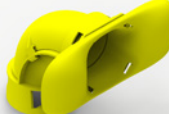
2" H x 2" W - 50x50mm system				
Runway Ordering Information				
FRD1SYN	FRD1TYL	FRD1SYL	FRAJ1Y	FRCT1YL
				
Solid Duct 2m w/o Lid	Slotted Duct 2m with Lid	Solid Duct 2m with Lid	Snap-Fit Joiner	Horizontal Tee with Lid
Runway Ordering Information				
FRCB1YLNK	FRCV1YLN	FRCV1YLR	FRCC1YL	FRCE1YL9H
				
Break Out Kit	Vertical Tee Drop with Lid	Vertical Tee Drop Retrofit with Lid	Horizontal cross with Lid	90° H - elbow with Lid
Runway Ordering Information				
FRCE1YL9U	FRCE1YL9D	FRCE1YL4H	FRCE1YL4D	FRAE1Y
				
90° up elbow with Lid	90° down elbow with Lid	45° H - elbow with Lid	45° down elbow with Lid	End Cap
Runway Ordering Information				
FRAE1YB	FRAE1YC	FRCR2YL	FRCP1YSNV	FRMCC
				
End Cap Tube Knockout	End Cap 38mm Tube Slot	Reducer 4x2" (100x50mm)	Top Outlet, Slotted Vertical Drop 50mm exit	Top Drop Mounting Clips

See page 16-17 mounting options and installation instructions.

1. Example Application – 50mm H x 50mm W (2" x 2")

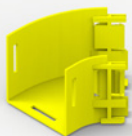




4" H x 4" W - 100x100mm system				
Runway Ordering Information				
FRD3TYH	FRD3TYL	FRD3SYL	FRAJ3Y	FRCV3YN
				
Slotted Duct 2m with Hinged Lid	Slotted Duct 2m with Lid	Solid Duct 2m with Lid	Snap-Fit Joiner	Vertical Tee Drop Retrofit
Runway Ordering Information				
FRAS3Y	FRCV3YLR	FRCV3YLN	FRCT3YL	FRCT3YN
				
Snap-Fit Joiner Slot-less	Vertical Tee Drop Retrofit with Lid	Vertical Tee Drop with Lid	Horizontal Tee with Lid	Horizontal Tee w/o Lid
Runway Ordering Information				
FRCS3YL9	FRCB3YL9	FRCB3YL9DK	FRCB3YL9SK	FRCU3YL
				
Side Spill Out, 90 Degree	90° Breakout Kit with Lid	90° Break Out Kit with Lid & flare	90° Break Out Kit with Lid & flare assembly	Tee Breakout with Lid
Runway Ordering Information				
FRMCC	FRCP3YLV	FRCP3YSNV	FRCC3YL	FRCC3YN
				
Top Drop Mounting Clips	Top Outlet, Vertical drop 100mm exit with Lid	Top outlet, Vertical drop 100mm exit	Horizontal cross with Lid	Horizontal cross w/o lid
Runway Ordering Information				
FRCE3YL9H	FRCE3YN9H	FRCE3YL9U	FRCE3YN9U	FRCE3YL9D
				
90° H - elbow with Lid	90° H - elbow w/o lid	90° up elbow with Lid	90° up elbow w/o lid	90° down elbow with Lid

4" H x 4" W - 100x100mm system - continued

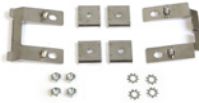
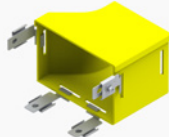
Runway Ordering Information

FRCE3YN9D	FRCE3YL4H	FRCE3YN4H	FRCE3YL4D	FRCE3YN4U
				
90° down elbow w/o Lid	45° H - elbow with Lid	45° H - elbow w/o Lid	45° down elbow with Lid	45° up elbow with lid

Runway Ordering Information

FRAE3Y	FRAE3YH	FRAE3Y1	FRAREY	FRCDUYL2SK
				
End Cap	End Cap 2x 48mm Tube Outlet	End Cap 88mm Tube Outlet	Convuluted Tube, 88m OD, 2mtr Length	Side Drop Square tube 50mm

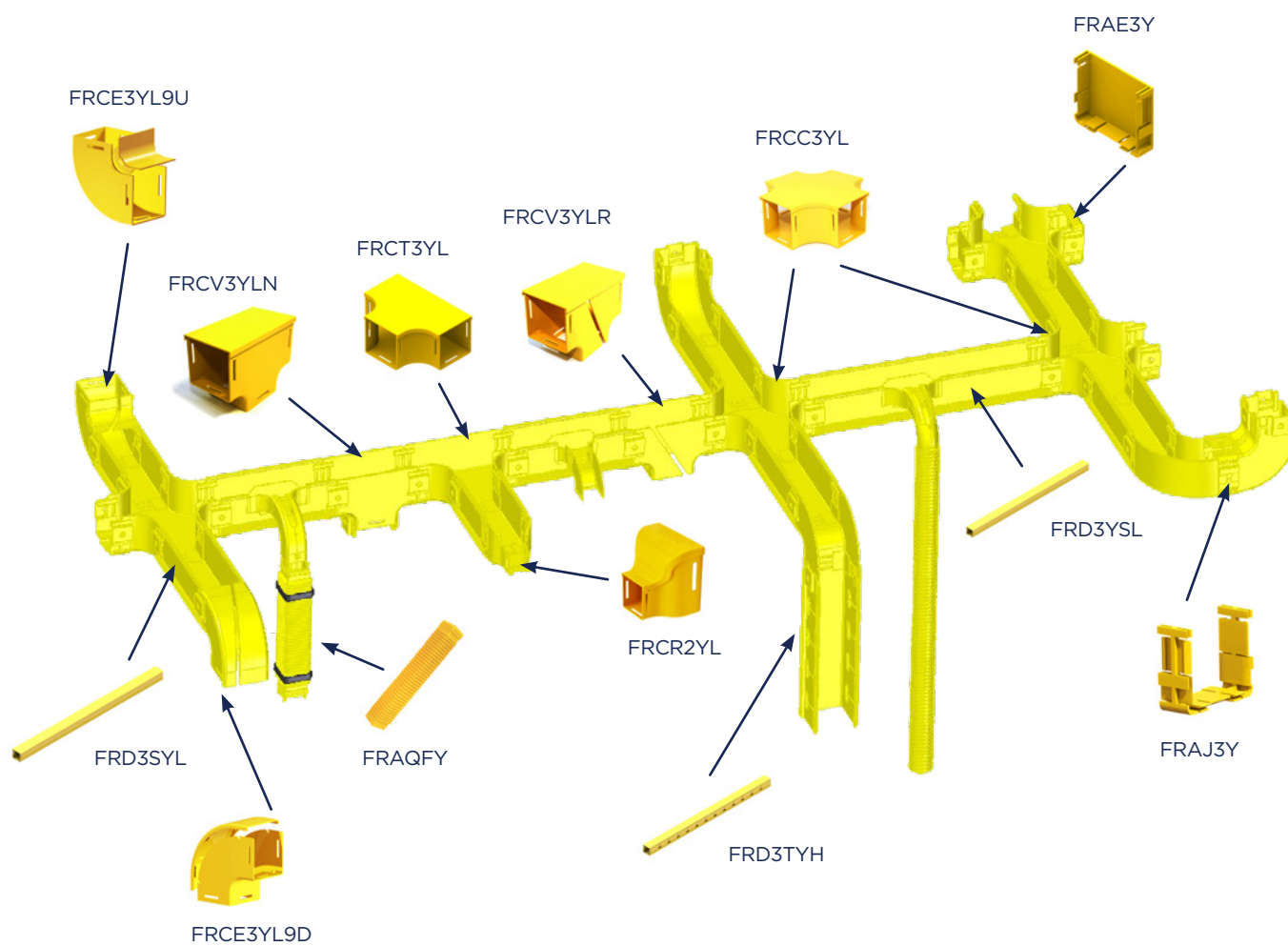
Runway Ordering Information

FRCDUYL1SK	FRAQFY	FRARY	FRAA3YSK	FRAA3YRK
				
Side Drop Round tube 50mm	Square tube 50mm OD, 0.35mtr Length	Convuluted Tube 50mm OD, 2mtr Length	Adapter ADC 4" to Belden S 100/4"	Adapter ADC 6" to Belden R 100/4"

See page 16-17 mounting options and installation instructions.

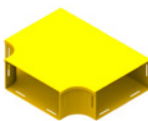
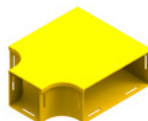
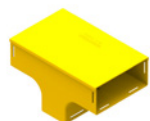


2. Example Application – 100mm H x 100mm W (4" x 4")



4" H x 8" W - 100x220mm system

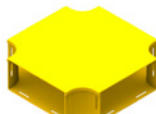
Runway Ordering Information

FRD4TYL	FRD4SYL	FRCT4YL	FRCT4YL2	FRCV4YLN
				
Solid Duct 2m with Lid	Solid Duct 2m w/o lid	Horizontal Tee, 8x4" with Lid	Horizontal Tee Reducer 8x4" with Lid	Vertical Tee Drop with Lid

Runway Ordering Information

FRCV4YNR	FRCB3YL9SK	FRCB4YL9	FRMCC	FRCP3YLVN
				
Vertical Tee Drop Retrofit	90° 1x 88mm Breakout Kit with Lid & flare	Outlet Flare, Drop Down 90 Degree with Lid	Top Drop Mounting Clips	Top Outlet, Vertical Drop 100mm exit with Lid

Runway Ordering Information

FRCR4YLN	FRCR4YNNL	FRCC4YL	FRCC4YL2	FRCE4YL9H
				
Reducer 8x4" (220x100mm) left hand with Lid	Reducer 8x4" (220x100mm) left hand w/o lid	Horizontal cross with Lid	Horizontal cross Reduction 4X8" (220x100mm) with Lid	90° H - elbow with Lid

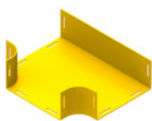
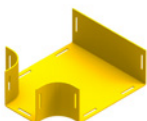
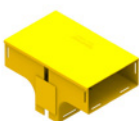
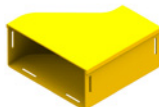
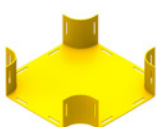
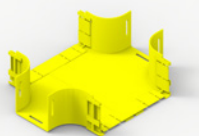
Runway Ordering Information

FRCE4YN9H	FRCE4YN4H	FRCE4YN4D	FRAE4Y	FRAE3Y1
				
90° H - elbow without lid	45° H - elbow with Lid	45° down elbow with lid	End Cap	End Cap 88mm Tube Outlet

Runway Ordering Information

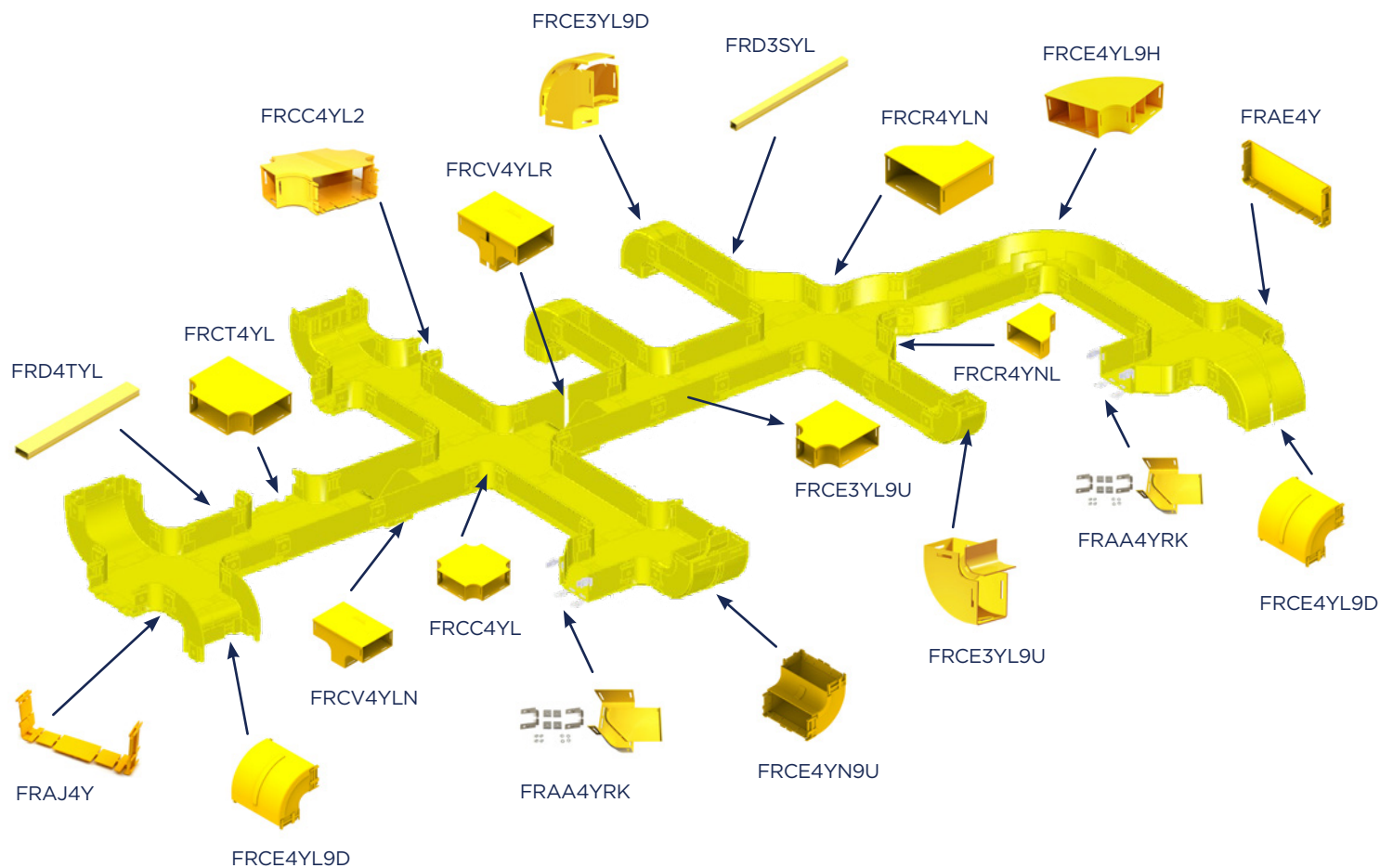
FRCDUYL2SK	FRAQFY	FRAA3YSK	FRAJ4Y	FRAS4Y
				
Side Drop Square tube 50mm	Square tube 50mm OD, 0.35mtr Length	Adapter ADC 4" to Belden S 100/4"	Snap-Fit Joiner	Snap-Fit Joiner Slot-less



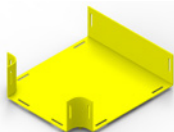
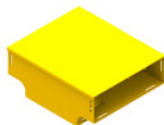
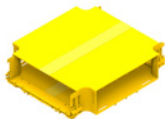
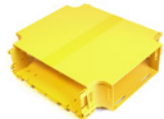
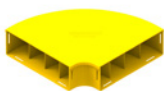
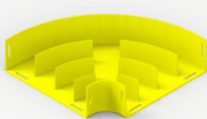
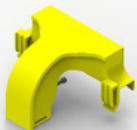
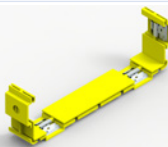
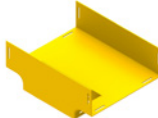
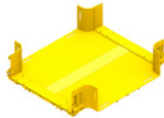
4" H x 8" W - 100x220mm system - continued				
Runway Ordering Information				
FRCT4YN	FRCT4YN2	FRCV4YLR	FRCB3YL9DK2	FRCB4YL9SK
				
Horizontal Tee 8x4" w/o lid	Horizontal Tee Reducer 8x4" w/o lid	Vertical Tee Drop Retrofit with Lid	90° Break Out Kit with Lid & flare	90° 2x 88mm Breakout Kit with Lid & flare
Runway Ordering Information				
FRCU4YL	FRCP3YSNH	FRCP3YSNV	FRCR4YLN	FRCR4YNN
				
Tee Break-Out	Top drop 100mm exit with Lid	Top outlet, Vertical drop 100mm exit	Reducer 8x4" (220x100mm) right hand with Lid	Reducer 8x4" (220x100mm) right hand w/o lid
Runway Ordering Information				
FRCC4YN	FRCC4YN2	FRCE4YL9D	FRCE4YN9U	FRCE4YN4U
				
Horizontal cross w/o lid	Horizontal cross Reduction 4 X 8" (220x100mm) w/o lid	90° Down - elbow with Lid	90° up elbow with lid	45° up elbow with lid
Runway Ordering Information				
FRAE4Y2	FRAREY	FRCDUYL1SK	FRARY	FRAA4YRK
				
End Cap 2x 88mm Tube Outlet	Convoluted Tube, 88m OD, 2mtr Length	Side Drop Round tube 50mm	Convoluted Tube 50mm OD, 2mtr Length	Adapter ADC 6" to Belden R 100/4"

See page 16-17 mounting options and installation instructions.

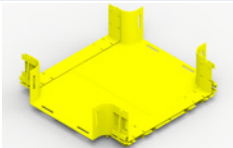
3. Example Application – 100mm H x 220mm W (4" x 8")



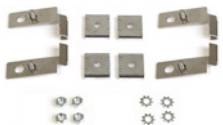


4" H x 12" W - 100x300mm system				
Runway Ordering Information				
FRD5TYL	FRD5SYL	FRCT7YL4	FRCT7YN4	FRCV5YLN
				
Solid Duct 2m with Lid	Solid Duct 2m w/o Lid	Horizontal Tee 8X12" with Lid	Horizontal Tee 8X12" w/o Lid	Vertical Tee Drop with Lid
Runway Ordering Information				
FRCC8YL	FRCC12X4YL4	FRCE5YL9H	FRCE5YN9H	FRCE5YL4H
				
Horizontal cross with Lid	Horizontal cross 12x8" with Lid	90° H - elbow with Lid	90° H - elbow w/o Lid	45° H - elbow with Lid
Runway Ordering Information				
FRCE5YN4H	FRCB3YL9SK	FRCB4YL9	FRCR5YLN4	FRMCC
				
45° H - elbow, w/o Lid	90° 1x 88mm 100mm drop down Breakout Kit with Lid & flare	Outlet Flare, Drop Down 90 Degree With Lid	Reducer 12x8" with Lid	Top Drop Mounting Clips
Runway Ordering Information				
FRCP1YSNV	FRCP1	FRCDUYL2SK	FRAQFY	FRAJ5YSKT
				
Top Outlet, Slotted Vertical Drop 50mm exit	Over the Top Breakout Assembly, 300mm	Side Drop Square tube 50mm	Square tube 50mm OD, 0.35mtr Length	Snap-Fit Joiner
Runway Ordering Information				
FRAS5Y	FRCT8YL	FRCT8YN	FRCV5YN	FRCC8YN
				
Snap-Fit Joiner Slot-less	Horizontal Tee 12x12" with Lid	Horizontal Tee 12x12" w/o Lid	Vertical Tee Drop w/o Lid	Horizontal cross w/o Lid

4" H x 12" W - 100x300mm system - continued

Runway Ordering Information				
FRCC12X4YN4	FRCE5YN9D	FRCE5YN9UK	FRCE5YN4D	FRCE5YN4U
				
Horizontal cross Connector 12x8" w/o Lid	90° down elbow with Lid	90° up elbow with Lid	45° down elbow with Lid	45° up elbow with Lid

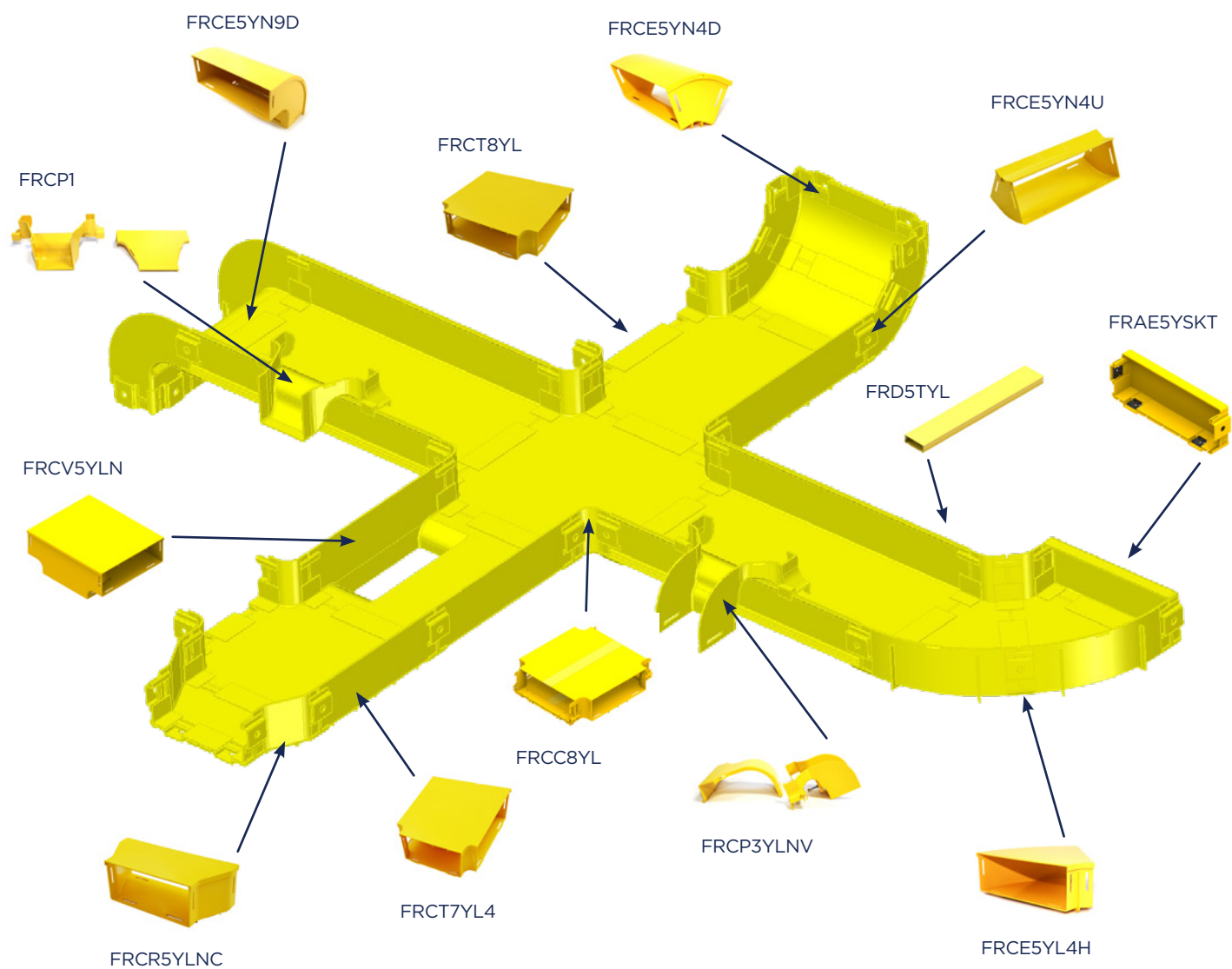
Runway Ordering Information				
FRCB4YL9SK	FRCU5YL	FRAE5YSKT	FRCR5YNNC	FRARY
				
90° 2x 88mm 220mm drop down Breakout Kit with Lid & flare	Tee Break-Out	End Cap Slot-less	Reducer 12x8" w/o Lid	Convolutional Tube 50mm OD, 2mtr Length

Runway Ordering Information			
FRCP3YSNV	FRCP3YSNH	FRCDUYL1SK	FRAA5YSK
			
Top outlet, Vertical drop 100mm exit	Top drop Slots 100mm exit with Lid	Side Drop Round tube 50mm	Adapter ADC 6" to Belden S 300/12"

See page 16-17 mounting options and installation instructions.



4. Example Application – 100mm H x 100mm W (4" x 4")



Runway Installation Instructions

Runway Joint Options

Joints (see tooling section as well)

Joint Type for Slotted Runway



Joint Type for Slot-less Runway
Used when duct cut without need of
Slot Tool to create Slots.



Runway Exit Options

Side Exits (see tooling section as well)

Round convoluted tube



Solid duct



Square convoluted tube



Trumpet



Top Exits use mounting clips.

Mounting clips

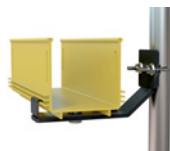


Runway Mounting Options

Wall Mount



Raised Floor
Mount



Under Floor



Unistrut



Raised Mount



Suspended



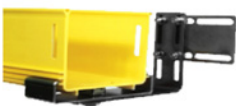
Ladder Rack
Mount



C Rail Mounting

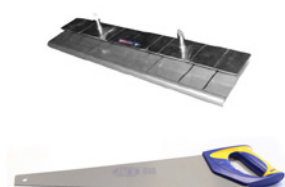




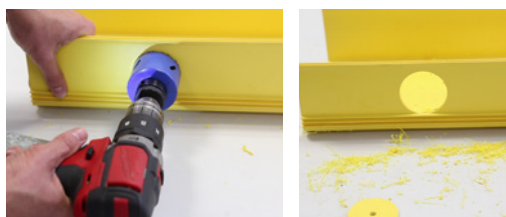
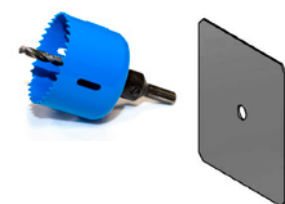
Mounting Options					
Runway Ordering Information					
Description	Image	EPN 2"/50mm	EPN 4"/100mm	EPN 8"/220mm	EPN 12"/300mm
"C" rail mounting		-	FRMC3K	FRMC4K	FRMC5K
Unistrut mounting C-Bracket Used with "C" type mounting		FRMC1	FRMC1	FRMC1	-
Raised mounting M12 threaded rod included		FRMS1	FRMS2	FRMS4	-
Ladder rack mounting Used with "C" type mounting		FRML1K	FRML4K	FRML4K	-
Raised floor 1" tube mounting		-	FRMV4K	FRMV4K	-
Suspension kits		-	FRMT3K	FRMT4K	FRMT5K
Wall mounting		-	FRMW3K	FRMW4K	-

Tooling

Joint Cutout Jig



EPN: FRTC1
Cut-out Jig for all ducts.



EPN: FRTC2
60mm duct cutout hole template, duct side or bottom for Exits/Drops



BROCHURE

GLOBAL LOCATIONS

EUROPE/MIDDLE EAST/AFRICA

France

Phone: +33-472-109-990
lyon.salesinfo@belden.com

Germany

Phone: +49-7127-14-0
venlo.salesinfo@belden.com

Italy

Phone: 0545 60470
bagnacavallo.itc@belden.com

Russia

Phone: +7-495-787-06-55
info@belden.ru

Spain

Phone: +34-91-746-17-30
madrid.salesinfo@belden.com

Sweden

Phone: +46-40-699-88-60
venlo.salesinfo@belden.com

The Netherlands

Phone: +31-773-878-555
venlo.salesinfo@belden.com

United Arab Emirates

Phone: +971-4-391-0490
dubai.salesinfo@belden.com

United Kingdom

Phone: +44-161-49837-49
manchester.salesinfo@belden.com

AMERICAS

USA

Phone: +1-800-BELDEN1
(1-800-235-3361)

ASIA/PACIFIC

China

Phone: +86-21-5445-2388
apac.ecsmarketing@belden.com

Singapore

Phone: +65-6879-9800
apac.ecsmarketing@belden.com



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