

# **CRL**

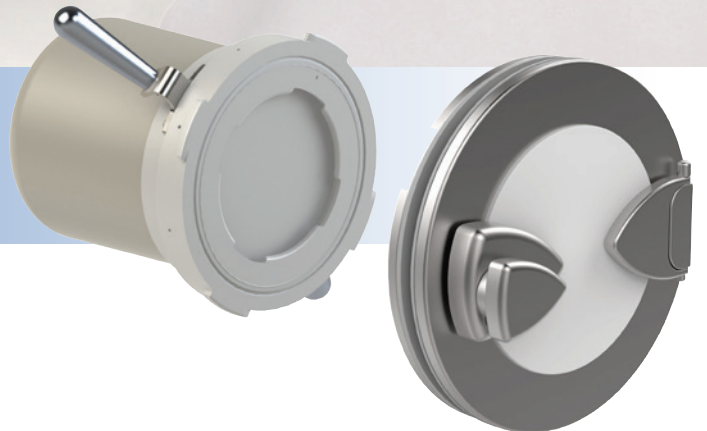
## ***Central Research Laboratories***

a **DESTACO** company



## **Transfer Systems**

L I F E   S C I E N C E







a DESTACO company

**CRL has been a trusted manufacturer of remote handling, transfer, and containment solutions for 75 years.**

**A safe and secure working environment for your operators and your products is of the utmost importance in the Life Science industry.**

Since 1945, CRL has been developing innovative technologies for the safe and efficient handling of hazardous and sterile materials. Our solutions span the globe; providing safer working environments and higher quality isolated environments for aseptic and potent processing by reducing the risk of product contamination and operator exposure.

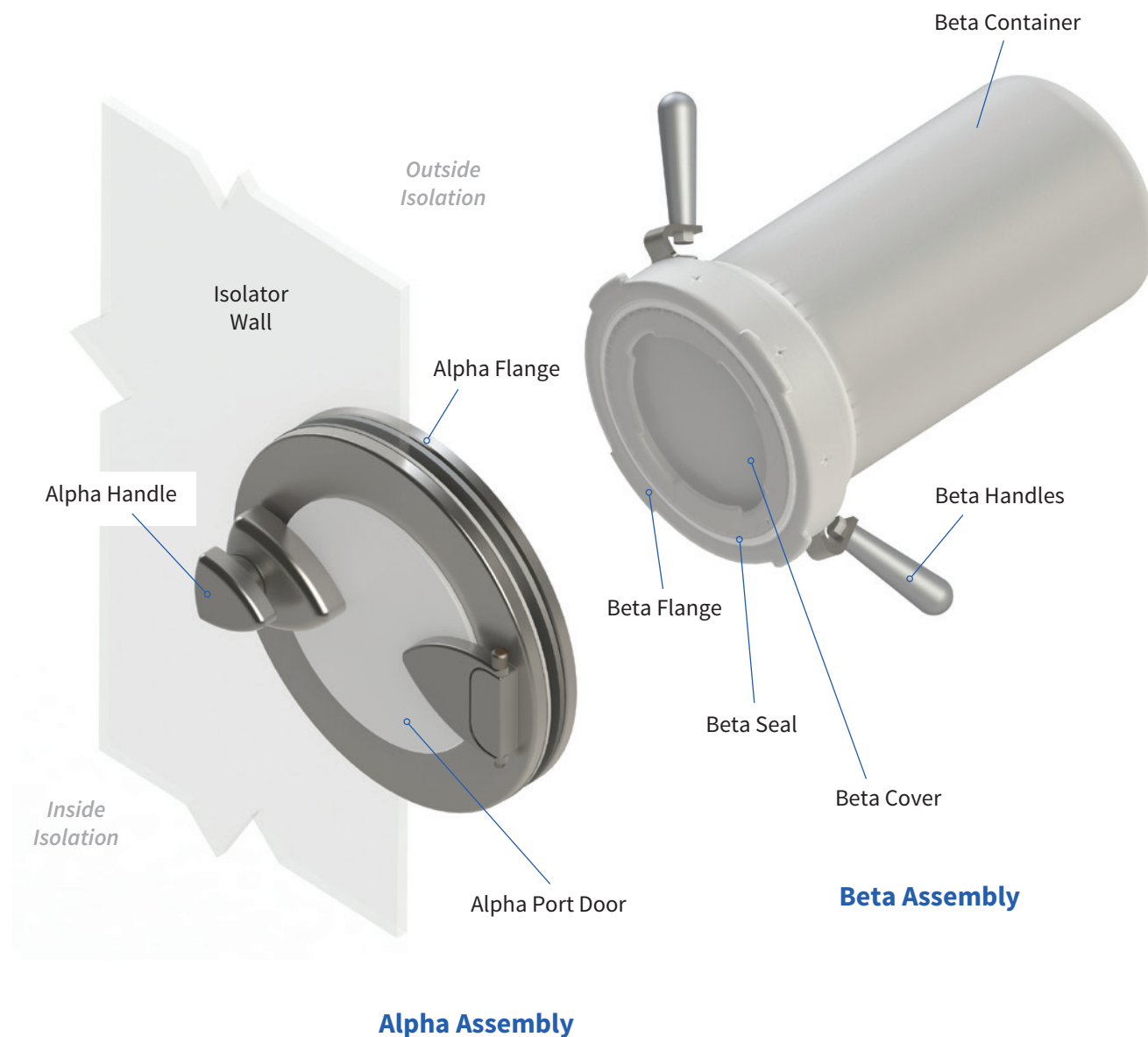
Every application has unique requirements to ensure the quality and safety of these critical environments. CRL solutions offer flexibility and customization to provide the best solution possible for safe and confident handling – for every application need.

[crlsolutions.com](http://crlsolutions.com)

## ***Transfer Systems***

**For safe and contained transfer of product or components into or out of isolation**

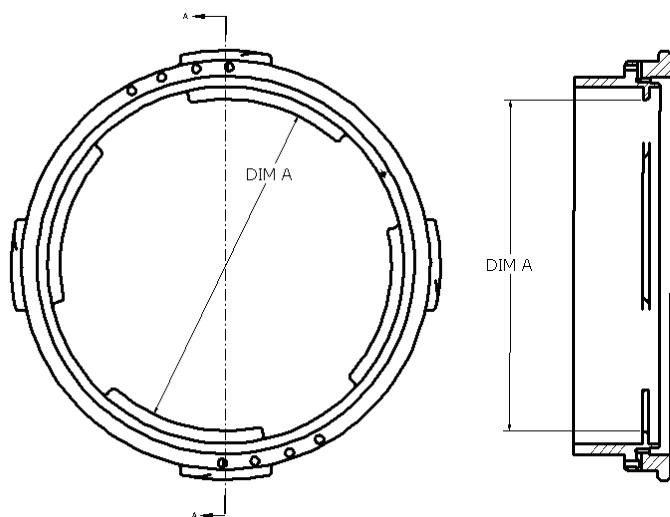
CRL Transfer Systems provide safe, contained transfer into or out of isolation; consisting of two main components, the Alpha assembly and the Beta assembly. The Alpha assembly is normally mounted to the cell wall of a contained environment and the Beta assembly is mobile and connected to a container, bag, or process component. When the two assemblies are mated, toxic or sterile materials can be rapidly transferred in and out of isolation without breaking containment, while maintaining the safety of the product and/or operators.





## Working Diameters

The following table provides the largest diameter of an object that can be passed through the Alpha and Beta container for the different size containers.



Beta Size	Material	Dimension A ([in.] mm)
105 mm	Polypropylene	[3.68] 93.47
	Stainless Steel	
190 mm	Polypropylene	[6.70] 170.18
	Stainless Steel	
270 mm	Polypropylene	[9.84] 249.93
	Stainless Steel	
	Ultem®	[9.00] 228.60

Ultem® is a Registered Trademark of GE.

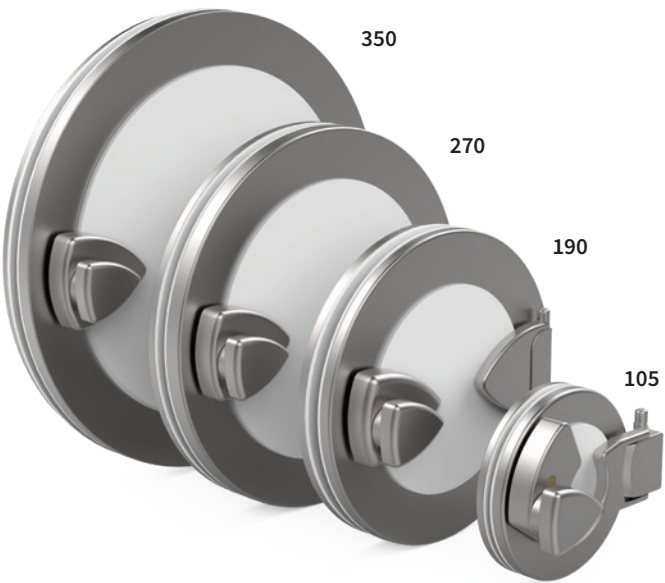


Clean Rapid Transfer Ports (CRTP)

For rapid and repeatable transfer

Designed for ease of cleaning and minimized glove issues due to new, improved handle design

- Rapid repeatable transfers without breaking containment
- Mechanical interlocks to prevent improper port operation
- 316L Stainless Steel with multiple door options available
- Available in 105, 190, 270, 350 sizes



Item	Size	Description
CRL-CRTP-105-SS	105	Alpha Flange Assembly - Stainless Steel Flange & Port Door with Interlocks
CRL-CRTP-105-PP		Alpha Flange Assembly - Stainless Steel Flange & Polypropylene Port Door with Interlocks
CRL-CRTP-190-SS	190	Alpha Flange Assembly - Stainless Steel Flange & Port Door with Interlocks
CRL-CRTP-190-PP		Alpha Flange Assembly - Stainless Steel Flange & Polypropylene Port Door with Interlocks
CRL-CRTP-270-SS	270	Alpha Flange Assembly - Stainless Steel Flange & Port Door with Interlocks
CRL-CRTP-270-PP		Alpha Flange Assembly - Stainless Steel Flange & Polypropylene Port Door with Interlocks
CRL-CRTP-350-SS	350	Alpha Flange Assembly - Stainless Steel Flange & Port Door with Interlocks
CRL-CRTP-350-PP		Alpha Flange Assembly - Stainless Steel Flange & Polypropylene Port Door with Interlocks

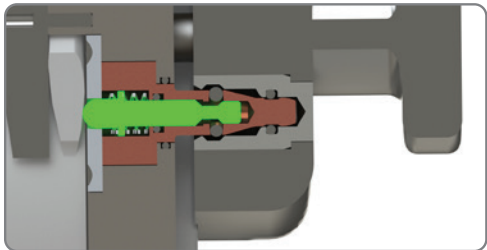


Stainless Steel Door (SS)

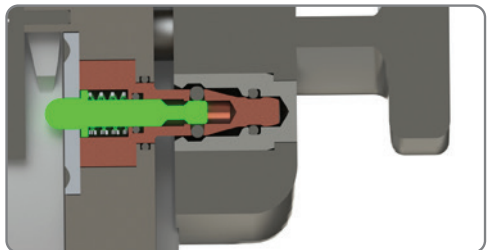


Polypropylene Door (PP)

Interlock System



Port door interlock (shown in unlocked position), Beta assembly docked.



Port door interlock (shown in locked position), Beta assembly not docked.

# SINGLE-USE TECHNOLOGY

## Single-Use Beta Bags

The CRL Single-Use Beta Bag is a safe, efficient, and cost-effective solution for aseptic production. This single-use technology provides contamination-free transfer of sterile components into isolation or removal of toxic components out of isolation. Used in conjunction with Alpha port systems, sealed containment and sterility of the environment are maintained.

The Single-Use Beta Bag system consists of Tyvek® and high-density polyethylene (HDPE) bag layers connected to a Beta flange which mates the entire assembly to the Alpha port on an isolator. Once filled with components, these bags can be autoclaved and connected for filling line production.

### Tested to be compatible with CRL or DPTE® XS Alpha ports

- Autoclavable and gamma-sterilizable versions available
- Removable, reusable handle system (required for use)
- Inventory stocked to keep supply levels consistently available, eliminating long lead times



Item	Size	Description
<b>CRL-49211</b>	190	Single-Use Single Layer Clean Beta Bag (for DPTE® XS Alpha Port) - Autoclave
<b>CRL-49209</b>	190	Single-Use Single Layer Clean Beta Bag (for CRL Alpha Port) - Autoclave
<b>CRL-50992</b>	190	Single-Use Single Layer Clean Beta Bag (for DPTE® XS Alpha Port) - Gamma
<b>CRL-50991</b>	190	Single-Use Single Layer Clean Beta Bag (for CRL Alpha Port) - Gamma
<b>CRL-49500</b>	190	Removable Handle System
<b>CRL-41115</b>	190	Beta Cover Wrench



## Standard Beta Containers

For safe and contained transport or storage of product, components, samples, and waste

- Gas tight design
- Multiple materials, sizes and lengths available



Item	Size	Inquire for Length
Beta Canister Assembly (Polypropylene)		
CRL-41204	105	Standard & Custom Lengths Available
CRL-41278	190	
CRL-41180	270	
CRL-41181	350	
Beta Canister Assembly (Stainless Steel)		
CRL-41599	105	Standard & Custom Lengths Available
CRL-41599-16.00		
CRL-41249	190	
CRL-41598	270	

**Note:** Please contact CRL for custom container lengths and specific overall dimensions.

## Beta Flange Wrench

For use to install or remove the Beta cover from the beta flange when the container is not mated to the Alpha flange

- Available for use with all standard CRL Beta containers



Item	Size	Description
<b>CRL-41114</b>	105	Beta Cover Wrench
<b>CRL-41115</b>	190	
<b>CRL-41116</b>	270	



## Beta Flange with Tri-Clamp Fitting

For connection of large tanks and process equipment to isolation

- Charging of formulation tanks and reactors
- Discharging from dryers
- Charging of a mill



Item	Size	Description
<b>CRL-45086</b>	105	Beta Flange Assembly - 3 inch Triclover (Stainless Steel)
<b>CRL-41030</b>		Beta Flange Assembly - 4 inch Tri-clover (Stainless Steel)
<b>CRL-47296</b>		Beta Flange Assembly - 4 inch Triclover (Polypropylene)
<b>CRL-46045</b>	190	Beta Flange Assembly - 4 inch Tri-clover (Stainless Steel)
<b>CRL-41019</b>		Beta Flange Assembly - 6 inch Tri-clover (Polypropylene)
<b>CRL-43526</b>		Beta Flange Assembly - 8 inch Triclover (Polypropylene)
<b>CRL-44197</b>		Beta Flange Assembly - 8 inch Triclover (Stainless Steel)
<b>CRL-41911</b>	270	Beta Flange Assembly - 8 inch Tri-clover (Stainless Steel)
<b>CRL-43971</b>		Beta Flange Assembly - 10 inch Triclover (Stainless Steel)
<b>CRL-46765</b>		Beta Flange Assembly - 10 inch Triclover (Polypropylene)

## Inside Funnel Assembly

For protection of seal surface during transfer of materials or tools

- Mounts into the Alpha port from inside the isolator



Item	Size	Description
<b>CRL-43169</b>	105	Inside Funnel Assembly (Stainless Steel)
<b>CRL-41261</b>	190	Inside Funnel Assembly (Polypropylene)
<b>CRL-41212</b>	270	Inside Funnel Assembly (Polypropylene)

## Inside Bagging Ring Assembly

For improved low OEL performance in powder-through-port applications

- Typically, a flexible chute is attached to allow for the transfer of powder into containers or through to another process vessel
- Mounts into the Alpha port from inside the isolator



Item	Size	Description
<b>CRL-41259</b>	190	Bagging Ring Assembly - Inside Mount (Polypropylene)

## Alpha Sterilizing Cover

For sterilization of the entire alpha port door, seal, and flange surface (by a VHP process, for example)

- Containment is maintained while port door is open during sterilization process

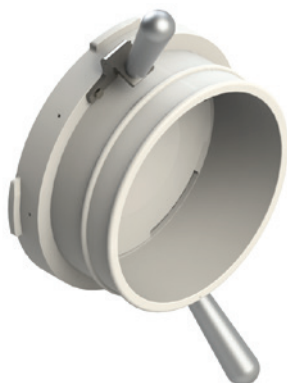


Item	Size	Description
CRTP		
CRL-CRTP-105-SC	105	CRTP Sterilization Cover Assembly (Polypropylene)
CRL-CRTP-190-SC	190	
CRL-CRTP-270-SC	270	
CRL-CRTP-350-SC	350	
Legacy RTP		
CRL-44357	105	RTP Sterilization Cover Assembly (Polypropylene)
CRL-44360	190	
CRL-43402	270	
CRL-43401	350	
CRL-43789	460	

## Beta Bag Flange Assembly

For product and component transfer into or out of isolation in potent applications

- Beta Bag Flange used with disposable bags
- Safe transfer of products, components or tools into or out of toxic containment



Item	Size	Description
<b>CRL-41032</b>	105	Beta Bagging Flange Assembly - One Rib (Polypropylene)
<b>CRL-42657</b>		Beta Bagging Flange Assembly - Two Rib (Polypropylene)
<b>CRL-41021</b>	190	Beta Bagging Flange Assembly - One Rib (Polypropylene)
<b>CRL-41022</b>		Beta Bagging Flange Assembly - Two Rib (Polypropylene)
<b>CRL-41000</b>	270	Beta Bagging Flange Assembly - One Rib (Polypropylene)
<b>CRL-41001</b>		Beta Bagging Flange Assembly - Two Rib (Polypropylene)
<b>CRL-44198</b>		Beta Bagging Flange Assembly (Ultem®)
<b>CRL-41038</b>	350	Beta Bagging Flange Assembly - Two Rib (Polypropylene)
<b>CRL-41037</b>		Beta Bagging Flange Assembly - One Rib (Polypropylene)
<b>CRL-44311</b>		Beta Bagging Flange Assembly (Ultem®)

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## Autoclaveable Beta Containers

For moist heat sterilization of tools and components for aseptic transfer into isolation

- For use with 1.5 in. Tri-Clamp vent port with 0.2  $\mu$ m filter and housing
- Available in 316L Stainless Steel and anodized Aluminum
- Stainless Steel perforated baskets available to ease unloading and improve sterilization process



Item	Size	Length ([in.] mm)
Aluminum		
CRL-44356-8.00	105	[8.00] 203.2
CRL-44359-15.75	190	[15.75] 400
CRL-41201-16.00	270	[16.00] 406.4
CRL-41580-16.00	350	[16.00] 406.4
CRL-41580-24.00		[24.00] 609.6
Stainless Steel		
CRL-41253-8.00	105	[8.00] 203.2
CRL-42070-16.00	190	[16.00] 406.4
CRL-41582-15.75	270	[15.75] 400
CRL-41581-16.00	350	[16.00] 406.4

Hydrophobic Filter & Housing with Clamp

**CRL-48289** - Housing w/ Filter Cartridge & Clamp

**CRL-95860** - Filter Cartridge (requires housing)

**Note:** The lengths shown are only for the container and do not include the additional length added by the bottom container support legs. Please contact CRL for custom container lengths and specific overall dimensions.

## Beta Couplers

For interconnection of isolators or specialty equipment to a fixed Alpha flange on another isolator

- For temporary connection of two process isolators



### Available Sizes:

105	190	270	350
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***Customer Service/Support***

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