



CSV Overview

Operating Instructions

Overview of the Ezi-Flow CSV Transfer Port



VERSION 1.0
DATE PRODUCED 04/04/22

Introduction to Ezi-Flow™ CSV Technology

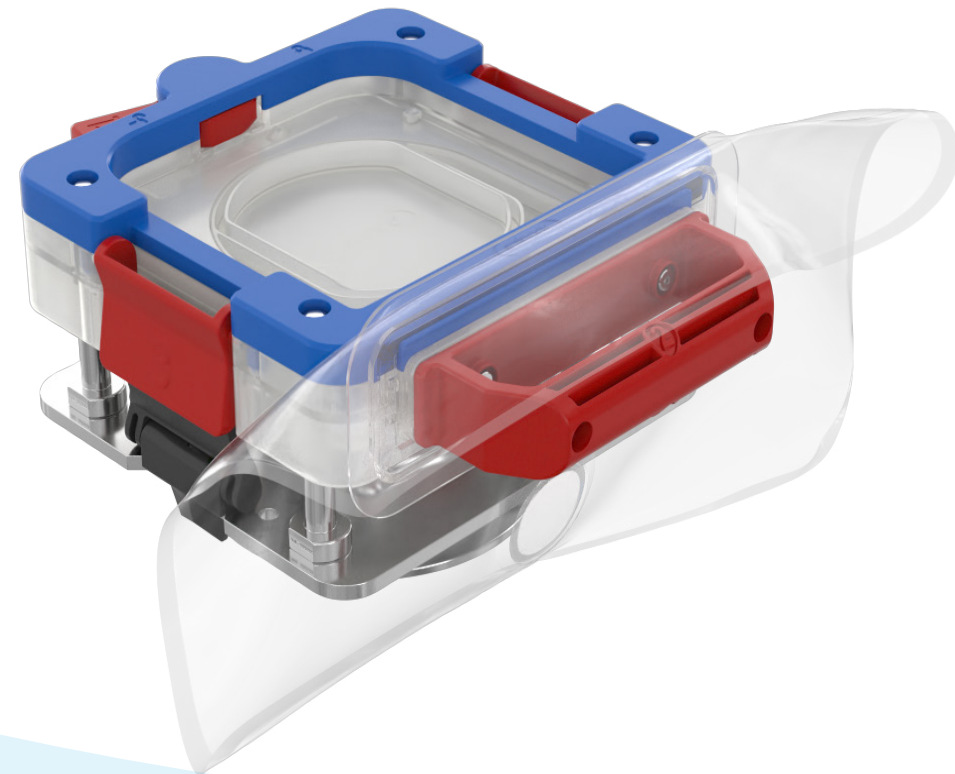
Ezi-Flow™ CSV Containment Technology is the Next Generation of High Containment Powder Transfer Solutions for Pharmaceutical, Bio-Pharmaceutical & Chemical Processes.

The Ezi-Flow™ CSV Containment System is suitable for the Contained Transfer of Solids with an Operator Exposure Limit of $<1\mu\text{g}/\text{m}^3$ (Task Duration), based on SMEPAC guidelines – The ISPE Good Practice Guide, 'Assessing the Particulate Containment Performance of Pharmaceutical Equipment'.

Ezi-Flow™ CSV Technology is suitable for Charging / Discharging and Sampling of Solids.

Key Advantages

- Smooth Full Bore Opening
- Optimum Protection for Personnel & Product ($<1\mu\text{g}/\text{m}^3$ Task Duration)
- Single Use or Reusable method of Product Transfer for Lean Manufacturing
- Prevention of Cross-Contamination
- Maximum Yield & Safe Emptying of Containers
- Suitable for Tablet Applications
- Easily integrated into existing equipment – Sanitary/Tri-Clamp ferrule connection
- Simple Safe Handling of Toxic and Hazardous Product
- Fully Interlocked Preventing Exposure of Product to the Operator or Operator to the Product
- Not Possible to Separate the Ezi-Flow™ CSV MK4 System when Partly Open
- Low Maintenance – Quick Release Replacement Cassette
- Suitable for use with Chargebags, Bottles, Seed Charge Pots, IBC's & Big Bags (FIBC's)
- Pressure Rated Option available
- Cost Effective Hastelloy C22 and PEEK options
- Alternative flange options available - DIN etc



Principle of the Ezi-Flow™ CSV Technology

The Ezi-Flow™ CSV MK4 is made up of two complementary parts one Active & one Passive. The Active half is typically attached to the Fixed Equipment: Reactor, Process Vessel, Filling or Discharge Station.

Ezi-Flow™ CSV MK4 Active Transfer Port

The Ezi-Flow™ CSV Active is fully interlocked, preventing the system from being accidentally opened before the Ezi-Flow™ CSV Passive is docked in place.

The Ezi-Flow™ CSV Active Transfer Port is connected using a Tri-Clamp /Sanitary Ferrule onto the Inlet Port of a Reactor/Process Vessel, or system.

For ease of use, the operator only has to perform 3 functions to set the system.

These have been clearly, sequentially marked on the Active as 1/2/3 - Also all of these parts are Red, to quickly identify them.

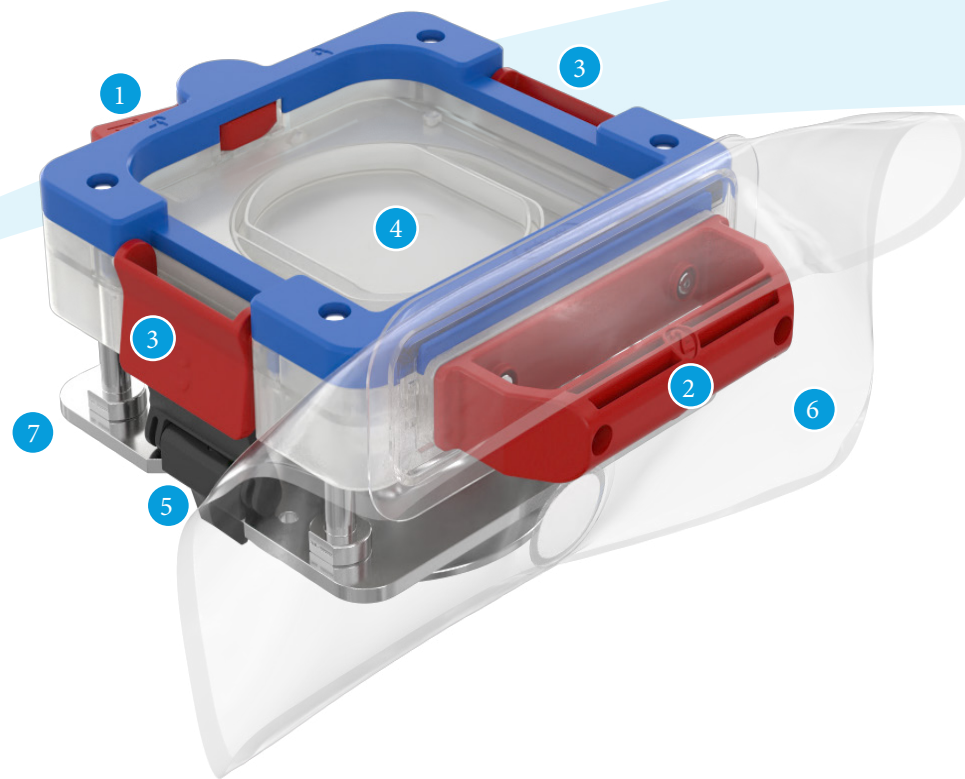
Contact Parts: 316L Stainless Steel, Polypropylene & EPDM

Finish of Contact Parts: 0.5µm/Ra (316L Stainless Steel) - Passivated & Electro-Polished

Non-Contact Parts: 316L Stainless Steel, 304 Stainless Steel (Nyloc Nuts)

Finish of Non-Contact Parts: 0.8 – 1.2µm/Ra (316L Stainless Steel & Acetal)

- Gasket Seal Material: EPDM
- Flange Type: 4" Tri-Clamp to BS4825-3 Standard
- Weight: 2.5kgs (4 inch version)



No	Description
1	Red Rear Active Lock Lever (No 1 Operation)
2	Red Ezi-Flow™ Handle (No 2 Operation)
3	Red Side Toggles (No 3 Operation)
4	Active Slider
5	Lock Nut
6	Secondary Containment Bellows
7	Spigot Plate



THE QUEEN'S AWARDS
FOR ENTERPRISE:
INNOVATION
2014



THE QUEEN'S AWARDS
FOR ENTERPRISE:
INNOVATION
2015



THE QUEEN'S AWARDS
FOR ENTERPRISE:
INNOVATION
2019

Ezi-Dock Systems Limited

Park Court, Park Lane Business Park, Kirkby in Ashfield,
Notts NG17 9GU United Kingdom



Tel: **+ 44 (0) 1623 888 000**



Email: **sales@ezidock.com**



Web: **www.ezidock.com**