



IMPACT® ST MANIFOLD

Installation and use manual

Introduction

The Impact® ST manifold has been designed for use with Impact Plus filters.

Features




- Compact footprint for easy installation and tool space savings
- Rapid filter changeout allows quick installation and minimizes downtime

Applications

- Point-of-use filtration


Safety

Special considerations and precautions are included in the manual, as described below. Contact Entegris with any questions regarding the safe and proper use of your equipment.

-  **DANGER!** Indicates a hazardous situation that, if not avoided, could result in death or serious injury.
-  **WARNING:** Indicates a potential hazardous situation that, if not avoided, could result in death or serious injury as well as irreparable damage to the equipment.
-  **CAUTION:** Indicates a potential hazardous situation that, if not avoided, could result in minor to moderate injury as well as minor to moderate damage to the equipment.



 **WARNING:** Only technically qualified personnel should install the manifold.

 **WARNING: CHEMICAL HAZARDS** DOUBLE-CONTAINMENT is required when used with toxic and hazardous chemicals. All filter housings, filters and other pressurized vessels must be double-contained to prevent serious personal injury.



SAFETY CLOTHING, eye protection and safety apparatus appropriate for the liquids in use must be worn during component changeout and startup. Perform all operations with standard liquid handling procedures in accordance with all local codes for safety and ventilation.

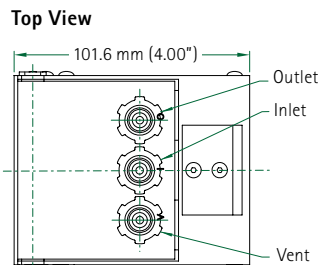
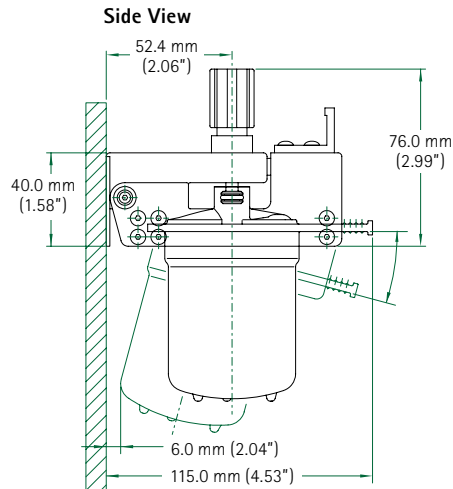
Specifications

Materials:	Internal wetted surface	PFA
	Nonwetted surface	Stainless steel
	O-rings	Kalrez® perfluoroelastomers provided with manifold part number DZUM 044 C1
Fittings:	1/2" Flaretek®	
Dimensions:	Height (manifold and fitting)	76.22 mm (3.0")
	Width	84 mm (3.3")
	Depth	101.6 mm (4.0")

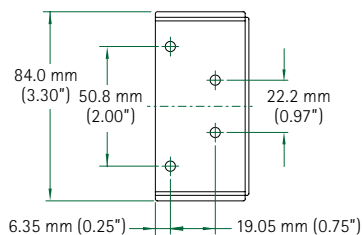
Dimensions

Minimum Space Requirements

To allow filter changeout, a minimum of 90 mm (3.5") is required in front of the manifold, and 160 mm (6.3") below the top of the manifold. Figure 1 shows a side view of manifold #DZUM 044 C1 with required filter changeout space for Impact LHVD and Impact Plus filters.



Mounting Hole Locations



Manifold # DZUM 044 C1 shown

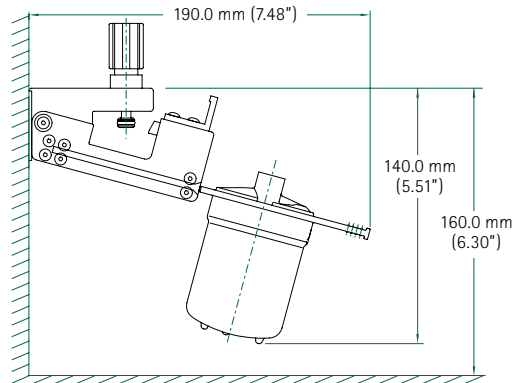


Figure 1

Installation

Mounting Procedure

Components are double-wrapped for cleanroom use. Handle components according to your cleanroom procedures.

1. Determine the installation location and required area for the manifold. The manifold should be mounted downstream of your dispense pump or pressure system.

CAUTION: Leave adequate space for fittings, filter and filter replacement.

2. Mount the manifold on a rigid vertical surface so the top of the manifold is horizontal. If necessary, use a small level or bubble level to ensure the manifold is mounted in a level position. Drill mounting holes and use required mounting hardware, as necessary to attach the manifold to the vertical surface. Provide enough in front of and under filter for filter removal.

CAUTION: The manifold must be level and VERY secure to ensure optimum venting and to ensure ease of filter replacement.

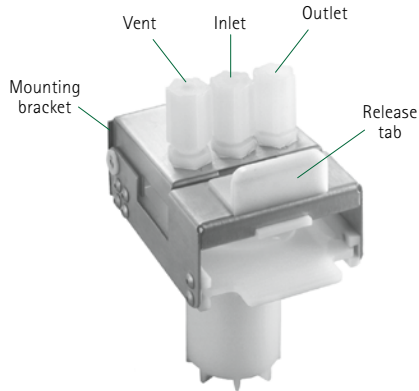
3. Optional: To retrofit the manifold in an older installation:
 - Remove any existing filter bracket and drain connections.
 - No drain connection is required. Eliminate or cap any drain line.
 - Drill mounting holes as needed to mount the manifold, or tap M3 or #6-32 threads into an existing mounting plate, or use nylon nuts to hold M3 or #6-32 screws in the mounting plate, as required to provide a secure connection to your existing mounting plate.

Connect the Fittings

1. Connect inlet, outlet, and vent lines with the appropriate fittings.

NOTE: You should attach a minimum length tube union and valve to the vent and outlet lines to minimize spills and drips during filter changeout.

CAUTION: LEAK HAZARD. DO NOT OVERTIGHTEN fittings, as they will leak.



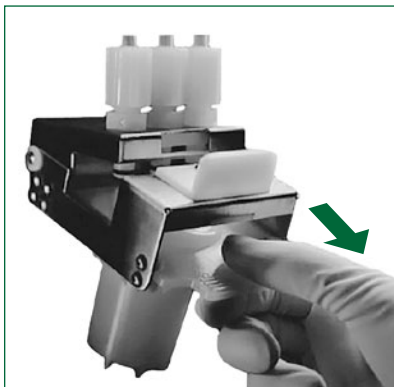
Install the Filter

Release fluid pressure to the manifold, then replace/insert a filter as follows:

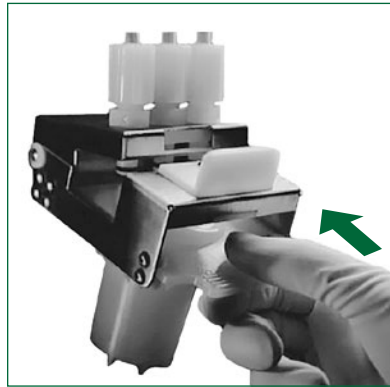
1. Pull out release tab to drop the jaw.



2. Slide the filter out of the manifold.



3. Slide the new filter into the manifold.



4. Raise the tab and squeeze up to lock the filter in place.



6. Prime the pump or pressure system, and open the vent valve until fluid emerges.
7. Verify that all fittings are tight.
8. Include periodic integrity testing in your system's preventative maintenance schedule.

Installation Equipment

Item	Size/Description	Quantity
Tub cutter	1	1
Tube fitting tool, connectors and caps	Model-dependent	As required
Drill and bits to mount manifold	3/8"	1
Small level or bubble level to ensure the manifold is level	–	1
Screwdrivers	Phillips or flatblade	1
Screws, pan head or button head	M3 or #6-32 × 5/16"	4
Nylon inset lock nut	M3 or #6-32	4

Ordering Information

Part Number			Description
with Kalrez perfluoroelastomer o-ring	with no o-ring		
DZUM 044 C1	DZUM 044 E1		Impact ST Manifold
DZUO R44 E1	DZUO R44 O1		Impact assist reinforced flushing shell

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