



**DYMESSION® SURFACE MOUNT  
MANIFOLD VALVES**

*Custom manifold valves incorporate FlareMount™  
sealing technology to provide a clean, reliable seal*



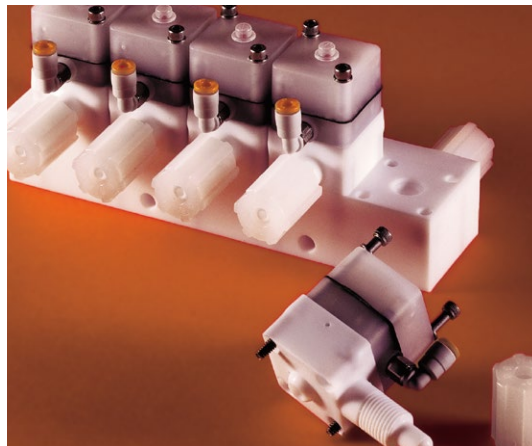
# lower cost of ownership

## Overview

Entegris offers Dymension® surface mount manifold valves for use in CMP polishers and process tools where space is limited. These manifold valves, which incorporate Galtek® SG actuators and FlareMount™ sealing technology, join the Galtek SG series family of 2-way and 3-way valves, chosen as *Semiconductor International Editor's Choice Best Product of the Year in 1999*.

## Modular Approach to Building Manifolds

FlareMount technology is a modular method of mounting valves to a manifold block using proven Flaretek® fitting sealing technology. This surface mount method enables you to replace or change a single valve as needed rather than discard an entire manifold, resulting in a lower cost of ownership.



*Interchangeable valves enable design flexibility and field repair.*

## FlareMount Sealing Technology

FlareMount sealing technology utilizes Entegris' fully characterized, industry proven Flaretek flared sealing technology to provide a robust, leak-free seal. This proven technology enables Entegris to seat valves without introducing additional parts, like gaskets and o-rings, that are required in other surface mount valve designs.

## Ideal Where Space is Limited

The Galtek SG series valve is the smallest ¼" orifice valve featuring PFA and PTFE wetted surfaces in high purity and corrosive semiconductor applications. The manifold's small size offers the equipment manufacturer design versatility and facilitates footprint reduction. This makes it ideal for ultrapure and corrosive applications where space is at a premium, such as valve boxes, chemical mechanical planarization (CMP) and other process tools.

In addition, these valve manifolds have fewer connections, resulting in fewer potential leak points and decreased installation time.

## Industry Standard Port Connections

Each valve is offered with ¼" or ⅜" Flaretek port connections. The fully characterized, industry standard port connections reduce entrapment areas, provide system design flexibility and simplify valve installation. Dymension valve manifolds are available with pneumatic normally open, pneumatic normally closed or manual actuation. Custom port connections are available on request.

## Features and Benefits

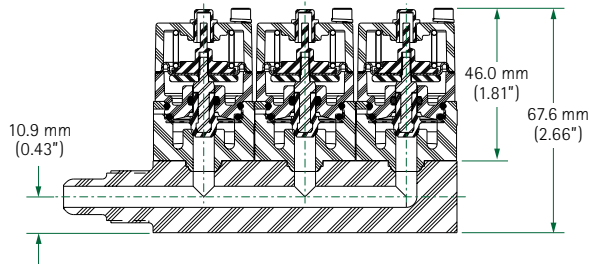
Features	Benefits
Field replaceable	Lower cost of ownership
FlareMount sealing technology	Proven, leak-free seal
No o-rings or gaskets	Cleaner connection
	Fewer potential leak points
	Easy to make up
Manifold blocks available in PFA or proprietary PTFE	High-purity fluid handling
	Chemical resistance
	Easy to clean
Small footprint	Saves valuable equipment space
Industry standard Flaretek port connection	Easy to install
	Reduces entrapment areas
	Fully characterized, reliable
Visual position indication	Increases safety

## Specifications

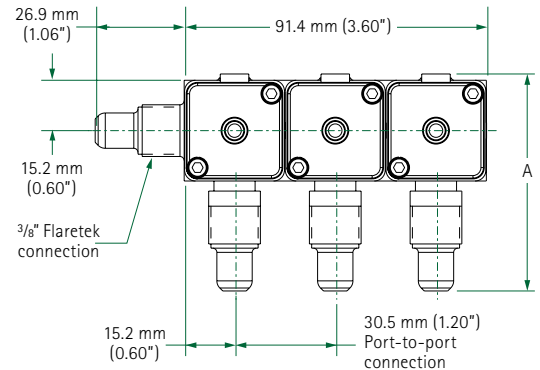
Materials:	Wetted parts	PFA, PTFE
	Exterior actuator parts	PVDF
	Interior actuator parts	PVDF, stainless steel and Viton®
	Fasteners	Stainless steel
Media pressure at:	21°C (70°F)	552 kPa (80 psig) inlet and 278 kPa (40 psig) outlet
	100°C (212°F)	276 kPa (40 psig) inlet and 286 kPa (20 psig) outlet
Temperature range:	23°C–50°C (73°F–122°F), ambient	
	21°C–100°C (70°F–212°F), fluid	
Pneumatic supply pressure:	335 kPa (50 psig) minimum to 483 kPa (70 psig) maximum	
Pneumatic supply port:	10–32 UNF (M5)	
Typical flow factor:	0.29 C <sub>v</sub> (4.2 K <sub>v</sub> ) for 1/4" Flaretek port connections	
	0.65 C <sub>v</sub> (9.3 K <sub>v</sub> ) for 3/8" Flaretek port connections	
	Flow is dependent on the internal flow path configuration.	

## Dimensions

### Dymension Valve with 3/8" Connection



Port Connection	Dimension A
1/4" Flaretek	64.0 mm (2.52")
3/8" Flaretek	65.8 mm (2.59")



## For More Information

Please call your Regional Customer Service Center today to learn what Entegris can do for you. Visit [www.entegris.com](http://www.entegris.com) and select the Customer Service link for the center nearest you.

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