

CR4 Series Manual Valves, 1/4" Orifice, 2- way, Toggle

For corrosive environments in wet etch and clean (WEC) applications

Smaller than most comparable valves, 1/4" CR4 Series valves are ideal for handling wet etch and clean process chemicals. These durable valves can handle temperatures up to 160°C (320°F) at 276 kPa (40 psig).

With no exposed metal hardware, the toggle valve is completely sealed and protected from harsh chemical environments. This all-PFA valve is available for high-purity chemical handling in line sizes 3/8" or smaller. A variety of connections including PrimeLock®, Flaretek®, FNPT, PureBond®, "SpaceSaver", and Super 300 Type Pillar® allow flexibility in your fluid design. And the compact, modular design enables manifold customization.

APPLICATIONS

- High-purity corrosive chemical handling
- All semiconductor WEC process chemicals
- Chemical line sizes 3/8" or smaller



Compact, toggle valve.

FEATURES & BENEFITS

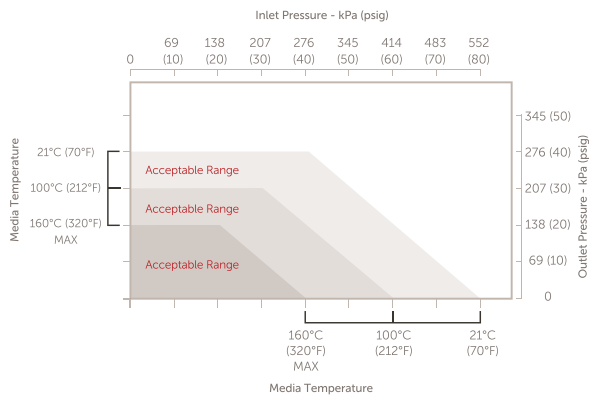
Small footprint	Preserves valuable space on OEM equipment
Valve diaphragms successfully tested to over 2.1 million cycles	Provides increased reliability
Standard mounting base	Enables valve installation and removal without tools
Integral safety lock out device	Safeguards against accidental altering or tampering
No exposed metal hardware	Keeps valve sealed and protected from harsh chemical environments
Modular design	Enables manifold customization into your fluid delivery system
Same footprint as Galetek® SG Series valves and Dymension® valve manifolds	Allows for easy retrofits or replacement

SPECIFICATIONS

Materials	All wetted parts	PFA	
	Exterior actuator parts	PVDF, Viton®	
	Interior actuator parts	PVDF, SST, Viton	
	Mounting base	PVDF	
Operating Conditions*	Media pressure at	21°C (70°F)	Inlet - 913 mbar (27" Hg) vacuum to 552 kPa (80 psig)
			Outlet - 913 mbar (27" Hg) vacuum to 276 kPa (40 psig)
	Temperature range	160°C (320°F)	Inlet - 276 kPa (40 psig)
			Outlet - 138 kPa (20 psig)
	Ambient	23°C - 50°C (73°F - 122°F), ambient	
	Fluid	21°C - 160°C (70°F - 320°F), fluid	
Compliant	RoHs & WEE		

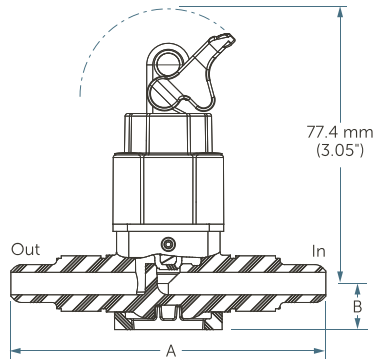
*Actual valve performance varies with pressure and temperature; refer to actual ratings in performance data.

PERFORMANCE DATA

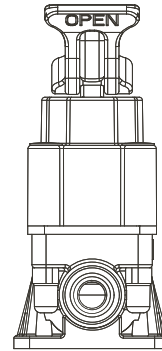


DIMENSIONS

Manual Toggle and Panel Mount
Front View

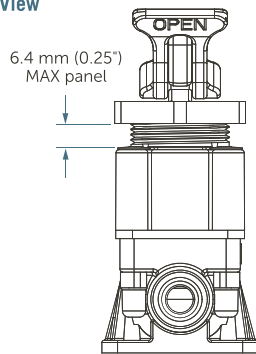


Manual Toggle
Side View

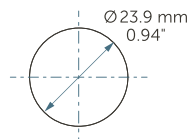


Port Connection	Flow Factor C_v	Flow Factor K_v	Dimensions	
			A	B
1/4" Flaretek	0.29	4.2	3.36" (85.3 mm)	0.51" (13.0 mm)
1/4" FNPT	0.84	12.0	2.75" (69.8 mm)	0.51" (13.0 mm)
1/4" Super 300 Type Pillar fitting	0.29	4.2	2.57" (65.3 mm)	0.51" (13.0 mm)
1/4" PrimeLock	0.34	4.9	3.18" (80.8 mm)	0.51" (13.0 mm)
1/4" PureBond	0.84	12.0	2.68" (68.1 mm)	0.51" (13.0 mm)
3/8" Flaretek	0.84	12.0	3.50" (88.9 mm)	0.51" (13.0 mm)
3/8" Super 300 Type Pillar fitting	0.84	12.0	2.88" (73.2 mm)	0.51" (13.0 mm)
3/8" PrimeLock	0.84	12.0	3.18" (80.8 mm)	0.61" (15.5 mm)

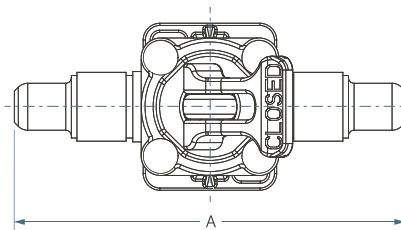
Manual Toggle Panel Mount
Side View



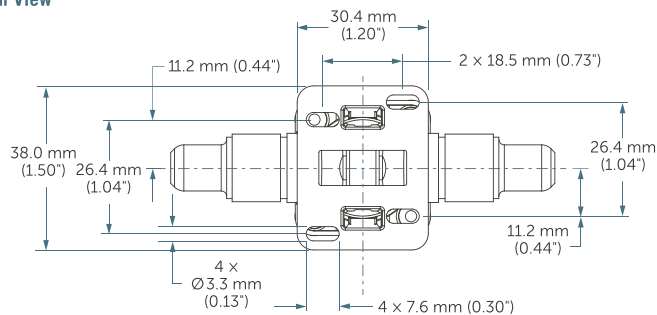
Panel Cutout



Manual Toggle
Top View



Manual Toggle and Panel Mount
Bottom View



ORDERING INFORMATION

CR4 Series Valves: part number

CR4 - - -

Special order

- 3 = PFA Flaretek nut*
- 6 = CPFA Flaretek nut*
- II = FlareLock® II nut*
- N = Pillar nuts, inserts and gauge rings included**
- = NA

Port configuration

- 4F = Port 1 (inlet), Port 2 (outlet) 1/4" Flaretek
- 4P = Port 1 (inlet), Port 2 (outlet) 1/4" PureBond
- 4SO = Port 1 (inlet) 1/4" Flaretek, Port 2 (outlet) 1/4" Flaretek "SpaceSaver"
- 4SI = Port 1 (inlet) 1/4" Flaretek "SpaceSaver", Port 2 (outlet) 1/4" Flaretek
- 4PS3 = Port 1 (inlet), Port 2 (outlet) 1/4" Super 300 Type Pillar
- 4K = Port 1 (inlet), Port 2 (outlet) 1/4" PrimeLock
- 4KV = Port 1 (inlet) 1/4" PrimeLock, Port 2 (outlet) 1/4" PrimeLock "SpaceSaver"
- 4VK = Port 1 (inlet) 1/4" PrimeLock "SpaceSaver", Port 2 (outlet) 1/4" PrimeLock
- 4VV = Port 1 (inlet), Port 2 (outlet) 1/4" PrimeLock "SpaceSaver"
- 4N = Port 1 (inlet), Port 2 (outlet) 1/4" FNPT
- 6F = Port 1 (inlet), Port 2 (outlet) 3/8" Flaretek
- 6SO = Port 1 (inlet) 3/8" Flaretek, Port 2 (outlet) 3/8" Flaretek "SpaceSaver"
- 6SI = Port 1 (inlet) 3/8" Flaretek "SpaceSaver", Port 2 (outlet) 3/8" Flaretek
- 6PS3 = Port 1 (inlet), Port 2 (outlet) 3/8" Super 300 Type Pillar
- 6K = Port 1 (inlet), Port 2 (outlet) 3/8" PrimeLock
- 6KV = Port 1 (inlet) 3/8" PrimeLock, Port 2 (outlet) 3/8" PrimeLock "SpaceSaver"
- 6VK = Port 1 (inlet) 3/8" PrimeLock "SpaceSaver", Port 2 (outlet) 3/8" PrimeLock
- 6VV = Port 1 (inlet), Port 2 (outlet) 3/8" PrimeLock "SpaceSaver"

Actuator

- 2MTL = 2-way manual toggle
- 2PMTL = 2-way manual toggle panel mount

Notes: Not all configurations are permitted. Consult Entegris if multiple special order features are required. Contact factory if "SpaceSaver" port connections are to be used in media containing a fluorinated surfactant.

*Available for Flaretek port connections only.

**Available for Super 300 Type Pillar port connections only.

FOR MORE INFORMATION

Please call your Regional Customer Service Center today to learn what Entegris can do for you. Visit entegris.com and select the [Contact Us](#) link to find the customer service center nearest you.

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