

CR4 Series Pneumatic Valves, 2-way, Top Mount, FNPT

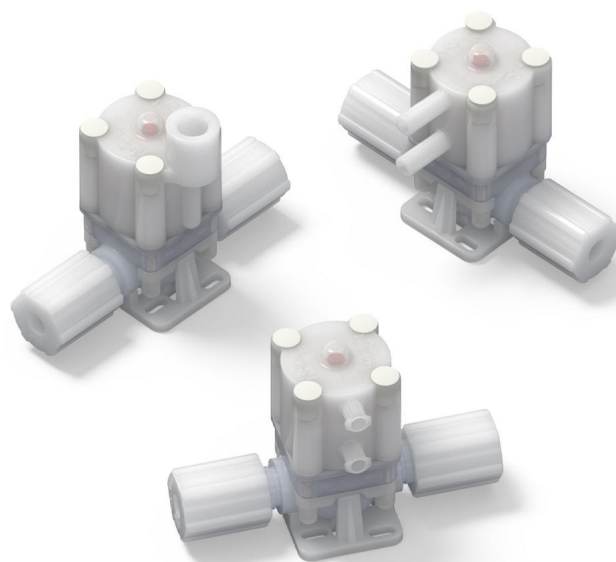
For corrosive environments in wet etch and clean applications

We have expanded our portfolio of 1/4" CR4 Series valves to include a pneumatic actuator top mount design that offers a pilot air FNPT connection as well as a reverse porting option that allows more flexibility in system design and layout. 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 valve is completely sealed and protected from harsh chemical environments. All-PFA construction is well suited for high-purity chemical handling in line sizes 3/8" or smaller. Available with standard Flaretek® port connections; other connection types are available upon request. The compact, module design enables manifold customization.

APPLICATIONS

- High-purity corrosive chemical handling
- All semiconductor wet etch and clean (WEC) process chemicals
- Chemical line sizes 3/8" or smaller



Available with a top mount, FNPT pilot port

FEATURES & BENEFITS

Top mount, FNPT pilot port	Alternative pilot air connection allows fluid system design flexibility
Small footprint	Preserves valuable space on OEM equipment
All PFA wetted parts	Provide corrosion resistance in harsh chemical and high-purity environments
Valve diaphragm successfully tested to over 2.1 million cycles	Provides increased product reliability
Stand alone mounting base	Enables valve installation and removal without tools

SPECIFICATIONS

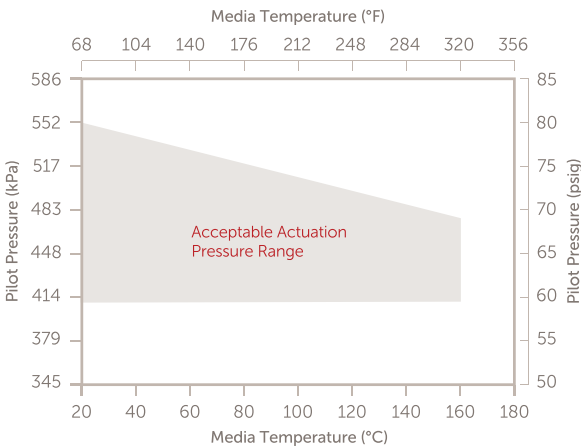
Materials	All wetted parts	PFA	
	Exterior actuator parts	PVDF, Viton®	
	Interior actuator parts	PVDF, SST, Viton	
	Mounting base	PVDF	
Operating conditions*	Media pressure at	21°C (70°F)	Inlet - 913 mbar (27" Hg) vacuum to 552 kPa (80 psig)*
			Outlet - 913 mbar (27" Hg) vacuum to 276 kPa (40 psig)*,**
		160°C (320°F)	Inlet - 276 kPa (40 psig)
			Outlet - 138 kPa (20 psig)
	Actuation pressure	345 - 552 kPa (50-80 psig)*	
Temperature range	Ambient	23°C - 50°C (73°F - 122°F), ambient	
	Fluid	21°C - 160°C (70°F - 320°F), fluid*	
Pneumatic supply port	1/8" FNPT		
Compliant	RoHs & WEE		

* Actual valve performance varies with pressure and temperature.

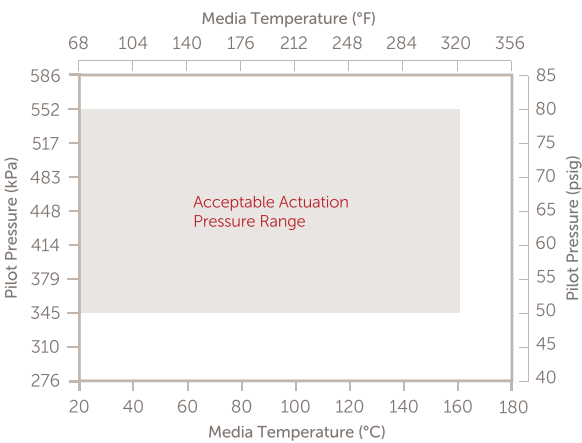
**Optional high-pressure outlet versions for up to 552 kPa (80 psig).

PERFORMANCE DATA

Normally Open Valve
Media Temperature vs. Actuator Pilot Pressure



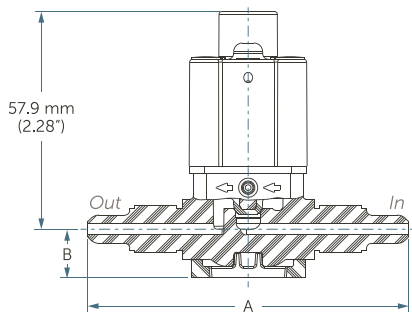
Normally Closed Valve
Media Temperature vs. Actuator Pilot Pressure



DIMENSIONS

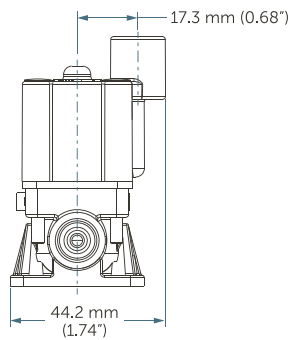
2-way, Top Mount, FNPT

Front View



2-way, Top Mount, FNPT

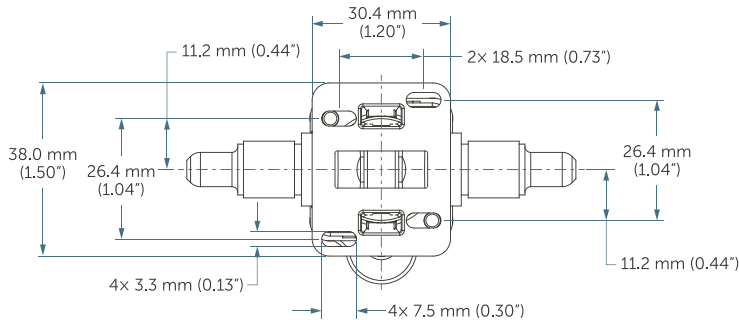
Side View



Dimensions			
Port Connection	Flow Factor	A	B
1/4" Flaretek	0.29 C _v (4.2 K _v)	3.36" (85.3 mm)	0.51" (13.0 mm)

2-way, Top Mount, FNPT

Bottom View



ORDERING INFORMATION

PART NUMBER	ACTUATOR	INLET	OUTLET	OPTIONS
CR4-2CN-4F	Pneumatic normally closed	1/4" Flaretek®	1/4" Flaretek®	PVDF Flaretek® nut

FOR MORE INFORMATION

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

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