

Integra® Pneumatic Valves, 1/2" Orifice, 2-way, Normally Closed

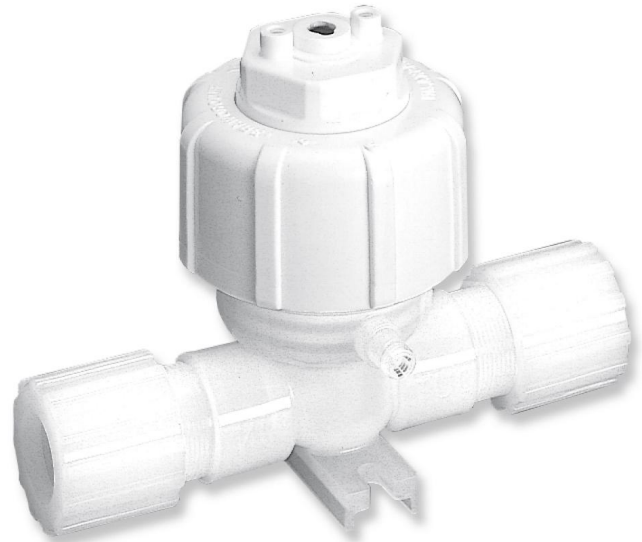
Purity and chemical inertness make these valves a reliable, cost-effective solution when high flow is not required

Integra® valves offer all molded PFA wetted surfaces for unmatched purity, chemical inertness, and high temperature capabilities. They are designed specifically for high purity, high corrosive fluid handling applications. These valves have no external metal parts that can corrode and represent a safety hazard with aggressive chemicals. The unique top loading design allows for field service, if necessary. Each valve receives 100% functional testing before it leaves the factory.

APPLICATIONS

Ideal in point-of-use applications when low flow is required, including:

- High-purity, corrosive chemical handling
- Wet etch and clean (WEC) process chemicals
- Low volume bulk chemical delivery
- Chemical line sizes 1/2" or larger



Designed for high purity, high corrosive fluid handling applications

FEATURES & BENEFITS

All PFA wetted parts	Provide chemical resistance in high purity, corrosive chemical applications
PVDF actuator components and no external wetted parts	Means lower contamination potential in the event of a media leak or exposure to harsh external environments
Unique body design	Allows for 100% cavity drainage to prevent fluid entrapment, while top loading design allows for field service
Available with Flaretek®, Flaretek "SpaceSaver", PureBond®, or FNPT connections	Provides fluid system design flexibility and versatility
Optional remote electronic position indication	Allows convenient valve open and closed position monitoring
Optional mounting base	Allows easy valve installation and removal without tools
Optional ECTFE material is available for external, nonwetted components	Provides higher chemical resistance to oxygenated solvents and bases

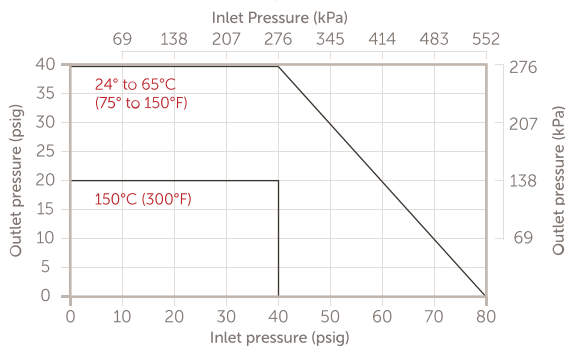
SPECIFICATIONS

Pressure range	29" Hg vacuum (980 mbar) to 80 psig (551.6 kPa) at 0 outlet pressure.
Temperature range	75° to 150°F (24° to 65°C), ambient 75° to 300°F (24° to 150°C), fluid 75°F (24°C) for ECTFE external components, ambient and fluid
Pneumatic supply pressure	35 psig (241.3 kPa) minimum to 70 psig (482.6 kPa) maximum.
Pneumatic supply port	1/8" FNPT
Materials	All wetted parts are PFA. Exterior actuator parts are PVDF or ECTFE. Interior actuator parts are PVDF, stainless steel, Viton®.

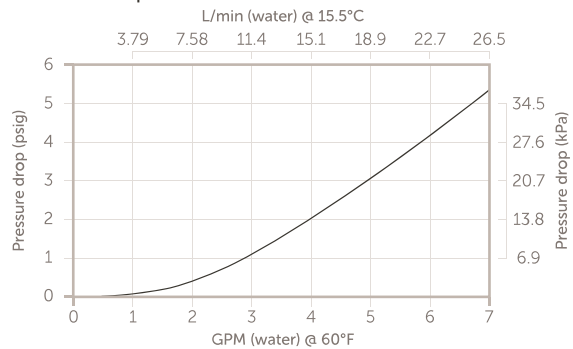
Note: Actual valve performance varies with pressure and temperature. Refer to actual ratings in performance charts.

PERFORMANCE DATA

**Inlet Pressure vs. Outlet Pressure
as a Function of Media Temperature**



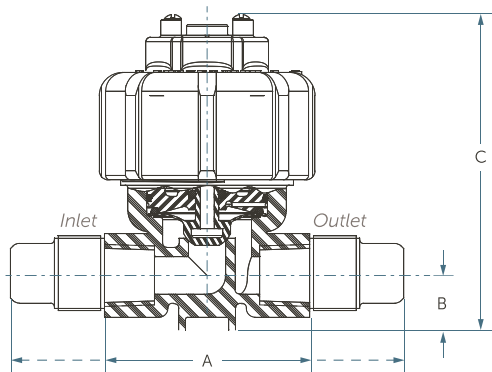
Pressure Drop vs. Water Flow



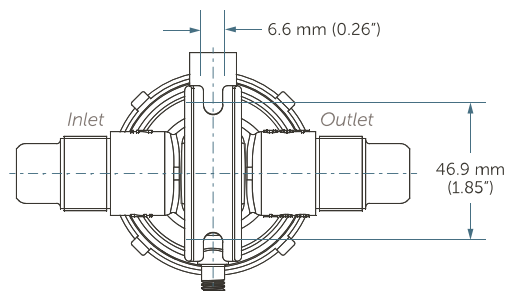
Note: The Inlet Pressure vs. Outlet Pressure as a Function of Media Temperature graph is not applicable for valves with ECTFE external components. For ECTFE temperature ratings refer to the Specification table below.

DIMENSIONS

Front View



Bottom View



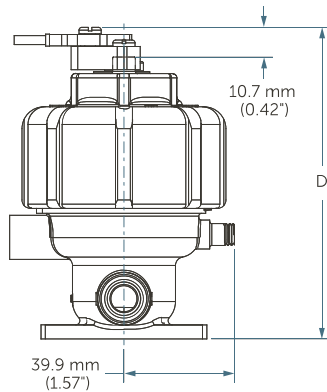
DIMENSIONS

Dimension Note:

Dimensions are the same regardless of body material (PVDF or ECTFE) or nut material (PVDF, PFA or CPFA).

Port Connection	Flow Factor C_v (K_v)	A	Dimensions B	C
1/2" Flaretek	2.0 (28.6)	4.40" (111.8 mm)	0.57" (14.5 mm)	4.06" (103.1 mm)
1/2" PureBond fusible pipe	3.0 (42.8)	5.75" (146.0 mm)	0.73" (18.5 mm)	4.22" (107.2 mm)
1/2" FNPT	3.0 (42.8)	2.75" (69.8 mm)	0.73" (18.5 mm)	4.22" (107.2 mm)
3/4" Flaretek	3.0 (42.8)	5.27" (133.9 mm)	0.73" (18.5 mm)	4.22" (107.2 mm)
3/4" PureBond fusible pipe	3.0 (42.8)	5.75" (146.0 mm)	0.73" (18.5 mm)	4.22" (107.2 mm)

Optional Remote Electronic Position Indication



Sensing Option Dimensional Information

A Remote Position Indication option is available to monitor valve open and closed positions electronically.

Port Connection	Flow Factor C_v (K_v)	Dimension D
1/2" Flaretek	2.0 (28.6)	4.42" (112.3 mm)
1/2" PureBond fusible pipe	3.0 (42.8)	4.58" (116.3 mm)
1/2" FNPT	3.0 (42.8)	4.58" (116.3 mm)
3/4" Flaretek	3.0 (42.8)	4.58" (116.3 mm)
3/4" PureBond fusible pipe	3.0 (42.8)	4.58" (116.3 mm)

Note: To enable the remote position indication option you must special order the Omron sensor (-OM) on the valve. In addition, order Omron position sensor indicator (EE-SX770R or EE-SX770A), which are sold separately.

ORDERING INFORMATION

PART NUMBER	INLET	OUTLET	OPTIONS
202-57-01	1/2" FNPT	1/2" FNPT	N/A
202-57-01-EC	1/2" FNPT	1/2" FNPT	ECTFE actuator
202-57-01-OM	1/2" FNPT	1/2" FNPT	Omron position sensor
202-58-01	1/2" PureBond® pipe	1/2" PureBond® pipe	N/A
202-58-01-EC	1/2" PureBond® pipe	1/2" PureBond® pipe	ECTFE actuator
202-58-01-OM	1/2" PureBond® pipe	1/2" PureBond® pipe	Omron position sensor
202-59-01	3/4" PureBond® pipe	3/4" PureBond® pipe	N/A
202-59-01-EC	3/4" PureBond® pipe	3/4" PureBond® pipe	ECTFE actuator
202-59-01-OM	3/4" PureBond® pipe	3/4" PureBond® pipe	Omron position sensor
202-60-01	3/4" Flaretek®	3/4" Flaretek®	PVDF Flaretek® nut
202-60-01-3	3/4" Flaretek®	3/4" Flaretek®	PFA Flaretek® nut
202-60-01-6	3/4" Flaretek®	3/4" Flaretek®	CPFA Flaretek® nut
202-60-01-EC	3/4" Flaretek®	3/4" Flaretek®	ECTFE actuator with PFA nut
202-60-01-OM	3/4" Flaretek®	3/4" Flaretek®	Omron position sensor
202-60-SI-01	3/4" Flaretek® "SpaceSaver"	3/4" Flaretek®	PVDF Flaretek® nut
202-60-SI-01-3	3/4" Flaretek® "SpaceSaver"	3/4" Flaretek®	PFA Flaretek® nut
202-60-SI-01-6	3/4" Flaretek® "SpaceSaver"	3/4" Flaretek®	CPFA Flaretek® nut
202-60-SI-01-EC	3/4" Flaretek® "SpaceSaver"	3/4" Flaretek®	ECTFE actuator with PFA nut
202-60-SO-01	3/4" Flaretek®	3/4" Flaretek® "SpaceSaver"	PVDF Flaretek® nut
202-60-SO-01-3	3/4" Flaretek®	3/4" Flaretek® "SpaceSaver"	PFA Flaretek® nut
202-60-SO-01-6	3/4" Flaretek®	3/4" Flaretek® "SpaceSaver"	CPFA Flaretek® nut
202-60-SO-01-EC	3/4" Flaretek®	3/4" Flaretek® "SpaceSaver"	ECTFE actuator with PFA nut
202-66-01	1/2" Flaretek®	1/2" Flaretek®	PVDF Flaretek® nut
202-66-01-3	1/2" Flaretek®	1/2" Flaretek®	PFA Flaretek® nut
202-66-01-6	1/2" Flaretek®	1/2" Flaretek®	CPFA Flaretek® nut
202-66-01-EC	1/2" Flaretek®	1/2" Flaretek®	ECTFE actuator with PFA nut

ORDERING INFORMATION

PART NUMBER	INLET	OUTLET	OPTIONS
202-66-01-OM	1/2" Flaretek®	1/2" Flaretek®	Omron position sensor
202-66-SI-01	1/2" Flaretek® "SpaceSaver"	1/2" Flaretek®	PVDF Flaretek® nut
202-66-SI-01-3	1/2" Flaretek® "SpaceSaver"	1/2" Flaretek®	PFA Flaretek® nut
202-66-SI-01-6	1/2" Flaretek® "SpaceSaver"	1/2" Flaretek®	CPFA Flaretek® nut
202-66-SI-01-EC	1/2" Flaretek® "SpaceSaver"	1/2" Flaretek®	ECTFE actuator with PFA nut
202-66-SO-01	1/2" Flaretek®	1/2" Flaretek® "SpaceSaver"	PVDF Flaretek® nut
202-66-SO-01-3	1/2" Flaretek®	1/2" Flaretek® "SpaceSaver"	PFA Flaretek® nut
202-66-SO-01-6	1/2" Flaretek®	1/2" Flaretek® "SpaceSaver"	CPFA Flaretek® nut
202-66-SO-01-EC	1/2" Flaretek®	1/2" Flaretek® "SpaceSaver"	ECTFE actuator with PFA 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.

TERMS AND CONDITIONS OF SALE

All purchases are subject to Entegris' Terms and Conditions of Sale. To view and print this information, visit [entegris.com](https://www.entegris.com) and select the [Terms & Conditions](#) link in the footer.



Corporate Headquarters
129 Concord
Billerica, MA 01821
USA

Customer Service
Tel +1 952 556 4181
Fax +1 952 556 8022
Toll Free 800 394 4083

Entegris®, the Entegris Rings Design®, and other product names are trademarks of Entegris, Inc. as listed on [entegris.com/trademarks](https://www.entegris.com/trademarks). All third-party product names, logos, and company names are trademarks or registered trademarks of their respective owners. Use of them does not imply any affiliation, sponsorship, or endorsement by the trademark owner.

©1996-2022 Entegris, Inc. | All rights reserved. | Printed in the USA | 3220-11404DSA-1122