# Integra® Manual Valves, 1" Orifice, Sampling, Multiturn

Ideal for high-flow bulk chemical distribution applications

Designed for applications where greater flow is required, the molded 1" orifice Integra® valve is ideal for valve boxes and bulk chemical distribution applications. The vacuum rated Integra valve can be installed in the upstream side of pressure vacuum vessels and pumps.

The valve maintains a high flow rate while reducing the footprint in manufacturer's equipment. This Integra valve illustrates our ability to address customer space constraints while still providing superior performance.



Our 1" orifice valves are ideal in applications where greater flow is required, including:

- CMP slurry, ultrapure water and high-purity, corrosive chemical handling
- Valve boxes and high flow bulk chemical distribution applications
- Upstream or downstream side of pressure vacuum vessels and pumps
- Chemical line sizes in 3/4" to 1"



Maintains a high flow rate while reducing footprint

#### **FEATURES & BENEFITS**

High-purity PFA construction	Provides broad chemical resistance		
Vacuum rated	Enables use in the upstream side of pressure vacuum vessels and pumps		
Small footprint	Saves valuable equipment space		
Sampling design	Enables continuous flow through the valve and the ability to pull a sample in different directions		

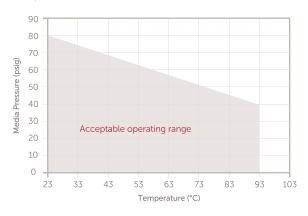


# **SPECIFICATIONS**

Materials	All wetted parts	PFA, PTFE		
	Exterior actuator parts	PVDF		
	Interior actuator parts	PVDF, Viton <sup>®</sup> , PFA		
Pressure Range	29" Hg to 80 psig (980 mbar to 552 kPa) @ 70°F (21°C) fluid temperature			
	29" Hg to 40 psig (980 mbar to 276 kPa) @ 200°F (93°C) fluid temperature			
Ambient Temperature	100°F (38°C)			

# PERFORMANCE DATA

## Temperature vs. Media Pressure

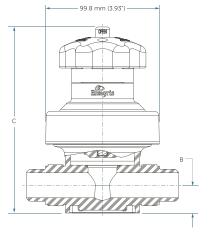


## **3-port Sampling Valve Flow Path**

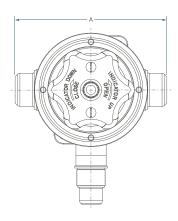


# **DIMENSIONS**

Front View



Top View



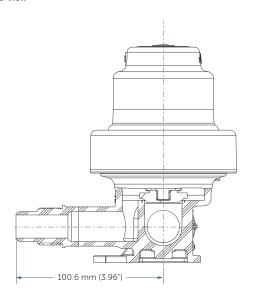
Port 1	Port 2 (sampling)	Port 3	Flow Factor	Α	Dimensions B	C
3/4" Flaretek¹	3/4" Flaretek	3/4" Flaretek	7.2 C <sub>v</sub> (102.8 K <sub>v</sub> )	5.08" (129.0 mm)	0.96" (24.4 mm)	6.47" (164.3 mm)

# **DIMENSIONS**

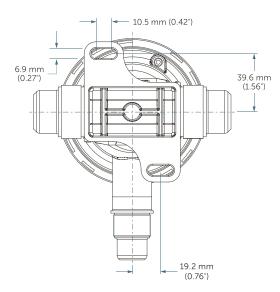
3/4" PureBond	3/4" Flaretek	3/4" PureBond	7.2 C <sub>v</sub> (102.8 K <sub>v</sub> )	6.59" (167.4 mm)	0.96" (24.4 mm)	6.47" (164.3 mm)
1" Flaretek	3/4" Flaretek	1" Flaretek	7.2 C <sub>v</sub> (102.8 K <sub>v</sub> )	5.26" (133.6 mm)	0.96" (24.4 mm)	6.47" (164.3 mm)
1" PureBond	3/4" Flaretek	1" PureBond	7.2 C <sub>v</sub> (102.8 K <sub>v</sub> )	6.59" (167.4 mm)	0.96" (24.4 mm)	6.47" (164.3 mm)
1" PureBond	3/4" Flaretek	1" Flaretek	7.2 C <sub>v</sub> (102.8 K <sub>v</sub> )	4.79" (121.7 mm)	0.96" (24.4 mm)	6.47" (164.3 mm)

 $<sup>^{1}(\</sup>mbox{PVDF}),$  –3 (PFA), –6 (CPFA) or -II (PFA FlareLock  $^{\otimes}$  II) nuts

#### Side View



## **Bottom View**



## ORDERING INFORMATION

PORT 1 CONNECTION	SAMPLE PORT CONNECTION	PORT 3 CONNECTION	OPTIONS
3/4" Flaretek®	3/4" Flaretek®	3/4" Flaretek®	PVDF Flaretek® nut
3/4" Flaretek®	3/4" Flaretek®	3/4" Flaretek®	PFA Flaretek® nut
3/4" Flaretek®	3/4" Flaretek®	3/4" Flaretek®	CPFA Flaretek® nut
3/4" Flaretek®	3/4" Flaretek®	3/4" Flaretek®	PFA FlareLock® II nut
3/4" PureBond® pipe	3/4" Flaretek®	3/4" PureBond® pipe	PVDF Flaretek® nut
3/4" PureBond® pipe	3/4" Flaretek®	3/4" PureBond® pipe	PFA Flaretek® nut
3/4" PureBond® pipe	3/4" Flaretek®	3/4" PureBond® pipe	CPFA Flaretek® nut
	3/4" Flaretek®  3/4" Flaretek®  3/4" Flaretek®  3/4" Flaretek®  3/4" PureBond® pipe  3/4" PureBond® pipe	3/4" Flaretek® 3/4" Flaretek®  3/4" Flaretek® 3/4" Flaretek®  3/4" Flaretek® 3/4" Flaretek®  3/4" Flaretek® 3/4" Flaretek®  3/4" PureBond® pipe 3/4" Flaretek®  3/4" PureBond® pipe 3/4" Flaretek®	3/4" Flaretek® 3/4" Flaretek® 3/4" Flaretek®  3/4" PureBond® pipe 3/4" Flaretek® 3/4" PureBond® pipe  3/4" PureBond® pipe 3/4" Flaretek® 3/4" PureBond® pipe

#### ORDERING INFORMATION

PART NUMBER	PORT 1 CONNECTION	SAMPLE PORT CONNECTION	PORT 3 CONNECTION	OPTIONS
DS16-SM-12P12F-II	3/4" PureBond® pipe	3/4" Flaretek®	3/4" PureBond® pipe	PFA FlareLock® II nut
DS16-SM-16F12F	1" Flaretek®	3/4" Flaretek®	1" Flaretek®	PVDF Flaretek® nut
DS16-SM-16F12F-3	1" Flaretek®	3/4" Flaretek®	1" Flaretek®	PFA Flaretek® nut
DS16-SM-16F12F-6	1" Flaretek®	3/4" Flaretek®	1" Flaretek®	CPFA Flaretek® nut
DS16-SM-16F12F-II	1" Flaretek®	3/4" Flaretek®	1" Flaretek®	PFA FlareLock® II nut
DS16-SM-16P12F	1" PureBond® pipe	3/4" Flaretek®	1" PureBond® pipe	PVDF Flaretek® nut
DS16-SM-16P12F-3	1" PureBond® pipe	3/4" Flaretek®	1" PureBond® pipe	PFA Flaretek® nut
DS16-SM-16P12F-6	1" PureBond® pipe	3/4" Flaretek®	1" PureBond® pipe	CPFA Flaretek® nut
DS16-SM-16P12F-II	1" PureBond® pipe	3/4" Flaretek®	1" PureBond® pipe	PFA FlareLock® II nut
DS16-SM-16PF12F	1" PureBond® pipe	3/4" Flaretek®	1" Flaretek®	PVDF Flaretek® nut
DS16-SM-16PF12F-3	1" PureBond® pipe	3/4" Flaretek®	1" Flaretek®	PFA Flaretek® nut
DS16-SM-16PF12F-6	1" PureBond® pipe	3/4" Flaretek®	1" Flaretek®	CPFA Flaretek® nut
DS16-SM-16PF12F-II	1" PureBond® pipe	3/4" Flaretek®	1" Flaretek®	PFA FlareLock® II nut

#### FOR MORE INFORMATION

Please call your Regional Customer Service Center today to learn what Entegris can do for you. Visit <u>entegris.com</u> and select the <u>Contact Us</u> 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 <a href="mailto:entegris.com">entegris.com</a> and select the <a href="mailto:Terms & Conditions">Terms & Conditions</a> 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 <u>entegris.com/trademarks</u>. 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.