

# Integra® Manual Valves, 1" Orifice, Sampling, Multi-turn

*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.

## APPLICATIONS

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"

## FEATURES & BENEFITS

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



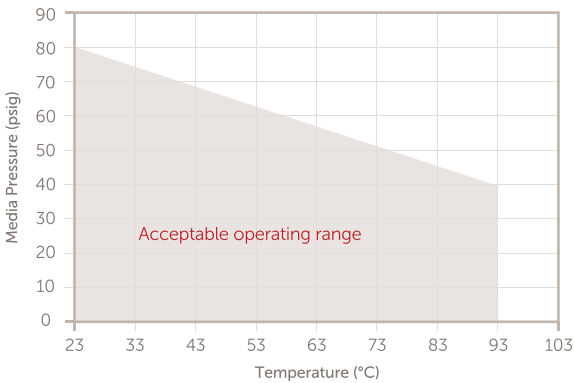
*Maintains a high flow rate while reducing footprint*

## SPECIFICATIONS

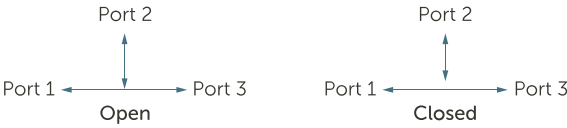
<b>Materials</b>	All wetted parts	PFA, PTFE
	Exterior actuator parts	PVDF
	Interior actuator parts	PVDF, Viton®, PFA
<b>Pressure Range</b>	29" Hg to 80 psig (980 mbar to 552 kPa) @ 70°F (21°C) fluid temperature	
	29" Hg to 40 psig (980 mbar to 276 kPa) @ 200°F (93°C) fluid temperature	
<b>Ambient Temperature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

## PERFORMANCE DATA

Temperature vs. Media Pressure

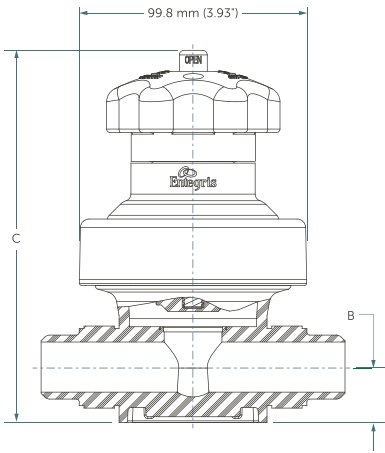


3-port Sampling Valve Flow Path

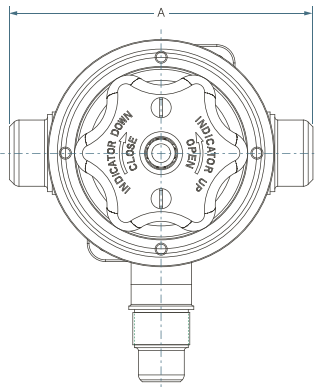


## DIMENSIONS

Front View



Top View



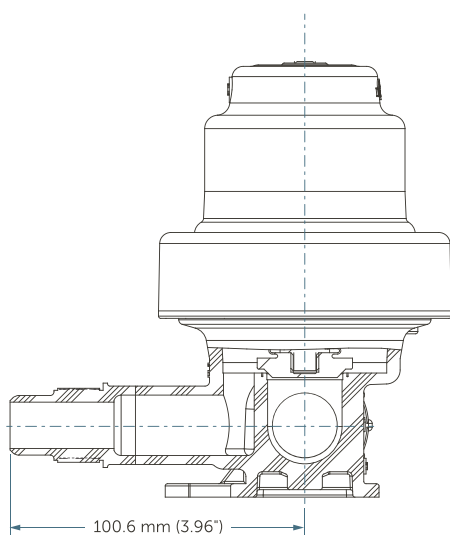
Port 1	Port 2 (sampling)	Port 3	Flow Factor	A	Dimensions B	C
3/4" Flaretek <sup>1</sup>	3/4" Flaretek	3/4" Flaretek	7.2 C <sub>v</sub> (102.8 K <sub>v</sub> )	5.08" (129.0 mm)	0.96" (24.4 mm)	6.47" (164.3 mm)
3/4" PureBond	3/4" Flaretek	3/4" PureBond	7.2 C <sub>v</sub> (102.8 K <sub>v</sub> )	6.59" (167.4 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)

## DIMENSIONS

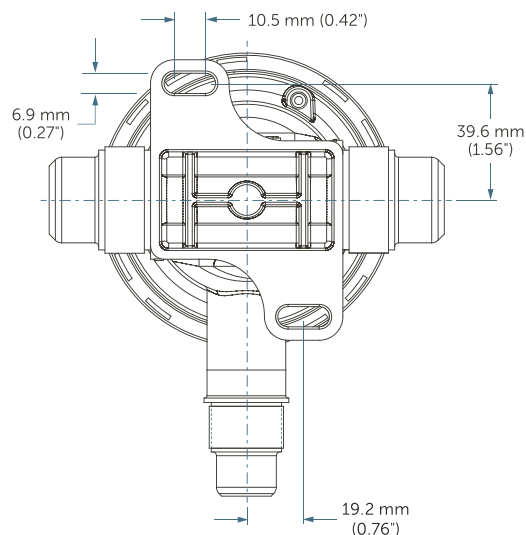
1" PureBond	3/4" Flaretek	1" PureBond	7.2 C <sub>v</sub> (102.8 K <sub>v</sub> )	6.59" (167.4 mm)	0.96" (24.4 mm)	6.47" (164.3 mm)
1" PureBond	3/4" Flaretek	1" Flaretek	7.2 C <sub>v</sub> (102.8 K <sub>v</sub> )	4.79" (121.7 mm)	0.96" (24.4 mm)	6.47" (164.3 mm)

<sup>1</sup> (PVDF), -3 (PFA), -6 (CPFA) or -II (PFA FlareLock® II) nuts

Side View



Bottom View



## ORDERING INFORMATION

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

## ORDERING INFORMATION

PART NUMBER	PORT 1 CONNECTION	SAMPLE PORT CONNECTION	PORT 3 CONNECTION	OPTIONS
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 [entegris.com](https://www.entegris.com) and select the [Contact Us](#) link to find the customer service center nearest you.

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