

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

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



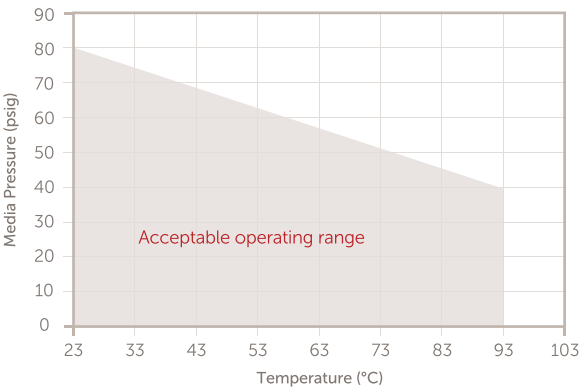
Maintains a high flow rate while reducing footprint

SPECIFICATIONS

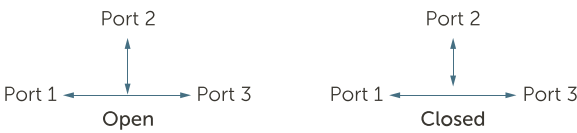
Materials	All wetted parts	PFA, PTFE
	Exterior actuator parts	PVDF
	Interior actuator parts	PVDF, Viton®, PFA
Pressure Range	29" Hg to 80 psig (980 mbar to 552 kPa) @ 70°F (21°C) fluid temperature	
	29" Hg to 40 psig (980 mbar to 276 kPa) @ 200°F (93°C) fluid temperature	
Ambient Temperature	100°F (38°C)	

PERFORMANCE DATA

Temperature vs. Media Pressure

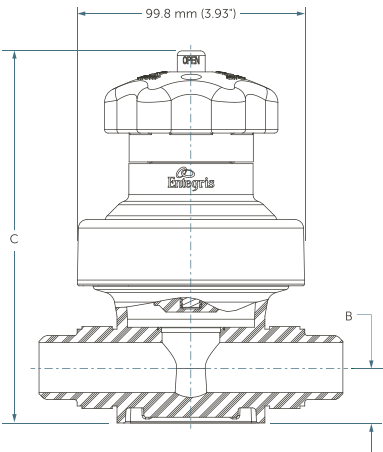


3-port Sampling Valve Flow Path

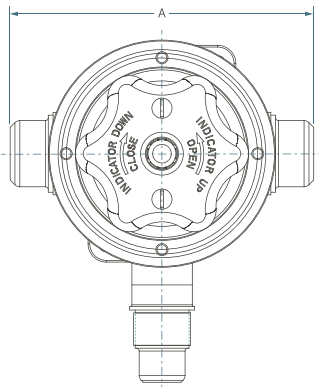


DIMENSIONS

Front View



Top View



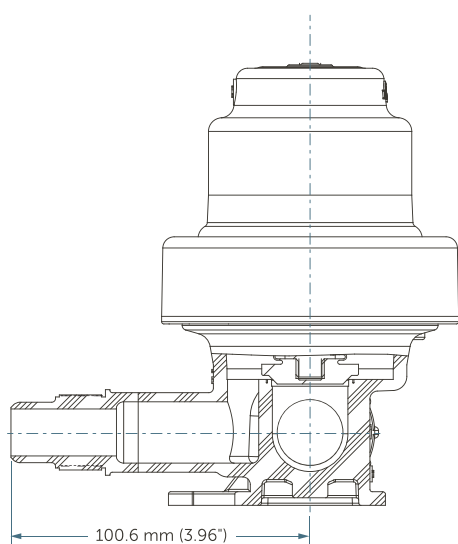
Port 1	Port 2 (sampling)	Port 3	Flow Factor	A	Dimensions B	C
3/4" Flaretek ¹	3/4" Flaretek	3/4" Flaretek	7.2 C _v (102.8 K _v)	5.08" (129.0 mm)	0.96" (24.4 mm)	6.47" (164.3 mm)

DIMENSIONS

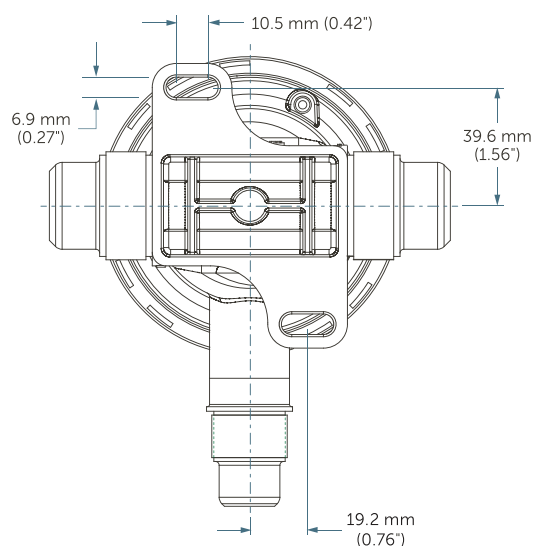
3/4" PureBond	3/4" Flaretek	3/4" PureBond	7.2 C _v (102.8 K _v)	6.59" (167.4 mm)	0.96" (24.4 mm)	6.47" (164.3 mm)
1" Flaretek	3/4" Flaretek	1" Flaretek	7.2 C _v (102.8 K _v)	5.26" (133.6 mm)	0.96" (24.4 mm)	6.47" (164.3 mm)
1" PureBond	3/4" Flaretek	1" PureBond	7.2 C _v (102.8 K _v)	6.59" (167.4 mm)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

¹(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-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	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-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-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

Notes:

- Not all configurations are permitted. [Contact Entegris](#) if multiple special order features are required.

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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