

Integra® Pneumatic Valves, 1" Orifice, Sampling, Normally Open

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"



Maintains a high flow rate while reducing equipment footprint.

FEATURES & BENEFITS

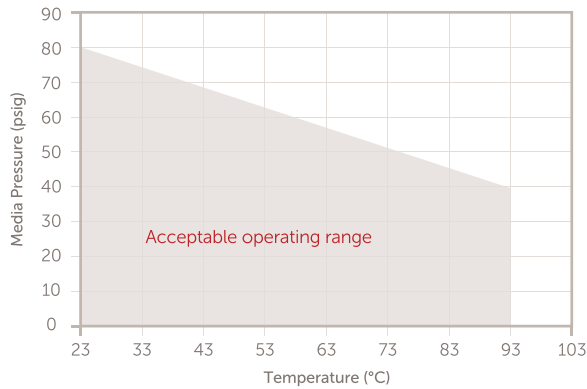
All PFA and PTFE wetted parts	Provide chemical resistance in high purity, corrosive chemical applications
PVDF actuator components and no external wetted parts	Means lower contamination potential in the event of a media leak or exposure to harsh external environments
Unique body design	Allows or 100% cavity drainage to prevent fluid entrapment, while top loading design allows for field service
Available with Flaretek® or PureBond® pipe connections	Provides fluid system design flexibility and versatility
Optional remote electronic position indication	Allows convenient valve open and closed position monitoring

SPECIFICATIONS

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)
Pneumatic Supply Pressure	50 psig (345 kPa) minimum to 80 psig (552 kPa) maximum
Pneumatic Supply Port	1/8" FNPT
Materials	All wetted parts are PFA and PTFE. Exterior actuator parts are PVDF. Interior actuator parts are PVDF, Viton® and PFA. The springs are fluoropolymer coated stainless steel.

PERFORMANCE DATA

Temperature vs. Media Pressure

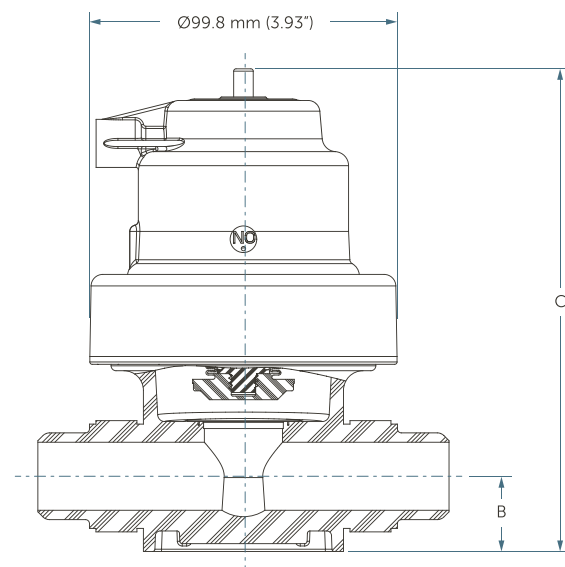


3-port Sampling Valve Flow Path

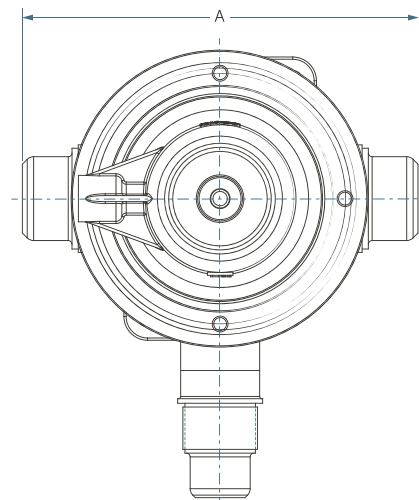


DIMENSIONS

Front View



Top View

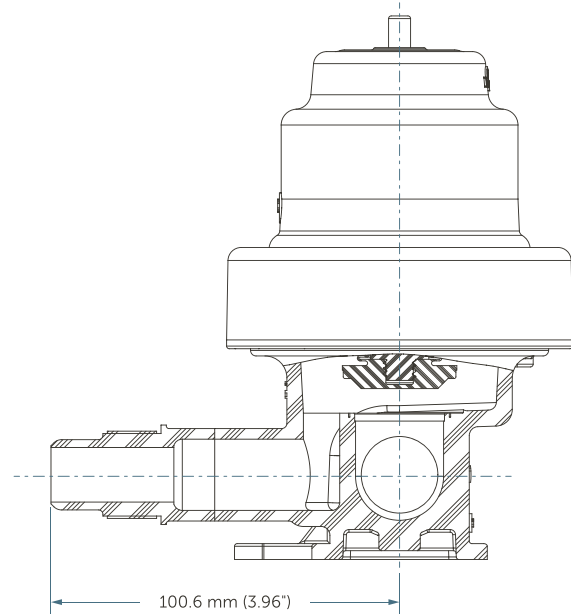


Port 1	Port 2 (sampling)	Port 3	Flow Factor	Dimensions		
				A	B	C

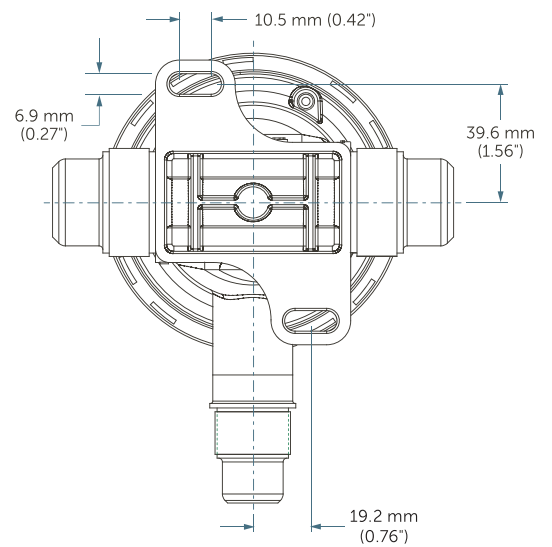
DIMENSIONS

3/4" Flaretek	3/4" Flaretek	3/4" Flaretek	7.2 C _v (102.8 K _v)	5.08" (129.0 mm)	0.96" (24.4 mm)	6.17" (156.7 mm)
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)	6.17" (156.7 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)	6.17" (156.7 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)	6.17" (156.7 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)	6.17" (156.7 mm)

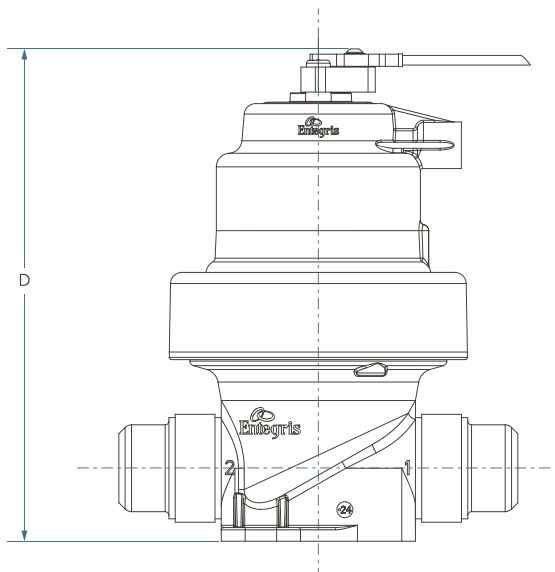
Side View



Bottom View



Position Sensor



Port 1

Port 2 (sampling)

Port 3

Dimension

DIMENSIONS

			D
3/4" Flaretek	3/4" Flaretek	3/4" Flaretek	6.49" (164.8 mm)
3/4" PureBond	3/4" Flaretek	3/4" PureBond	6.49" (164.8 mm)
1" Flaretek	3/4" Flaretek	1" Flaretek	6.49" (164.8 mm)
1" PureBond	3/4" Flaretek	1" PureBond	6.49" (164.8 mm)
1" PureBond	3/4" Flaretek	1" Flaretek	6.49" (164.8 mm)

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

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	PORT 1 CONNECTION	SAMPLE PORT CONNECTION	PORT 3 CONNECTION	OPTIONS
DS16-SU-12F12F	3/4" Flaretek®	3/4" Flaretek®	3/4" Flaretek®	PVDF Flaretek® nut
DS16-SU-12F12F-3	3/4" Flaretek®	3/4" Flaretek®	3/4" Flaretek®	PFA Flaretek® nut
DS16-SU-12F12F-6	3/4" Flaretek®	3/4" Flaretek®	3/4" Flaretek®	CPFA Flaretek® nut
DS16-SU-12F12F-II	3/4" Flaretek®	3/4" Flaretek®	3/4" Flaretek®	PFA FlareLock® II nut
DS16-SU-12F12F-OM	3/4" Flaretek®	3/4" Flaretek®	3/4" Flaretek®	Omron position sensor
DS16-SU-12P12F	3/4" PureBond® pipe	3/4" Flaretek®	3/4" PureBond® pipe	PVDF Flaretek® nut
DS16-SU-12P12F-3	3/4" PureBond® pipe	3/4" Flaretek®	3/4" PureBond® pipe	PFA Flaretek® nut
DS16-SU-12P12F-6	3/4" PureBond® pipe	3/4" Flaretek®	3/4" PureBond® pipe	CPFA Flaretek® nut
DS16-SU-12P12F-II	3/4" PureBond® pipe	3/4" Flaretek®	3/4" PureBond® pipe	PFA FlareLock® II nut
DS16-SU-12P12F-OM	3/4" PureBond® pipe	3/4" Flaretek®	3/4" PureBond® pipe	Omron position sensor
DS16-SU-16F12F	1" Flaretek®	3/4" Flaretek®	1" Flaretek®	PVDF Flaretek® nut
DS16-SU-16F12F-3	1" Flaretek®	3/4" Flaretek®	1" Flaretek®	PFA Flaretek® nut
DS16-SU-16F12F-6	1" Flaretek®	3/4" Flaretek®	1" Flaretek®	CPFA Flaretek® nut
DS16-SU-16F12F-II	1" Flaretek®	3/4" Flaretek®	1" Flaretek®	PFA FlareLock® II nut
DS16-SU-16F12F-OM	1" Flaretek®	3/4" Flaretek®	1" Flaretek®	Omron position sensor
DS16-SU-16P12F	1" PureBond® pipe	3/4" Flaretek®	1" PureBond® pipe	PVDF Flaretek® nut
DS16-SU-16P12F-3	1" PureBond® pipe	3/4" Flaretek®	1" PureBond® pipe	PFA Flaretek® nut

ORDERING INFORMATION

PART NUMBER	PORT 1 CONNECTION	SAMPLE PORT CONNECTION	PORT 3 CONNECTION	OPTIONS
DS16-SU-16P12F-6	1" PureBond® pipe	3/4" Flaretek®	1" PureBond® pipe	CPFA Flaretek® nut
DS16-SU-16P12F-II	1" PureBond® pipe	3/4" Flaretek®	1" PureBond® pipe	PFA FlareLock® II nut
DS16-SU-16P12F-OM	1" PureBond® pipe	3/4" Flaretek®	1" PureBond® pipe	Omron position sensor
DS16-SU-16PF12F	1" PureBond® pipe	3/4" Flaretek®	1" Flaretek®	PVDF Flaretek® nut
DS16-SU-16PF12F-3	1" PureBond® pipe	3/4" Flaretek®	1" Flaretek®	PFA Flaretek® nut
DS16-SU-16PF12F-6	1" PureBond® pipe	3/4" Flaretek®	1" Flaretek®	CPFA Flaretek® nut
DS16-SU-16PF12F-II	1" PureBond® pipe	3/4" Flaretek®	1" Flaretek®	PFA FlareLock® II nut
DS16-SU-16PF12F-OM	1" PureBond® pipe	3/4" Flaretek®	1" Flaretek®	Omron position sensor

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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