



**INTEGRA® HIGH-TEMPERATURE
3/4" VALVE**

*For high-temperature, ultrapure
chemical applications*



for high-temperature, ultra-pure chemical handling

Overview

The Entegris 3/4" Integra® valve is designed for high-temperature, ultrapure chemical handling, yet has the same high-flow capabilities and small footprint as the original 3/4" Integra valve. Key material selections and material isolation allow this valve to reach higher temperatures than competitive valves. The valve can be used for applications up to 180°C (356°F). This can be especially useful for photoresist stripping applications with high-temperature sulfuric and phosphoric acid. The Integra high-temperature 3/4" valve has the ability to support systems in a cost-effective and reliable package. This valve is differentiated from other Integra valves by the yellow actuation indicator on top of the valve.

Applications

- High-temperature, ultrapure chemical handling
- Photoresist stripping applications with high-temperature sulfuric and phosphoric acid
- Chemical line sizes 3/4" to 1"

Features and Benefits

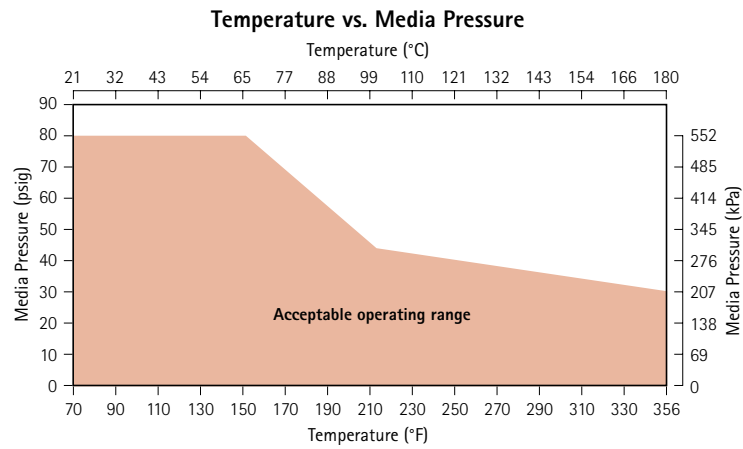
- Capable of media temperatures up to 180°C (356°F) @ 206.9 kPa (30 psig)
- Long life cycle
- Small footprint
- Available in molded 2-way or machined sampling valve versions, normally open and normally closed actuators
- 2-way valves available with connection options: PrimeLock®, PrimeLock "SpaceSaver", PureBond® and Super 300 Type Pillar®
- Sampling valves available with 3/4" and 1" PureBond fusible pipe
- Pressure rating remains the same for both inlet and outlet ports
- Yellow actuation indicator on the top of the valve indicates high temperature

Specifications

Materials:	Wetted parts	PFA or PTFE
	Exterior parts	PVDF
Pressure range:	29" HG vacuum (980 mbar)	
	551.6 kPa (80 psig) maximum rating at inlet or outlet port (see performance data)*	
Temperature range:	21° - 49°C (70° - 120°F), ambient	
	21° - 180°C (70° - 356°F), fluid*	
Pneumatic supply pressure:	Normally closed	448.2 kPa (65 psig) minimum to 551.6 kPa (80 psig) maximum
	Normally open	448.2 kPa (65 psig) minimum to 482.6 kPa (70 psig) maximum
Pneumatic supply port:	1/8" FNPT	

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

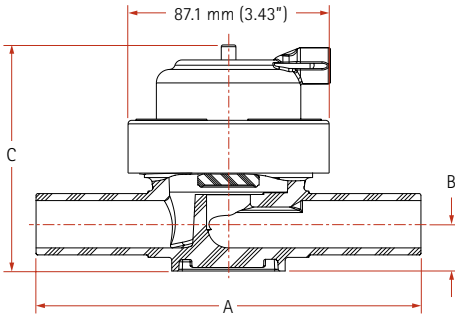
Performance Data



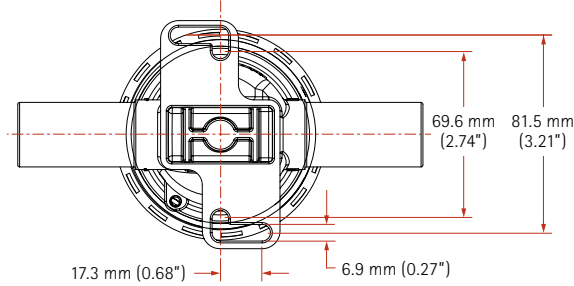
Dimensions

Integra DH12 2-way Valve

Side View



Bottom View

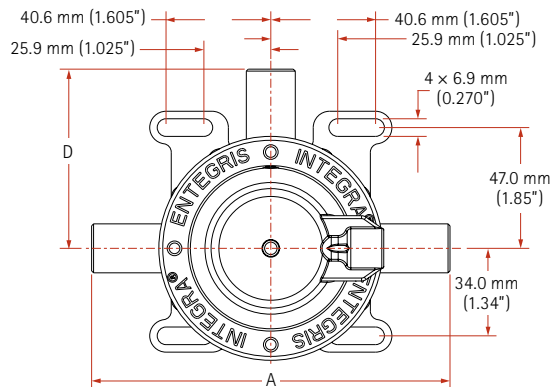


Port Connection	Flow Factor		Dimensions		
	C _v	K _v	A	B	C
3/4" Super 300 Type Pillar*	6.1	87.1	133.4 mm (5.25")	20.3 mm (0.80")	98.3 mm (3.87")
3/4" PrimeLock	6.1	87.1	150.4 mm (5.92")	24.4 mm (0.96")	107.4 mm (4.23")
3/4" PureBond	7.4	105.7	118.6 mm (4.67")	20.3 mm (0.80")	98.3 mm (3.87")
3/4" Tube Stub	6.1	87.1	128.8 mm (5.07")	20.3 mm (0.80")	98.3 mm (3.87")
1" Super 300 Type Pillar*	8.8	125.7	146.1 mm (5.75")	26.4 mm (1.04")	109.5 mm (4.31")
1" PrimeLock	8.8	125.7	159.0 mm (6.26")	28.4 mm (1.12")	111.5 mm (4.39")
1" PureBond	9.8	140	118.6 mm (4.67")	24.4 mm (0.96")	107.4 mm (4.23")
1" Tube Stub	8.8	125.7	145.8 mm (5.74")	24.4 mm (0.96")	107.4 mm (4.23")

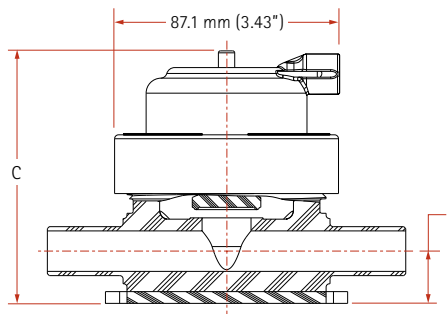
*Pillar nuts, inserts and gauge rings are supplied separately.

Integra DH12 Sampling Valve

Top View



Side View



Port Connection	Flow Factor		Dimensions			
	C _v	K _v	A	B	C	D
3/4" PureBond	7.4	105.7	118.6 mm (4.67")	20.3 mm (0.80")	98.3 mm (3.87")	59.4 mm (2.34")
3/4" Tube Stub	6.1	87.1	139.5 mm (5.49")	20.3 mm (0.80")	98.3 mm (3.87")	69.9 mm (2.75")
1" PureBond	9.8	140	118.6 mm (4.67")	24.4 mm (0.96")	107.4 mm (4.23")	59.4 mm (2.34")
1" Tube Stub	8.8	125.7	158.8 mm (6.25")	24.4 mm (0.96")	107.4 mm (4.23")	79.5 mm (3.13")

Sensing Option Dimensional Information

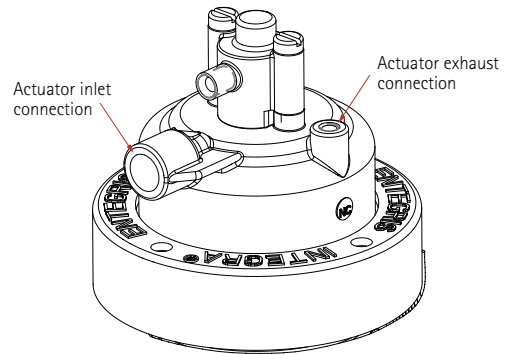
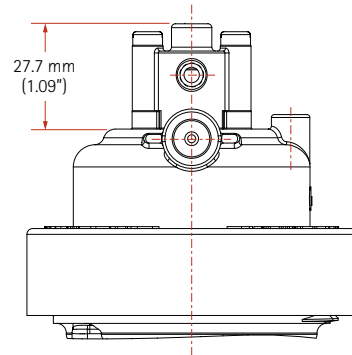
Remote Position Indication Option:

Electronic valve position sensing for monitoring valve open and close positions.

NOTE: To enable the remote position indication option you must special order the Espy® sensor (-ES) on the valve. In addition, order the Espy® Position Indication Mounting Adapter (ES-IN-01), which is sold separately.

DH12 with Espy Sensor

Entegris Espy part number ES-IN-01



Ordering Information

Integra High-temperature 3/4" Valves, 2-way

Part Number

DH12 - - - -

Special Order

N = Pillar nuts, inserts and gauge rings included*
 ES = Espy sensor
 = NA

Port Connection

12PS3 = Port 1 (inlet), Port 2 (outlet) 3/4" Super 300 Type Pillar*
 12PS312P = Port 1 (inlet) 3/4" Super 300 Type Pillar, Port 2 (outlet) 3/4" PureBond
 12K = Port 1 (inlet), Port 2 (outlet) 3/4" PrimeLock
 12KV = Port 1 (inlet) 3/4" PrimeLock, Port 2 (outlet) 3/4" PrimeLock "SpaceSaver"*
 12KP = Port 1 (inlet) 3/4" PrimeLock, Port 2 (outlet) 3/4" PureBond
 12VK = Port 1 (inlet) 3/4" PrimeLock "SpaceSaver", Port 2 (outlet) 3/4" PrimeLock
 12VW = Port 1 (inlet) 3/4" PrimeLock "SpaceSaver", Port 2 (outlet) 3/4" PrimeLock "SpaceSaver"
 12P12PS3 = Port 1 (inlet) 3/4" PureBond, Port 2 (outlet) 3/4" Super 300 Type Pillar
 12PK = Port 1 (inlet) 3/4" PureBond, Port 2 (outlet) 3/4" PrimeLock
 12P = Port 1 (inlet), Port 2 (outlet) 3/4" PureBond
 12F-TS = Port 1 (inlet), Port 2 (outlet) 3/4" Tube stub
 16PS3 = Port 1 (inlet), Port 2 (outlet) 1" Super 300 Type Pillar
 16PS316P = Port 1 (inlet) 1" Super 300 Type Pillar, Port 2 (outlet) 1" PureBond
 16K = Port 1 (inlet), Port 2 (outlet) 1" PrimeLock
 16KV = Port 1 (inlet) 1" PrimeLock, Port 2 (outlet) 1" PrimeLock "SpaceSaver"
 16KP = Port 1 (inlet) 1" PrimeLock, Port 2 (outlet) 1" PureBond
 16VK = Port 1 (inlet) 1" PrimeLock "SpaceSaver", Port 2 (outlet) 1" PrimeLock
 16VW = Port 1 (inlet) 1" PrimeLock "SpaceSaver", Port 2 (outlet) 1" PrimeLock "SpaceSaver"
 16P16PS3 = Port 1 (inlet) 1" PureBond, Port 2 (outlet) 1" Super 300 Type Pillar>sup>
 16PK = Port 1 (inlet) 1" PureBond, Port 2 (outlet) 1" PrimeLock
 16P = Port 1 (inlet), Port 2 (outlet) 1" PureBond
 16F-TS = Port 1 (inlet), Port 2 (outlet) 1" Tube stub

Description

2C = 2-way, normally closed
 2U = 2-way, normally open

**Pillar nuts, inserts and gauge rings are supplied separately.*

Integra High-temperature 3/4" Valves, sampling

Part Number

DH12 - - - -

Port Connection

12P12P-A = 3/4" PureBond
 1212-TSA = 3/4" Tube stub
 16P16P-A = 1" PureBond
 1616-TSA = 1" Tube stub

Description

SC = 2-way, normally closed
 SU = 2-way, normally open

*Note: Not all configurations are permitted. Consult Entegris if multiple special order features are required.
 Contact factory if "SpaceSaver" port connections are to be used in media containing a fluorinated surfactant.*

For More Information

Please call your Regional Customer Service Center today to learn what Entegris can do for you. Visit www.entegris.com and select the Customer Service link for the center nearest you.

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