

# **BSV-Series Sample Valve**

**Engineered Product Reference Guide** 

canada.dixonvalve.com Customer Service 877.963.4966

#### **BSV-Series Dixon/Rieger Sample Valve**



#### Applications

- Used when you need to easily and safely sample liquids from closed systems such as vessels and pipelines.
- They are found in the pharmaceutical, bio-pharmaceutical, biochemical, cosmetic, food processing, beverage, and dairy markets.

#### Sizes

• 1/2" to 4"

#### Features

- · Valve body made from solid bar
- No dead space
- Drainable
- · Connections suitable for orbital welding
- Available with single or dual ports
- Hermetically sealed against environment
- Optimum cleanability
- Change of seals without special tools

#### Specifications

- · Standard clamp connections
- · Sample ports: weld (standard), clamp or hose barb 1/2" only
- Valve data
  - Maximum pressure: 116 PSI
  - Maximum operating temperature: 250°F (121°C)
  - Maximum sterilization temperature (20 min/max): 275°F (135°C)
  - Maximum ambient temperature: 140°F (60°C)
- Actuator data
  - Fastener size: M4 x 7 mm
  - Control air
    - Spring return pressure range: 87-145 PSI (6-10 bar)
    - Maximum temperature: 176°F (80°C)
    - Solids content: 196 microinch (5um) maximum
    - Oil content: .025 ppm (25 mg/m<sup>3</sup>) maximum
- Materials of construction
  - Product contact metal components: 316L stainless steel
  - Non-product contact metal components: 304 stainless steel
  - Product contact seals: PTFE bellows
- Surface finish
  - Product contact metal components: ≤ 32 Ra
  - Non-product contact metal components: ≤ 63 Ra

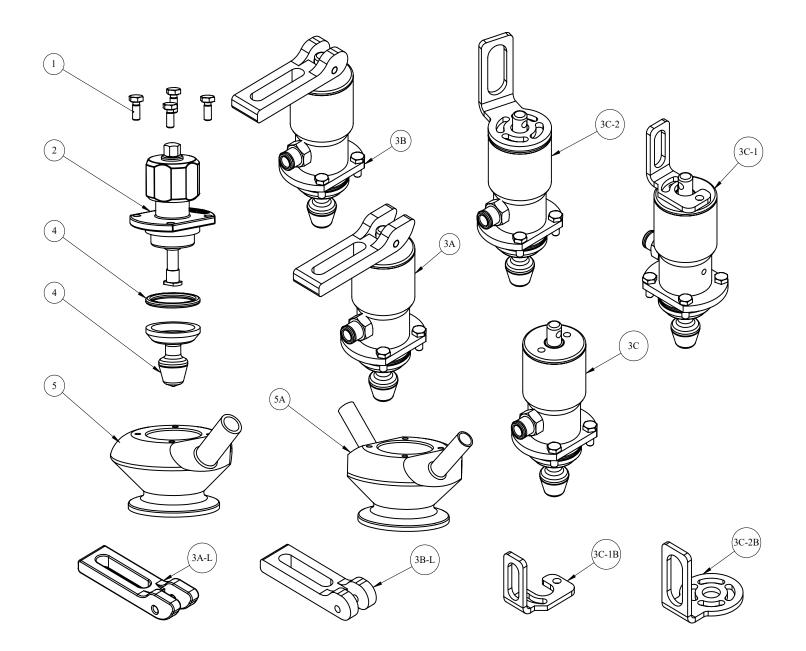


BSV Series Sample Valve Part Number Key Example: BSVS-PC050C025		Series	Туре	-	Actuator	Process End Connection	Process End Connection Size	Sample Port Connection	Sample Port Connection Size	Options
		BSV	S	-	Р	С	050	С	025	
Series	Code									
BSV	BSV	<b>▲</b>								
Туре	Code									
Single port	S									
Dual port	D									
Actuator	Code									
Actuator	Р	◄								
Actuator with open lever	0									
Actuator with self-closing	S									
lever Handwheel	H	_								
Actuator with 8 mm proximity		-								
sensor bracket	J									
Actuator with 12 mm	К									
proximity sensor bracket		_								
Process End Connection	Code	-								
Clamp (standard)	C									
Process End Connection Size	Code	_								
1/2" and 3/4"	050									
1" and 1-1/2"	100									
2"	200									
2-1/2"	250									
3"	300									
4"	400									
Sample Port Connection	Code									
Clamp (1/2" sample ports only)	С									
Weld (standard)	В									
Hose barb (1/2" sample ports only, not 3A)	н									
Sample Port Connection Size	Code									
1/4"	025									
3/8"	375									
1/2"	050									
Options	Code									
Standard 32 Ra finish	Blank									
SF1 finish	Α	1								
SF2 finish	В	1								
SF3 finish	С	1								
SF4 finish	D	1								
SF5 finish	E	-								

# BSV-Series Sample Valve - Part Number Key

The Right Connection®







# **BSV-Series Sample Valve - Bill of Materials**

Item	Size	Part #	Description	Material	Qty
1	NA		M4x7 hex screw	18-8	4
2		BSV-MAN050400	manual handle assembly	304 SS / Polyoxymethylene	1
ЗA		BSV-ACL050400	pneumatic actuator assembly - self closing lever	304 SS / Nylon 6	1
3AL		BSV-LEV-CL	self-closing lever	Nylon 6	1
3B		BSV-AOL050400	pneumatic actuator assembly - normally open lever	304 SS / Nylon 6	1
3BL	1/2" - 4"	BSV-LEV-OP	normally open lever	Nylon 6	1
3C		BSV-ANL050400	pneumatic actuator - no lever	304 SS	1
3C-1		BSV-A8M050400	pneumatic actuator - 8 mm prox bracket	304 SS	1
3C-1B		BSV-PB-8M	8 mm prox bracket (Kit)	304 SS	1
3C-2	BSV-A12M050400		pneumatic actuator - 12 mm prox bracket	304 SS	1
3C-2B	-	BSV-PB-12M	12 mm prox bracket (Kit)	304 SS	1
4		BSV-NRKS050400	repair kit (includes PTFE bellow & O-rings)	PTFE / Silicone	1
	1/2" x 1/4"	BSVS-VBC050B025	1/2" tri-clamp connection / 1/4" single buttweld sample port		
	1/2" x 1/4"	BSVS-VBC050B050	1/2" tri-clamp connection / 1/2" single buttweld sample port		
	1/2" x 3/8"	BSVS-VBC050B375	1/2" tri-clamp connection / 3/8" single buttweld sample port		
	1" x 1/4"	BSVS-VBC100B025	1" tri-clamp connection / 1/4" single buttweld sample port		
	1" x 1/2"	BSVS-VBC100B050	1" tri-clamp connection / 1/2" single buttweld sample port		
	1" x 3/8"	BSVS-VBC100B375	1" tri-clamp connection / 3/8" single buttweld sample port		
	2" x 1/4"	BSVS-VBC200B025	2" tri-clamp connection / 1/4" single buttweld sample port		
	2" x 1/2"	BSVS-VBC200B050	2" tri-clamp connection / 1/2" single buttweld sample port		
5	2" x 3/8"	BSVS-VBC200B375	2" tri-clamp connection / 3/8" single buttweld sample port	316L stainless steel	1
5	2.5" x 1/4"	BSVS-VBC250B025	2-1/2" tri-clamp connection / 1/4" single buttweld sample port	3 TOL Stairliess Steel	1
	2.5" x 1/2"	BSVS-VBC250B050	2-1/2" tri-clamp connection / 1/2" single buttweld sample port		
	2-1/2" x 3/8"	BSVS-VBC250B375	2-1/2" tri-clamp connection / 3/8" single buttweld sample port		
-	3" x 1/4"	BSVS-VBC300B025	3" tri-clamp connection / 1/4" single buttweld sample port		
	3" x 1/2"	BSVS-VBC300B050	3" tri-clamp connection / 1/2" single buttweld sample port		
_	3" x 3/8"	BSVS-VBC300B375	3" tri-clamp connection / 3/8" single buttweld sample port		
	4" x 1/4"	BSVS-VBC400B025	4" tri-clamp connection / 1/4" single buttweld sample port		
	4" x 1/2"	2" BSVS-VBC400B050 4" tri-clamp connection / 1/2" single buttweld sample port			
	4" x 3/8"	BSVS-VBC400B375	4" tri-clamp connection / 3/8" single buttweld sample port		

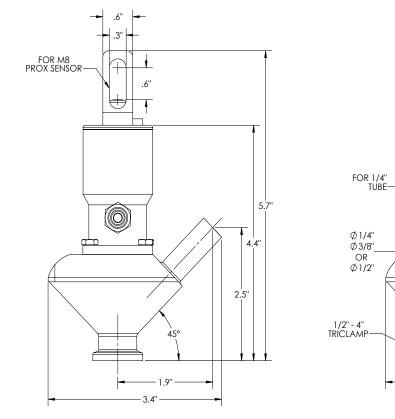
ltem	Size	Part #	Description	Material	Qty
1/2" x 1/2" x 1" x 1 1" x 1 1" x 1 1" x 3 2" x 1 2" x 1 2" x 3 2-1/2" x 2-1/2" x	1/2" x 1/4"	BSVD-VBC050B025	1/2" tri-clamp connection / 1/4" dual buttweld sample ports		
	1/2" x 1/2"	BSVD-VBC050B050	1/2" tri-clamp connection / 1/2" dual buttweld sample ports		
	1/2" x 3/8"	BSVD-VBC050B375	1/2" tri-clamp connection / 3/8" dual buttweld sample ports	_	
	1" x 1/4"	BSVD-VBC100B025	1" tri-clamp connection / 1/4" dual buttweld sample ports		
	1" x 1/2"	BSVD-VBC100B050	1" tri-clamp connection / 1/2" dual buttweld sample ports		
	1" x 3/8"	BSVD-VBC100B375	1" tri-clamp connection / 3/8" dual buttweld sample ports		
	2" x 1/4"	BSVD-VBC200B025	2" tri-clamp connection / 1/4" dual buttweld sample ports		
	2" x 1/2"	BSVD-VBC200B050	2" tri-clamp connection / 1/2" dual buttweld sample ports	_	al 1
	2" x 3/8"	BSVD-VBC200B375	2" tri-clamp connection / 3/8" dual buttweld sample ports	316L stainless steel	
	2-1/2"x 1/4"	BSVD-VBC250B025	2-1/2" tri-clamp connection / 1/4" dual buttweld sample ports		'
	2-1/2" x 1/2"	BSVD-VBC250B050	2-1/2" tri-clamp connection / 1/2" dual buttweld sample ports	_	
	2-1/2" x 3/8"	BSVD-VBC250B375	2-1/2" tri-clamp connection / 3/8" dual buttweld sample ports		
	3" x 1/4"	BSVD-VBC300B025	3" tri-clamp connection / 1/4" dual buttweld sample ports	_	
	3" x 1/2"	BSVD-VBC300B050	3" tri-clamp connection / 1/2" dual buttweld sample ports		
	3" x 3/8"	BSVD-VBC300B375	3" tri-clamp connection / 3/8" dual buttweld sample ports	_	
	4" x 1/4"	BSVD-VBC400B025	4" tri-clamp connection / 1/4" dual buttweld sample ports	_	
	4" x 1/2"	BSVD-VBC400B050	4" tri-clamp connection / 1/2" dual buttweld sample ports		
	4" x 3/8"	BSVD-VBC400B375	4" tri-clamp connection / 3/8" dual buttweld sample ports		

# **BSV-Series Sample Valve - Bill of Materials (continued)**

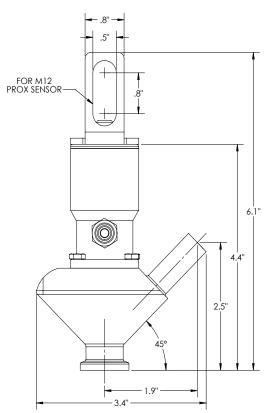


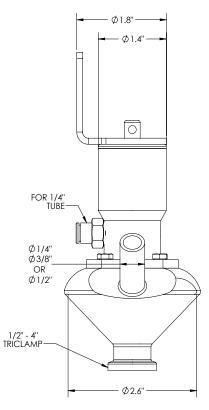
**BSV-Series Sample Valve - Dimensions** 

## Actuated Single Port 8 mm Prox Bracket









Ø1.6"-

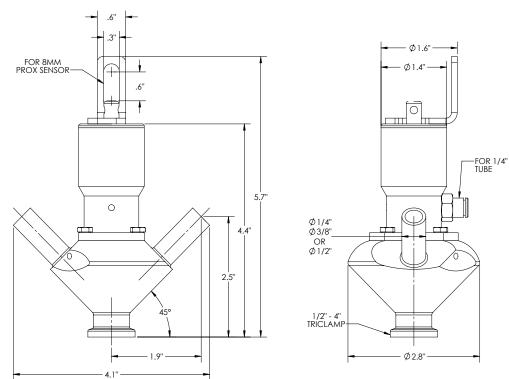
- Ø1.4"

0

m

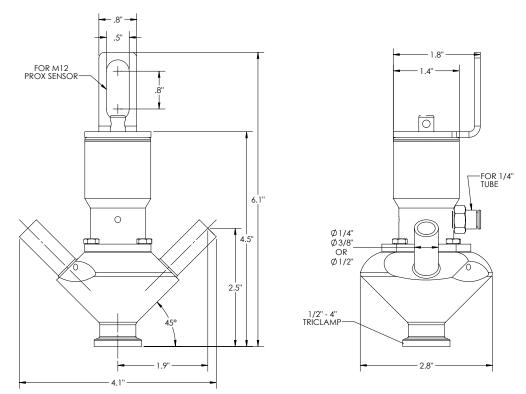
Ø2.8"





#### **Actuated Dual Port 8 mm Prox Bracket**

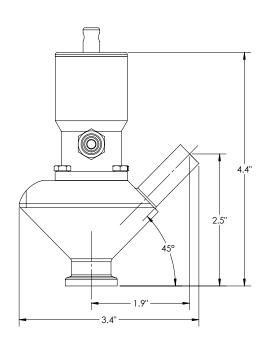
Actuated Dual Port 12 mm Prox Bracket

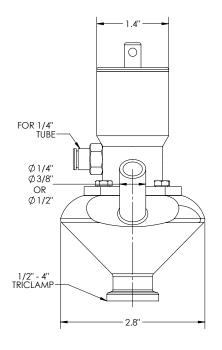




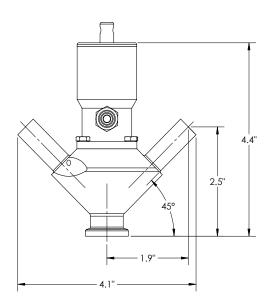
#### **BSV-Series Sample Valve - Dimensions**

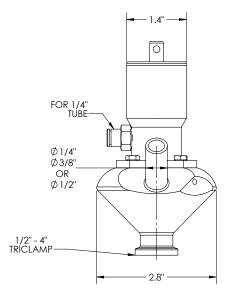
## **Single Port with Actuator**



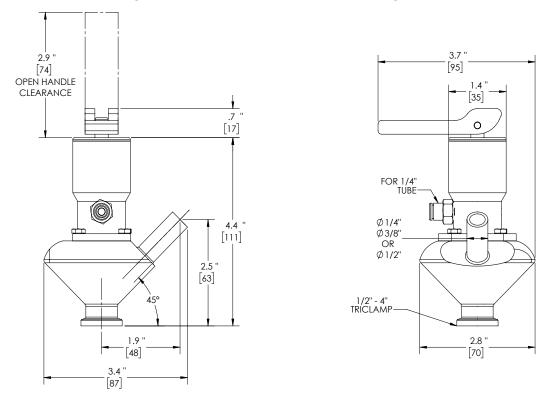


## **Dual Port with Actuator**



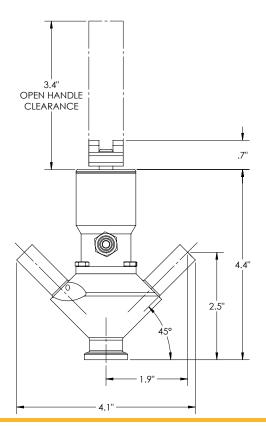


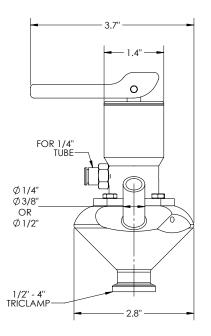




## Single Port with Actuator & Self-Closing Lever



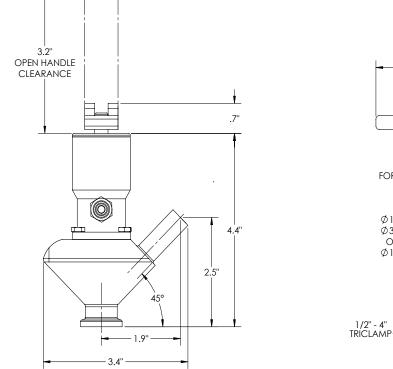


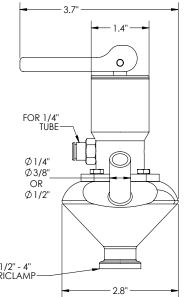




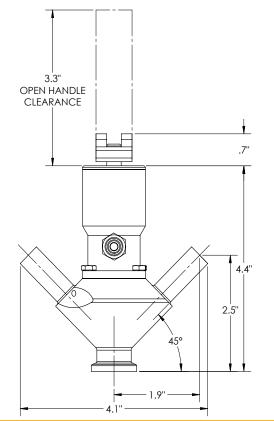
#### **BSV-Series Sample Valve - Dimensions**

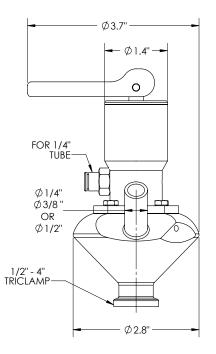






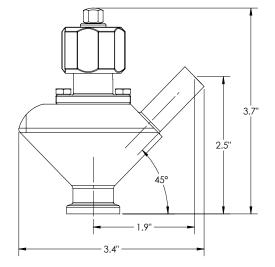
#### **Dual Port with Actuator & Open Lever**

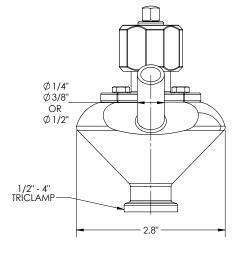




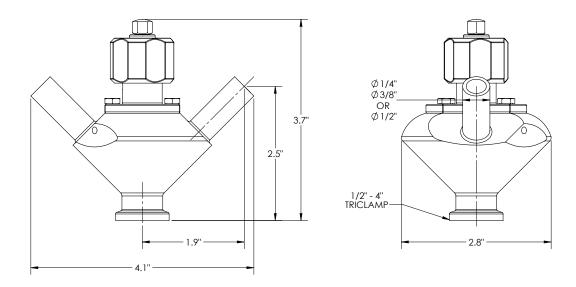
## **BSV-Series Sample Valve - Dimensions**

### **Single Port with Handwheel**





#### **Dual Port with Handwheel**



#### **BSV-Series Sample Valve - Repair Kit**

Valve Size	Repair Kit Part Number
1/2" - 4"	BSV-NRKS050400

NOTE: Repair kit contains: (1) silicone O-ring, (1) PTFE bellows

<b>BSV</b>	/-Se	ries



Notes

#### **Limited Warranty**

DIXON VALVE & COUPLING COMPANY, LLC (herein called "Dixon") warrants the products described herein and manufactured by Dixon to be free from defects in material and workmanship for a period of one (1) year from date of shipment by Dixon under normal use and service. Its sole obligation under this warranty being limited to repairing or replacing, as hereinafter provided, at its option any product found to Dixon's satisfaction to be defective upon examination by it, provided that such product shall be returned for inspection to Dixon's factory within three (3) months after discovery of the defect. The repair or replacement of defective products will be made without charge for parts or labor. This warranty shall not apply to: (a) parts or products not manufactured by Dixon, the warranty of such items being limited to the actual warranty extended to Dixon by its supplier; (b) any product that has been subject to abuse, negligence, accident, or misapplication; (c) any product altered or repaired by others than Dixon; and (d) normal maintenance services and the replacement of service items (such as washers, gaskets, and lubricants) made in connection with such services. To the extent permitted by law, this limited warranty shall extend only to the buyer and any other person reasonably expected to use or consume the goods who is injured in person by any breach of the warranty. No action may be brought against Dixon for an alleged breach of warranty unless such action is instituted within one (1) year from the date the cause of action accrues. This limited warranty shall be construed and enforced to the fullest extent allowable by applicable law.

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Some products and sizes may be discontinued when stock is depleted or may require a minimum quantity for ordering.

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Safety logos, which appear throughout our catalog, are used as a reminder that the user should carefully review for the appropriateness of the product for the media, application, and environment in which it will be used.

NOTE: Because of the health hazards associated with contamination and lead content in drinking water systems, Dixon couplings, unless otherwise specifically approved, are not recommended for potable water service and should not be used in applications where drinking water will contact the wetted surfaces of the coupling.

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