

Bleed Valves & Purge Valves



FloLok[®] BV Series & 4900 Series



Bleed valves up to 10,000 psig (689 bar)



NPT, BSPT and SAE end conections



Wide range of shapes and end connection types and sizes

Purge valves up to 6000 psig (413bar)



316 SS and Alloy 400



316 SS and Brass





At SSP, we are proud to be an American manufacturing success story.

100% of our products are made in America. All of our manufacturing is performed in our 165,000 sq. ft. facility located near Cleveland, Ohio. Our facility is the largest vertically integrated, single-site operation in the industry. In addition to manufacturing and assembly, we have closed die forging, tool & die design, product engineering and testing operations under the same roof with customer service and management.

Made in America is good business. Not only do we make everything in America, we use American suppliers too. Buying American allows us to have better quality control and a more reliable supply chain. We can work more closely within our walls and with our suppliers to improve quality, reduce costs, and shorten lead times, which means faster service and better products for you.

Support where it counts. SSP products and services are supported by more than 4000 people and 350 distributor locations around the globe. For a distributor near you, contact SSP Customer Service or visit www.mySSP.com/distributors.







TABLE of CONTENTS

BV Series Bleed Valves3
Features3
Technical Information4
Ordering Information5 - 6

4900 Series Purge Valves7	
Features7	
Technical Information7 - 8	
Ordering Information9 - 10	

BV Series Bleed Valves

Compact, convenient and 100% factory tested, SSP bleed valves are used to vent signal line pressure before the removal of an instrument or calibration of a instrument or other device. SSP bleed valves are for systems up to 10,000 psig (689 bar) and temperatures up to 850°F (454°C). They are available in 316 SS and Alloy 400 with male NPT, SAE and BSPT ends from 1/8 through 1/2 in.



Features



2

3

Metal to Metal Seal • Allows temperatures from -65 o 850°F

Optional Tee-Bar Handle • 316 SS

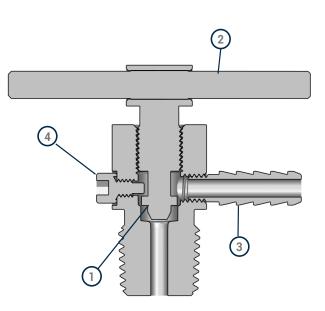
Outlet Options

- Tube Stub
- Hose Barb
- No Tube Stub



Backstop Screw

Prevents blowout or unintentional removal of the valve stem

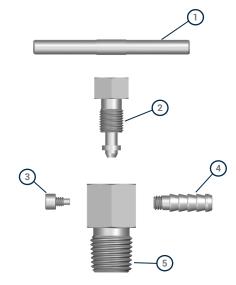


Warning! Bleed valves do not have stem packing. Therefore, operators may be exposed to system media that can escape during operation. Operators should open valves slowly with the vent port directed away from personnel and take appropriate precautions to protect themselve from system fluids.

Technical Information

Materials of Construction

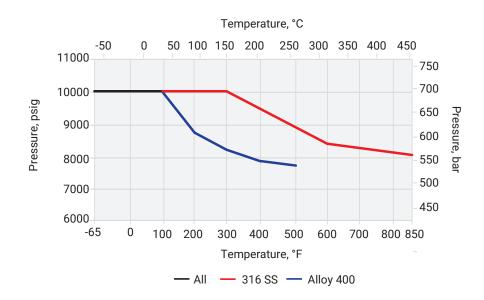
ID	Component	Stainless Steel	Alloy 400	
1	Handle	316 SS / A479	316 SS / A479	
2*	Stem	Chrome Plated 316 SS / A276	Chrome Plated Alloy 400 / B164	
3*	Back Stop Screw	300 Series / A479	Alloy 400/ / B164	
4*	Vent Tube	316 SS / A269	Alloy 400 / B165	
5*	Body ²	316 SS / A479	Alloy 400 / B164	
	Lubricant	Fluorocarbon-based lubricant with Tungsten Disulfide		



Optional tee handle and barbed outlet shown.

*Wetted components ¹Male SAE fitting bodies have FKM o-rings.

Pressure - Temperature



Pressure Temperature Limitations

Alloy 400 Bodies

 Maximum Temperature 500° F (260° C)
SAE Ended Valves

Max. Allowable Pressure

- 4568 psig (315 bar)
- Maximum Temperature 450° (232° C)

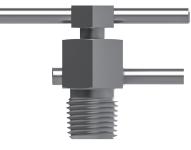
Ordering Information

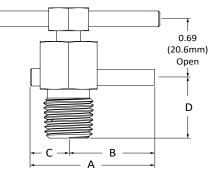
Ordering Instructions

Ordering BV Series valves requires the following steps:

- 1 Locate the Basic Part Number from the Part Number and Dimensions table below.
- 2 Add the designators for options listed on page 6 in alphabetical order.

NOTE: The Part Number and Dimensions Tables contain the most popular part numbers. Valves can be configured with different end connection types and sizes. For valves with other requirements contact your local SSP Distributor or SSP Customer Service.





Part Numbers and Dimensions

End Connections		Basic Part	0	Dimensions, in. (mm)			
Туре	Size	Number	Cv	Α	В	С	D
MALE NPT	1/8	BV2PM		1.34 (34.0)	0.94 (23.9)	0.41 (10.4)	0.71 (19.1)
	1/4	BV4PM	_	1.34 (34.0)	0.94 (23.9)	0.41 (10.4)	0.71 (19.1)
	3/8	BV6PM		1.47 (37.3)	1.03 (26.2)	0.44 (11.2)	0.88 (22.4)
	1/2	BV8PM	0.25	1.47 (37.3)	1.03 (26.2)	0.44 (11.2)	0.92 (22.4)
	7/16-20	BV4MST		1.34 (34.0)	0.94 (23.9)	0.41 (10.4)	0.69 (17.5)
MALE SAE	3/4-16	BV8MST		1.47 (37.3)	1.03 (26.2)	0.44 (11.2)	0.64 (16.0)
MALE ISO/	1/4	BV4MRT		1.34 (34.0)	0.94 (23.9)	0.41 (10.4)	0.71 (19.1)
BSPT	1/2	BV8MRT		1.47 (37.3)	1.03 (26.2)	0.44 (11.2)	0.92 (23.4)



Options & Accessories

Body Materials

Select the body material for your application then add the designator after the end connection designator. *Example: BV8PM-M*

Material	Designator
316 SS	-316
Alloy 400	-M
Alloy C-276*	-HC

* Contact SSP Customer Service for availability.

Vent Options

Select the vent option for your application and add the designator after the material designator. *Example: BV8PM-316-C3*

Material	Designator
No Vent Tube	-NVT
Tube Stub	Blank
Hose Barb	-C3

Stainless Steel Handles

Stainless steel tee-bar handles can be specified by adding -TBH to the part number. *Example: BV8PM-316-TBH*

Option Designators

- Add option designators after end connection & material designators in alphabetical order. Example: BV8PM-316-**C3-TBH**

SSP Lifetime Limited Warranty

SSP valves are backed by the SSP Lifetime Limited Warranty. This warranty is available from your local distributor or at www..com.

Duolok®, Unilok®, Griplok® and TruFit® are registered trademarks of SSP Fittings Corp.

Special Cleaning

BV Series valves are available cleaned in compliance with ASTM G93 Level C and CGA G-4.1, *Cleaning Methods and Cleanliness Levels for Material and Equipment Used in Oxygen-Enriched Environments*. To specify, add -XP98 to the part number. *Example: BV8PM*-316-**XP98**

For more information about other types of special cleaning, please contact your local SSP distributor or SSP Customer Service.

Testing

SSP bleed valves are tested using 1000 psig (69 bar) Nitrogen to have a maximum leak rate across the seat of 0.1 std cm³/min. and no detectable shell leakage when tested using a liquid leak detector.

🔺 Important Information

IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE PERSONAL INJURY AND PROPERTY DAMAGE. It is the sole responsibility of the system designers and users to properly select and use products for their specific applications. This document has been provided to users with technical expertise as a reference for further investigation to determine specific product needs relative to their design requirements.





4900 Series Purge Valves

SSP 4900 Series Purge Valves are used for relief, bleeding or draining of instrument and process lines. One-quarter turn with a wrench achieves shut off up to 6000 psig (413 bar). Knurled caps allow easy operation in low pressure applications. In addition to standard shapes, purge valves can be created from any instrumentation tube end fitting. This provides great flexibility in body shapes and end connections.

General Specification

Feature	316 SS	Brass		
Maximum Working Pressure	6000 psig (413 bar)	3000 psig (206 bar)		
Temperature Range	-65 to 600°F	-65 to 400°F		
	Materials			
Body	316 SS Brass			
Ball	316 SS, PTFE (Optional)			
End Connections				
Types	Duolok, Griplok and Unilok Tube and tube adapter NPT, and SAE pipe ends			
Sizes	1/8 to 3/4 in. 1/8 to 3/4 in.			



Features

2

3

Knurled Stainless Steel or Brass Cap

(2)

 $\langle \langle \rangle \rangle$

- Fast opening and closing
- ¼-turn from finger tight achieves shut off
- Low operating torque

Ball Poppet

- Minimizes sticking
- Reliable resealing
- Optional PTFE ball

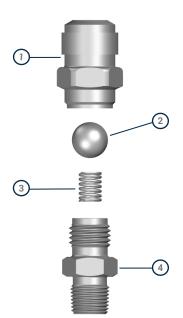
Poppet Spring

- Secures ball poppet against the cap when purging
- Prevents ball or seat damage

Warning! Operator should take appropriate precautions to protect themselve from system fluids that will escape during operation. The direction of the vent changes as the cap rotates. Operators should open valves slowly and ensure that system fluilds are directed away from personnel.

3

Technical Information

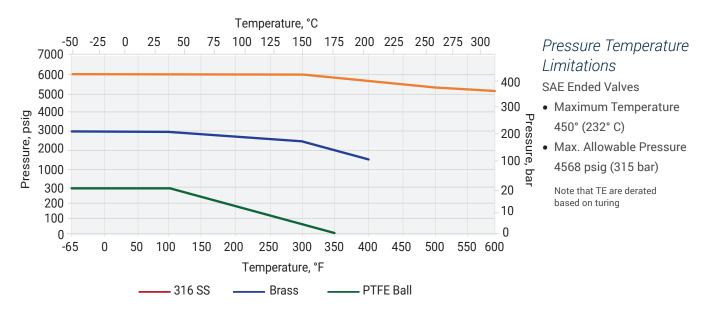


Materials of Construction

ID	Component	316 SS	Brass	
1*	Сар	316 SS / A479	Brass / B16	
2*	Ball	316 SS / A276	316 SS / A276	
3*	Spring	302 SS / A313	302 SS / A313	
4*	Body ¹	316 SS / A479	Brass / B16	
	Lubricant	Molybdenum disulfide-based paste		

¹Male SAE bodies have an Fluorocarbon FKM O-ring. **Wetted components*

Pressure - Temperature







Ordering Information

Ordering Instructions

Ordering 4900 Series valves requires the following steps:

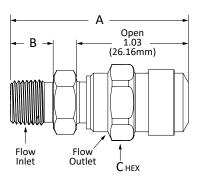
- Locate the Basic Part Number from the Part Number and Dimensions table below.
- (2) Add the designators for options from page 10.

NOTE: The Part Number and Dimensions Tables contain the most popular part numbers. Valves can be configured with different end connection types and sizes. For valves with other requirements contact your local SSP Distributor or SSP Customer Service.

Part Numbers and Dimensions

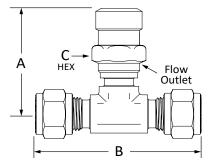
End Conn	ections		Basic Part	Dim	ensions, in. (mm)		
Туре	Size	Cv	Number	Α	В	С	
	1/8		4902	1.86 (46.74)	0.60 (14.99)	5/8	
Fractional	1/4		4912	1.95 (49.28)	0.70 (17.53)	5/8	
Tube Fitting	3/8		4922	2.03 (51.56)	0.76 (19.05)	5/8	
	1/2		4932	2.15 (55.63)	0.90 (22.35)	5/8	
	1/8		4910	1.57 (39.62)	0.54 (13.46)	5/8	
	1/4		4920	1.75 (44.45)	0.72 (18.29)	5/8	
Female NPT	3/8		4930	1.82 (48.01)	0.79 (19.81)	5/8	
	1/2		4940	2.01 (50.29)	0.98 (24.64)	5/8	
Male NPT	1/8	0.08	4906	1.63 (41.15)	0.39 (9.65)	5/8	
	1/4	0.06	4916	1.83 (45.97)	0.57 (14.22)	5/8	
	3/8		4926	1.85 (46.74)	0.57 (14.22)	5/8	
	1/2		4936	2.10 (53.09)	0.76 (19.05)	5/8	
Fractional Tube Adapter	1/8		4952	1.79 (45.47)	0.53 (13.46)	5/8	
	1/4		4954	1.88 (47.50)	0.62 (16.00)	5/8	
	3/8		4956	1.94 (49.28)	0.70 (17.53)	5/8	
	1/2		4958	2.16 (54.61)	0.96 (23.11)	5/8	
SAE Straight	9/16-18		4926ST	1.74 (43.9)	0.39 (9.9)	5/8	
Thread	3/4-14		4928ST	1.82 (46.2)	0.44 (11.2)	5/8	
			Purge Tees				
	1/4		4912T	1.40 (35.6)	2.13 (55.9)	5/8	
Fractional Tube Fitting	3/8	0.08	4922T	1.48 (35.6)	2.40 (55.9)	5/8	
	1/2	0.08	4932T	1.59 (40.4)	2.83 (71.9)	5/8	
	3/4		4942T	1.77 (45.0)	3.13 (79.5)	5/8	













Options & Accessories

Body Materials

Select the body material for your application, then add the designator after the end connection designator. *Example: 4912-B*

Material	Designator
316 SS	-316
Brass	-B

Tube Fitting End Connections

SSP offers three tube fitting designs. Duolok twoferrule tube fittings are standard. To select a different design, select the designator from the table below, then add it to the part number.

Example: 4912-316-U for Unilok tube ends.

Design	Description	Designator
Duolok (Standard)	2-Ferrule	Blank
Unilok	1-Ferrule	U
Griplok	2-Ferrule	G

PTFE Ball Material

316 SS poppet balls are standard. To order PTFE balls, add -TFE to the part number. *Example: 4912-316-TFE*

Special Purge Valve Configurations

Purge valves can be created from any fitting with one 1/4 in. tube fitting end. The

illustrations show purge valves created from a male run tee and a union elbow. For more information, please contact you local SSP Authorized Distributor or SSP Customer Service.



Special Cleaning

4900 Series valves are available cleaned in compliance with ASTM G93 Level C and CGA G-4.1, *Cleaning Methods and Cleanliness Levels for Material and Equipment Used in Oxygen-Enriched Environments*. To specify special cleaning, add -XP98 to the part number. *Example: 4912-316-XP98*

Testing

SSP purge valves are tested using 1000 psig (69 bar) Nitrogen to have a maximum leak rate across the seat of 0.1 std cm³/min. and no detectable shell leakage when tested using a liquid leak detector.

SSP Lifetime Limited Warranty

SSP valves are backed by the SSP Limited Lifetime Warranty. This warranty is available from your local distributor or at www.mySSP.com.

\land Important Information

IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE PERSONAL INJURY AND PROPERTY DAMAGE. It is the sole responsibility of the system designers and users to properly select and use products for their specific applications. This document has been provided to users with technical expertise as a reference for further investigation to determine specific product needs relative to their design requirements.

More SSP Products



Tube Fittings

Duolok and Griplok twoferrule and Unilok® single ferrule tube fittings provide leak-tight installation even when intermixed with Swagelok®, Hoke Gyrolok® and Parker CPI™ fittings.



Valves

The FloLok valve offering includes ball, check, metering, needle, toggle, plug, bleed, and purge valves for pressures up to 10,000 psig.



Tubing

SSP offers straight and coiled seamless 316 stainless steel instrumentation tubing for instrumentation, process and utility applications.



Pipe Fittings

TruFit and TruFit 10K pipe fittings are available in a wide range of weld, threaded and flared connections.



Filters

FloLok in-line and teetype filters trap particles to clean sample fluids and protect sensitive process and analytical instrumentation components and equipment.



Hose

TruFit PTFE-lined and flexible metal core hose assemblies are used in a variety of instrumentation, utility, biopharm and other applications.



Tools & Accessories

SSP TurnPro professional hand tools, power tools and installation training make quality tube system installation faster and easier.



Quick Connects

SSP offers single-end shutoff, double-end shut off, and full-flow quick connects for instrumentation and process applications.



Founded 1926 Privately owned, third generation business Modern single-site vertically integrated manufacturing facility DFARS-compliant raw material ISO 9001 quality management system Lifetime Limited Warranty





The Only 100% American Made Instrument Valves & Fittings

8250 Boyle Parkway • Twinsburg, OH 44087 330-425-4250 • www.mySSP.com

©2021 SSP Fittings Corp. All rights reserved.