Needle Valves

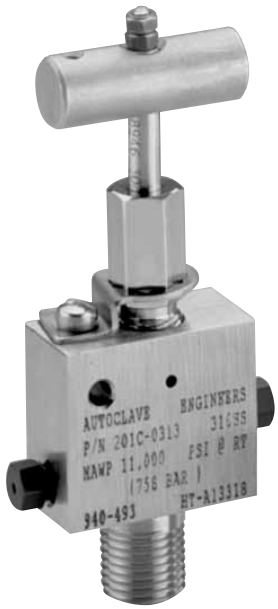
Low Pressure

Bottle Valve Series

Pressures to 15,000 psi (1034 bar)

Since 1945 Parker Autoclave Engineers has designed and built premium quality valves, fittings and tubing. Parker Autoclave Engineers has long been established as the world leader in high-pressure fluid handling components for the chemical/petrochemical, research, and oil and gas industries. Bottle valves are used on sample bottles and cylinders for remote sampling in the oil industry.





Bottle Valve Features:

- BTV Series valve design provides male inlet connections from 1/8" to 1/2" NPT.
- Outlet connections in NPT or tube to 1/4".
- Rising stem/barstock body design.
- Non-rotating stem prevents stem/seat galling.
- Metal-to-metal seating achieves bubble-tight shut-off, longer stem/seat life in abrasive flow, greater durability for repeated on/off cycles and excellent corrosion resistance.
- PTFE encapsulated packing provides dependable stem and body sealing.
- Stem sleeve and packing gland materials have been selected to achieve extended thread cycle life and reduced handle torque.
- Available with Vee stem tips.
- Available in five body patterns.

Parker Autoclave Engineers valves are complemented by a complete line of low pressure fittings, tubing, check valves and line filters. The Bottle Valve Series use Parker Autoclave Engineers' SpeedBite connection. This single-ferrule compression sleeve-connection delivers fast, easy make-up and reliable bubble-tight performance in liquid or gas service.

Parker

Autoclave Engineers

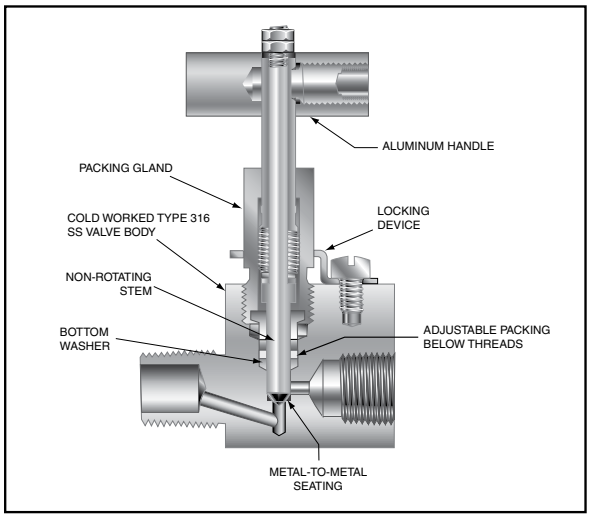
www.autoclave.com

Needle Valves - Bottle Valve Series

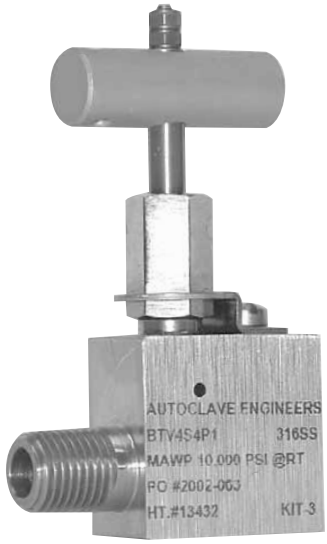
Low Pressure

Valve Series - BTV Series

Pressures to 15,000 psi (1034 bar)



To ensure proper fit use Autoclave tubing



Ordering Procedure

For complete information on available stem types, optional connections and additional valve options, see Needle Valve Options section or contact your Sales Representative. BTV Series valves are furnished complete with connection components, unless otherwise specified.

Typical catalog number: **BTV4S4P1**

BTV	4	S	4	P	1	—	XX
Valve Series	**Male NPT** **2**-1/8” **4**-1/4” **6**-3/8” **8**-1/2”	**Male NPT Position** **F** - Front **S** - Side **B** - Bottom	**Female Port Sizes** **2**-1/8” **4**-1/4” **6**-3/8” **8**-1/2”	**Female Connection Type** **P** - NPT **L** - Low Pressure	**Body Pattern** **1** - Straight **2** - Angle **3** - 3 Way 2 on Pressure *2 **4** - 3 Way 1 on Pressure *1		**Options** **R** - Regulating Stem

*Note: 1 inlet is NPT male
2 inlets are NPT male and 1 female connection

Valve Options

Standard Parker Autoclave valves with PTFE packing may be operated to 450°F (232°C).
R regulating stem

Parker Autoclave Engineers does not recommend compression sleeve connections below 0°F (-17.8°C) or above 650°F(343°C). For additional valve options, contact your Sales Representative.

Valve Maintenance

Repair Kits: add “R” to the front of valve catalog number for proper repair kit. (Example: **RBTV4F2L1**)

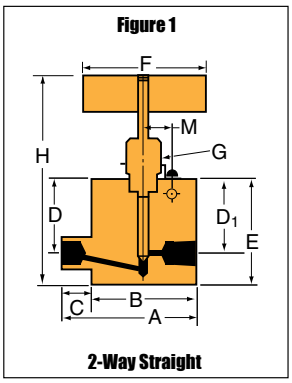
Valve Bodies: Valve bodies are available. Order using the eight (8) digit part number found on the valve drawing or contact your Sales Representative for information.

Consult your Parker Autoclave Engineers representative for pricing on repair kits and valve bodies. Refer to the Tools, Installation, Operation and Maintenance section for proper maintenance procedures.

All general terms and conditions of sale, including limitations of our liability, apply to all products and services sold.

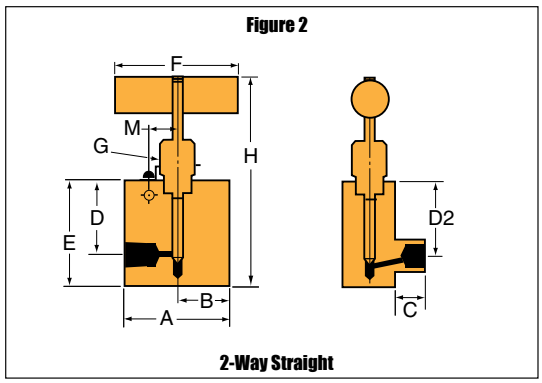
Catalog Number	Stem Type	Pipe/ Tube	Orifice Diameter	Dimensions - inches (mm) A	B	C	D	D_1	D_2	E	F	G	H	M	Block Thickness	Valve Pattern
2-Way Straight																
BTV4S4P1 Side Inlet	VEE	1/4	0.094	2.00	1.31	0.69	0.82	0.82		1.28	1.50	0.61	3.41	0.56	0.75	See Figure 1
		(6.35)	(2.39)	(50.80)	(33.27)	(17.53)	(20.83)	(20.83)		(32.51)	(38.10)	(15.49)	(86.61)	(14.22)	(19.05)	
BTV4F2L1 Front Inlet	VEE	1/8	0.094	1.50	0.75	0.63	0.81		0.88	1.38	1.50	0.61	3.49	0.56	0.63	See Figure 2
		(3.18)	(2.39)	(38.10)	(19.05)	(15.88)	(20.57)		(22.35)	(35.05)	(38.10)	(15.49)	(88.65)	(14.22)	(16.00)	
2-Way Angle																
BTV4B2L2 Bottom Inlet	VEE	1/8	0.094	2.00	1.00	0.81	1.19			1.63	1.50	0.75	4.75	0.62	0.75	See Figure 3
		(3.18)	(2.39)	(50.80)	(25.40)	(20.57)	(30.23)			(41.40)	(38.10)	(19.05)	(120.65)	(15.75)	(19.05)	
BTV4B4P2 Bottom Inlet	VEE	1/4	0.203	1.50	1.00	1.25	1.19			1.63	3.00	0.75	5.30	0.62	0.75	See Figure 3
		(6.35)	(5.16)	(38.10)	(25.40)	(31.75)	(30.23)			(41.40)	(76.20)	(19.05)	(134.62)	(15.75)	(19.05)	

Figure 1



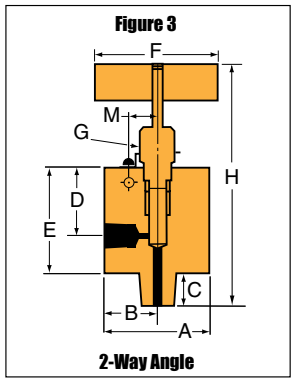
2-Way Straight

Figure 2



2-Way Straight

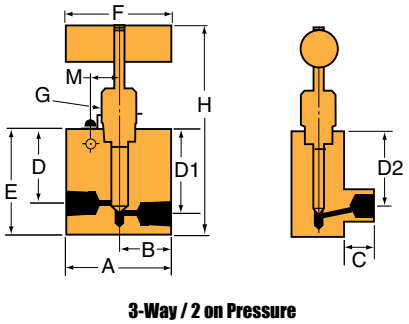
Figure 3



2-Way Angle

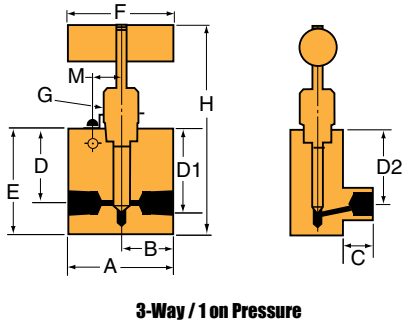
Catalog Number	Stem Type	Pipe/ Tube	Orifice Diameter	Dimensions - inches (mm) A	B	C	D	D_1	D_2	E	F	G	H	M	Block Thickness	Valve Pattern
3-Way/2 on Pressure																
BTV4F2L3 Front Inlet	VEE	1/8	0.094	1.50	0.75	0.63	0.81	1.06	0.88	1.38	1.50	0.75	3.49	0.50	0.75	See Figure 4
		(3.18)	(2.39)	(38.10)	(19.05)	(15.88)	(20.57)	(26.92)	(22.35)	(34.93)	(38.10)	(19.05)	(88.65)	(12.70)	(19.05)	
3-Way/1 on Pressure																
BTV4F2L4 Front Inlet	VEE	1/8	0.094	1.50	.75	0.63	0.81	0.81	0.88	1.38	1.50	0.75	3.49	0.50	0.75	See Figure 5
		(3.18)	(2.39)	(38.10)	(19.05)	(15.88)	(20.57)	(20.57)	(22.35)	(34.93)	(38.10)	(19.05)	(86.66)	(12.70)	(19.05)	

Figure 4



3-Way / 2 on Pressure

Figure 5



3-Way / 1 on Pressure

G - Packing gland mounting hole drill size

** H Dimension is with stem in closed position.*

For prompt service, Parker Autoclave Engineers stocks select products. Consult factory.

All dimensions for reference only and subject to change.

All general terms and conditions of sale, including limitations of our liability, apply to all products and services sold.