



#### Design

- Applicable to gas and liquid.
- Designed to vent system fluid to atmosphere from instrument devices such as manifold and gauge valves.
- Venting through vent tube constructed on the body.
- Back stop screw (with hollow hex 2.5mm) locks up stem in shut-off position. Fully loosen the screw to open the valve, and then unthread the stem.

#### Operation

- Stem hex allows the valve operation by hex. wrench.
- Optional bar handle allows the valve operation manually with no tool.
- Valve vent tube should be directed away from the valve operator for safety.
- While valve is in the open position, fluid may flow through the stem thread due to no stem thread packing. Operator must protect themselves from exposure to system fluids.

#### Materials of Construction

Components	Valve Body Materials	
	SS316	Steel
	Grade / ASTM Standard	
Stem	SS316 / A276, A479	
Body	SS316/A 276	S20C-S45C/ JIS G4051
Back Stop Screw	SS316 / A276	
Vent Tube	SS316 / A269	

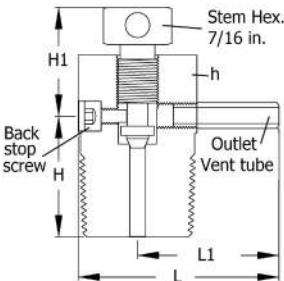
**Lubricant:** Molybdenum disulfide-based

- Carbon steel body is plated with white zinc for corrosion resistance.

#### Pressure – Temperature Ratings

Temp. °F ( °C)	SS316	Steel
-65 to 100 (-53 to 37)	10 000 (689)	10 000 (689)
200 (93)	9290 (640)	9110 (627)
300 (148)	8390 (578)	8860 (610)
400 (204)	7705 (530)	8555 (589)
450 (232)	7435 (512)	8315 (572)
500 (260)	7165 (493)	-
600 (315)	6770 (466)	-
700 (371)	6480 (446)	-
800 (426)	6230 (429)	-
850 (454)	6085 (419)	-

- Min. temperature rating of steel valve: -20 °F (-28 °C).



#### Ordering Information and Dimensions

Complete Ordering Number	Inlet End Connection	Dimensions, mm (in.)					
		L	L1	H	H1	h	
VBL-	M2N-SS	1/8 in. Male NPT	34.0 (1.34)	23.9 (0.94)	19.1 (0.75)	20.6 (0.81)	5/8
	M4N-SS	1/4 in. Male NPT					
	M6N-SS	3/8 in. Male NPT	37.3 (1.47)	26.2 (1.03)	22.4 (0.88)	7/8	
	M8N-SS	1/2 in. Male NPT					

Dimensions shown are for reference only and subject to change.

- Valve orifice: 3.2 mm (0.125 in.); Cv 0.25.
- Vent tube OD: 3/16 in. (4.7 mm).

#### Options

##### SS316 bar handle

50mm (2 in.) long bar handle allows the valve actuation with no tool.

- Ordering designator: **SH**

##### Barbed vent tube

3/16 in. OD barbed tube allows soft plastic or rubber hose connection at the valve outlet for containment of vented fluid.

- Ordering designator: **HA3**

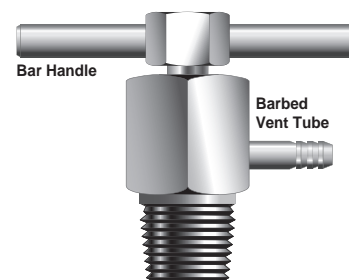
#### How to order

To order, select an applicable valve ordering number.

To order carbon steel valve, replace "SS" with "C" in the ordering number.

To order valve with optional 3/8 in. OD barbed vent tube, insert "HA3".

To order valve with optional SS316 bar handle, insert "SH" in the valve ordering number.



VBL-M2N-SS  
VBL-M2N-C  
VBL-M2N-HA3-C  
VBL-M2N-HA3-SH-C

#### Factory Test

Every valve is tested with nitrogen @ 68 bar (1000 psi) for leakage at the seat to a maximum leak rate of 0.1 std cm<sup>3</sup>/min.

#### Safe Valve Selection

The selection of a valve for any application or system must be considered to ensure safe performance. Valve rating, valve function, material compatibility, proper installation, operation and maintenance remain the sole responsibility of the system designer and the user. HSME Corporation accepts no liability for any improper selection, compatibility, installation, operation or maintenance.