

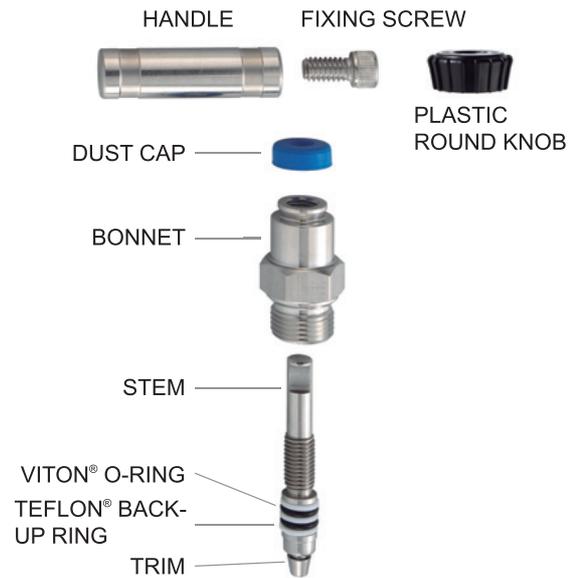
Square Bar Stock Needle Valve
BNV Series



Features

- Maximum working pressure:
6000 psi (414bar) at 100°F (38°C)
- Working temperature:
-22°F (-30°C) to 392°F (200°C)
- Compact design provides economical and long service life.
- Non rotating stem design to reduce the galling and provide excellent seal on seat.
- Stem threads are rolled and lubricated to prevent galling and reduce operating torque.
- Sealing are below the threads protects from the contaminant by process and prevents lubricant washout.
- Safety back seating seal in fully open position to perform a secondary stem seal.
- Body to bonnet seal is metal to metal in constant compression, creating a reliable seal point to eliminate possible tensile breakage of bonnet and isolate bonnet threads from process fluid corrosion.
- Bonnet lock pin prevents accidental removal while in service.
- Hydro test performed with pure water at 1.5 times of working pressure
- 100% factory test
- Material traceability

Material of Construction



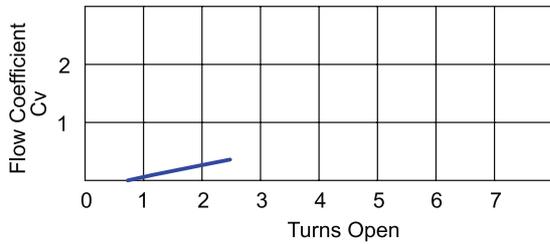
Component	Valve Body Material	
	316L S.S.	Carbon Steel
Body	316L S.S./A479	Carbon Steel/A108
Bonnet	316L S.S./A479	Carbon Steel/A108
Stem	316L S.S./A276	304 S.S./A276
Handle	303 S.S./A276	Carbon Steel/A108
Fixing Screw	302 S.S./A276	Zinc plated steel
Lock Pin	303 S.S./A276	303 S.S./A276
O-Ring	Viton®	Viton®
Back-Up Ring	Teflon®	Teflon®
Dust Cap	NBR	NBR

Note:

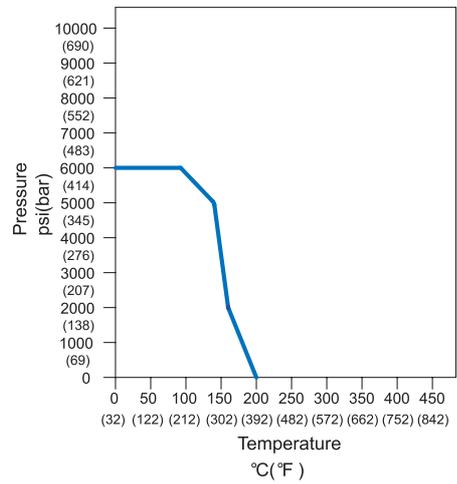
Optional with

1. VEE-LOK twin ferrule tube end
2. panel mountable nuts
3. bleeding screw
4. black plastic round knob

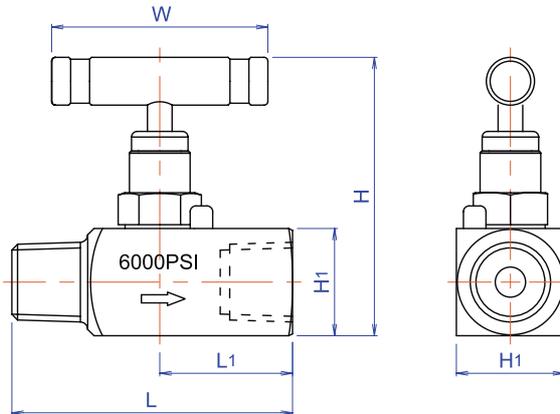
Flow Characteristics



Pressure Vs. Temperature



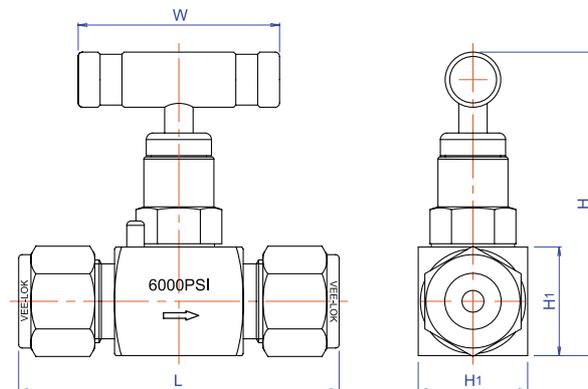
Dimensions



Ordering No.	End Connection		Orifice (bore)	Dimensions (mm)				
	Inlet	Outlet		L	L1	H	H1	W
BNV□2MF	1/8"NPT male	1/8"NPT female	4.8	57	27	64	19	46
BNV□2FF	1/8"NPT female	1/8"NPT female		57	28.5	64	19	46
BNV□4MF	1/4"NPT male	1/4"NPT female		57	27	64	19	46
BNV□4FF	1/4"NPT female	1/4"NPT female		57	28.5	64	19	46
BNV□6MF	3/8"NPT male	3/8"NPT female		65	31	70.5	25.4	57
BNV□6FF	3/8"NPT female	3/8"NPT female		62	31	70.5	25.4	57
BNV□8MF	1/2"NPT male	1/2"NPT female		74	35	74	29	57
BNV□8FF	1/2"NPT female	1/2"NPT female		70	35	74	29	57

All dimensions shown are for reference and subject to change without prior notice.

Sizes listed are standard. Other sizes and end types are available upon request. Refer to ordering information.



Ordering No.	End Connection		Orifice (bore)	Dimensions (mm)			
	Inlet	Outlet		L	H	H1	W
TBNV□2OD	1/8" O.D.	1/8" O.D.	4.8	63.6	46	19	46
TBNV□4OD	1/4" O.D.	1/4" O.D.		65	46	19	46
TBNV□6OD	3/8" O.D.	3/8" O.D.		68	57	25.4	57
TBNV□8OD	1/2" O.D.	1/2" O.D.		73.2	57	25.4	57
TBNV□M6OD	6mm O.D.	6mm O.D.		65	46	19	46
TBNV□M12OD	12mm O.D.	12mm O.D.		73.2	57	25.4	57

Dimensions shown are Vee-Lok twin ferrule tube nuts finger-tightened and subject to change without prior notice. Sizes listed are standard. Other sizes and end types are available upon request. Refer to ordering information.

Standard Material

Valve	Body	Bonnet	Stem	Packing	Trim
316L SS	316-A479	316-A479	316-A276	Viton [®]	316-A276
Carbon Steel	A108	A108	304-A276	Viton [®]	304-A276

Ordering Information

BNV	S		4		MF		Optional	
Series	Body Material		Size		End Connection			
BNV	S	316L S.S.	2	1/8"	M	Male	PN	Panel mountable
TBNV	C	Carbon Steel	4	1/4"	F	Female	B	M6 bleeding screw
			6	3/8"	OD	VEE-LOK twin ferrule tube fittings	R	Plastic round knob
			8	1/2"			BSPT	BSP Taper
			M6	6mm			BSP	BSP parallel
			M12	12mm				

Note:

1. Viton[®], Teflon[®] and Delrin[®] are all registered trademarks of DuPont. Refer to chemical resistance guide and choose suitable elastomer for your application.
2. Carbon steel valves are yellow zinc plated to resist corrosion.