

Hexagonal Bar Stock Needle Valve

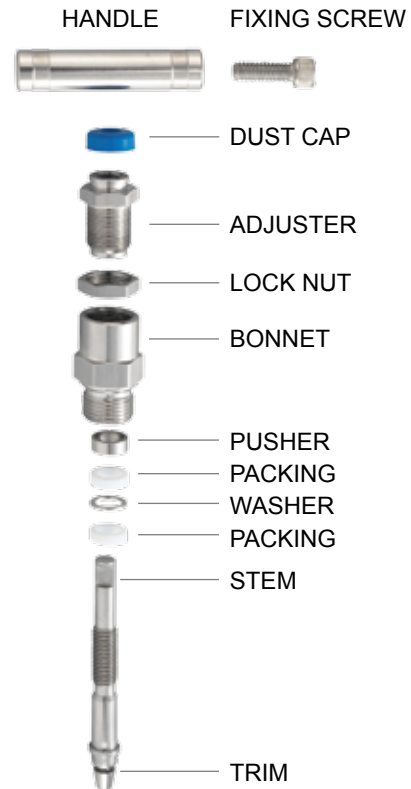
HBNV Series



Features

- Maximum working pressure:
 - 6000 psi (414bar) at 100°F (38°C)
 - 10000 psi (690bar) at 100°F (38°C)
- Working temperature:
 - 65°F (-54°C) to 464°F (240°C)
 - 65°F (-54°C) to 842°F (450°C)
- Teflon[®] packings can be adjusted to extend the valve 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 area 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 creates metal to metal constant and reliable compression.
- Bonnet lock pin prevents accidental removal while in service.
- Optional sour gas service conforms to NACE MR0175.
- Hydro test performed with pure water at 1.5 times of working pressure
- 100% factory test
- Material traceability

Material of Construction

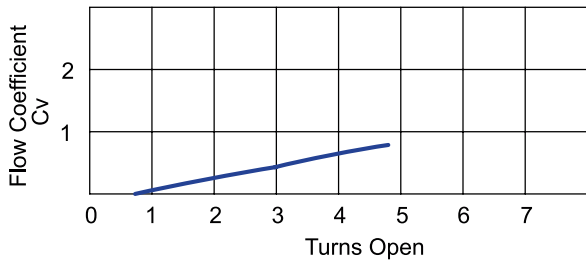


Component	Valve Body Material	
	316 S.S.	Carbon Steel
Body	316 S.S./A479	Carbon Steel/A108
Bonnet	316 S.S./A479	Carbon Steel/A108
Stem	316 S.S./A276	304 S.S./A276
Adjuster	316 S.S./A276	316 S.S. /A276
Lock Nut	316 S.S./A276	Carbon Steel /A108
Handle	303 S.S./A276	Carbon Steel/A108
Fixing Screw	302 S.S.	Zinc plated steel
Packing	Teflon ^{® 1}	Teflon ^{® 1}
Washer	316 S.S./A276	316 S.S./A276
Pusher	316 S.S./A276	316 S.S./A276
Dust Cap	NBR	NBR
Lock Pin	303 S.S./A276	303 S.S./A276
Bleed Screw ²	316 S.S./A276	316 S.S./A276

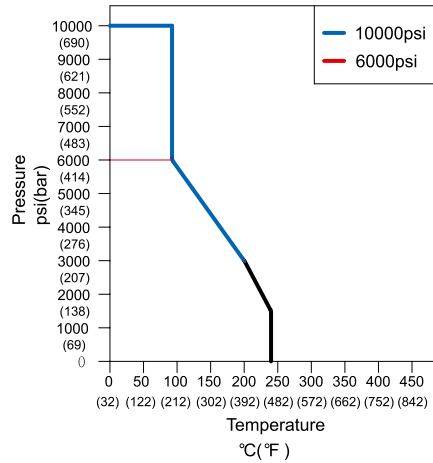
Note:

1. Packing is optional with graphite for high temperature to 450°C.
2. Optional with bleed screw

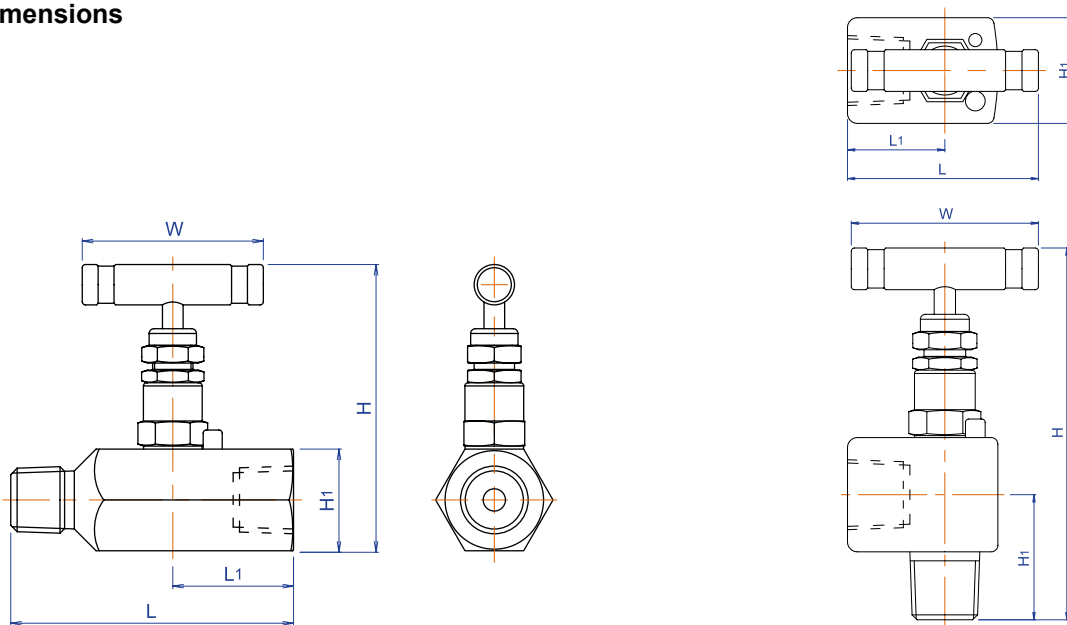
Flow Characteristics



Pressure Vs. Temperature



Dimensions



Ordering No.	End Connection		Orifice (bore)	Dimensions (mm)				
	Inlet	Outlet		L	L1	H	H1	W
HBNV□8MF	1/2"NPT male	1/2"NPT female	6	89	38	90	32	57
HBNV□8FF	1/2"NPT female	1/2"NPT female	6	76	38	90	32	57
HBNV□3412MF	3/4"NPT male	1/2"NPT female	6	89	38	90	32	57
HBNV□12MF	3/4"NPT male	3/4"NPT female	6	89	38	93	35	57
HBNV□12FF	3/4"NPT female	3/4"NPT female	6	76	38	93	35	57
HBNV□16MF	1"NPT male	1"NPT female	6	94	42.5	99	41	57
HBNV□16FF	1"NPT female	1"NPT female	6	85	42.5	99	41	57
HBNV□8MF90	1/2"NPT male	1/2"NPT female	6	-	-	121.3	37.5	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.

Standard Material

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

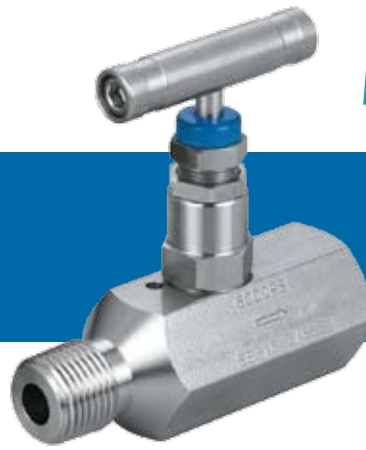
Ordering Information

HBNV	S		8		MF		10 B	
Series	Body Material		Size		End Connection		Optional	
HBNV	S	316 S.S.	4	1/4"	M	Male	90	Angle pattern
	C	Carbon Steel	6	3/8"	F	Female	10	10,000 psi
			8	1/2"			B	Bleeding screw
			12	3/4"			G	Graphite
			16	1"			BSPT	BSPT thread

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.

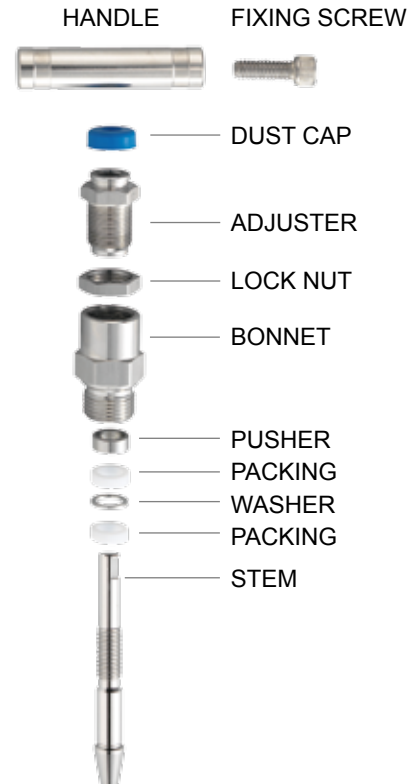
Hexagonal Bar Stock Needle Valve SNV Series



Features

- Maximum working pressure:
6000 psi (414bar) at 100°F (38°C)
- Working temperature:
Delrin[®] Seat: -20°F (-28°C) to 200°F (93°C)
PEEK Seat: -20°F (-28°C) to 400°F (204°C)
- Straight-through design provides high capacity with bi-directional flow and is roddable for easy cleaning.
- Teflon[®] packings can be adjusted to extend the valve life.
- Stem threads are rolled and lubricated to prevent galling and reduce operating torque.
- Sealing area 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.
- Bonnet lock pin prevents accidental removal while in service.
- Optional sour gas service conforms to NACE MR0175.
- Hydro test performed with pure water at 1.5 times of working pressure
- 100% factory test
- Material traceability

Material of Construction

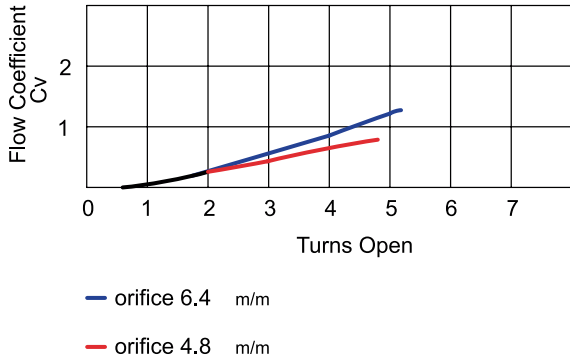


Component	Valve Body Material	
	316 S.S.	Carbon Steel
Body	316 S.S./A479	Carbon Steel/A108
Bonnet	316 S.S./A479	Carbon Steel/A108
Stem	316 S.S./A276	304 S.S./A276
Adjuster	316 S.S./A276	Carbon Steel/A108
Lock Nut	316 S.S./A276	Carbon Steel /A108
Handle	303 S.S./A276	Carbon Steel/A108
Fixing Screw	302 S.S.	Zinc plated steel
Packing	Teflon [®]	Teflon [®]
Washer	316 S.S./A276	316 S.S./A276
Pusher	316 S.S./A276	316 S.S./A276
Dust Cap	NBR	NBR
Lock Pin	303 S.S./A276	303 S.S./A276
Seat	Delrin [®]	Delrin [®]

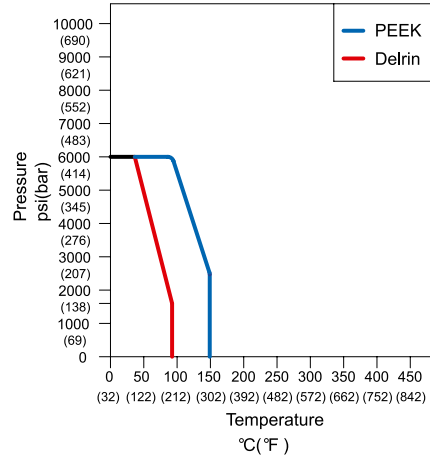
Note:

1. Optional PEEK seat is available.

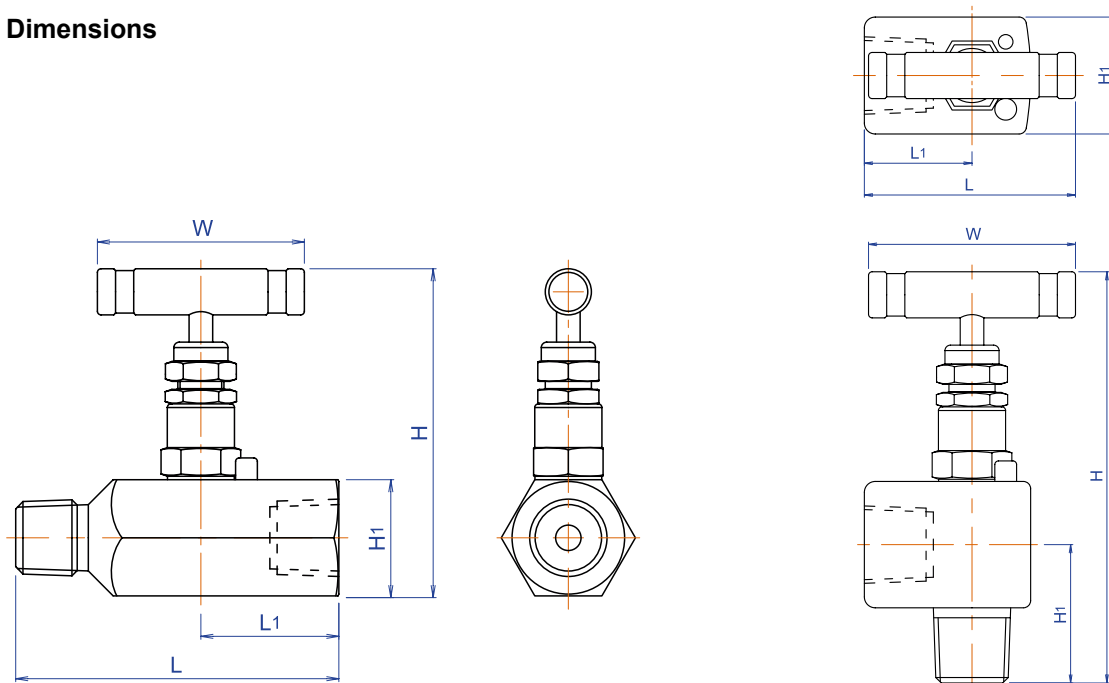
Flow Characteristics



Pressure Vs. Temperature



Dimensions



Ordering No.	End Connection		Orifice (bore)	Dimensions (mm)				
	Inlet	Outlet		L	L1	H	H1	W
SNV□8MF	1/2"NPT male	1/2"NPT female	4.8	89	38	94	32	57
SNV□8FF	1/2"NPT female	1/2"NPT female	4.8	76	38	94	32	57
SNV□12MF	3/4"NPT male	3/4"NPT female	6.4	89	38	96	35	57
SNV□12FF	3/4"NPT female	3/4"NPT female	6.4	76	38	96	35	57
SNV□16MF	1"NPT male	1"NPT female	7	94	42.5	101	41	57
SNV□16FF	1"NPT female	1"NPT female	7	85	42.5	101	41	57
SNV□8MF90	1/2"NPT male	1/2"NPT female	4.8	-	-	121.3	37.5	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.

Standard Material

Valve	Body	Bonnet	Stem	Packing	Seat
316 SS	316-A479	316-A479	316-A276	Teflon® or Viton® Oring with Teflon® backup ring	Delrin®
Carbon Steel	A108	A108	304-A276	Teflon® or Viton® Oring with Teflon® backup ring	Delrin®

Ordering Information

SNV	S		8		MF		90	
Series	Body Material		Size		End Connection		Optional	
SNV	S	316 S.S.	4	1/4"	M	Male	PK	PEEK seat
	C	Carbon Steel	6	3/8"	F	Female	VT	Viton® O-ring with Teflon® back-up rings
			8	1/2"			90	Angle pattern
			12	3/4"			BSPT	BSPT thread
			16	1"				

Note:

1. Valves are standard with Delrin® soft seat and Teflon® packings.
2. Viton®, Teflon® and Delrin® are all registered trademarks of DuPont. Refer to chemical resistance guide and choose suitable elastomer for your application.
3. Carbon steel valves are yellow zinc plated to resist corrosion.