

Mini Series Needle Valves



- **Vee tip design** – Controls accurate flow.
- **Stem threads Rolled & Hard Plated** – Provides additional strength & maximum service life.
- **Mirror Finish Stem, burnished to a 16RMS** – Extends packing life and smooth stem operation
- **Fully Supported Packing** – Reduces need for adjustment.
- **Packing Nut** – Easy and fast to move external adjustment.
- **Stainless Steel Handle** – For proper actuation.
- **Dust Cap** – Prevents contaminants and lubricant washout of bonnet assembly.
- **Maximum Working Pressure** : 4000 PSI (280 bar) at 200 o C. .
- **100% Factory tested.**

Testing

Every Mini Needle Valve is 100% tested with nitrogen gas at 1200psig (80 Bar) for leakage at seal & seat. Hydrostatic test performed with pure water at 1 times of the working pressure. Other optional tests like helium and temperature are available upon request.

I. B. Series Needle Valves



- Bar stock Body construction.
- Straight or Angle Pattern with Panel Mounting optional.
- Metal to Metal or Stellite seats. Stem threads Rolled and hard plated and tie stellite (Vee Regulating one piece or non-regulating) or non-rotating ball tip optional.
- 2 piece Chevron packed offers zero leak, sealing over conventional packing design.

- Variety of End connections include “PANAM” single or twin ferrule tube fittings, Male or Female N. P. T. and I. S. O., DIN and JIS tapered pipe ends.
- **Maximum Working Pressure** : 6000 PSI (400 bar) at 200 o C. 10000 PSI (700 bar) at 120 o C.
- **100% Factory tested.**

H. B. Series Needle Valves



- Hex Bar stock Body construction.
- Straight or Angle Pattern with Panel Mounting optional.
- Metal to Metal or Stellite seats. Stem threads Rolled and hard plated and tie stellite (Vee Regulating one piece or non-regulating) or non-rotating ball tip optional.
- 2 piece Chevron packed offers zero leak, sealing over conventional packing design.
- Variety of End connections include “**Divine Metal Industries**” single or twin ferrule tube fittings, Male or Female N. P. T. and I. S. O., DIN and JIS tapered pipe ends.
- **Maximum Working Pressure** : 6000 PSI (400 bar) at 200 o C. 10000 PSI (700 bar) at 120 o C.
- **100% Factory tested.**

SB Series Needle Valves



Features

- Standard pressure upto 6000 psig, optional pressure upto 10000 psig.
- Derlin seat standard for easier replacement also available in PEEK, PTFE & KEL-F.
- Non rotating vee / Ball tip design which forms a bearing joint with the stem eliminates rotation between plug & seat at closure, This prevents scoring and galling up the valve seat and ensure long life in repetitive shut off service.
- Safety bonnet lock prevents accidental disassembly.
- Stem thread rolled & hard plated for additional strength & maximum service life.
- Mirror finish stem, Furnished to a 16RMS extends packing life and smooth stem operation.
- Adjustable packing below stem threads prevents stem lubrication washout and isolate threads from process contamination.
- Safety back seating provides secondary stem seal in full open position, prevents stem blow out.
- Stainless steel handle for proper actuation.
- Body to bonnet seal metal to metal constant compression, isolate bonnet threads from system fluids and eliminates possible tensile.
- Dust cap prevents contaminants and lubricant washout of bonnet assembly.
- Panel Mounting Option Available.

Testing

Each valve is 100% tested in accordance with MSS-SP-99. This procedure includes testing of the body cavity. Hydrostatic test is performed with pure water or other liquids of similar or lower viscosity at 1.5 times and seat leakage test at 1.1 times of the maximum working pressure.

Each valve is also tested with Nitrogen Gas / Air at 100 psi for seat, seal and shell leakage. Other tests like Vibration, Temperature, Helium are available upon request.

100% Material Traceability.

HARD SEAT NEEDLE VALVE (MALE X FEMALE)

Part.No	P(M/F)	L	H-SQUARE	A-OP
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DNV-SB-H-S-04-MF	1/4"	60	27	93.5
DNV-SB-H-H-06-MF	3/8"	60	27	93.5
DNV-SB-H-S-08-MF	1/2"	80	32	96.5
DNV-SB-H-S-M20-MF	M20 X 1.5	80	32	96.5
DNV-SB-H-S-12-MF	3/4"	95	42	117
DNV-SB-H-S-16-MF	1"	100	45	118

HARD SEAT NEEDLE VALVE (FEMALE X FEMALE)

Part.No.	P(F/F)	L	H-SQUARE	A-OP
DNV-SB-H-S-04-FF	1/4"	55	27	93.5
DNV-SB-H-S-06-FF	3/8"	55	27	93.5
DNV-SB-H-S-08-FF	1/2"	75	32	96.5
DNV-SB-H-S-M20-FF	M20 X 1.5	75	32	96.5
DNV-SB-H-S-12-FF	3/4"	80	42	117
DNV-SB-H-S-16-FF	1"	95	45	119

HARD SEAT BLOCK & BLEED VALVE (MALE X FEMALE)

Part.No.	P(M)	P(F)	L	H-SQUARE	A-OP
DBB-SB-H-S-04-MF	1/4"	1/4"	70	27	93.5
DBB-SB-H-S-06-MF	3/8"	3/8"	70	27	93.5

DBB-SB-H-S-08-MF	1/2"	1/2"	85	32	96.5
DBB-SB-H-S-M20-MF	M20 X 1.5	20	85	32	96.5
DBB-SB-H-S-128-MF	3/4"	1/2"	85	32	96.5
DBB-SB-H-S-12-MF	3/4"	3/4"	100	42	117
DBB-SB-H-S-16-FF	1"	1"	110	45	119

HARD SEAT BLOCK & BLEED VALVE (FEMALE X FEMALE)

Part.No.	P(F/F)	L	SQUARE	A-OP
DBB-SB-H-S-04-FF	1/4"	65	27	93.5
DBB-SB-H-S-06-FFF	3/8"	65	27	93.5
DBB-SB-H-S-08-FF	1/2"	80	32	96.5
DBB-SB-H-S-M20-FF	M20 X 1.5	80	32	96.5
DBB-SB-H-S-12-FF	3/4"	90	42	117
DBB-SB-H-S-16-FF	1"	100	45	119

SOFT SEAT NEEDLE VALVE (MALE X FEMALE)

Part.No.	P(M/F)	L	H-SQUARE	A-OP
DNV-SB-S-S-04-MF	1/4"	60	27	93.5
DNV-SB-S-S-06-MF	3/8"	60	27	93.5
DNV-SB-S-S-08-MF	1/2"	80	32	96.5

DNV-SB-S-S-M20-MF	M20 X 1.5	80	32	96.5
DNV-SB-S-S-12-MF	3/4"	95	42	117
DNV-SB-S-S-16-MF	1"	100	45	118

SOFT SEAT NEEDLE VALVE (FEMALE X FEMALE)

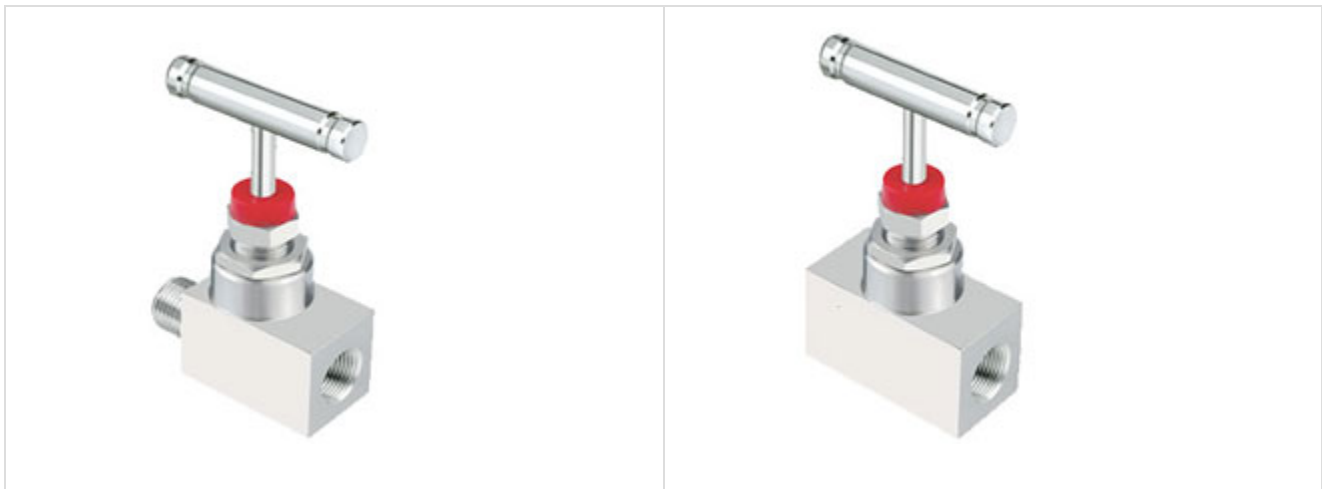
Part.No.	P(F/F)	L	H-SQUARE	A-OP
DNV-SB-S-S-04-FF	1/4"	55	27	93.5
DNV-SB-S-S-06-FF	3/8"	55	27	93.5
DNV-SB-S-S-08-FF	1/2"	75	32	96.5
DNV-SB-S-S-M20-FF	M20 X 1.5	75	32	96.5
DNV-SB-S-S-12-FF	3/4"	80	42	117
DNV-SB-S-S-16-FF	1"	95	45	119

SOFT SEAT BLOCK & BLEED VALVE (MALE X FEMALE)

Part.No.	P(M)	P(F)	L	H-SQUARE	A-OP
DBB-SB-S-S-04-MF	1/4"	1/4"	70	27	93.5
DBB-SB-S-S-06-MF	3/8"	3/8"	70	27	93.5
DBB-SB-S-S-08-MF	1/2"	1/2"	85	32	96.5
DBB-SB-S-S-M20-MF	M20 X 1.5	M20 X 1.5	85	32	96.5
DBB-SB-S-S-128-MF	3/4"	1/2"	85	32	96.5

DBB-SB-S-S-12-MF	3/4"	3/4"	100	42	117
DBB-SB-S-S-16-FF	1"	1"	110	45	119
SOFT SEAT BLOCK & BLEED VALVE (FEMALE X FEMALE)					
Part.No.	P(F/F)	L	SQUARE	A-OP	
DBB-SB-S-S-04-FF	1/4"	65	27	93.5	
DBB-SB-S-S-06-FF	3/8"	65	27	93.5	
DBB-SB-S-S-08-FF	1/2"	80	32	96.5	
DBB-SB-S-S-M20-FF	M20 X 1.5	80	32	96.5	
DBB-SB-S-S-12-FF	3/4"	90	42	117	
DBB-SB-S-S-16-FF	1"	100	45	119	

HP Series Needle Valves



- **One piece body construction no welding** – For high strength and full safety.
- **Vee tip design** – Controls accurate flow.
- **Stem threads rolled & hard plated** – Provides additional strength & maximum service life.
- **Mirror finish stem, furnished to a 16 RMS** – Extends packing life and smooth stem operation.
- **Stainless steel handle** – For proper actuation.
- **Dust cap** – Prevents contaminants and lubricant washout of bonnet assembly.

Testing

Each valve is hydrostatically tested in accordance with MSS-SP-99. This procedure includes testing of the body cavity. Hydrostatic test is performed with pure water or other liquids of similar or lower viscosity at 1.5 times and seat leakage test at 1.1 times of the maximum working pressure. Each valve is also tested with Nitrogen Gas at 1000 psi for seat, seal and shell leakage. Other tests like Vibration, Temperature, Helium are available upon request.

DIMENSION						
Part.No.	Size	A(MF)	A(FF)	S-SQ	H	L
DNV-HP-S-4-MF DNV-HP-S-4-FF	1/4"	60	55	25	86	60
DNV-HP-S-6-MF DNV-HP-S-6-FF	3/8"	60	55	28	86	60
DNV-HP-S-8-MF DNV-HP-S-8-FF	1/2"	82	75	34	98	70
DNV-HP-S-12-MF DNV-HP-S-12-FF	3/4"	87	80	38	98	70