

IB Series - Needle Valves

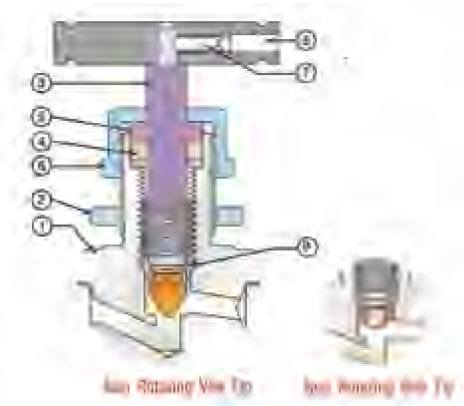
Sync-Lok IB Series Needle Valves are specially designed and ruggedly manufactured for use in corrosive & hazardous conditions. Our valves are precision machined for maximum durability & efficiency to provide a high quality, low cost alternative in fluid & gaseous control systems to meet the demands of our customers. All valves are available in high-grade stainless steel, carbon steel, brass & monel. End connections are available in M/F threaded NPT, BSP, BSPT, ISO, DIN and JIS tapered ends.

Features / Benefits

- One Piece Body** - no weld construction for high strength and full safety
- Non-Rotating Vee / Ball Tip Design** - forms a bearing joint with the stem which eliminates rotation between plug & seat @ closure. This prevents scoring and galling up the valveseat and ensures long life in repetitive shut-off service.
- Stem Thread Rolled & Hard Platted** - provides additional strength & maximum service life.
- Mirror Finish Stem (Burnished to a 16 RMS)** - extends packing life and smooth stem operation.
- Stainless Steel Handle** - for proper actuation.

Materials of Construction

SR No	Part	Qty	Material
1	Body	1	A479-316 / A-105
2	Panel Nut	1	A479-316 / A-105
3	Stem	1	A479-316 / 17-4PH
4	Packing	1	Teflon / Graphoil
5	Washer	1	A479-316
6	Gland Nut	1	A479-316
7	Grub Screw	1	Steel Plated
8	Handle	1	Stainless Steel
9	Vee Tip / Ball Tip	1	A 564-630



Pressure / Temperature Ratings

Valve Size	Orifice	Cv	Max Working Pressure	Temp	Pressure @ Max. Temp
1/4"	3.5mm	0.31	6,000 psi (41,300 kpa)	PTFE -20° to 250° F (-29° to 121° C)	PTFE 4000 psi @ 260° C
3/8"					
1/2"	4.8mm	0.52		Graphoil -29° to 600° F (-29° to 315° C)	Graphoil 1500 psi @ 538° C
3/4"	6.4mm	1.40			
1"	9.5mm	2.4			

Testing

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

*Each valve is also tested with Nitrogen Gas @ 1,000 PSI for seat, seal and shell leakage.
Other tests like vibration, temperature and helium are available upon request.*