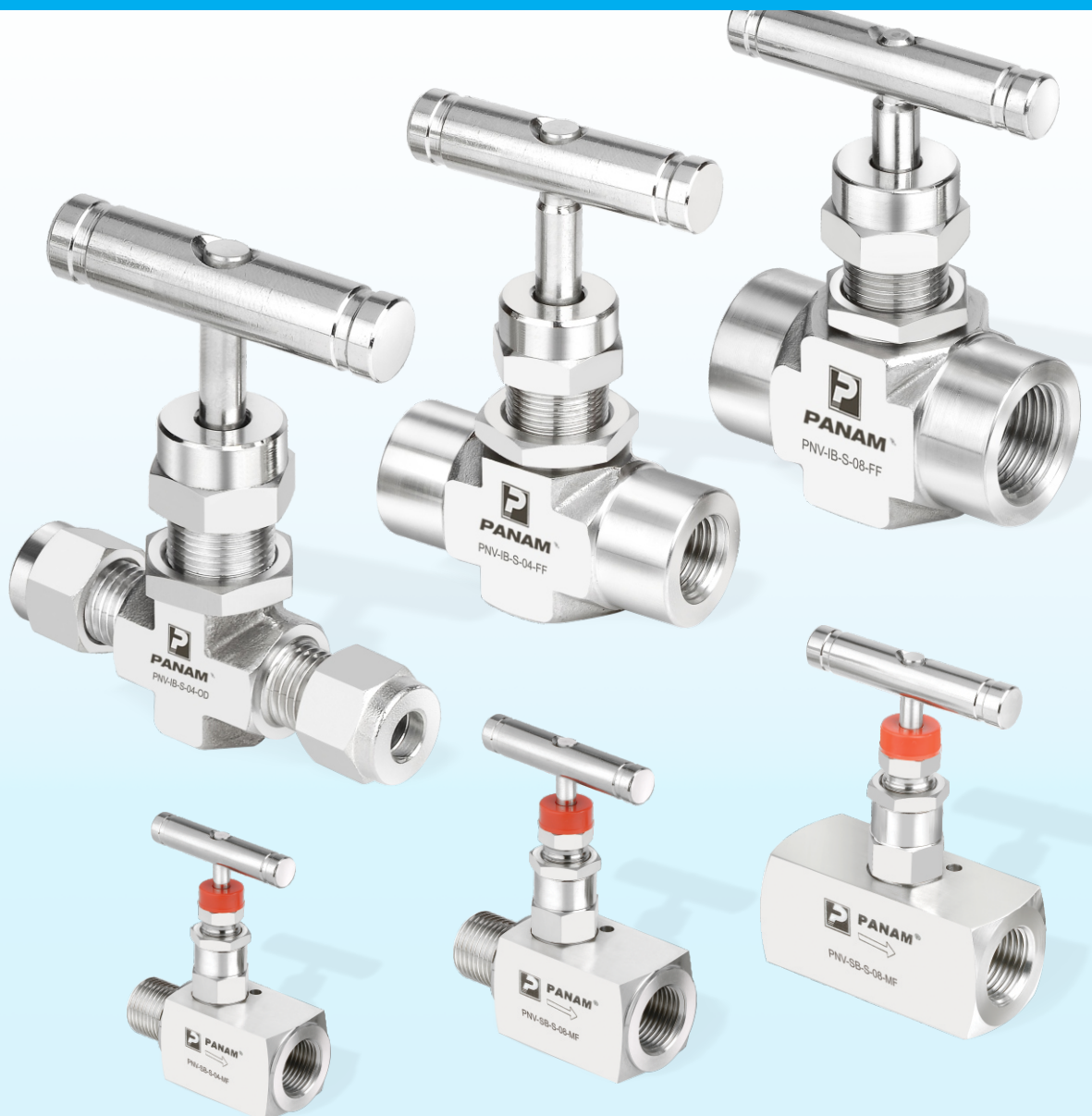


Needle Valves (IB Series)



www.panamengineers.com

Features & Benefits

PANAM "IB" Series Needle Valves are specially designed and manufactured for use in rugged, corrosive & hazardous environments. Valves are used in process control, instrumentation and flow control applications. Valves are precision machined, designed for durability and maximum efficiency and provide high quality, low cost alternatives used in a wide variety of fluid and gaseous control systems.

PANAM strives to exceed the exacting standards of our growing and demanding customers. **PANAM** "IB" series needle valves are available in high grade stainless steel, carbon steel, brass and monel materials in variety of end connections includes male / female threaded NPT, BSP, BSPT, ISO, DIN and JIS tapered pipe ends.

Valves can be supplied to meet current revision of NACE MR-01 - 75 (Sour Gas Service)

All Valves are 100% factory tested and complete traceability is available upon request.

Features & Benefits

One Piece Body Construction No Welding Used - For high strength and fully safety.

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.

Stem Thread Rolled & Hard Plated

- Provides additional strength & maximum service life.

Mirror Finish Stem, Furnished to a 16RMS

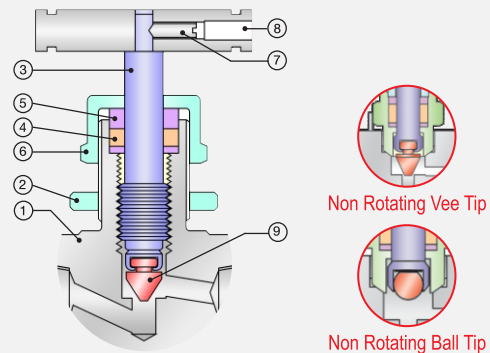
- Extends packing life and smooth stem operation.

Stainless Steel Handle

- For proper actuation

Material of Construction

Sr. No.	Part	Qty.	Material
1.	Body	1	A479-316
2.	Panel Nut	1	A479-316
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"	3.5 mm	0.31	6000 psi (41300 kpa)	PTFE	PTFE
3/8"				-20° to 250° F -29° to 121° C	4000 psi @ 260° C
1/2"	4.8 mm	0.52		GRAPHOIL	GRAPHOIL
3/4"	6.4 mm	1.40		-29° to 600° F -29° to 315° C	1500 psi @ 538° C
1"	9.5 mm	2.40			

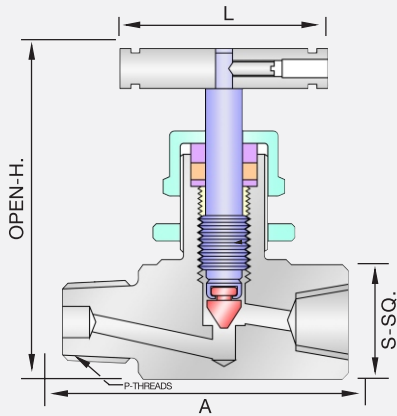
Testing

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.

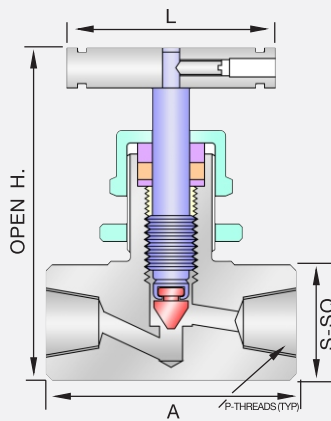
Other tests like Vibration, Temperature, Helium are available upon request.

Needle Valve (Male x Female)



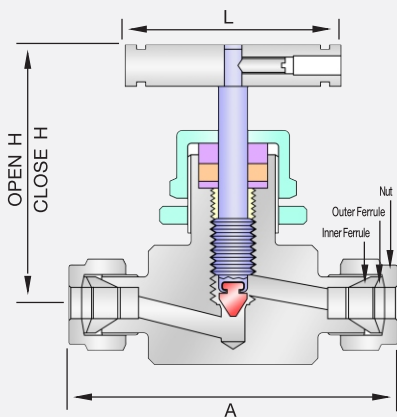
PART NO.	P-NPT (M/F)	A	S-SQ.	H	L
PNV-IB-S-02-MF	1/8"	45.5	15.0	61.0	50.0
PNV-IB-S-04-MF	1/4"	53.0	22.5	69.0	50.0
PNV-IB-S-06-MF	3/8"	54.0	25.0	70.0	50.0
PNV-IB-S-08-MF	1/2"	70.0	32.0	80.0	60.0
PNV-IB-S-12-MF	3/4"	85.0	45.0	122.0	80.0
PNV-IB-S-16-MF	1"	85.0	45.0	122.0	80.0

Needle Valve (Female x Female)



PART NO.	P-NPT (F/F)	A	S-SQ.	H	L
PNV-IB-S-04-FF	1/4"	54.0	22.5	69.0	50.0
PNV-IB-S-06-FF	3/8"	53.0	26.0	70.0	50.0
PNV-IB-S-08-FF	1/2"	64.4	32.0	73.0	60.0
PNV-IB-S-12-FF	3/4"	80.0	45.0	122.0	80.0
PNV-IB-S-16-FF	1"	80.0	45.0	122.0	80.0

Needle Valve (OD x OD)



PART NO.	P-NPT (M/F)	A	S-SQ.	H	L
PNV-IB-S-02-OD	1/8"	61.0	16.0	62.0	50.0
PNV-IB-S-04-OD	1/4"	60.7	15.5	64.0	50.0
PNV-IB-S-06-OD	3/8"	60.4	15.6	61.0	50.0
PNV-IB-S-08-OD	1/2"	71.0	22.5	69.0	50.0
PNV-IB-S-12-OD	3/4"	90.0	36.0	122.0	80.0
PNV-IB-S-16-OD	1"	90.0	40.0	122.0	80.0
PNV-IB-S-M04-OD	4mm	61.0	15.0	63.0	50.0
PNV-IB-S-M06-OD	6mm	61.0	15.0	63.0	50.0
PNV-IB-S-M08-OD	8mm	61.0	15.0	63.0	50.0
PNV-IB-S-M10-OD	10mm	69.0	18.0	64.0	50.0
PNV-IB-S-M12-OD	12mm	73.5	22.5	68.0	50.0

All Above Part No are For SS 316 / Add "C" for A 105 / Add "B" for Brass
Needle Valve IB Series are Also Available in Soft Seat

WARNING: Inadequate care improper utilization of the product can cause intense and excessive damage to life and property. PANAM's products are at your liable use and at the behest of the user's responsibility to check and analyses the product in which it is going to be further inserted in to, so that the same functions properly and the relevant product is also very important for all safe guard and also precautions to be taken before the user puts the product in to service.



PANAM ENGINEERS LTD.

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