

**PANAMA**

# **NEEDLE VALVE**

**I. B. Series**



Catalogue No. NV-IB-1  
June 2003.

## I. B. Series - Needle Valve

**PANAM** "IB" Series Needle Valves are specially designed and ruggedly manufactured for use in corrosive & hazardous environment. These valves are used in Process control, instrumentation and flow control applications.

Valves are precision machined, designer durability and maximum efficiency to provide high quality and low cost alternatives in fluid and gaseous control systems of different applications, to meet the exacting standards of our growing and demanding customers.

**PANAM** "IB" Series 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 MR01-75 (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

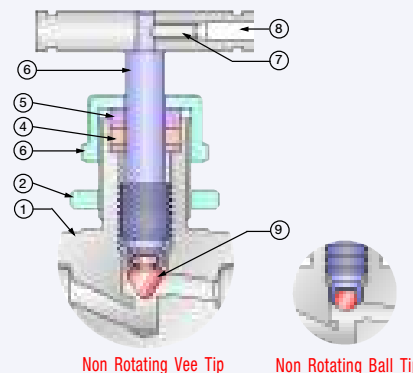
**Stem thread Rolled & Hard Plated** - Provides additional strength & maximum service life

**Mirror Finish Stem, burnished 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	Pannel Nut	1	A479-316
3	Stem	1	A479-316
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	17-4 PH



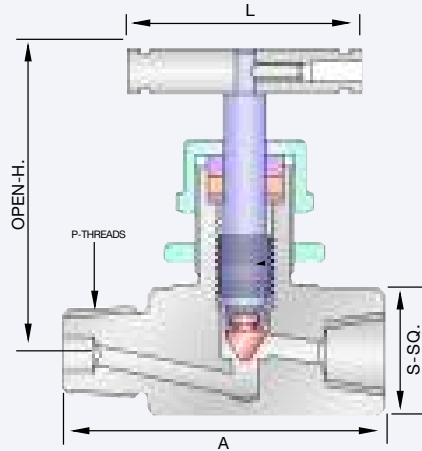
### Pressure / Temperature Ratings

Valve Size	Orifice	Cv	Max.Working Pressure	Temp	Pressure @ Max. Pressure
1/4"	3.5mm	0.31	6000 psi ( 41300 kpa)	<b>PTFE</b>	
3/8"				-20° to 250° F -29° to 121° C	4000 psi @ 230° C
1/2"	4.8mm	0.52		<b>GRAPHOIL</b>	
3/4"	6.4mm	1.40		-29° to 600° F -29° to 315° C	3600 psi @ 230° C
1"	9.5mm	2.40			

### Standard Testings

Every **PANAM** "IB" series Needle Valve is 100% tested with nitrogen gas at 1200psig (80 Bar) for leakage at seal & seat. Hydrostatic test performed with pure water at 1½ times of the working pressure. Other optional tests like helium , temperature, seismic are available upon request.

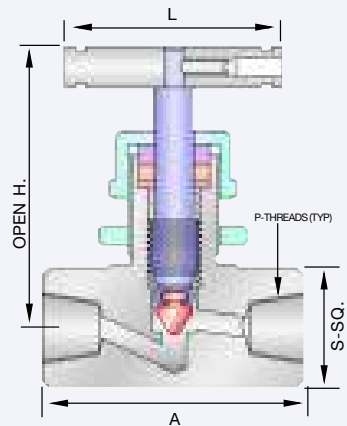
## Needle Valve I. B. Series MF



### Dimensions:-

Part No.	P-NPTF	A	S-SQ.	H	L
PNV-IB-S-4-MF	1/4"	55	22	69	60
PNV-IB-S-6-MF	3/8"	55	25	69	60
PNV-IB-S-8-MF	1/2"	73	30	83	60
PNV-IB-S-12-MF	3/4"	80	36	89	70
PNV-IB-S-12-MF	1"	88	45	102	70

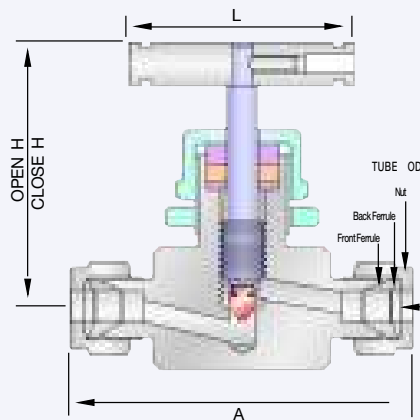
## Needle Valve I. B. Series FF



### Dimensions:-

Part No.	P-NPTF	A	S-SQ.	H	L
PNV-IB-S-4-FF	1/4"	50	22	69	50
PNV-IB-S-6-FF	3/8"	50	25	69	60
PNV-IB-S-8-FF	1/2"	68	30	83	60
PNV-IB-S-12-FF	3/4"	70	36	89	70
PNV-IB-S-12-FF	1"	88	45	102	70

## Needle Valve I. B. Series OD.



### Dimensions:-

Part No.	TUBE OD.	A	CLOSE-H	OPEN-H	L
PNV-IB-S-4-OD	1/4"	50	22	69	50
PNV-IB-S-6-OD	3/8"	50	25	69	60
PNV-IB-S-8-OD	1/2"	68	30	83	60
PNV-IB-S-12-OD	3/4"	70	36	89	70
PNV-IB-S-12-OD	1"	80	45	102	70

\* NEEDLE VALVE I. B. SERIES ARE ALSO AVAILABLE IN SOFT SEAT

**WARNING:** Inadequate care and improper utilisation 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 analyse 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***  
**AN ISO 9001:2000 COMPANY**

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