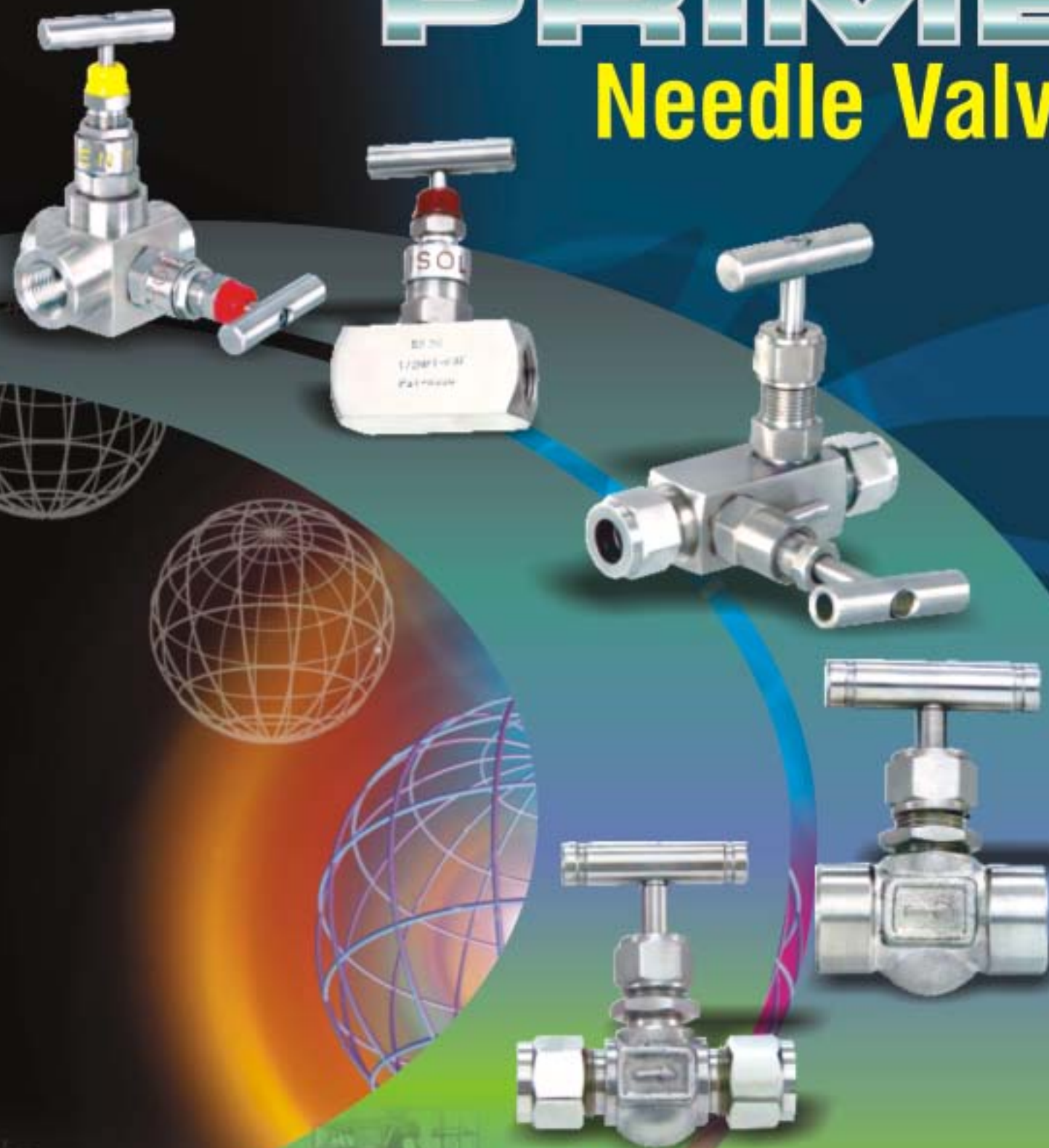


# PRIME Needle Valve



## NEEDLE VALVE

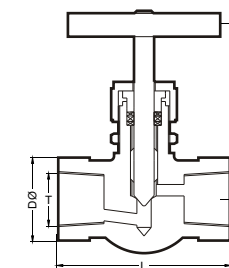
### NEEDLE VALVE

'PRIME' Needle valves are made for various operating pressure and temperatures. Looking at ever increasing demand and variety of applications, we have developed special purpose valves for instrumentation and flow control application.

DESIGN: Needle valves are also known as isolation valve, shut off valve or regulatory valve. Rotating angle tipped spindle, which in turn moves axially over the orifice seat, controls flow of the fluid. At the lower most position or closed position of the spindle, inlet orifice is completely blocked and thus isolates the fluid flow. In open condition Teflon or Grafoil packing seal restricts the leakage from the bonnet end.

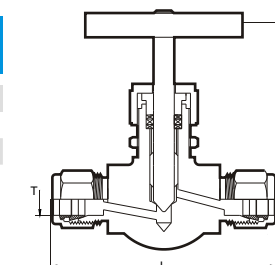
#### Forged Body Needle Valve - Female end

PART NO.	SIZE	T NPT(F)	D	L	H Open
PNV-FB-S-2FF-T	1/8"	1/8"	0.79	1.97	2.28
PNV-FB-S-4FF-T	1/4"	1/4"	0.79	1.97	2.28
PNV-FB-S-6FF-T	3/8"	3/8"	0.98	1.97	2.44
PNV-FB-S-8FF-T	1/2"	1/2"	1.26	2.52	2.87
PNV-FB-S-12FF-T	3/4"	3/4"	1.42	2.52	3.07
PNV-FB-S-16FF-T	1"	1"	1.69	3.31	3.94



#### Forged Body Needle Valve - Tube end

PART NO.	SIZE	T Tube OD	L	H Open
PNV-FB-S-4TT-T	1/4"	1/4"	2.55	2.28
PNV-FB-S-6TT-T	3/8"	3/8"	2.55	2.28
PNV-FB-S-8TT-T	1/2"	1/2"	2.77	2.44

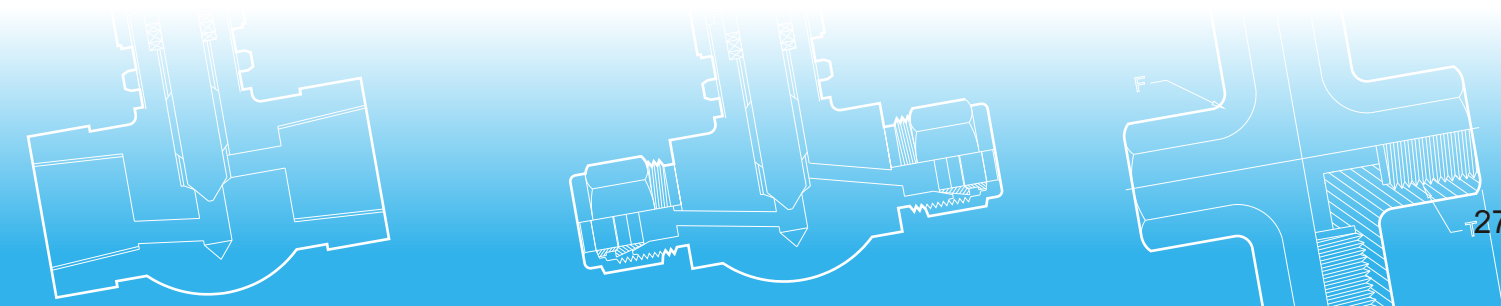


#### Forged body Needle Valve :

##### Features:

- Single piece SS forged body construction
- Straight or angle pattern with optional panel mounting design.
- Metal to metal, stellited seat for high-pressure application.
- One piece or non-rotating Vee tipped spindle.
- Non-rotating ball tipped or stellited tip are optionally provided for stringent application.
- Teflon or Grafoil packing seal for bubble free joint at various temperatures.
- Powder coated Metal Handle for easy control.
- Variety of end connections includes, Single or double ferrule tube end, male or female NPT, BSP, ISO, JIS or DIN pipe end.
- Pressure rating 3000-8000 psi at 100-500 F.
- 100% factory tested.

NOTE : Forged body Needle valves - Single piece Design, are also available in various sizes end connections

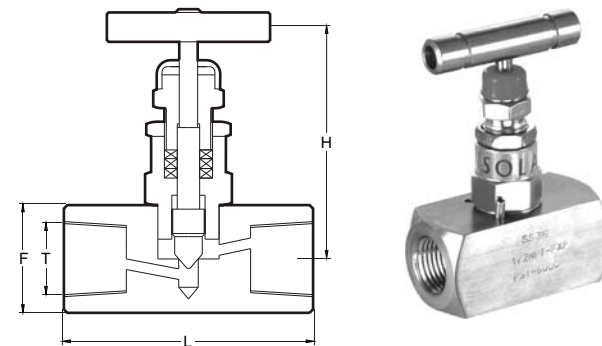






**Screwed Bonnet Needle Valve - Female end**

PART NO.	SIZE	T NPT(F)	F A/F	L	H Open
PNV-SB-S-4FF-T	1/4"	1/4"	0.87	2.01	2.28
PNV-SB-S-6FF-T	3/8"	3/8"	0.98	2.01	2.44
PNV-SB-S-8FF-T	1/2"	1/2"	1.18	2.56	2.87
PNV-SB-S-12FF-T	3/4"	3/4"	1.50	2.76	3.07
PNV-SB-S-16FF-T	1"	1"	1.73	3.74	3.94



**Screwed Bonnet Needle Valve:**

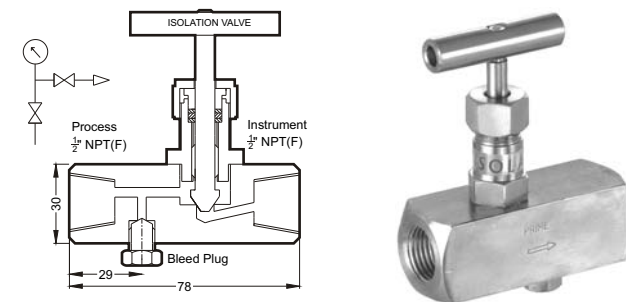
**Features :**

- Round or square body screwed bonnet construction for medium pressure application.
- Straight or angle pattern with optional panel mounting design.
- Metal to metal, stellite seat for high-pressure application, soft seat for low-density non-lubricating fluids.
- One piece or non-rotating Vee tipped spindle.
- Non-rotating ball tipped or stellite tip are optionally provided for stringent application.
- Teflon or Grefoil packing seal for bubble free joint at various temperatures.
- Powder coated Metal Handle for easy control.
- Variety of end connections includes, Single or double ferrule tube end, male or female NPT, BSP, ISO, JIS or DIN pipe end.
- Pressure rating 1000-5000 psi at 100-500 F.
- 100% factory tested.
- Material of construction: SS, M.S, Monel, Brass, Aluminum, Titanium, and Hastalloy.

**Special purpose Needle Valve :**

**Features:**

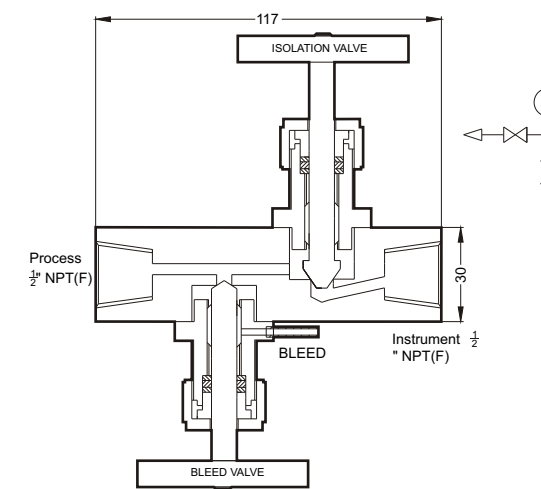
- For protecting the instrument with contaminated fluids and constant pressure, optional bleed plug or a bleed valve is provided so as to release the residual fluid/ pressure on instrument side after use.
- Union bonnet type or special screwed Bonnet type needle valves are made for safety at high pressure.
- Needle valve with packing material below actuating threads are made to ensure bubble free shut off.



Needle valve with bleed plug to release residual fluid after isolation valve shuts off, which avoid continuous pressure on the instrument. Generally used for pressure gauge. Process and instrument sides can be provided with different sizes(1/8"-3/4") and various end connections (Tube end, female or male end)

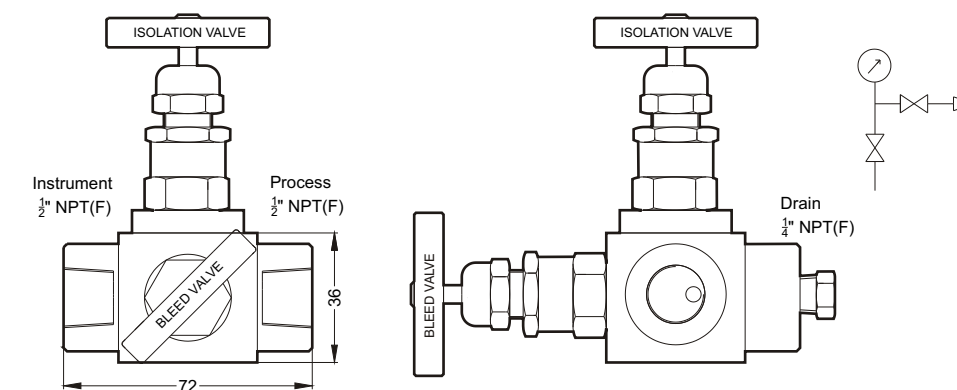
NOTE : Forged body Needle valves - Single piece Design, are also available in various sizes end connections

**Special purpose Needle Valve :  
Block & Bleed valve**



Two way block and bleed valve have one isolation and one drain valve to release residual fluid after isolation valve shuts off, which avoid continuous pressure on the instrument. Drain port (1/4"NPT) can be connected back to process side to avoid wastage of fluid. Generally used for pressure gauge. Both instrument and process sides are 1/2"NPT threaded ends

**Block & Bleed valve - Gauge Valve**



Two way block and bleed valve have one isolation and one drain valve to release residual fluid after isolation valve shuts off, which avoid continuous pressure on the instrument. Generally used for pressure gauge. Process and instrument sides can be provided with different sizes (1/8"-3/4") and various end connections (Tube end, female or male end)

NOTE : Bar Stock Needle valves - Two piece Design, are also available in various sizes end connections