

Needle Valves : -

Needle valves have a slender, tapered point at the end of the valve stem that is lowered through the seat to restrict or block flow. Fluid flowing through the Needle valve turns 90 degrees and passes through an orifice that is the seat for a rod with a cone shaped tip. Needle valves are widely used to accurately regulate the flow of liquids and gases at low flow rates. The fine threading of the stem and the large seat area allow for precise resistance to flow. Needle valves are used to control flow into delicate gauges, which might be damaged by sudden surges of fluid under pressure. Needle valves are also used in situations where the flow must be gradually brought to a halt, and at other points where precise adjustments of flow are necessary or where a small flow rate is desired. They can be used as both on/off valves and for throttling service.

Needle valves are often designed with a metal needle (generally brass, bronze, or stainless or other alloys of steel) and an elastomeric seat (generally PVC, CPVC, PTFE, or a wide range of brand name plastics and thermoplastics). While this is the most common form, valves are available that have metal - metal, plastic - plastic, or plastic - metal needles and seats. These variations are usually designed with specific applications in mind, especially situations where corrosion, high or low temperatures or extensive wear are possible. In such cases, it is best to consult with the manufacturer to find which type of valve is best for the application at hand.

Needle valves are used in almost every industry in an incredibly wide range of applications - anywhere control or metering of steam, air, gas, oil, water or other non-viscous liquids is required. They can be found in every industry from aerospace to zoological sciences, every service from gas and liquid dispensation to instrumentation control and cooling to power generation. However, Needle valves should be avoided in applications where the media is viscous, or in the dispensation of slurries. The small flow orifice can easily trap thick materials or solids and become blocked.

Ve-Lock Brand Make Needle valves are available in materials like - Steel , Stainless Steel , Brass , Monel , & various Alloy & Non Alloy steel

Ve-Lock manufacturer Needle valves with Low pressure design up to 3000 Psi , High Pressure design up to 6000 psi & Very High Pressure Design up to 10000 psi (On Request Only)

Hydraulic Needle Valves - Screwed End - Low Pressure : -

Needle valves Low Pressure Series used for Application in Hydraulic Systems where W.P. requirements are up to 3000 Psi & Test pressure up to 4500 Psi. Needle valves controls & Maintain Pressure of the fluid inside the Hydraulic systems at the set desired value. Needle valves are available in Steel , Stainless Steel , Brass Materials & can be applicable for Low pressure Application , High pressure Application & for water application also. Low Pressure Needle valves can be made in Cast body / Forged body & also in Solid bar stock body.

Ve-Lock manufactures Needle Valves from Solid bar stock Materials & all parts details are as below:

Needle Valves	Series	Sizes For Threads	Types of Threads Available	CLICK to Submit
Needle Valves w ith Female Threads	3000 6000	¼" up to 2"	BSPP/ BSPT/ NPT/ UNF	Enquiry Form
Needle Valves w ith Male Threads	3000 6000	1/4" up to 2"	BSPP/ BSPT/ NPT/ UNF	Enquiry Form
Needle Valves w ith Metric Tube Od	3000 6000	6mm up to 42mm od	Metric Threads w ith Nut + Ferrule	Enquiry Form
Needle Valve w ith UNF Tube Od	3000 6000	1/4" od up to 2" od	UNF Threads w ith Nut + Ferrule	Enquiry Form
Needle Valve w ith Tube to Thread End	3000 6000	6mm up to 42mm od	Metric to BSPP Threads	Enquiry Form
Needle Valves w ith Flanges	3000 6000	1/4" NB up to 5" NB	SAF Flange / ERW Flange	Enquiry Form
Needle Valves w ith QRC End	3000 6000	1/4" up to 2"	BSPP/ BSPT/ NPT/ UNF	Enquiry Form

Materials :-

Valve Body - Steel Phosphatised / Yellow chromazite / trivalent Zinc Blue Passivation

Valve Body - STAINLESS STEEL -304 / 316

Valve Spindle - SS 321 / 304 - On request - SS 316 (At Extra Cost)

SEALING - Copper washer sealing / Metal sealing

SEALING - WITH O RING -NBR - (Viton - O ring - On Request at Extra Cost only)

Handle - made out of Steel or Stainless Steel

W.P. = Low Pressure = 200 bar & Test pressure up to 3000 psi

Optional - M.S. -Powder coating on request only

All other Parts are trivalent Zinc with Blue passivation

Needle Valve -Screwed End- High Pressure Needle valves :-

High Pressure Needle valve regulates Working Pressure up to 6000 Psi & Burst Pressure up to 10000 Psi.
High Pressure Needle valve can be Manufacture up to Working Pressure 10000 psi & Burst pressure up to 15000 psi.

High Pressure Needle valves are available in Steel , Stainless Steel , Brass Materials & can be applicable for Fluids like water , Oil , Petrol , Grease,chemicals , viscous gases.

Needle valves can be made in Forged body & also in Solid bar stock body.

High Pressure Needle valves are widely used for Severe Service Operation as regulating and shut off type in critical High pressure up to 10,000 psi.

High Pressure Needle valves are also used for vacuum application on fluid line connections like natural gas lines , Gas sampling Lines, Pressure Test Bench,

Control panels , Instrument Air lines , Steel Plant , Hydraulic Power packs , High Pressure Manifolds, Drain vents ,Pressure Gauges, & Transmitters Ve-Lock manufactures High Pressure Needle Valves from Solid bar stock Materials & all parts details are as below.

Needle Valves	Series		Sizes For Threads	Types of Threads Available	CLICK to Submit
Needle Valves w ith Female Threads	3000	6000	1/4" up to 2"	BSPP/ BSPT/ NPT/ UNF	Enquiry Form
Needle Valves w ith Male Threads	3000	6000	1/4" up to 2"	BSPP/ BSPT/ NPT/ UNF	Enquiry Form
Needle Valves w ith Metric Tube Od	3000	6000	6mm up to 42mm od	Metric Threads w ith Nut + Ferrule	Enquiry Form
Needle Valve w ith UNF Tube Od	3000	6000	1/4" od up to 2" od	UNF Threads w ith Nut + Ferrule	Enquiry Form
Needle Valve w ith Tube to Thread End	3000	6000	6mm up to 42mm od	Metric to BSPP Threads	Enquiry Form
Needle Valves w ith Flanges	3000	6000	1/4" NB up to 5" NB	SAF Flange / ERW Flange	Enquiry Form
Needle Valves w ith QRC End	3000	6000	1/4" up to 2"	BSPP/ BSPT/ NPT/ UNF	Enquiry Form



High Pressure Needle Valve

Materials :-

Valve Body - Steel Phosphatised / Yellow chromatize / trivalent Zinc Blue Passivation

Valve Body - STAINLESS STEEL -304 / 316

Valve Spindle - Steel , Stainless Steel 304 / 316

SEALING - Copper washer sealing / Metal sealing

SEALING - WITH O RING -NBR - (Viton - O ring - On Request at Extra Cost only)

Handle - made out of Steel or Stainless Steel

W.P. = Low Pressure = 200 bar & High Pressure up to 400 bar

Optional - M.S. -Powder coating on request only

All other Parts are trivalent Zinc with Blue passivation

Needle Valves - Tube to Tube End - For Hydraulic Applications :-

Needle valves tube to tube end are applicable for the systems where we have use Seamless tubes (Metric / Inch Od / Inch NB types) & to connect this tube end to this

Needle valves we have to make Ball valves with Tube end & to Provide Nut & Ferrule Ring to get this tubes Grip with Valves Body.

Needle vales with Hydraulic tube end utilise in Paper Industry , Steel Plant manufacturer , Power Pack Manufacturer , Aircraft construction equipments, SPM, Process Machineries , Hydraulic Power Booster Units.

Needle Valves with tube to tube end connection are available in below types & sizes.

Needle Valve Tube to Tube End	W.P. = BAR	Series	Sizes For Threads	Types of Threads Available	CLICK to Submit
6 mm to 15 mm OD	250	Light	6 mm to 15 mm	Metric Threads Both End	Enquiry Form
18 mm to 22 mm OD	160	Light	18 mm to 22 mm	Metric Threads Both End	Enquiry Form
28 mm to 42 mm OD	100	Light	28 mm to 42 mm	Metric Threads Both End	Enquiry Form
6 mm to 12 mm OD	630	Heavy	6 mm to 12 mm	Metric Threads Both End	Enquiry Form
14 mm to 25 mm OD	400	Heavy	14 mm to 25 mm	Metric Threads Both End	Enquiry Form
30 mm to 38 mm OD	250	Heavy	30 mm to 38 mm	Metric Threads Both End	Enquiry Form

Materials :-

Valve Body - Steel Phosphatised / Yellow chromitize / trivalent Zinc Blue Passivation

Valve Body - STAINLESS STEEL -304 / 316

Valve Spindle - Steel , Stainless Steel 304 / 316

SEALING - Copper washer sealing / Metal sealing

SEALING - WITH O RING -NBR - (Viton - O ring - On Request at Extra Cost only)

Handle - made out of Steel or Stainless Steel

W.P. = Low Pressure = 200 bar & High Pressure up to 400 bar

Optional - M.S. -Powder coating on request only

All other Parts are trivalent Zinc with Blue passivation

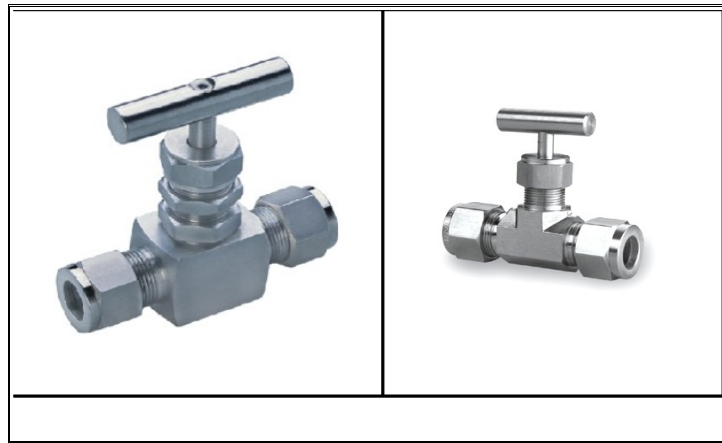
Needle Valves - Tube to Tube End - For Instrument Compression type :-

Needle valves tube to tube end are applicable for the systems where we have use Seamless tubes (Metric / Inch Od / Inch NB types) & to connect this tube end to this Needle valves we have to make Ball valves with Tube end & to Provide Nut & Ferrule Ring to get this tubes Grip with Valves Body.

High Pressure Needle valves are widely used for Severe Service Operation as regulating and shut off type in critical High pressure up to 10,000 psi.

High Pressure Needle valves are also used for vacuum application on fluid line connections like natural gas lines , Gas sampling Lines, Pressure Test Bench, Control panels , Instrument Air lines , Steel Plant , Hydraulic Power packs , High Pressure Manifolds, Drain vents ,Pressure Gauges, & Transmitters

Needle Valve Tube to Tube End	W.P. = BAR	Series	Sizes For Threads	Types of Threads Available	CLICK to Submit
1/8" up to 2" Od Tube Size	400	Heavy	1/8" up to 2"	UNF Threads Both End	Enquiry Form
6 mm to 50 mm Od Tube Size	400	Heavy	6 mm to 50 mm	UNF Threads Both End	Enquiry Form



Materials :-

Valve Body - Steel Phosphatised / Yellow chromatize / trivalent Zinc Blue Passivation

Valve Body - STAINLESS STEEL -304 / 316

Valve Spindle - Steel , Stainless Steel 304 / 316

SEALING - Copper washer sealing / Metal sealing

SEALING - WITH O RING -NBR - (Viton - O ring - On Request at Extra Cost only)

Handle - made out of Steel or Stainless Steel

W.P. = Low Pressure = 200 bar & High Pressure up to 400 bar

Optional - M.S. -Powder coating on request only

All other Parts are trivalent Zinc with Blue passivation

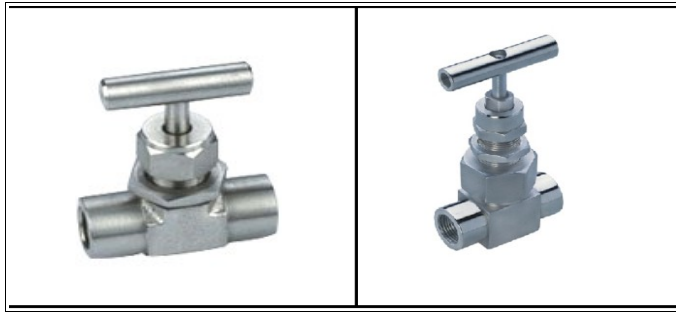
Needle Valves - Socket Weld type :-

Welding always Preferable to the piping systems to join tubes with valves where the end user has to avoid any leakage problem of fluids or gases at High Pressure.

Needle valves with Socket weld type connection are used for welding to tube end with valves in the Oil & gas industry to lower the risk of High pressure & lower risk of leakage of viscous gases from the connections.

Needle valves with Socket weld type having Square body Shape & socket hex adaptors screwed on both side of Body. Seamless Tubes of the same Size of Socket has to be weld at both end of the Needle valve Socket weld type.

Needle Valves with Socket Weld type	W.P. -BAR	SERIES	SIZES FOR THREADS	MOC OF BALL VALVE	CLICK to Submit
1/4" NB up to 5" NB	200	3000	1/4" NB to 5" NB	STEEL/ STAINLESS STEEL	Enquiry Form
1/4" NB up to 3" NB	400	6000	1/4" NB to 3" NB	STEEL/ STAINLESS STEEL	Enquiry Form



Materials :-

Valve Body - Steel Phosphatised / Yellow chromazite / trivalent Zinc Blue Passivation

Valve Body - STAINLESS STEEL -304 / 316

Valve Spindle - Steel , Stainless Steel 304 / 316

SEALING - Copper washer sealing / Metal sealing

SEALING - WITH O RING -NBR - (Viton - O ring - On Request at Extra Cost only)

Handle - made out of Steel or Stainless Steel

W.P. = Low Pressure = 200 bar & High Pressure up to 400 bar

Optional - M.S. -Powder coating on request only

All other Parts are trivalent Zinc with Blue passivation

Needle Valves - Butt Weld type :-

Welding always Preferable to the piping systems to join tubes with valves where the end user has to avoid any leakage problem of fluids or gases at High Pressure.

Needle valves with Butt weld type connection are used for welding to tube end with valves in the Oil & gas industry to lower the risk of leakage of fluid at High pressure & lower risk of leakage of viscous gases from the connections.

Needle valves with Butt weld type having Square body Shape & socket hex adaptors screwed on both side of Body.

Seamless Tubes of the same Size of Socket has to be weld at both end of the Needle valve Butt weld type.

Needle Valves with Socket Weld type	W.P. -BAR	SERIES	SIZES FOR THREADS	MOC OF BALL VALVE	CLICK to Submit
1/4" NB up to 5" NB	200	3000	1/4" NB to 5" NB	STEEL/ STAINLESS STEEL	Enquiry Form
1/4" NB up to 3" NB	400	6000	1/4" NB to 3" NB	STEEL/ STAINLESS STEEL	Enquiry Form

Materials :-

Valve Body - Steel Phosphatised / Yellow chromazite / trivalent Zinc Blue Passivation

Valve Body - STAINLESS STEEL -304 / 316

Valve Spindle - Steel , Stainless Steel 304 / 316

SEALING - Copper washer sealing / Metal sealing

SEALING - WITH O RING -NBR - (Viton - O ring - On Request at Extra Cost only)

Handle - made out of Steel or Stainless Steel

W.P. = Low Pressure = 200 bar & High Pressure up to 400 bar

Optional - M.S. -Powder coating on request only

All other Parts are trivalent Zinc with Blue passivation

Needle Valves - Integral Bonnet type : -

Needle valves with Integral Bonnet type reduces Leakage at High pressure Application in the Oil & gas industry to lower the risk of leakage of fluid at High pressure & lower risk of leakage of viscous gases from the connections. Needle valves Integral Bonnet type is having Square body Shape & Bonnet is in One piece only so to avoid chances of leakage from the spindle side.

Needle Valves – Screwed	Series		Sizes For Threads	Types of Threads Available	CLICK to Submit
Needle Valves with Female Threads	3000	6000	¼” up to 2”	BSPP/ BSPT/ NPT/ UNF	Enquiry Form
Needle Valves with Male Threads	3000	6000	1/4” up to 2”	BSPP/ BSPT/ NPT/ UNF	Enquiry Form
Ball Valves with Metric Tube Od	3000	6000	6mm up to 42mm od	Metric Threads with Nut + Ferrule	Enquiry Form
Ball Valve with UNF Tube Od	3000	6000	1/4” od up to 2” od	UNF Threads with Nut + Ferrule	Enquiry Form

Materials :-

Valve Body - Steel Phosphatised / Yellow chromitize / trivalent Zinc Blue Passivation

Valve Body - STAINLESS STEEL -304 / 316

Valve Spindle - Steel , Stainless Steel 304 / 316

SEALING - Copper washer sealing / Metal sealing

SEALING - WITH O RING -NBR - (Viton - O ring - On Request at Extra Cost only)

Handle - made out of Steel or Stainless Steel

W.P. = Low Pressure = 200 bar & High Pressure up to 400 bar

Optional - M.S. -Powder coating on request only

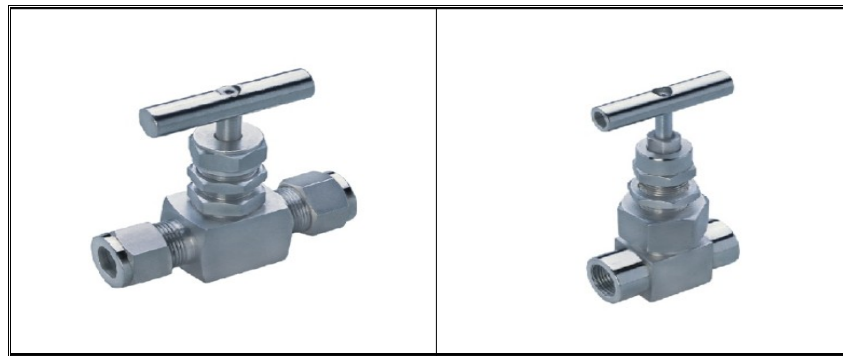
All other Parts are trivalent Zinc with Blue passivation

Needle Valves Panel Mounted type : -

Needle valves with Panel Mounted type reduces are mainly used for the mounting application of Needle valve on panel with the help of check nut .

Needle valves controls & Maintain Pressure of the fluid inside the Hydraulic systems at the set desired value.

Needle valves are available in Steel , Stainless Steel , Brass Materials & can be applicable for Low pressure Application , High pressure Application & for water application also. Low Pressure Needle valves can be made in Cast body / Forged body & also in Solid bar stock body.



Materials :-

Valve Body - Steel Phosphatised / Yellow chromitize / trivalent Zinc Blue Passivation

Valve Body - STAINLESS STEEL -304 / 316

Valve Spindle - Steel , Stainless Steel 304 / 316

SEALING - Copper washer sealing / Metal sealing

SEALING - WITH O RING -NBR - (Viton - O ring - On Request at Extra Cost only)

Check Nut / Handle - made out of Steel or Stainless Steel

W.P. = Low Pressure = 200 bar & High Pressure up to 400 bar

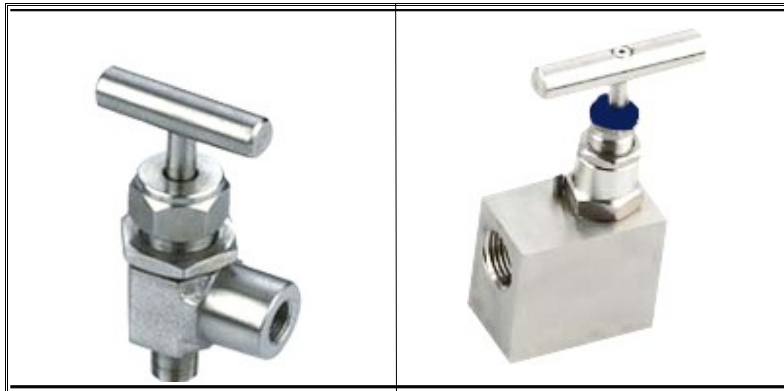
Optional - M.S. -Powder coating on request only

All other Parts are trivalent Zinc with Blue passivation

Needle Valves Angular type :-

Needle valves Angle type are mainly used for the mounting 90 degree application of Needle valve on piping systems. Needle valves control & maintain pressure of the fluid inside the hydraulic systems at the set desired value. Needle valves are available in Steel, Stainless Steel, Brass materials & can be applicable for low pressure application, high pressure application & for water application also. Low pressure needle valves can be made in cast body / forged body & also in solid bar stock body.

Needle Valves – Screwed	Series		Sizes For Threads	Types of Threads Available	CLICK to Submit
Needle Valves with Female Threads	3000	6000	¼” up to 2”	BSPP/ BSPT/ NPT/ UNF	Enquiry Form
Needle Valves with Male Threads	3000	6000	1/4” up to 2”	BSPP/ BSPT/ NPT/ UNF	Enquiry Form
Ball Valves with Metric Tube Od	3000	6000	6mm up to 42mm od	Metric Threads with Nut + Ferrule	Enquiry Form
Ball Valve with UNF Tube Od	3000	6000	1/4” od up to 2” od	UNF Threads with Nut + Ferrule	Enquiry Form



Materials :-

Valve Body - Steel Phosphatised / Yellow chromate / trivalent Zinc Blue Passivation

Valve Body - STAINLESS STEEL -304 / 316

Valve Spindle - Steel, Stainless Steel 304 / 316

SEALING - Copper washer sealing / Metal sealing

SEALING - WITH O RING -NBR - (Viton - O ring - On Request at Extra Cost only)

Check Nut / Handle - made out of Steel or Stainless Steel

W.P. = Low Pressure = 200 bar & High Pressure up to 400 bar

Optional - M.S. -Powder coating on request only

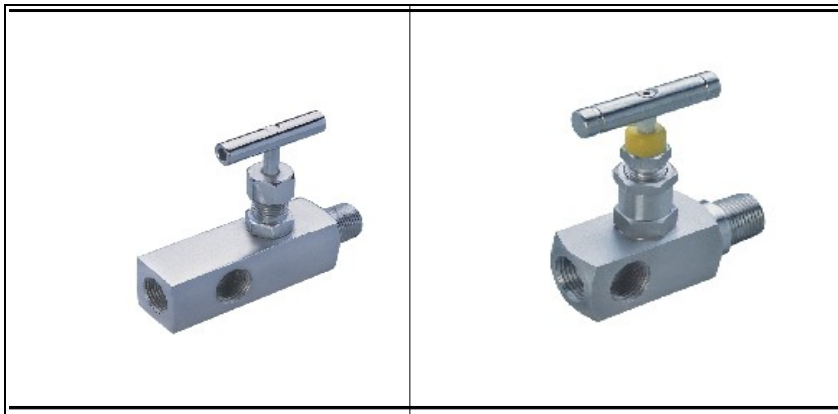
All other Parts are trivalent Zinc with Blue passivation

Needle Valves Gauge Root Type :-

Needle valve Gauge Root type are widely used in differential pressure transmitters, Block and Bleed Assemblies Etc. to test Pressure source required in sampling line or Purge valve lines.

Needle valve Gauge Root type are offered with multiple outlets to accommodate a variety of gauger positions with handle orientations.

Needle Valves – Screwed	Series		Sizes For Threads	Types of Threads Available	CLICK to Submit
Needle Valves with Female Threads	3000	6000	1/4" up to 2"	BSPP/ BSPT/ NPT/ UNF	Enquiry Form
Needle Valves with Male Threads	3000	6000	1/4" up to 2"	BSPP/ BSPT/ NPT/ UNF	Enquiry Form
Ball Valves with Metric Tube Od	3000	6000	6mm up to 42mm od	Metric Threads with Nut + Ferrule	Enquiry Form
Ball Valve with UNF Tube Od	3000	6000	1/4" od up to 2" od	UNF Threads with Nut + Ferrule	Enquiry Form



Materials :-

Valve Body - Steel Phosphatised / Yellow chromatize / trivalent Zinc Blue Passivation

Valve Body - STAINLESS STEEL -304 / 316

Valve Spindle - Steel , Stainless Steel 304 / 316

SEALING - Copper washer sealing / Metal sealing

SEALING - WITH O RING -NBR - (Viton - O ring - On Request at Extra Cost only)

Check Nut / Handle - made out of Steel or Stainless Steel

W.P. = Low Pressure = 200 bar & High Pressure up to 400 bar

Optional - M.S. -Powder coating on request only

All other Parts are trivalent Zinc with Blue passivation