



S.D. INDUSTRIES

Needle Valves



We deliver confidence through quality products



NEEDLE VALVES

INTRODUCTION

SD range of Needle valves come in various sizes, sealing styles, end connections and stem types. They are available in bar stock as well as in forged construction. Main feature of our Needle valves is that its stems are interchangeable with any of its valves of the similar configurations thus resulting in low cost and less inventory.

MATERIAL OF CONSTRUCTION

Normally the material that is used for construction of Needle Valve bodies and its various parts is SS 316 or SS 316L, but depending on the application and the system requirements brass, monel, hastalloy can also be used.

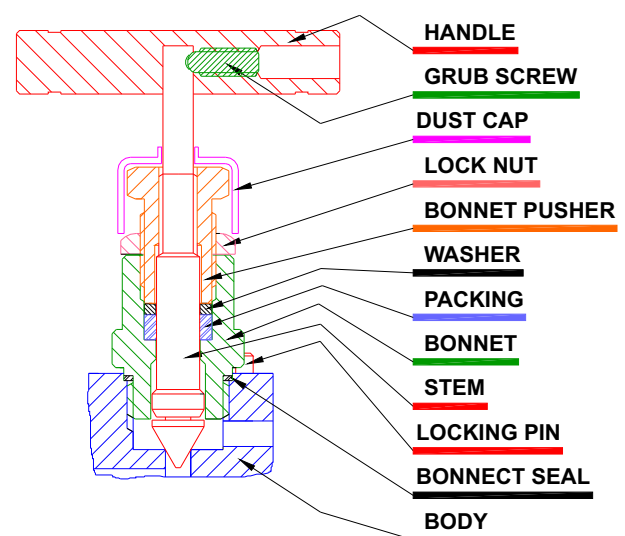
FEATURES

- Forged Bodies to ensure close grain structure for high pressure and good results.
- High working pressures
- Different type of end connections viz: Double ferrule type, NPT, BSPT and many other standard connections.
- Gland Packing are so placed that the medium doesn't come in contact with stem threads thus reducing the leakage problems and threads seizing.
- Threads are cold rolled for maximum strength and high accuracy.
- Stems are burnished at the packing area for less torque in the valve operation.
- Various packing materials are used for different applications depending on requirements, temperature and medium to be moved.
- Hard seat and soft seat design.
- Colour coded handles.

SPECIFICATION

- Size
1/4" & 1/2"
- End ports
NPT, BSPT, socket weld
- Max. Std. Pressure
6000 Psi (413 Bar)
- Temperature Rating
PTFE 450° F (232° C)
Grafoil 700° F (371° C)
- Stem Packing
PTFE, Grafoil
- Standard seat
Ø4mm

BONNET ASSEMBLY





NEEDLE VALVES

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ANGLE TYPE NEEDLE VALVE

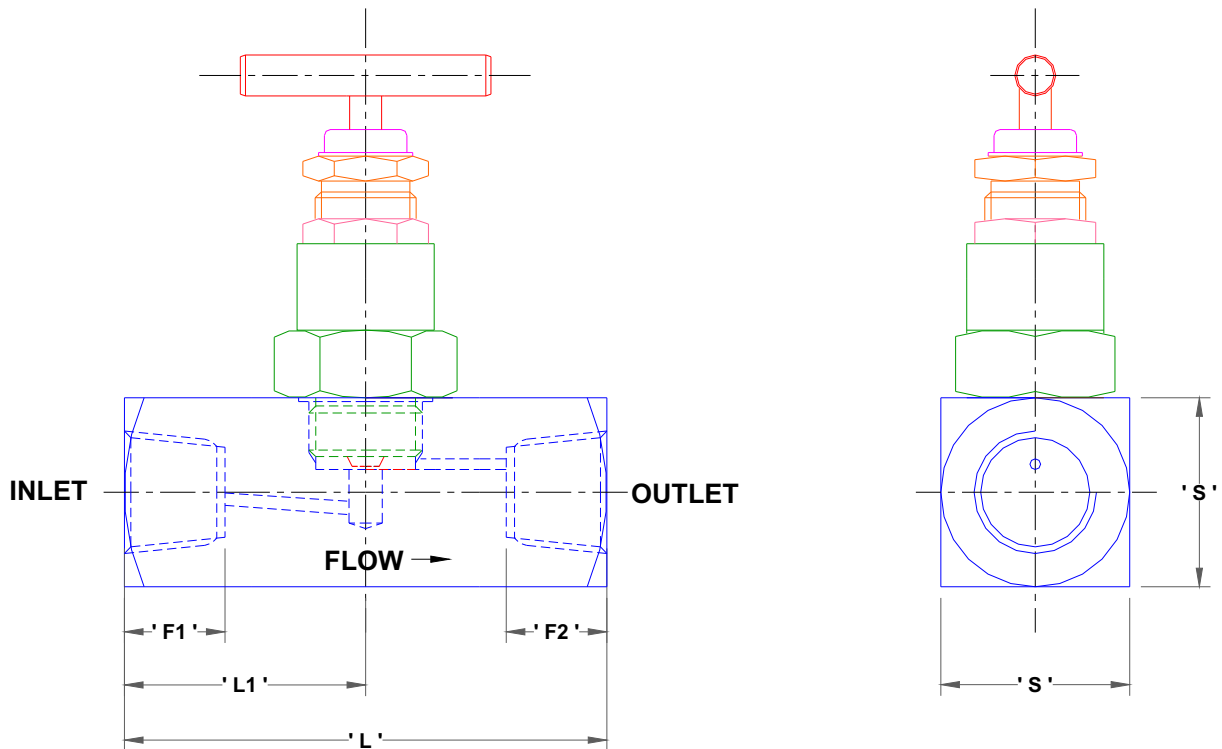
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STRAIGHT TYPE NEEDLE VALVE WITH TUBE END CONNECTIONS

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NEEDLE VALVE NPT(F) X NPT(F)

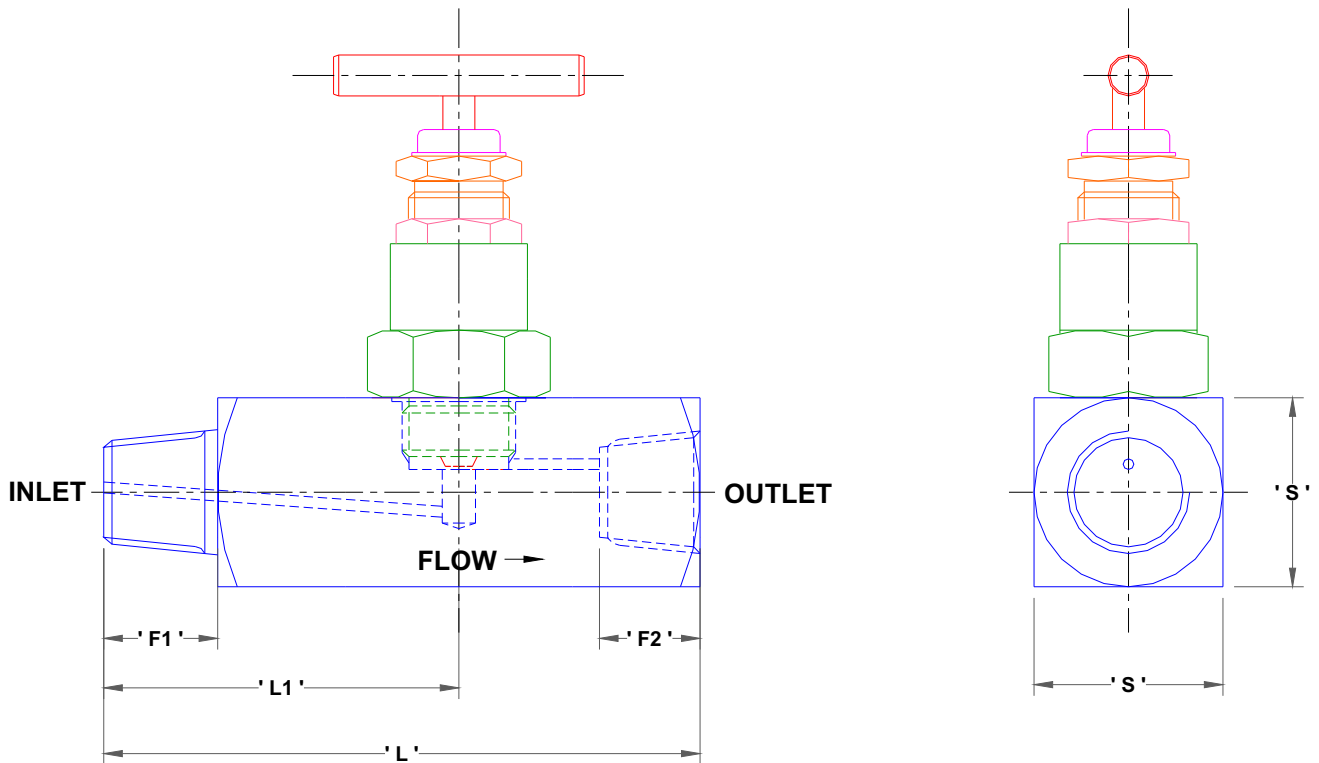


Female NPT Threads X Female NPT Threads

INLET	OUTLET	S	L	L1	F1	F2	PART NO.
		mm	mm	mm	mm	mm	
1/8 " NPT (F)	1/8 " NPT (F)	25	48	24	10	10	2-2 / F-F / NV
1/4 " NPT (F)	1/4 " NPT (F)	25	56	28	14	14	4-4 / F-F / NV
3/8 " NPT (F)	3/8 " NPT (F)	25	56	28	14	14	6-6 / F-F / NV
1/2 " NPT (F)	1/2 " NPT (F)	32	66	33	19	19	8-8 / F-F / NV
3/4 " NPT (F)	3/4 " NPT (F)	38	66	33	19	19	12-12 / F-F / NV
1 " NPT (F)	1 " NPT (F)	45	78	39	24	24	16-16 / F-F / NV



NEEDLE VALVE NPT(M) X NPT(F)

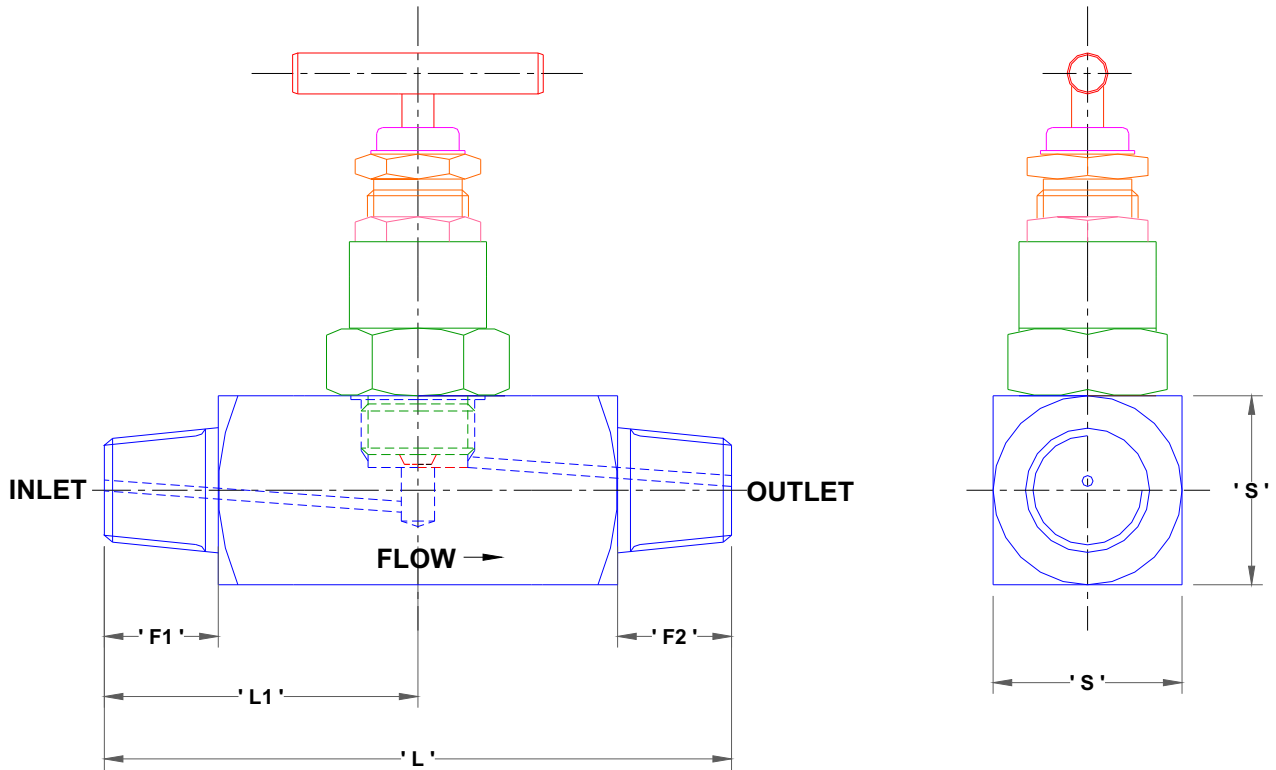


Male NPT Threads X Female NPT Threads

INLET	OUTLET	S	L	L1	F1	F2	PART NO.
		mm	mm	mm	mm	mm	
1/8 " NPT (M)	1/8 " NPT (F)	25	50	26	10	10	2-2 / M-F / NV
1/4 " NPT (M)	1/4 " NPT (F)	25	58	30	14	14	4-4 / M-F / NV
3/8 " NPT (M)	3/8 " NPT (F)	25	58	30	14	14	6-6 / M-F / NV
1/2 " NPT (M)	1/2 " NPT (F)	32	68	35	19	19	8-8 / M-F / NV
3/4 " NPT (M)	3/4 " NPT (F)	38	68	35	19	19	12-12 / M-F / NV
1 " NPT (M)	1 " NPT (F)	45	80	41	24	24	16-16 / M-F / NV



NEEDLE VALVE NPT(M) X NPT(M)

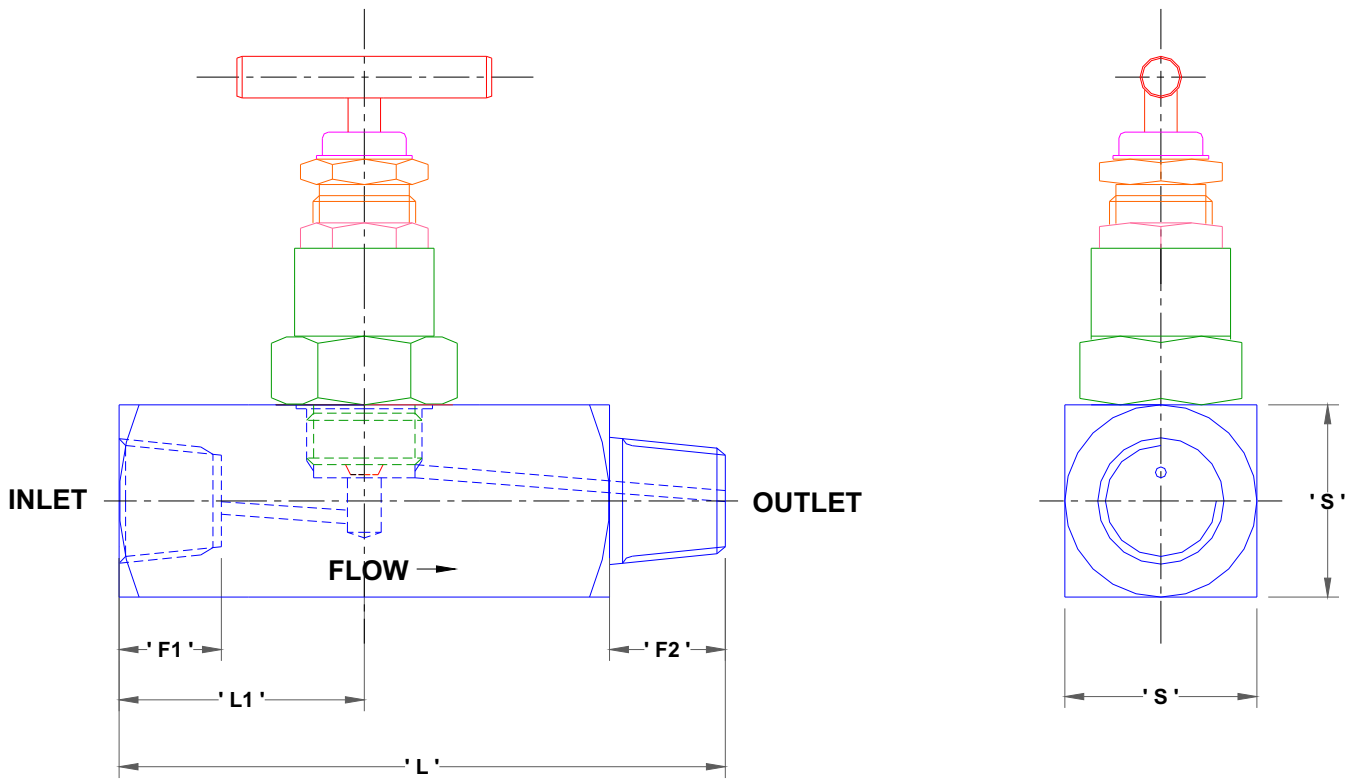


Male NPT Threads X Male NPT Threads

INLET	OUTLET	S	L	L1	F1	F2	PART NO.
		mm	mm	mm	mm	mm	
1/8 " NPT (M)	1/8 " NPT (M)	25	52	26	10	10	2-2 / M-M / NV
1/4 " NPT (M)	1/4 " NPT (M)	25	60	30	14	14	4-4 / M-M / NV
3/8 " NPT (M)	3/8 " NPT (M)	25	60	30	14	14	6-6 / M-M / NV
1/2 " NPT (M)	1/2 " NPT (M)	32	70	35	19	19	8-8 / M-M / NV
3/4 " NPT (M)	3/4 " NPT (M)	32	70	35	19	19	12-12 / M-M / NV
1 " NPT (M)	1 " NPT (M)	38	82	41	24	24	16-16 / M-M / NV



NEEDLE VALVE NPT(F) X NPT(M)

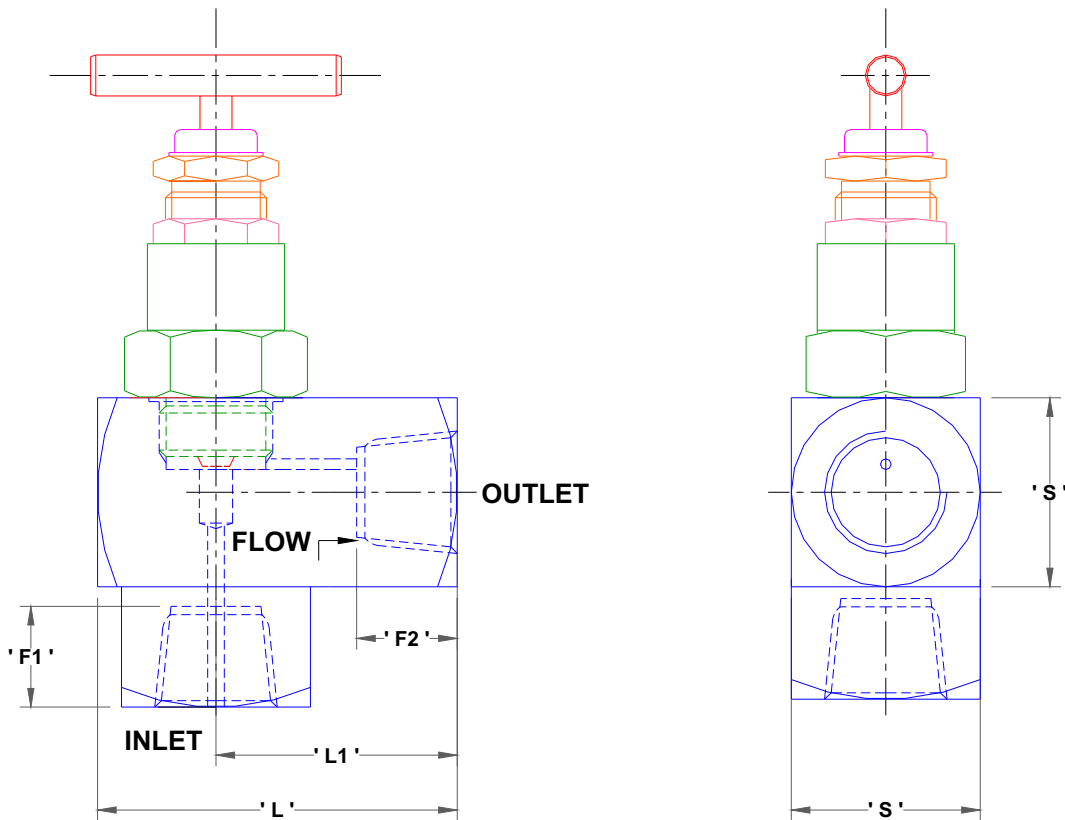


Female NPT Threads X Male NPT Threads

INLET	OUTLET	S	L	L1	F1	F2	PART NO.
		mm	mm	mm	mm	mm	
1/8 " NPT (F)	1/8 " NPT (M)	25	50	24	10	10	2-2 / F-M / NV
1/4 " NPT (F)	1/4 " NPT (M)	25	58	28	14	14	4-4 / F-M / NV
3/8 " NPT (F)	3/8 " NPT (M)	25	58	28	14	14	6-6 / F-M / NV
1/2 " NPT (F)	1/2 " NPT (M)	32	68	33	19	19	8-8 / F-M / NV
3/4 " NPT (F)	3/4 " NPT (M)	38	68	33	19	19	12-12 / F-M / NV
1 " NPT (F)	1 " NPT (M)	45	80	39	24	24	16-16 / F-M / NV



ANGLE TYPE NEEDLE VALVE NPT(F) X NPT(F)

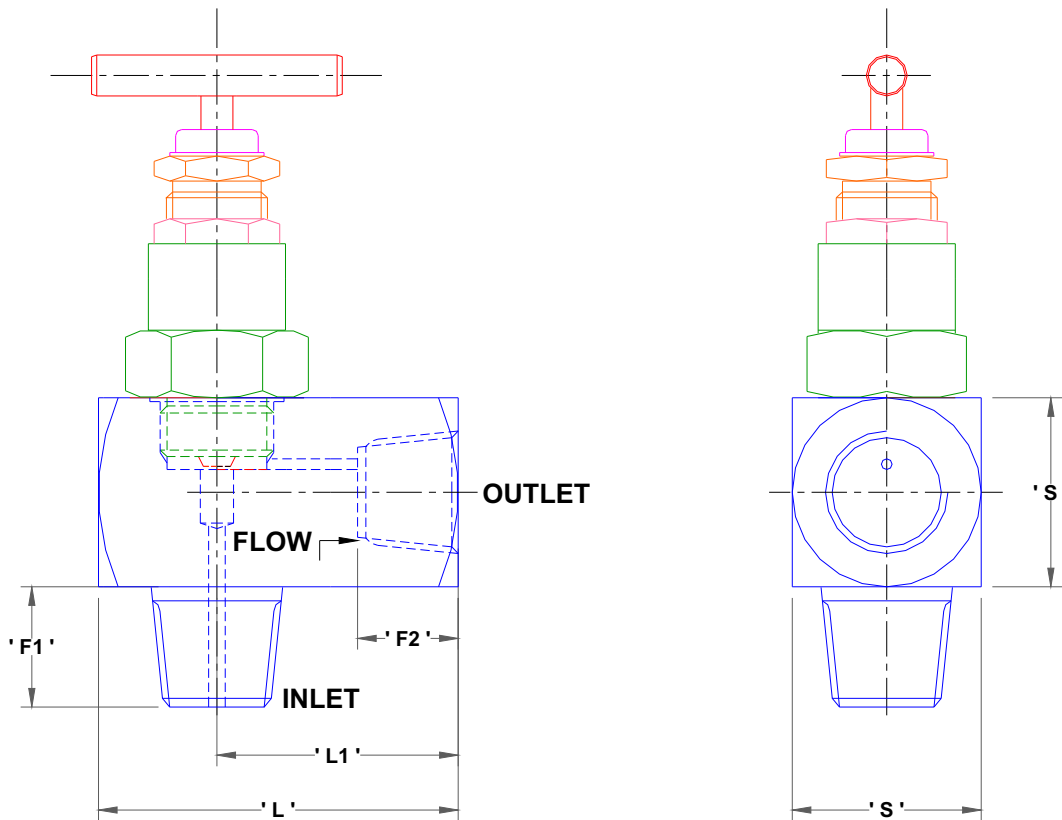


Female NPT Threads X Female NPT Threads - Angle Type

INLET	OUTLET	S	L	L1	F1	F2	PART NO.
		mm	mm	mm	mm	mm	
1/8 " NPT (F)	1/8 " NPT (F)	25	36.5	24	10	10	2-2 / A-F-F / NV
1/4 " NPT (F)	1/4 " NPT (F)	25	40.5	28	14	14	4-4 / A-F-F / NV
3/8 " NPT (F)	3/8 " NPT (F)	25	40.5	28	14	14	6-6 / A-F-F / NV
1/2 " NPT (F)	1/2 " NPT (F)	32	49	33	19	19	8-8 / A-F-F / NV
3/4 " NPT (F)	3/4 " NPT (F)	38	52	33	19	19	12-12 / A-F-F / NV
1 " NPT (F)	1 " NPT (F)	45	61.5	39	24	24	16-16 / A-F-F / NV



ANGLE TYPE NEEDLE VALVE NPT(M) X NPT(F)

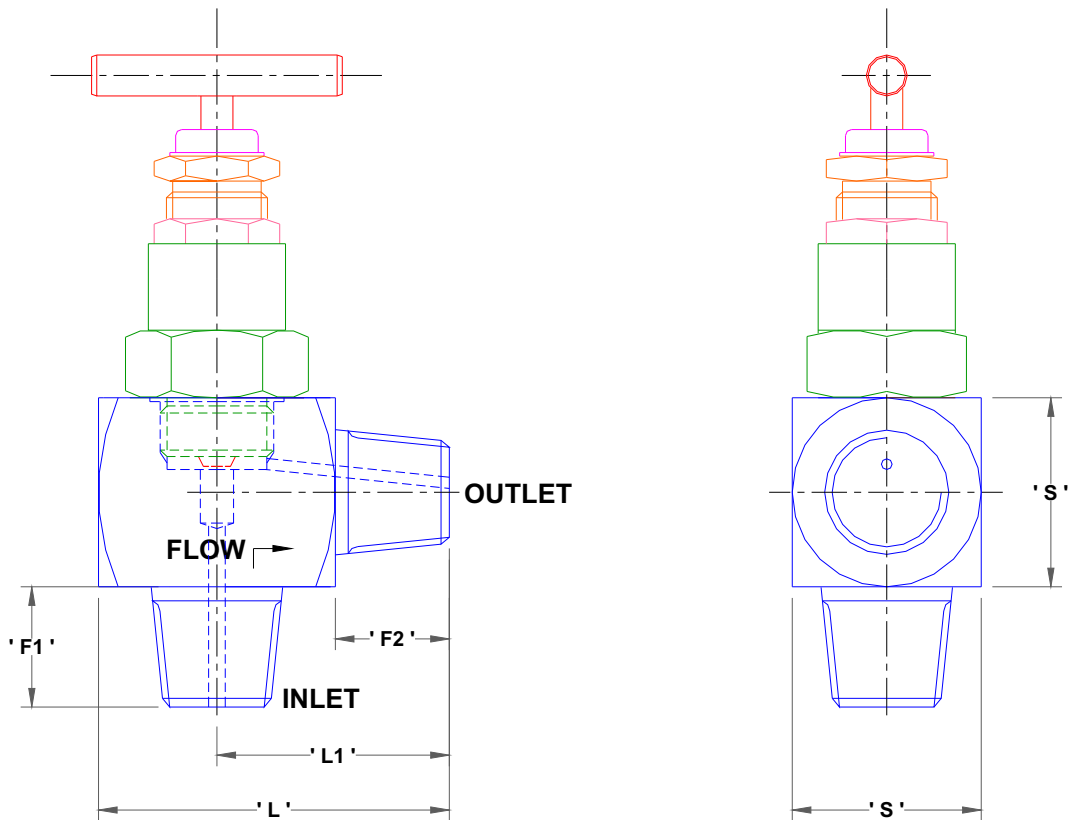


Male NPT Threads X Female NPT Threads - Angle Type

INLET	OUTLET	S	L	L1	F1	F2	PART NO.
		mm	mm	mm	mm	mm	
1/8 " NPT (M)	1/8 " NPT (F)	25	36.5	24	10	10	2-2 / A-M-F / NV
1/4 " NPT (M)	1/4 " NPT (F)	25	40.5	28	14	14	4-4 / A-M-F / NV
3/8 " NPT (M)	3/8 " NPT (F)	25	40.5	28	14	14	6-6 / A-M-F / NV
1/2 " NPT (M)	1/2 " NPT (F)	32	49	33	19	19	8-8 / A-M-F / NV
3/4 " NPT (M)	3/4 " NPT (F)	38	52	33	19	19	12-12 / A-M-F / NV
1 " NPT (M)	1 " NPT (F)	45	61.5	39	24	24	16-16 / A-M-F / NV



ANGLE TYPE NEEDLE VALVE NPT(M) X NPT(M)

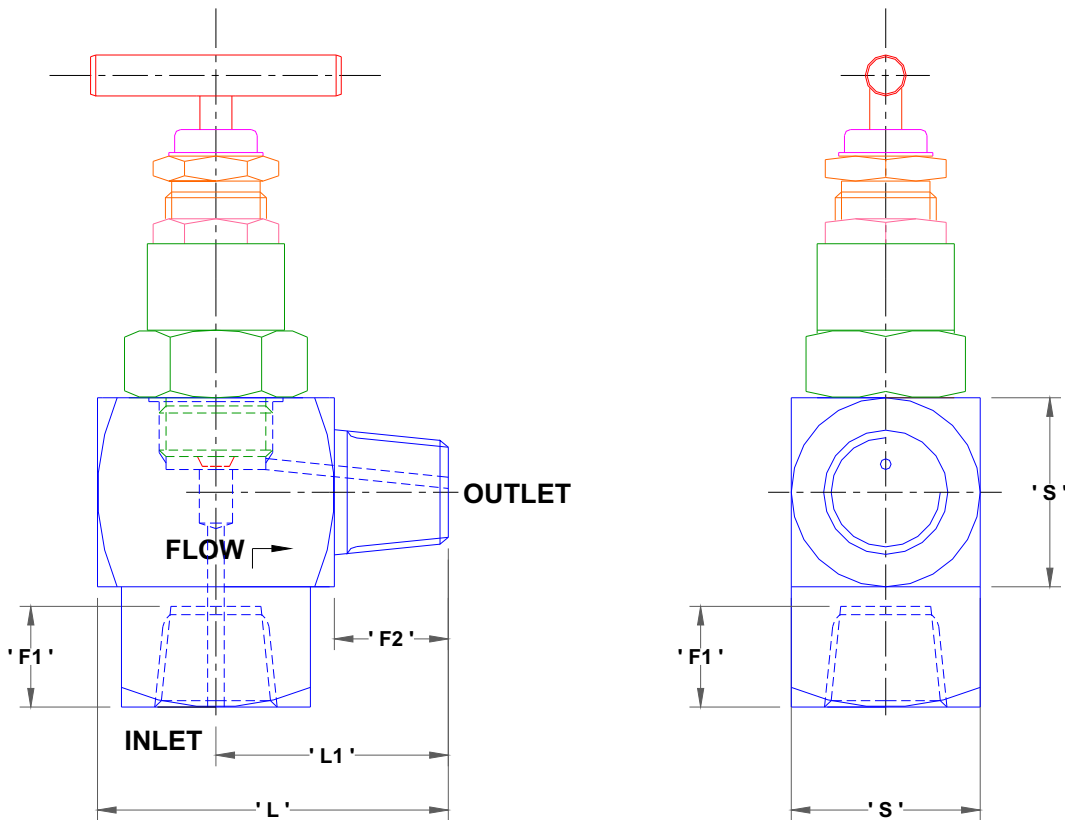


Male NPT Threads X Male NPT Threads - Angle Type

INLET	OUTLET	S	L	L1	F1	F2	PART NO.
		mm	mm	mm	mm	mm	
1/8 " NPT (M)	1/8 " NPT (M)	25	38.5	26	10	10	2-2 / A-M-M / NV
1/4 " NPT (M)	1/4 " NPT (M)	25	42.5	30	14	14	4-4 / A-M-M / NV
3/8 " NPT (M)	3/8 " NPT (M)	25	42.5	30	14	14	6-6 / A-M-M / NV
1/2 " NPT (M)	1/2 " NPT (M)	32	51	35	19	19	8-8 / A-M-M / NV
3/4 " NPT (M)	3/4 " NPT (M)	32	51	35	19	19	12-12 / A-M-M / NV
1 " NPT (M)	1 " NPT (M)	38	60	41	24	24	16-16 / A-M-M / NV



ANGLE TYPE NEEDLE VALVE NPT(F) X NPT(M)

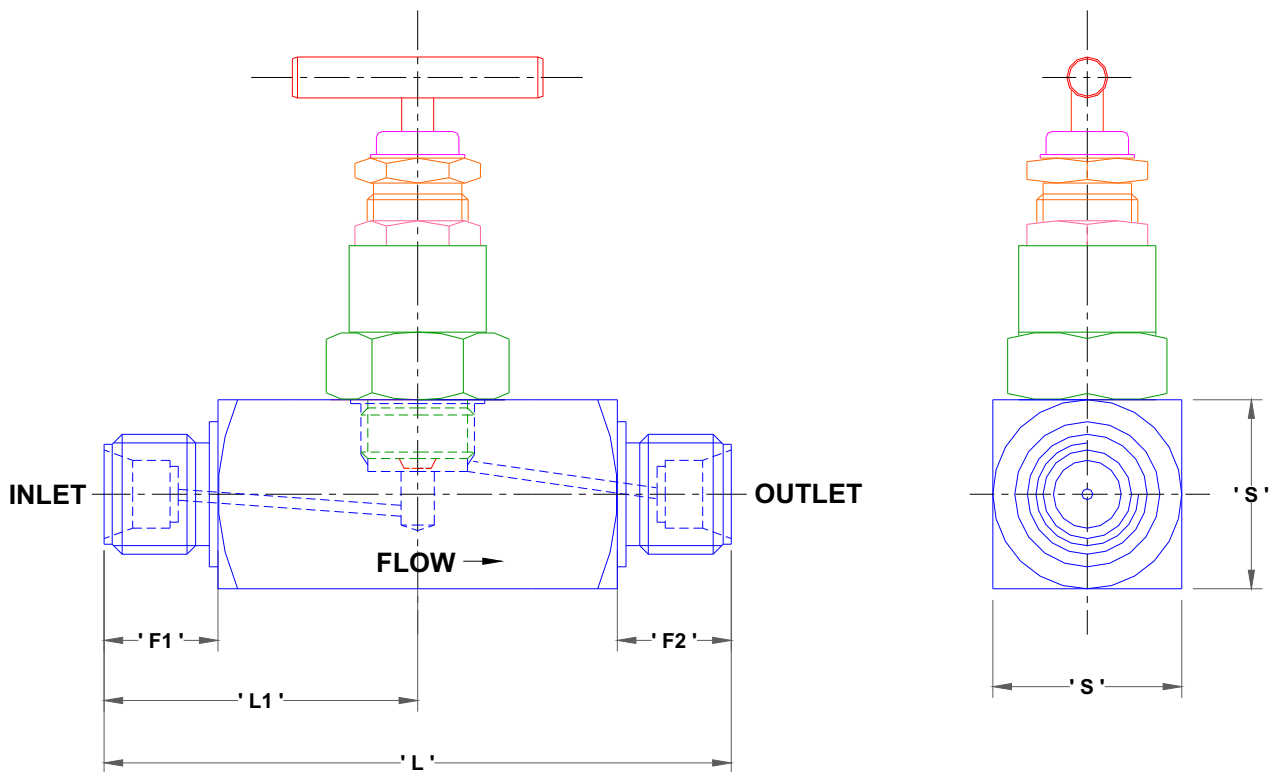


Female NPT Threads X Male NPT Threads - Angle Type

INLET	OUTLET	S	L	L1	F1	F2	PART NO.
		mm	mm	mm	mm	mm	
1/8 " NPT (F)	1/8 " NPT (M)	25	38.5	26	10	10	2-2 / A-F-M / NV
1/4 " NPT (F)	1/4 " NPT (M)	25	42.5	30	14	14	4-4 / A-F-M / NV
3/8 " NPT (F)	3/8 " NPT (M)	25	42.5	30	14	14	6-6 / A-F-M / NV
1/2 " NPT (F)	1/2 " NPT (M)	32	51	35	19	19	8-8 / A-F-M / NV
3/4 " NPT (F)	3/4 " NPT (M)	38	54	35	19	19	12-12 / A-F-M / NV
1 " NPT (F)	1 " NPT (M)	45	63.5	41	24	24	16-16 / A-F-M / NV



NEEDLE VALVE TUBE END X TUBE END



INCH OD Tubes x INCH OD Tubes

INLET	OUTLET	S	L	L1	F1	F2	PART NO.
		mm	mm	mm	mm	mm	
1/8 " OD TUBE	1/8 " OD TUBE	25	58	29	10.3	10.3	2-2 / T-T / NV
1/4 " OD TUBE	1/4 " OD TUBE	25	62	31	10.3	10.3	4-4 / T-T / NV
3/8 " OD TUBE	3/8 " OD TUBE	25	64	32	12	12	6-6 / T-T / NV
1/2 " OD TUBE	1/2 " OD TUBE	25	68	34	12	12	8-8 / T-T / NV
3/4 " OD TUBE	3/4 " OD TUBE	38	74	37	12	12	12-12 / T-T / NV
1 " OD TUBE	1 " OD TUBE	42	80	40	14.2	14.2	16-16 / T-T / NV



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