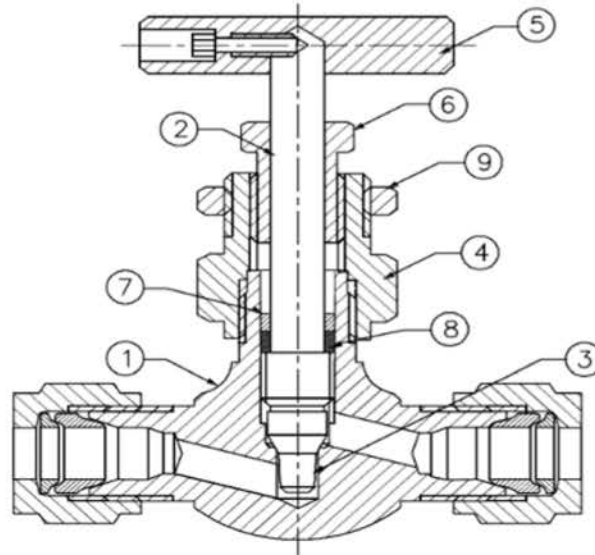


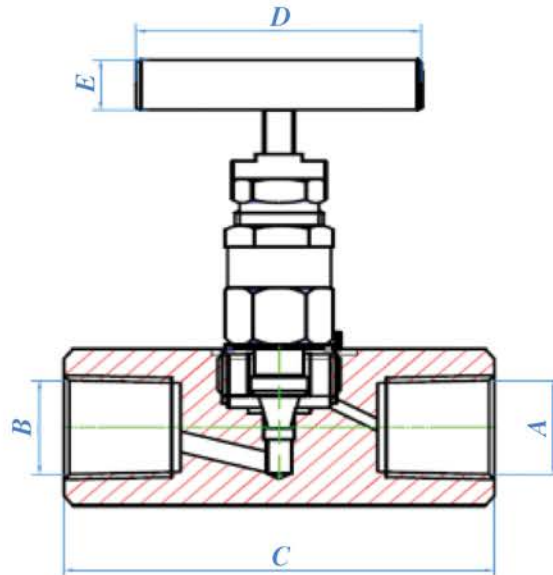
NEEDLE VALVE

OD (TUBE END CONNECTIONS)



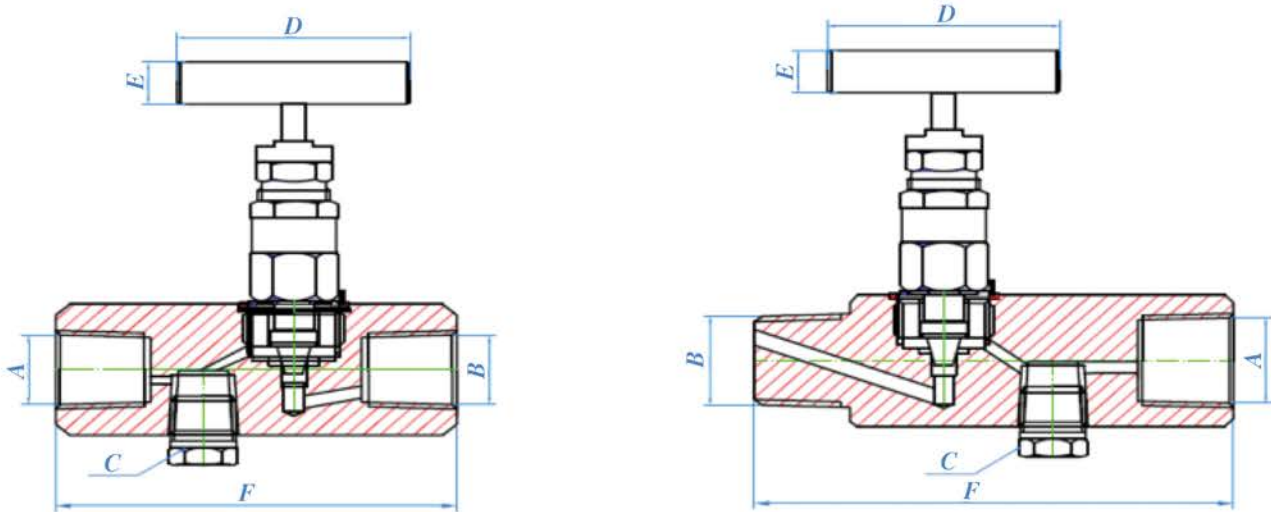
Materials of Construction		
ROW	DESCRIPTION	MATERIAL
1	BODY	316L STAINLESS STEEL
2	STEM	316L STAINLESS STEEL
3	STEM TIP	17-4PH STAINLESS STEEL
4	BONNET	316L STAINLESS STEEL
5	HANDLE	STAINLESS STEEL
6	PANEL MOUNTING NUT	316L STAINLESS STEEL
7	RING	316L STAINLESS STEEL
8	STEM PACKING	PTFE + GRAPHIT
9	BONNET NUT	316L STAINLESS STEEL

NEEDLE VALVE (Bar Stock)



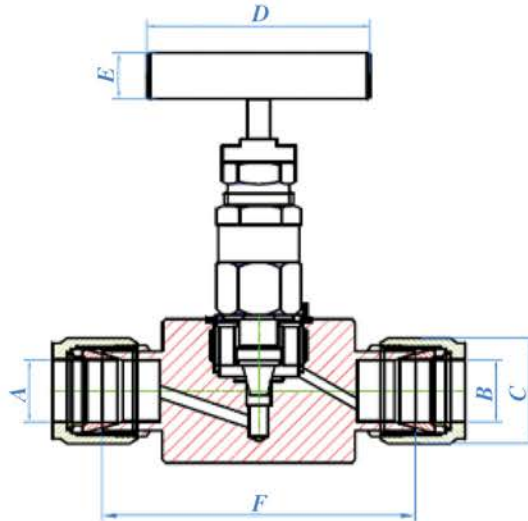
PAP Part Number	Working Pressure	End Connection		Dimerions				
		Inlet	Outlet	A NPT (Female)	B NPT	C(mm)	D(mm)	E
NVS 4FF	3000 6000 10000 Psi	1/4"NPT Female	1/4"NPT Female	1/4"	1/4" Male	55	58	Ø13
NVS 6FF		3/8"NPT Female	3/8"NPT Female	3/8"	3/8" Male	59	58	Ø13
NVS 8FF		1/2"NPT Female	1/2"NPT Female	1/2"	1/2" Male	65	58	Ø13
NVS 4M4F		1/4" NPT Male	1/4" NPT Female	1/4"	1/4" Male	55	58	Ø13
NVS 6M6F		3/8" NPT Male	3/8" NPT Female	3/8"	3/8" Male	59	58	Ø13
NVS 8M8F		1/2" NPT Male	1/2" NPT Female	1/2"	1/2" Female	65	58	Ø13
NVS 12FF		3/4" NPT Female	3/4" NPT Female	3/4"	3/4" Female	65	58	Ø13
NVS 16FF		1"NPT Female	1" NPT Female	1"	1" Female	86	58	Ø13
NVS 12M8F		3/4" NPT Male	1/2" NPT Female	1/2"	3/4" Male	70	58	Ø13
NVS 12M12F		3/4" NPT Male	3/4" NPT Female	3/4"	3/4" Male	70	58	Ø13

NEEDLE VALVE (With down Stream Vent)



PAP Part Number	Working Pressure	End Connection		Dimensions					
		Inlet	Outlet	A NPT (F)	B NPT (M)	C (Vent) NPT	D (mm)	E	F(mm)
NVS 4FFV	3000 6000 10000 Psi	1/4" NPT Female	1/4" NPT Female	1/4"	1/4"	1/4"	58	Ø13	90.5
NVS 8FFV		1/2" NPT Female	1/2" NPT Female	1/2"	1/2"	1/4"	58	Ø13	90.5
NVS 12FFV		3/4" NPT Female	3/4" NPT Female	3/4"	3/4"	1/4"	58	Ø14	90.5
NVS 4M4FV		1/4" NPT Male	1/4" NPT Female	1/4"	1/4"	1/4"	58	Ø13	90.5
NVS 8M8FV		1/2" NPT Male	1/2" NPT Female	1/2"	1/2"	1/4"	58	Ø13	90.5
NVS 12M12FV		3/4" NPT Male	3/4" NPT Female	3/4"	3/4"	1/4"	58	Ø14	90.5

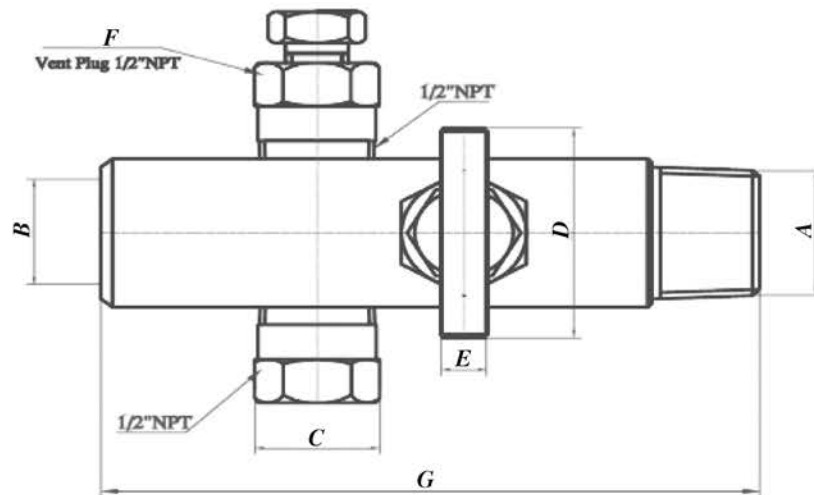
NEEDLE VALVE (Bar Stock)



PAP Part Number	Working Pressure	End Connection		Dimension:					
		Inlet Tube O.D	Outlet Tube O.D	A Tube O.D	B Tube O.D	C	D(mm)	E	F(mm)
NVS 4A	3000 6000 10000 Psi	1/4"	1/4"	1/4"	1/4"	Hex 14	58	Ø13	50
NVS 6A		3/8"	3/8"	3/8"	3/8"	Hex 17	58	Ø13	55
NVS 8A		1/2"	1/2"	1/2"	1/2"	Hex 22	58	Ø14	65
NVS M6A		6 mm	6 mm	6 mm	6 mm	Hex 14	58	Ø13	50
NVS M10A		10 mm	10 mm	10mm	10mm	Hex 17	58	Ø13	55
NVS M12A		12mm	12mm	12mm	12mm	Hex 22	58	Ø13	65

NEEDLE VALVE

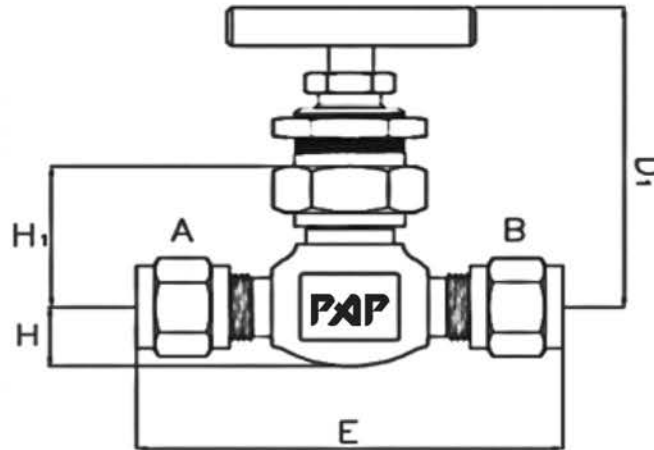
(Multi-Port Gauge Valve)



PAP Part Number	Working Pressure	End Connection		Dimensions						
		Inlet NPT Male	Outlet NPT Female	A NPT (M)	B NPT (M)	C Plug NPT	D(mm)	E	F Vent Plug NPT	G(mm)
GVS 8	3000 6000	1/2"	3x1/2"	1/2"	1/2"	Plug 1/2"	58	Ø13	1/2"	120
GVS 12	10000 Psi	3/4"	3x1/2"	3/4"	1/2"	1/2"	58	Ø13	1/2"	120

NEEDLE VALVE

O.D (Tube End Connection), Globe Pattern



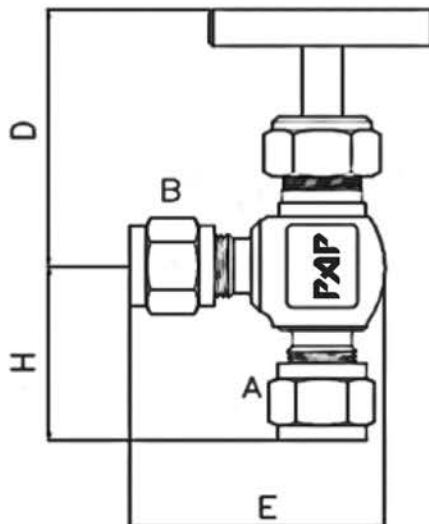
PAP Part Number	Working Pressure	End Connection		Dimensions					
		Inlet	Outlet	Unit	D	D ¹ *	E	H	H ¹ *
NEGOO 10M002	3000 6000 10000 Psi	1/8" TUBE	1/8" TUBE	in	2 7/32	2 3/4	2 1/8	4 19/6	1 1/32
				mm	56	70	54	8	26
NEGMM 10M002		1/8" M-NPT	1/8" M-NPT	in	2 1/8	2 21/32	1 3/4	2 5/64	1 5/16
				mm	54	67	44	10	24
NEGMN 10M002		1/8" M-NPT	1/8" F-NPT	in	2 1/8	2 21/32	1 3/4	2 5/64	1 5/16
				mm	54	67	44	10	24
NEGNN 10M002		1/8" F-NPT	1/8" F-NPT	in	2 1/8	2 21/32	1 3/4	2 5/64	1 5/16
				mm	54	67	44	10	24
NEGOO 10M004		1/4" TUBE	1/4" TUBE	in	2 1/8	2 21/32	2 3/8	2 5/64	1 5/16
				mm	54	67	60	10	24
NEGMO 10M004		1/4" M-NPT	1/4" TUBE	in	2 1/8	2 21/32	2 3/16	2 5/64	1 5/16
				mm	54	67	56	10	24
NEGMM 10M004		1/4" M-NPT	1/4" M-NPT	in	2 1/8	2 21/32	2	2 5/64	1 5/16
				mm	54	67	51	10	24
NEGOO 10M3m		3mm TUBE	3mm TUBE	in	2 3/16	2 3/4	2 1/8	1 9/64	1 1/32
				mm	56	70	54	8	26
NEGOO 10M6m	6mm TUBE	6mm TUBE	in	2 1/8	2 21/32	2 3/8	2 5/64	1 5/16	
			mm	54	67	60	10	24	
NEGOO 10M8m	8mm TUBE	8mm TUBE	in	2.125	2 21/32	2 3/8	2 5/64	1 5/16	
			mm	54	67	60	10	24	

All dimensions could be considered as reference.

* D¹ and H¹ For valves with panel mounting.

NEEDLE VALVE

O.D (Tube End Connection), Angel Pattern



PAP Part Number	Working Pressure	End Connection		Dimensions					
		Inlet	Outlet	Unit	D	D ¹ *	E	H	H ¹ *
NEA00 10M002	3000 6000 10000Psi	1/8" TUBE	1/8" TUBE	inch	2 7/32	2 3/4	1 1/2	1 1/64	1 1/64
				mm	56	70	38	26	26
NEAMM 10M002		1/8" M-NPT	1/8" M-NPT	inch	2 1/8	2 21/32	1 17/64	7/8	15/16
				mm	54	67	32	22	24
NEANN 10M002		1/8" F-NPT	1/8" F-NPT	inch	2 1/8	2 21/32	1 17/64	7/8	15/16
				mm	54	67	32	22	24
NEAMO 10M002		1/8" M-NPT	1/4" TUBE	inch	2 1/8	2 21/32	1 19/32	7/8	15/16
				mm	54	67	40	22	24
NEA00 10M004		1/4" TUBE	1/4" TUBE	inch	2 1/8	2 21/32	1 19/32	1 3/16	15/16
				mm	54	67	40	30	24
NEAMO 10M004	1/4" M-NPT	1/4" TUBE	inch	2 1/8	2 21/32	1 19/32	7/8	15/16	
			mm	54	67	40	22	24	
NEAMM 10M004	1/4" M-NPT	1/4" M-NPT	inch	2 1/8	2 21/32	1 17/64	7/8	15/16	
			mm	54	67	32	22	24	
NEA00 10M6m	6mm TUBE	6mm TUBE	inch	2 1/8	2 21/32	1 37/64	1 3/16	15/16	
			mm	54	67	40	30	24	

All dimensions could be considered as reference.

* D¹ and H¹ For valves with panel mounting.