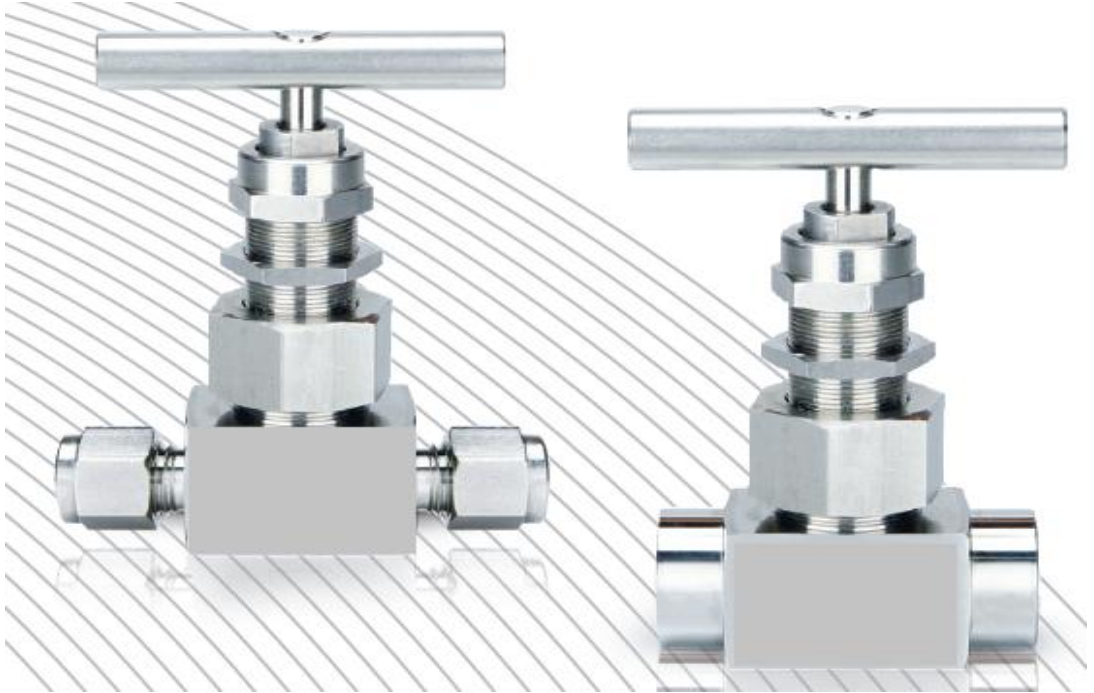




Union Bonnet GUV1 Needle Valves



Features

Pressure Rating	6000psig (413 bar) @100°F(38°C)
Temperature rating	-65 to 450°F (-54 to 232 °C) with PTFE packing and up to 1200°F(648°C) with Grafoil packing.
Body Material	316 stainless steel
Orifice	0.156" to 0.437" (4.0mm to 11.1mm)

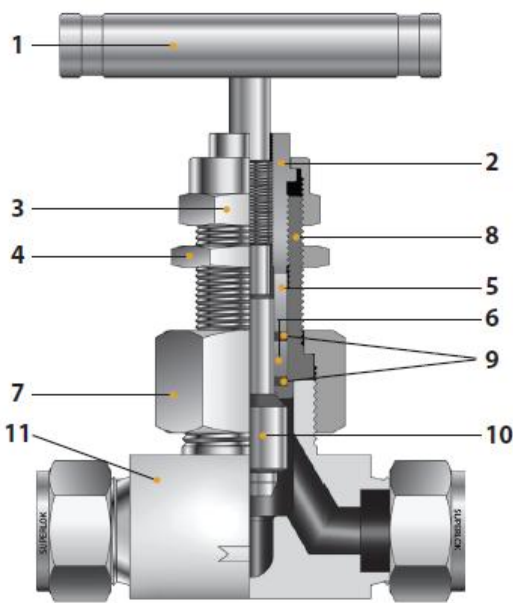
Applications

- Severe service application, high pressure sampling and shut-down systems, test stands.

Testing

- Each Valve is tested with nitrogen at 1000psig(69bar) to maximum allowable leak rate of 0.1 SCCM.
- Hydrostatic shell test is performed at 1.5 times of the working pressure. (OPTION)

Material of Constructions



No	Description		Materials
1	Bar Handle		SS316 / A276
	Set Screw		Stainless Steel
2	Packing Bolt		SS316 / A276
3	Packing Nut		SS316 / A276 or A479
4	Panel Nut		SS316 / A276
5	Packing Gland		SS316 / A276
6	Packing		PTFE
7	Union Nut		SS316 / A276
8	Bonnet		SS316 / A479
9	Packing Supports		Glass-filled PTFE
10	STEM	Vee Tip	SS316 / A276
		Ball Tip	
		Soft Tip	
		Regulating	
11	Body		SS316 / A479

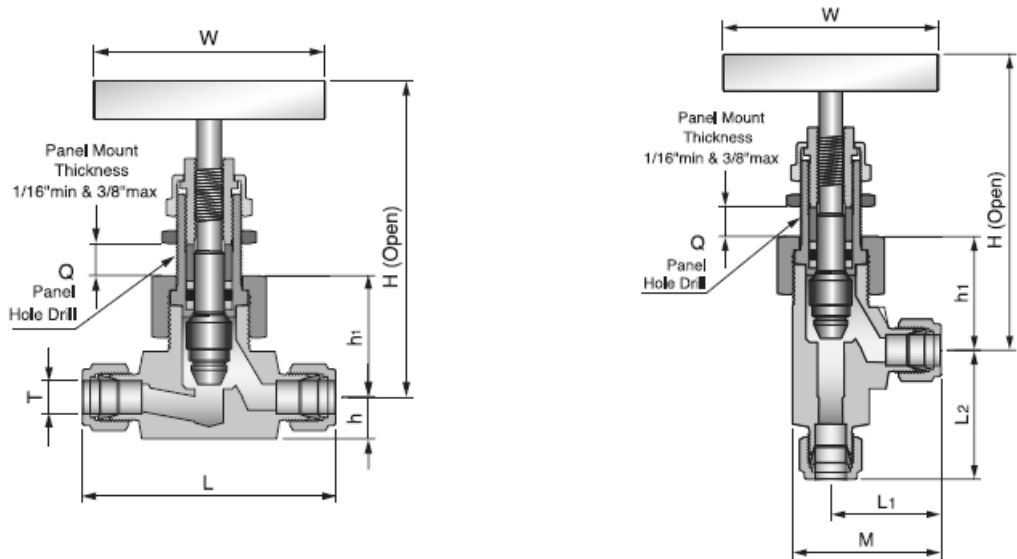


Table of Dimensions

Order Number		End Connections		Orifice (mm)	Cv	Dimensions (mm)													
Series	Part No.	Inlet	Outlet			L	L1	L2	B	C	B1	B2	A1	A2	H	G	D	D1	F
F2N-	F2N-	1/8" Female NPT		4.0	0.35	50.8	25.4	22.6	25.4	32.3	27.7	27.7	9.7	9.7	44.4	15.1	77.2	77.2	-
	F4N-	1/4" Female NPT				52.3	26.2	22.6	25.4	32.3	27.7	27.7	9.7	9.7	44.4	15.1	77.2	77.2	-
	M4N-	1/4" Male NPT				50.8	25.4	25.4	25.4	35.1	27.7	27.7	9.7	9.7	44.4	15.1	77.2	77.2	-
	MF4N-	1/4" Male to Female NPT				51.6	26.2	22.6	25.4	32.3	27.7	27.7	9.7	9.7	44.4	15.1	77.2	77.2	-
	G6M-	6mm GPI Lok				61.0	30.5	29.5	37.6	39.1	27.7	27.7	9.7	9.7	44.4	15.1	77.2	77.2	-
	G4T-	1/4" GPI Lok				61.0	30.5	29.5	37.6	39.1	27.7	27.7	9.7	9.7	44.4	15.1	77.2	77.2	-
	SW4T-	1/4" TSW				46.2	23.1	22.4	30.2	31.8	27.7	27.7	9.7	9.7	44.4	15.1	77.2	77.2	7.1
	G8M-	8mm GPI Lok				61.0	30.5	-	-	-	27.7	-	9.7	-	44.4	15.1	77.2	-	-
F4N-	F4N-	1/4" Female NPT		6.4	0.86	57.2	28.4	25.4	28.4	38.1	34.0	37.3	12.7	12.7	63.5	19.8	92.0	92.0	-
	F6N-	3/8" Female NPT				57.2	28.4	25.4	28.4	38.1	34.0	37.3	12.7	12.7	63.5	19.8	92.0	92.0	-
	G10M-	10mm GPI Lok				72.4	36.1	33.0	39.4	45.7	34.0	34.3	12.7	12.7	63.5	19.8	92.0	92.0	-
	G6T-	3/8" GPI Lok				71.9	35.8	32.8	42.2	45.5	34.0	31.0	12.7	12.7	63.5	19.8	92.0	92.0	-
	G12M-	12mm GPI Lok				77.2	38.6	35.6	41.9	48.3	34.0	34.0	12.7	12.7	63.5	19.8	92.0	92.0	-
	G8T-	1/2" GPI Lok				77.2	38.6	35.6	41.9	48.3	34.0	34.0	12.7	12.7	63.5	19.8	92.0	92.0	-
	SW4P-	1/4" PSW				57.2	28.4	25.4	28.4	38.1	34.0	37.3	12.7	12.7	63.5	19.8	92.0	92.0	9.5
	SW6T-	3/8" TSW				57.2	28.4	25.4	31.8	38.1	34.0	34.0	12.7	12.7	63.5	19.8	92.0	92.0	7.9
F8N-	SW8T-	1/2" TSW				57.2	28.4	25.4	25.4	38.1	34.0	35.6	12.7	12.7	63.5	19.8	92.0	92.0	9.5
	F8N-	1/2" Female NPT		11.1	2.20	79.2	39.6	33.3	39.6	50.8	46.2	50.8	15.7	17.5	88.9	26.2	121.0	126.0	-
	F12N-	3/4" Female NPT				82.6	41.1	-	-	-	48.5	-	19.8	-	88.9	26.2	124.0	-	-
	F16N-	1" Female NPT				91.9	46.0	-	-	-	54.1	-	25.4	-	88.9	26.2	129.0	-	-
	MF8N-	1/2" Male to Female NPT				79.2	39.6	33.3	39.6	50.8	46.2	50.8	15.7	17.5	88.9	26.2	121.0	126.0	-
	MF12N-	3/4" Male to Female NPT				82.6	41.1	36.5	41.3	56.4	48.5	50.8	19.8	19.8	88.9	26.2	124.0	126.0	-
	MF16N-	1" Male to Female NPT				91.9	46.0	-	-	-	54.1	-	25.4	-	88.9	26.2	129.0	-	-
	G12M-	12mm GPI Lok				99.6	49.8	42.7	52.8	60.2	46.2	47.8	15.7	17.5	88.9	26.2	121.0	123.0	-
	G8T-	1/2" GPI Lok				99.6	49.8	42.7	52.8	60.2	46.2	47.8	15.7	17.5	88.9	26.2	121.0	123.0	-
	G12T-	3/4" GPI Lok				99.0	49.5	42.7	52.8	60.2	46.2	47.8	15.7	17.5	88.9	26.2	121.0	123.0	-
	G16T-	1" GPI Lok				104.0	51.8	-	-	-	47.8	-	17.5	-	88.9	26.2	123.0	-	-
	SW8P-	1/2" PSW				79.2	39.6	33.3	39.6	50.8	46.2	50.8	17.5	17.5	88.9	26.2	123.0	126.0	9.5
	SW8T-	1/2" TSW				79.2	39.6	33.3	42.9	50.8	46.2	47.8	15.7	17.5	88.9	26.2	121.0	123.0	9.5
	SW12T-	3/4" TSW				79.2	39.6	-	-	-	46.2	-	15.7	-	88.9	26.2	121.0	-	11.2

*All dimensions shown are for reference only and are subject to change. Dimensions with GPI Lok nuts are in finger-tight position.

Ordering Information

GUV



G

04T



S316



Valve Series	End Connection	Size	Packing Materials	Stem Type	Body Materials
UV: Straight Pattern	G: Tube Fitting	1	Nil: PTFE	Nil: Vee	S316: 316 Stainless Steel
UVA: Angle Pattern	F: Female NPT	▽	PK: PEEK	R: Regulating	
	M: Male NPT	▽	GF: Grafoil	S: Soft Seat	
	SWT: Socket Weld-Tube	▽		B: Ball	
	SWP: Socket Weld-Pipe	▽			

Connection Type							
Fractional(Inch) Tube O.D. Designation							
Tube O.D	inch	1/8	1/4	3/8	1/2	3/4	1
O.D.	mm	3.17	6.35	9.52	12.7	19.05	25.4
Designator		02T	04T	06T	08T	12T	16T

Pipe Thread Designation							
Pipe Thread	inch	1/8	1/4	3/8	1/2	3/4	1
Designator		02N®	04N®	06N®	08N®	12N®	16N®

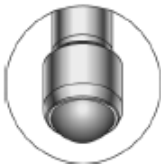
Metric Tube O.D. Designation					
Tube O.D	mm	6	8	10	12
Designator		6M	8M	10M	12M

Weld Size Designation					
Tube O.D	inch	1/4	3/8	1/2	3/4
Designator		04T	06T	08T	12T
Pipe Thread	inch	1/4	3/8	1/2	
Designator		04P	06P	08P	

Packing and Body Materials &Temperature and Pressure Rating

Valve Material	Stem	Temperature °F(°C)	Pressure @ Temp Rating psig (bar)
Stainless Steel S316	PTFE	-65°F to 450°F (-54°C to 232°C)	4,130psig (284bar)
	PEEK	-65°F to 600°F (-54°C to 315°C)	3,760psig (259bar)
	Grafoil	-65°F to 1200°F (-54°C to 648°C)	1,715psig (118bar)

Stem Type



Ball Tip



Soft Seat Tip



Regulating
Soft Seat Tip



Regulating Tip



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