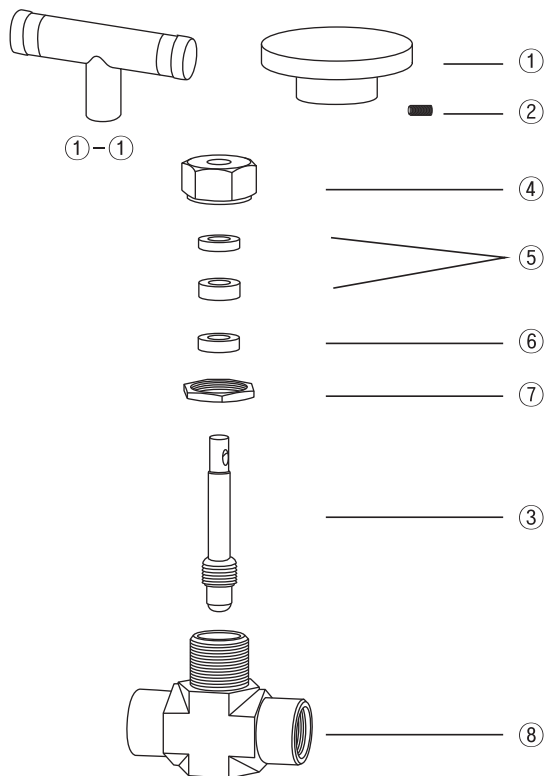
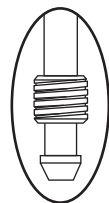


# SNV Series

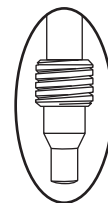
5000psig (345 Bar) Intergral Bonnet Forged Needle Valve



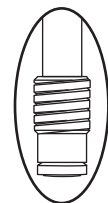
Components		VALVE BODY MATERIALS Material Grade / ASTM Specification	
		SS316	BRASS
1	Handle (Round)	Nylon with brass insert	
1-1	Bar Handle	SS316 / A276	
2	Set Screw	SS304 / A276	
3	Standard "V" Stem	SS316 / A276 Hard Chrome-plated on stem tip and threads	
	Optional Regulating Stem	SS316 / A276 Hard Chrome-plated on threads	
	Optional Soft Seat Stem	PCTFE	
4	Union Nut	SS316 / A276	Brass B16
5	Packing	Standard PTFE , Optional PEEK	
6	Packing Gland	SS316 / A276	Brass B16
7	Panel Nut	SS316 / A276	Brass B16
8	Body	SS316 / A182	Brass B283



V Stem



Regulating Stem



Non-Rotating Soft Seat

## Features

- Working Press 5,000 psig (345bar) @ 38°C (100°F).
- Temperature rating up to 450°F (232°C) with standard PTFE packing. Up to 600°F (315°C) with optional PEEK packing.
- One Piece Body – straight and angle pattern.
- Stem-Tip – vee , regulating , Non-Rotating Soft Seat.
- Panel Mounting Nut easy mounting.

## Operation

- V5 valves are designed to control fluid in shut-off and regulation flow.
- The default specification for the V5 valves is a nylon round handle with a bar handle.
- Every valve working pressure is adjusted for factory test at 1000 psig (68.9 bar) @ 21°C (70°F). For use in higher pressure, the valve packing may be required for re-adjustment (Packing Nut Tighten).
- Packing adjustment may be required during the valve in service.

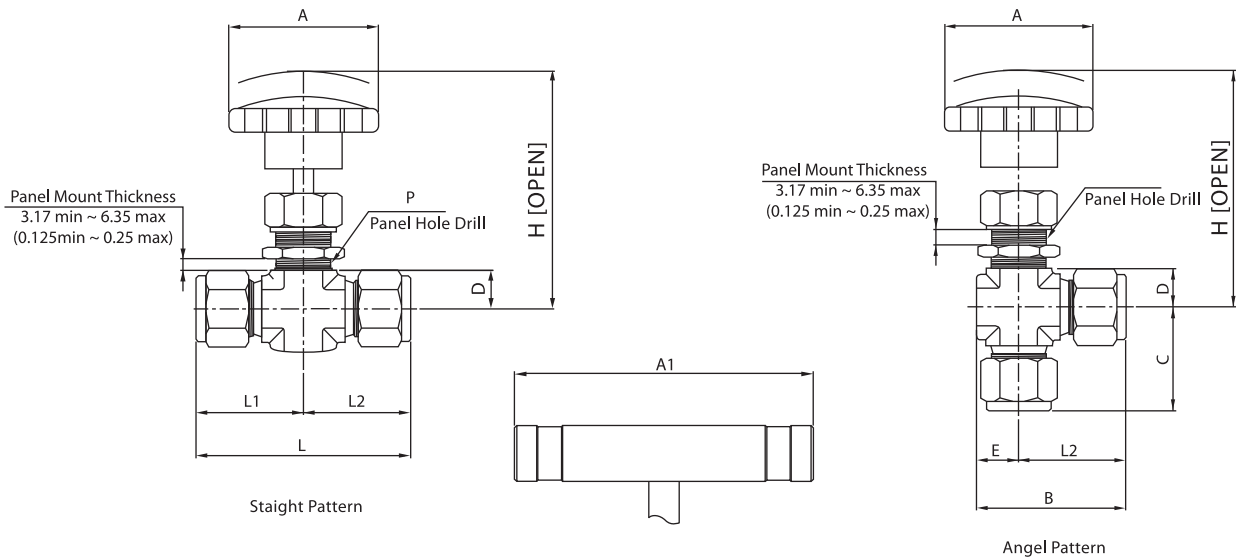
## Application

- Analytical user requiring a valve with lowest dead volume to prevent fluid entrapment which can cause contamination.
- Valve with minimum inert volume to prevent leakage of fluid

## Factory Test and Packaging

- Every valve is factory tested (taken a factory test) with nitrogen gas at 1000 psig (68.9 bar) for leakage at seat to a maximum allowable leak rate of 0.1 SCCM. The packing is tested with nitrogen gas for no detectable leakage.
- Every valve is cleaned and packaged in accordance with Sinilace cleaning standard.

## Ordering Information and Table of Dimensions



Basic Ordering Number	End Connections		Orifice	Cv											
	INLET	OUTLET			L	L1	L2	C	B	D	E	A	A1	P	H
SNV1	F2N-	1/8" Female NPT	2.0 (0.08)	0.09	42.0	21.0	21.0	21.0	30.5	11.0	9.5	38.0	45.0	13.5	51.2
	M2N-	1/8" Male NPT			42.0	21.0	20.0	21.0	29.5						
	MI2N2T	1/8" Male NPT			47.0	26.0	26.0	21.0	35.5						
	I-2T-	1/8" I-LOK			52.0	26.0	26.0	26.0	35.5						
	I-3M-	3mm I-LOK													
SNV2	F2N-	1/8" Female NPT	4.3 (0.17)	0.37	42.0	21.0	21.0	21.0	30.5	11.0	9.5	38.0	45.0	13.5	51.2
	M2N	1/8" Male NPT			50.0	25.0	25.0	25.0	34.5						
	M4N	1/4" Male NPT			53.8	28.8	28.8	25.0	38.3						
	MI4N4T-	1/4" Male NPT			57.6	28.8	28.8	28.8	38.3						
	I-6M-	6mm I-LOK			59.2	29.6	29.6	29.6	39.1						
	I-4T-	1/4" I-LOK													
	I8M-	8mm I-LOK													
SNV3	F4N	1/4" Female NPT	6.3 (0.252)	0.73	53.8	26.9	26.9	28.0	41.0	13.5	13.0	50.0	64.0	20.0	63.6
	F4R	1/4" Female PT			60.0	30.0	30.0		42.0						
	MF4N	1/4" Male NPT			61.2	33.2	46.2								
	MI4N6T	1/4" Male NPT			58.0	29.0	29.0	42.0							
	M6N	3/8" Male NPT			62.2	29.0	33.2	29.0	46.2						
	MI6N6T	3/8" Male NPT			65.0	36.0	36.0	49.0							
	I-10M	10mm I-LOK			66.4	33.2	33.2	33.2	46.2						
	I-6T	3/8" I-LOK			72.0	36.0	36.0	36.0	49.0						
	I-12M	12mm I-LOK													
	I-8T	1/2" I-LOK													
	SNV4	F6N			3/8" Female NPT	9.5 (0.374)	1.80	76.0	38.0						
F6R		3/8" Female PT													
F8N		1/2" Female NPT													
F8R		1/2" Female PT													
M8N		1/2" Male NPT													
MF8N		1/2" Male NPT													
I-8T		1/2" I-LOK	97.0	48.5	48.5			48.5	67.5						
I-12T		3/4" I-LOK													

## Temperature of PRESSURE RATING

ASME CLASS	2080	N/A	1500
MATERIAL GROUP	2.2	N/A	3.4
MATERIAL NAME	SUS 316	BRASS	ALLOY 400
Temperature	Working Pressure		
- 65□ (-54□) to 100□ (38□)	5000 (377)	3000	3000
200□ (93□)	4290	2600	2640
300□ (148□)	3870	2210	2470
350□ (176□)	3710	1470	2430
400□ (204□)	3560	740	2390
450□ (232□)	3430	-	2380

## Body MATERIAL & PACKING MATERIAL OF PRESSURE RATING

Packing Material	Body Material	Temperature	Pressure@Temp Rating
PTFE	SUS 316	450□ (232□)	3430 psig (bar)
PEEK	SUS 316	-65□ (-54□) to 600□ (315□)	3130
	ALLOY 400	-65□ (-54□) to 600□ (315□)	2370

## Ordering Information

**SNV1 - MI - 4N4T - R - RH - A - S**

1                      2                      3                      4                      5                      6                      7

### 1. Valve Designator

SNV 1 : Orifice 2.0mm SNV 2 : Orifice 4.3mm SNV3 : Orifice 6.3mm SNV4 :Orifice 9.5mm

### 2. End Connection

I : I-LOK Tube Fitting F : Female Pipe Thread M : Male Pipe Thread MI : Male Pipe Thread to I-LOK Tube

### 3. Size Designator

Thread(in)	1/8	1/4	3/8
Designator	2N(R)	4N(R)	6N(R)

Inch Tube	Tube O.D	1/8	1/4	3/8	1/2
	Designator	2	4	6	8
Metric Tube	Tube O.D	3mm	6mm	10mm	12mm
	Designator	3M	6M	10M	12M

### 4. Stem

Blank : Vee Stem ( Standard) R : Regulator Stem S : Soft Stem

### 5. Handle

Blank : Round Handle (Standard) BH : Bar Handle

### 5. Body Pattern Type

Blank :straight pattern A : Angle Pattern

### 6. Material

SS316 : SS BRASS : B