



SNV Series

VALVE BODY MATERIALS Material Grade / ASTM Specification

Nylon with brass insert

SS316 / A276

SS304 / A276

SS316 / A276

Hard Chrome-plated on stem tip and threads

SS316 / A276

Hard Chrome-plated on threads

PCTFE

Standard PTFE , Optional PEEK

BRASS

Brass B16

Brass B16

Brass B16

Brass B283

5000psig (345 Bar) Intergral Bonnet **Forged Needle Valve**

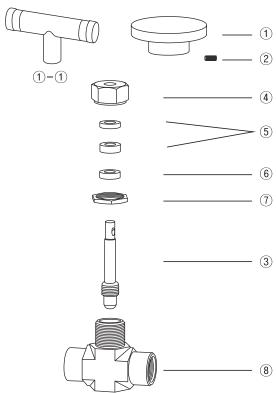
SS316

SS316 / A276

SS316 / A276

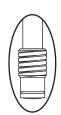
SS316 / A276

SS316 / A182



Features	





V Stem

Regulating Stem

Non-Rotating Soft Seat

- 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 pattem.
- Stem-Tip vee , regulating , Non-Rotating Soft Seat.
- Panel Mounting Nut easy mounting.

Operation

Components

Handle (Round)

Bar Handle

Set Screw

Standard "V" Stem

Optional

Regulating Stem

Optional Soft Seat Stem

Union Nut

Packing

Packing Gland

Panel Nut

Body

1

1-1

2

3

4

5

6

7

8

- 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.





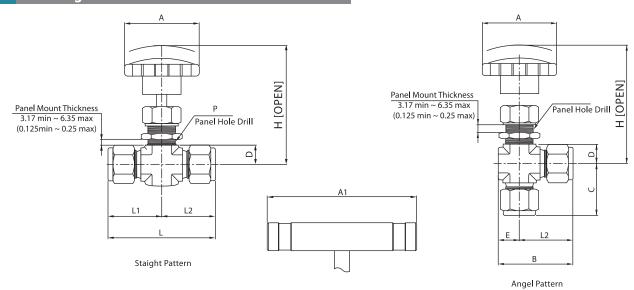
Application

- 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	End Connections	Orifice												
Nu	mber	INLET OUTLET	Orifice	Cv	L	L1	L2	С	В	D	E	A	A1	P	н
	F2N-	1/8" Female NPT		0.09	42.0	21.0	21.0	21.0	30.5		0.5				
	M2N-	1/8" Male NPT	2.0		42.0	24.0	20.0	21.0	29.5		9.5	38.0	45.0	13.5	
SNV1	MI2N2T	1/87" Male NPT 1/8" I-LOK	2.0		47.0	21.0	26.0	21.0	35.5	11.0					51.2
	I-2T-	1/8" I-LOK	(0.08)		E2.0	52.0 26.0 26.0	26.0 26.0	0 35.5		9.5					
	I-3M-	3mm I-LOK			32.0		20.0	20.0	33.3						
	F2N-	1/8" Female NPT		0.37	42.0	21.0	21.0		30.5						
	M2N	1/8" Male NPT				21.0									51.2
	M4N	1/4" Male NPT	4.3		50.0	25.0	25.0	25.0	34.5					13.5	
SNV2	MI4N4T-	1/4" Male NPT 1/4" I-LOK	(0.17)		53.8	23.0	28.8	23.0	38.3	11.0	9.5	38.0	45.0		
	I-6M-	6mm I-LOK	(0.17)		57.6	28.8	28.8	28.8	38.3						
	I-4T-	1/4" I-LOK			37.0	20.0	20.0	20.0	30.3						
	I8M-	8mm I-LOK			59.2	29.6	29.6	29.6	39.1						
	F4N	1/4" Female NPT			F2.0	26.0	26.0							20.0	63.6
	F4R	1/4" Female PT			53.8	26.9	26.9	28.0	41.0						
	MF4N	1/4" Male NPT 1/4" Female N	PT		60.0	30.0	30.0	28.0							
	MI4N6T	1/4" Male NPT 3/8" I-LOK			61.2		33.2		46.2						
	M6N	3/8" Male NPT	6.3		58.0		29.0		42.0		13.0	50.0	64.0		
SNV3	MI6N6T	3/8" Male NPT 3/8" I-LOK	(0.252)	0.73	62.2	29.0	33.2 29.0	29.0	46.2	13.5					
	MI6N8T	3/8" MAle NPT 1/2" I-LOK	(0.232)		65.0		36.0		49.0						
	I-10M	10mm I-LOK			66.4 3	4 33.2 33	33.2	33.2	46.2						
	I-6T	3/8" I-LOK					33.2	33.2							
	I-12M	12mm I-LOK			72.0	36.0	0 36.0	36.0 36.0	36.0 49.0						
	I-8T	1/2" I- LOK				72.0 36.0		30.0		79.0					
	F6N	3/8" Female NPT													91.7
	F6R	3/8" Female PT													
	F8N	1/2" Female NPT			76.0	38.0	38.0	38.0	57.0						
SNV4	F8R	1/2" Female PT	9.5	1.80	70.0	30.0	30.0	30.0	37.0	19.0	19.0	63.5	76.0	22.5	
	M8N	1/2" Male NPT	(0.374)	1.00					19.0	15.0	15.0	05.5	70.0	22.5	
	MF8N	1/2" Male NPT 1/2" Female N	PT												
	I-8T	1/2" I-LOK			97.0	48.5	48.5	48.5	67.5						
	I-12T	3/4" I-LOK				10.5	10.5	10.5	07.5						





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

Ordering Information

$$\frac{\text{SNV1}}{1} - \frac{\text{MI}}{2} - \frac{4\text{N4T}}{3} - \frac{\text{R}}{4} - \frac{\text{RH}}{5} - \frac{\text{A}}{6} - \frac{\text{S}}{7}$$

1. Valve Designator

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

2. End Connection

 $I:I\text{-LOK Tube Fitting} \ \ F:Female\ Pipe\ Thread \ \ M:Male\ Pipe\ Thread\ \ MI:Male\ Pipe\ Thread\ to\ I\text{-LOK Tube}$

3. Size Designator

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

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

