



## **INSTRUMENTATION**

# **Non Rotating- Stem Needle Valve**

**VNN Series**



# Non Rotating Stem Needle Valve - VNN Series

## Features

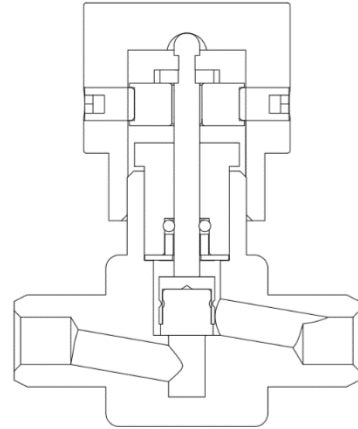
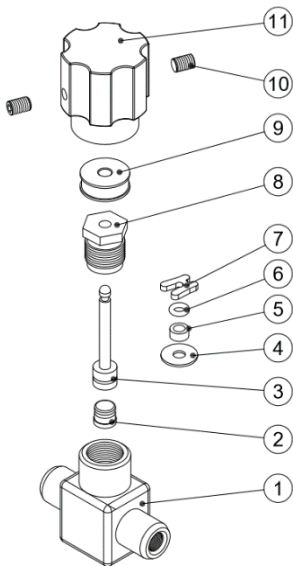
- Design Spec : ANSI / ASME B13.34
- PRESSURE RATING : 3000psig(206bar) @38°C(100°F)
- Compact, rugged design is available in straight and angle flow patterns.
- Protection handles are applied to prevent contaminants from entering the valve when it is operated.
- Female NPT, male NPT, UNILOK tube fitting, and mixed end connections are available
- Stem tips interchangeable
- Orifice sizes from 2.4 to 5.6mm are available.
- Flow coefficients (Cv) From 0.12 to 0.53 are available.

## Testing

Every Valve is 100% factory tested with air and nitrogen at 1000psig(69bar) for leakage at the seat and packing.

Each test is performed to a maximum allowable leak rate of 0.1scc/min.

Hydrostatic shell test to be performed at 1.5 time of the working pressure with optional.



## Cleaning

UNILOK valves are free from machine oils, loose particles and grease throughout the close cleaning process.

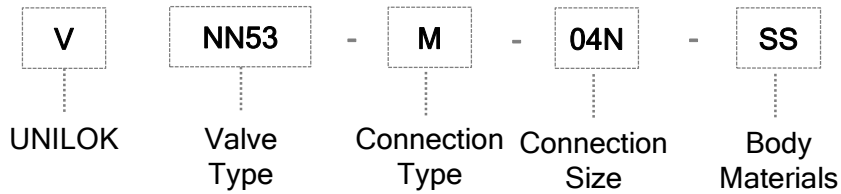
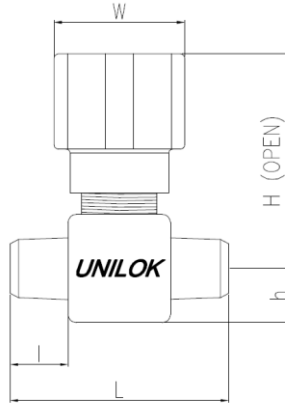
## Materials of Construction

No.	Description	Materials	EA
1	Body	PCTFE	1
2	Soft Stem Tip	SUS316	1
3	Stem	SUS316	1
4	Washer	SUS316	1
5	Packing	PTFE	1
6	O-Ring	FKM	1
7	Stopper	SUS304	1
8	Packing Bolt	SUS316	1
9	Spool	AL	1
10	Handle Set Screw	SUS304	2
11	Handle	AL	1

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## How to Order

- UNILOK VNN Series Needle Valves are ordered by part number as shown below.



Valve Type	
NN53	CV 0.53
NN27	CV 0.27
NN12	CV 0.12

Connection Size				
Male NPT or ISO7/1(PT)				
Size	1/8	1/4	3/8	1/2
Designator	02M	04M	06M	08M

Body Materials	
SS	316SS

Stem Type	
None	Soft seat stem

Connection Type	
U	UNILOK Tube Fitting
F	Female NPT or ISO7/1(PT)
M	Male NPT or ISO7/1(PT)

Connection Size		
Female NPT or ISO7/1(PT)		
Size	1/8	1/4
Designator	02F	04F

Handle Type	
None	Nylon Round Handle

Connection Size				
Fractional(Inch) Tube O.D. Designation				
Tube O.D.	inch	1/8	1/4	3/8
	mm	3.17	6.35	9.52
Designator		02T	04T	06T

Connection Size		
Metric Tube O.D. Designation		
Tube O.D.	mm	6
Designator		M06T

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### Ordering Information & Dimensions

Part Number		End Connection	orifice	CV	Dimensions mm(in.)				
			mm		L	I	H	h	W
V-NN53	M-04N-SS	1/4" Male NPT	5.6	0.53	56.7	28.4	47.2	13.6	31.5
	M-06N-SS	3/8" Male NPT	5.6	0.53	57.2	28.4	51.3	14.2	
	F-04N-SS	1/4" Female NPT	5.6	0.53	53.8	26.9	51.3	12.7	
	U-06T-SS	3/8 UNILOK	5.6	0.53	57.6	32.8	51.3	12.7	
	MU-04M08T-SS	1/4 Male NPT / 3/8 UNILOK	5.6	0.53	60.5	28.4 / 32.0	51.3	12.7	
	MF-04M02F-SS	1/4 male NPT / 1/4 Female NPT	5.6	0.53	55.6	28.4 / 26.9	51.3	12.7	
	MF-08M04F-SS	1/2 Male NPT / 1/4 Female NPT	5.6	0.53	63.5	31.8	51.3	14.2	

Part Number		End Connection	orifice	CV	Dimensions mm(in.)				
			mm		L	I	H	h	W
V-NN27	M-04N-SS	1/4" Male NPT	4.0	0.27	50.0	24.9	47.2	9.7	31.5
	U-04T-SS	1/4" UNILOK	4.0	0.27	65.5	28.7	47.2	9.7	
	U-M06T-SS	6MM UNILOK	4.0	0.27	57.6	28.7	47.2	9.7	
	U-04TT-SS	1/4 UNILOK / 1/4 UNILOK	4.0	0.27	53.8	24.9 / 28.7	47.2	9.7	
	MU-04MM06T-SS	1/4 Male NPT / 6MM UNILOK	4.0	0.27	53.8	24.9 / 28.7	47.2	9.7	

Part Number		End Connection	orifice	CV	Dimensions mm(in.)				
			mm		L	I	H	h	W
V-NN12	12-U-02T-SS	1/8" UNILOK	2.4	0.12	55.9	27.9	47.2	7.9	31.5
	12-MU-02M04T-SS	1/8 Male NPT / 1/4 UNILOK	2.4	0.12	47.0	19.0 / 27.9	47.2	7.9	
	12-MF-02M02F-SS	1/8 Male NPT / 1/8 Female NPT	2.4	0.12	42.9	19.0 / 23.9	47.2	7.9	