

INSTRUMENT

Non Rotating- Stem Needle Valve VNN Series



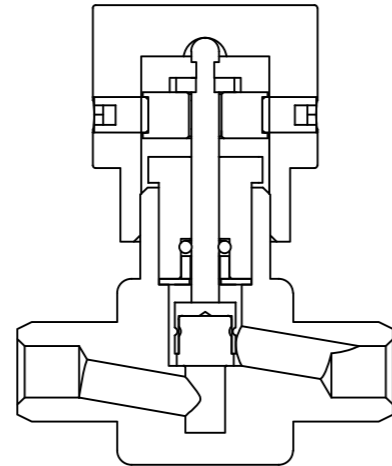
Non Rotating Stem Needle Valve – VNN Series

CONTENTS

Features	170	Materials of Construction	170
Testing	170	How to Order	171
Cleaning	170	Ordering Information & Dimensions	172

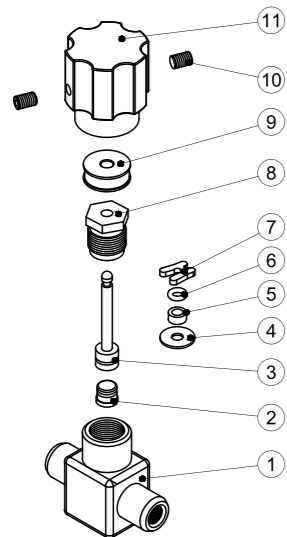
Features

- 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

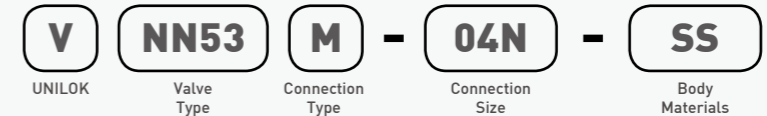
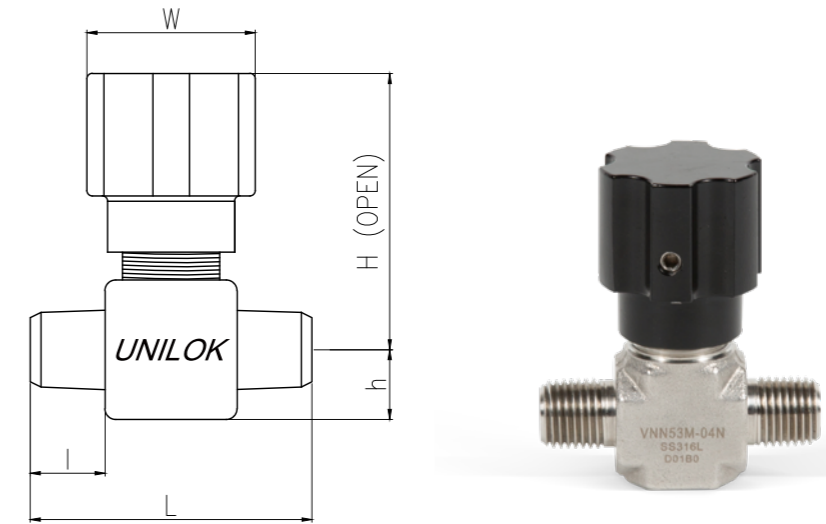
UNILOK valves are free from machine oils, loose particles and grease throughout the close cleaning process.

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

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

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

Stem Type	
None	Soft seat stem

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

Handle Type	
None	Nylon Round Handle

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

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	