

SERIES 3000

SCREWED BONNET NEEDLE VALVE

1/8" - 1/2" NPT

Globe, Block and Angle Configuration
Brass, 303 and 316 Stainless Steel

Description

Series 3000 bar stock, screwed bonnet type needle valves are available in brass, 303 & 316 stainless steel with working pressures to 5000 Psig in 1/8" to 1/2" sizes. The unique, externally adjustable, wear compensating, virgin teflon stem packing offers long trouble free service life in most liquid or gas applications. A wide variety of options including panel mounting, metal to metal seat, soft stem tip & tamper proof cap, the Series 3000 provides economical, quality solutions for the most demanding applications. Valves can be ordered cleaned and packaged for oxygen service.

Technical Data

- Maximum Pressure @ 100°F (38°C)
Brass: 3000 Psig (206 bar)
303 and 316 Stainless Steel: 5000 Psig (345 bar)
- Flow Coefficient:
Globe and Angle (.187" Orifice): 0.40 Cv
Block (.312" Orifice): 0.90 Cv
- Temperature Rating:
Metal to Metal Stem: -320°F to 400°F
(-195°C to 204°C)
Kel-F Stem Tip Stem: -65°F to 200°F
(-54°C to 93°C)

Features and Benefits

- Adjustable TFE Stem packing
- Excellent Gauge Isolation Valve
- Wide variety of options to suit many diverse applications
- Available in 303 SS as an economical alternative to 316 SS (where applicable)
- 100% factory tested

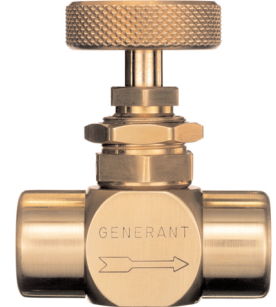
Materials of Construction

Component	Valve Body Material		
	Brass	303 Stainless Steel ¹	316 Stainless Steel ¹
Valve Body, Bonnet Packing Nut	Brass, ASTM B16	303 SS, ASTM A582	316 SS, ASTM A479
Stem ²		303 SS, ASTM A582/Kel-F (CTFE)	316 SS, ASTM A479/Kel-F (CTFE)
Handle ³		Brass, ASTM B16, (Nickel Plated, ASTM689)	
Set Screw	ANSI B18.3 (Alloy Steel)		
Packing	Virgin TFE		
Panel Nut	Brass, ASTM B16	Brass, ASTM B16, (Nickel Plated, ASTM 689)	
Tamper Proof Cap		N/A	

¹ Angle valves are not available in Stainless Steel

² Stainless valves supplied with Kel-F tip stem, optional metal to metal stem, option code "Q", see ordering information

³ Optinal black phenolic knob, option code "M"



Globe

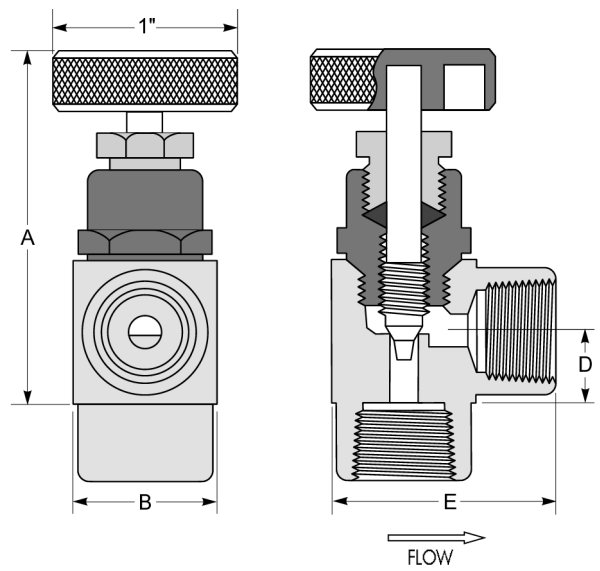
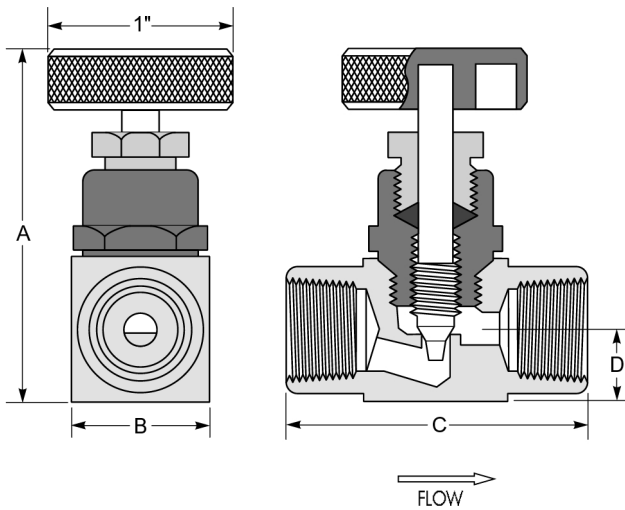


Angle



Block

SERIES 3000 NEEDLE VALVE



Dimensional Data

Valve Number	Pipe Size (NPT)	Porting Configuration		A (Open)	B	C	D	E	Orifice	Cv
		Inlet	Outlet							
1	1/8"	Female		2-1/4"	3/4"	1-5/8"	3/8"	1-1/4"	.187"	.40
2		Male								
3		Male	Female							
4	Female		1-13/16"							
5	Male									
6	Male	Female								
7	3/8"	Male		2-7/16"	1"	2-3/16"	1/2"	N/A	.312"	0.90
8		Female								
9		Male	Female							
10	Female		1-1/2"							
11	Male									
12	Male	Female								

Flow tested in accordance with ISA S75.02 with air. Restrictions in the inlet or outlet piping may reduce flow.

Ordering Information

3000 - 4SS - X

PART NUMBER

Valve Number	Porting Configuration	Part Number	
		Inline	Angle (brass only)
1	1/8" Female x 1/8" Female	3000-1	3000-1AN
2	1/8" Male x 1/8" Male	3000-2	N/A
3	1/8" Male x 1/8" Female	3000-3	3000-3AN
4	1/4" Female x 1/4" Female	3000-4	3000-4AN
5	1/4" Male x 1/4" Male	3000-5	N/A
6	1/4" Male x 1/4" Male	3000-6	3000-6AN
7	3/8" Male x 3/8" Male	3000-7	
8	3/8" Female x 3/8" Female	3000-8	
9	3/8" Male x 3/8" Female	3000-9	
10	1/2" Female x 1/2" Female	3000-10	
11	1/2" Male x 1/2" Male	3000-11	
12	1/2" Male x 1/2" Female	3000-12	

NPT threads per ANSI/ASME B1.20.1. For other thread configurations, consult the factory.

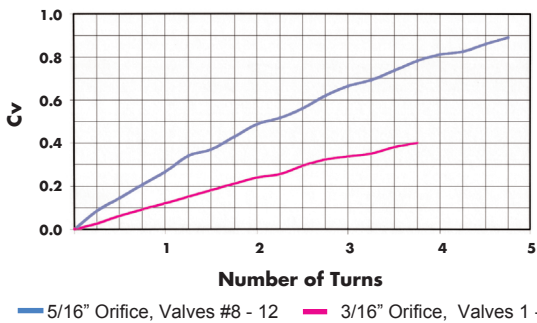
MATERIAL CODE

B - Brass (standard omit)
SS - 303 SS
SSS - 316 SS

OPTIONS

P - Panel Mount (9/16" Hole, 3/16" Max. Panel Thickness)
M - Plastic Knob (1-3/8" Diameter)
N - Kel-F Soft Stem Tip
T - TFE Soft Stem Tip
Q - Stainless Steel Stem
QN - Stainless Steel Stem with Kel-F Soft Stem Tip
C - Screw Driver Slotted Stem
QC - Stainless Steel Screw Driver Slotted Stem
K - Nickel Plated, ASTM 689
X - Cleaned and Packaged for Oxygen Service

Flow Coefficient (Cv) @ Turns Open



PROPER COMPONENT SELECTION - When specifying a component, the total system design must be considered to ensure safe and trouble-free performance. Intended component function, materials compatibility, pressure ratings, installation, environment and maintenance are the responsibility of the system designer.

GENERANT

www.generant.com

version 11.09.01

1865 Route 23 South PO Box 768 Butler, New Jersey 07405 973.838.6500 Fax 973.838.4888