

GENERANT

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

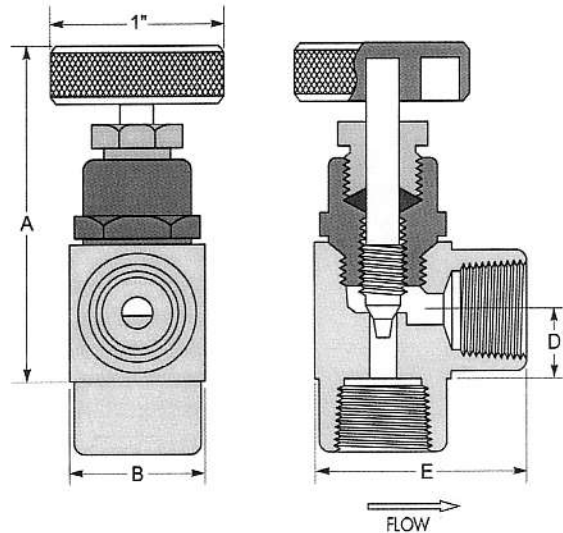
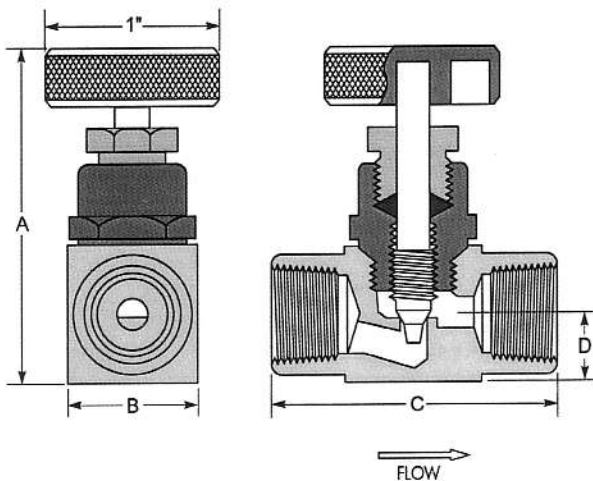


Angle



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	1/4"	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	1/2"	Female									
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.

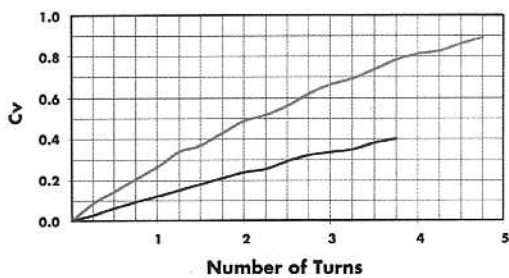
MATERIAL CODE

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



— 5/16" Orifice, Valves #8 - 12 - - - 3/16" Orifice, Valves 1 - 7

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

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