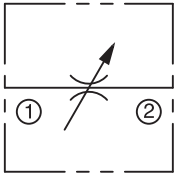


N Needle Valve
Female-to-Female

IN-LINE



DESCRIPTION

A variable flow restrictor with positive shut-off. A wide range of flow adjustment is possible because of the fine thread and tapered needle. Unwanted changes in adjustment are prevented by a locknut. A tamperproof adjustment key is standard; a knurled knob is available at slight extra cost.

- Wide range of flow adjustability
- Lock Nut to maintain flow setting
- Positive shut-off

SPECIFICATIONS

Maximum Operating Pressure (Non-Shock Service)

Brass: 2,000 psi (138 bar)
Carbon Steel: 5,000 psi (345 bar)
Stainless Steel: 5,000 psi (345 bar)

Operating Temperature Range

-15° to +400° F (-26° to +204° C)

Threads

NPTF, BSPT, SAE

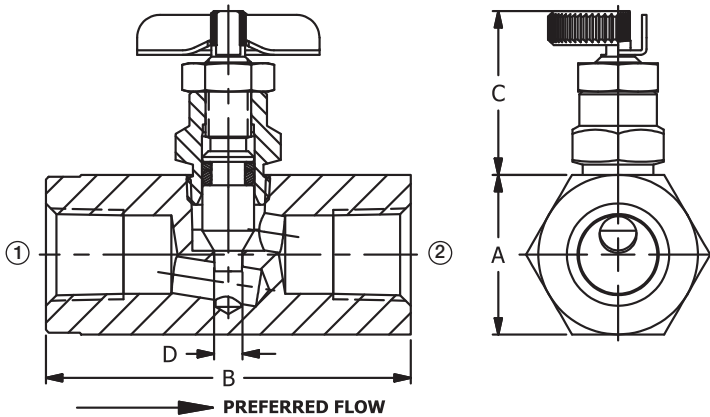
Materials

Body, Housing: Brass, Steel, Stainless Steel 303
Needle: Brass (Brass Valves)
Stainless Steel 416 (Steel and Stainless Steel Valves)
O-Ring: Viton
Back-Up Washer: Teflon
Lock Nut: Brass, Steel, Stainless Steel 303
Knob: Aluminum
Tamperproof Key: Steel

FLOW RATING

Size	Max Recommended Flow gpm (lpm)	Co-Efficient (Cv Factor) Fully Open
1/8"	3.2 (12.1)	.20
1/4"	7.0 (26.5)	.43
3/8"	13.5 (51.1)	.78
1/2"	22.5 (85.2)	1.24
3/4"	34.0 (128.7)	1.93

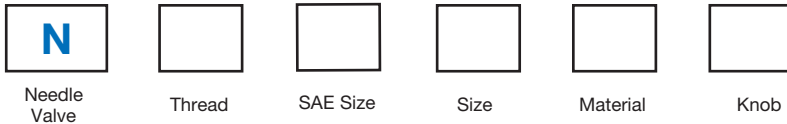
INSTALLATION DIMENSIONS



Pipe Size	A HEX	B	C Open	D Orifice
1/8"	11/16 (17.5)	1-15/32 (37.3)	7/8 (22.2)	.107 (2.7)
1/4"	7/8 (22.2)	2 (50.8)	1-1/16 (27.0)	.156 (4.0)
3/8"	1-1/16 (27.0)	2-1/4 (57.2)	1-3/16 (30.2)	.219 (5.6)
1/2"	1-5/16 (33.4)	2-21/32 (67.5)	1-15/32 (37.3)	.281 (7.1)
3/4"	1-5/8 (41.3)	2-15/16 (74.6)	1-11/16 (42.9)	.344 (8.7)

() Parentheses = Millimeters

HOW TO ORDER



Code	Thread
Omit	NPTF
B	BSPT
M	SAE

Code	Material
B	Brass
S	Carbon Steel
SS	Stainless Steel

Code	Knob
Omit	Tamperproof Adjustment Key
K	Knob

Code	SAE Size
Omit	NPTF, BSPT
4	7/16-20 UNF
6	9/16-18 UNF
8	3/4-16 UNF
12	1-1/16-12 UN

Code	Size
10	1/8"
20	1/4"
25	3/8"
30	1/2"
35	3/4"

AVAILABLE MODEL CODES

Size	NPTF Thread			ISO 7/1 - RS — BSP Taper Thread		SAE Thread
	Brass	Steel	Stainless Steel	Brass	Steel	Steel
1/8"	N10B N10BK	N10S N10SK	— N10SSK	NB10BK	NB10SK	—
1/4"	N20B N20BK	N20S N20SK	— N20SSK	NB20BK	NB20SK	NM620SK
3/8"	N25B N25BK	N25S N25SK	— N25SSK	NB25BK	NB25SK	NM425SK
1/2"	N30B N30BK	N30S N30SK	— N30SSK	—	NB30SK	NM830SK
3/4"	N35B N35BK	— N35SK	— —	—	NB35SK	NM1235SK