

# NV2H Needle Valves

**Bidirectional Metered Flow (no check) ~ 1/8" to 1 1/4"**  
**Carbon Steel body for working pressures to 5,000 PSI**



Flow-regulating, steel body needle valves provide metered flow in both directions.

- 5,000 psi pressure rating (1" size and above rated to 3000 psi).
- Carbon steel body, stainless steel trim, Buna-N O-ring.
- Port sizes from 1/8" to 1 1/4".
- Choice of threaded connection types.
- Dual taper needle for coarse adjustments at high flow and fine adjustments at low flow (optional fine needle profile available).
- Chromaflow feature provides color bands for visual setup validation.
- Set screw to secure knob for tamper prevention.
- Suitable for use with air or oil.

NV2H	Physical Parameters
VALVE BODY	Carbon Steel
Needle	416 S/S
SEALING	Buna-N Standard
WORKING PSI (1/8" - 3/4")	5,000 PSI (345 Bar)
WORKING PSI (1" - 2")	3,000 PSI (207 Bar)
SAFETY FACTOR	Minimum 3:1
RETURN FLOW CHECK	Not Present
TEMP RANGE	-40°F/250°F (-40°C/121°C)

## Ordering Codes

**NV2H**

**0500**

**N**

Size Codes	
Code	Port Size
0125	1/8"
0250	1/4"
0375	3/8"
0500	1/2"
0625	5/8"
0750	3/4"
1000	1"
1250	1 1/4"

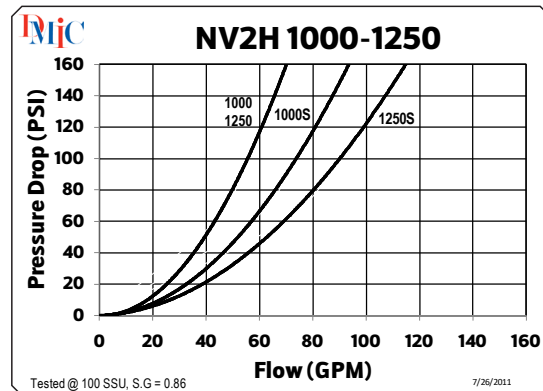
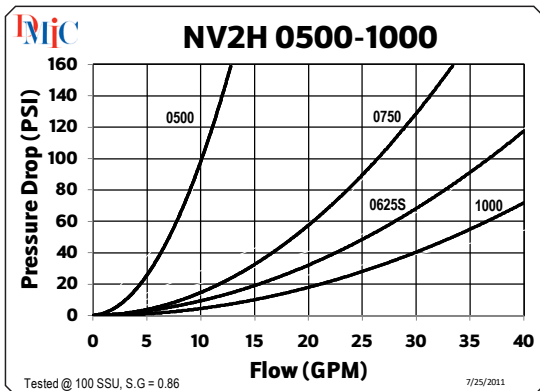
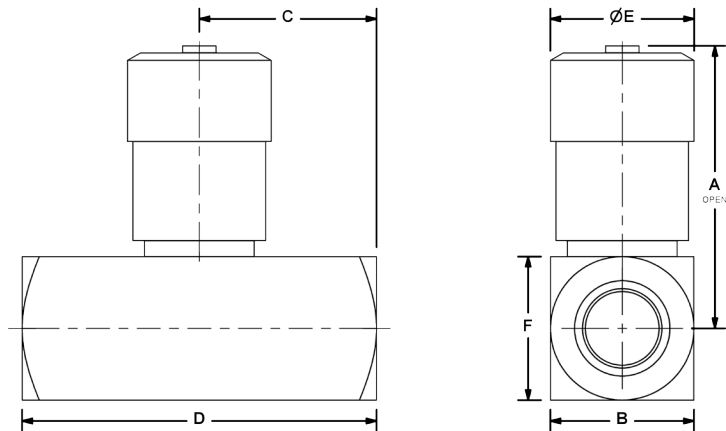
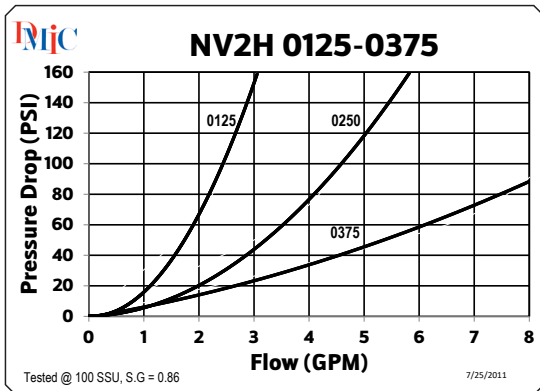
Port Thread	
N	NPT
S	SAE ORB
B	BSPP



# NV2H Needle Valves

NV2H	Nominal Size	Performance Data				Dimensions (inches)						
		Flow GPM <sup>1</sup>	Orifice Area	Effective C <sub>v</sub>	Working Pressure	A	B	C	D	E	F	Lbs.
NV2H-0125N	1/8"	3 GPM	0.0102	0.230	5,000 PSI	1.54	0.63	0.75	1.50	0.75	0.63	0.3
NV2H-0125B												
NV2H-0250N	1/4"	5 GPM	0.0194	0.433	5,000 PSI	1.79	0.81	1.00	2.00	0.81	0.81	0.5
NV2H-0250B												
NV2H-0250S		3 GPM	0.0102	0.230		1.63	0.81	1.00	2.00	0.75	0.81	0.3
NV2H-0375N	3/8"	8 GPM	0.0344	0.787	5,000 PSI	2.18	1.00	1.25	2.50	1.00	1.00	0.9
NV2H-0375B												
NV2H-0375S		5 GPM	0.0194	0.443		1.88	1.00	1.19	2.38	0.81	1.00	0.5
NV2H-0500N	1/2"	15 GPM	0.0427	0.976	5,000 PSI	2.70	1.25	1.31	2.62	1.19	1.25	1.3
NV2H-0500B												
NV2H-0500S		8 GPM	0.0344	0.787		2.24	1.12	1.50	3.00	1.00	1.12	0.9
NV2H-0625S	5/8"	15 GPM	0.0427	0.976	5,000 PSI	2.70	1.25	1.75	3.50	1.19	1.25	1.3
NV2H-0750N	3/4"	25 GPM	0.1080	2.470	5,000 PSI	3.38	1.50	1.63	3.25	1.38	1.50	2.2
NV2H-0750B												
NV2H-0750S						3.38	1.50	2.00	4.00	1.38	1.50	2.2
NV2H-1000N	1"	40 GPM	0.2300	5.250	3,000 PSI	4.87	1.75	2.13	4.25	1.88*	1.75	4.6
NV2H-1000B												
NV2H-1000S			0.3070	7.000		5.15	2.25	2.13	4.25	1.88*	2.25	4.6
NV2H-1250N	1 1/4"	70 GPM	0.2300	5.250	3,000 PSI	5.12	2.25	2.13	4.25	1.88*	2.25	6.4
NV2H-1250B												
NV2H-1250S			0.3710	8.470		5.52	2.75	2.25	4.50	1.88*	2.25	6.4

(\*) Depicts HEX size  
 Note: [1] Typical flow rates in US GPM for 100 SSU petroleum based fluid



Note: [2] Flow characteristics shown are nominal values only. Actual results may differ depending on fluid viscosity, temperature, and port connection.  
 This valve series is factory sealed and disassembly will destroy the valve and void the warranty. Due to our policy of continual product improvement, the specifications in this catalog may change without notice. When designing by spec, please request a certified print.

