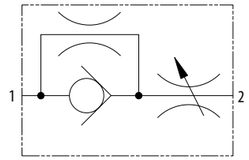
NV1-16 - Flow restrictor valve

Needle
151 L/min (40 USgpm) • 210 bar (3000 psi)



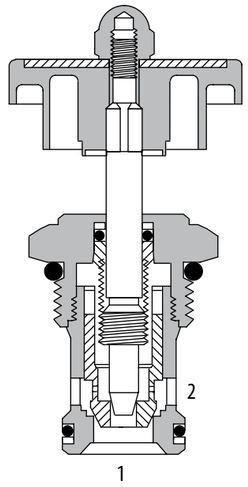
Operation

This needle valve is non-pressure compensated. Flow is controlled in the direction from port 2 to port 1, from full flow to tight shut-off, by turning the adjustment feature clockwise. The flow from port 1 to port 2 will be restricted.

Features

Hardened and ground working components. Cartridge construction for maximum mounting flexibility.

Sectional view



Performance data

Ratings and specifications

Performance data is typical with fluid at 21,8 cSt (105 SUS) and 49°C (120°F)	
Typical application pressure (all ports)	210 bar (3000 psi)
Cartridge fatigue pressure (infinite life)	210 bar (3000 psi)
Rated flow	151 L/min (40 USgpm)
Internal leakage	5 drops/min maximum @ 210 bar (3000 psi)
Temperature range	-40° to 120°C (-40° to 248°F)
Cavity	C–16–2
Fluids	All general purpose hydraulic fluids such as: MIL-H-5606, SAE 10, SAE 20 etc.
Filtration	Cleanliness code 18/**16/13**
Standard housing material	Aluminum
Weight cartridge only	0,34 kg. (0.76 lbs)
Seal kit	565810 (Buna-N), 889609 (Viton®)

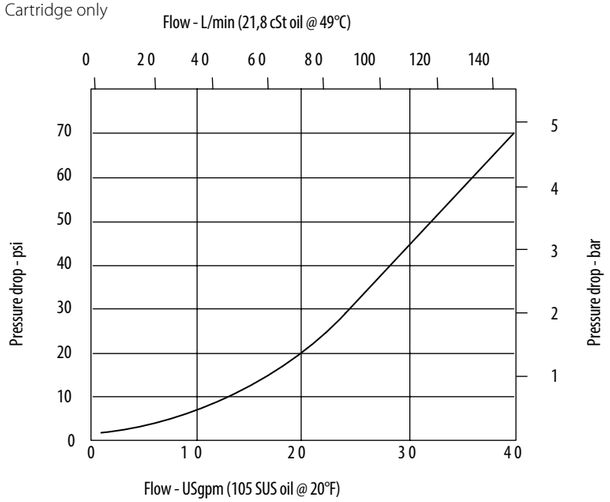
Viton is a registered trademark of E.I. DuPont

Description

This is a manually adjusted cartridge type needle valve. With fine control it is ideal for none compensated speed control of actuators or as a control orifice in conjunction with a pressure compensator Total shut off can be achieved allowing the valve to be used as a shut of valve.

Pressure drop curves

Cartridge only



Full open port 2 to port 1

NV1-16 - Flow restrictor valve

Needle
151 L/min (40 USgpm) • 210 bar (3000 psi)

Model code

NV1 – 16 (V) – * – ** – 00

1 2 3 4 5 6

1 Function

NV1 - Needle valve

2 Size

16 - 16 size

3 Seal material

Blank - Buna-N
V - Viton®

4 Adjustment

K - Knob (black)
R - Knob (red)

5 Port size

Code	Port size	Housing number	
		Aluminium light duty	Aluminium fatigue rated
0	Cartridge only		
6B	3/4" BSPP	02–175463	–
12T	SAE 12	566149	–
4G	1/2" BSPP	–	876716
6G	3/4" BSPP	–	876718
10H	SAE 10	–	876717
12G	SAE 12	–	566113

See section J for housing details.

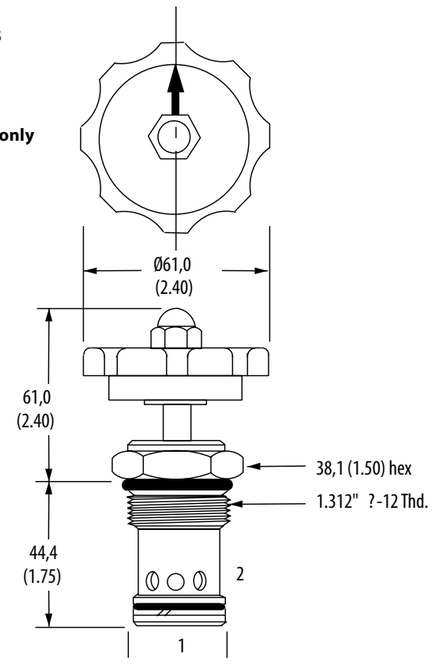
6 Special features

00 - None
(Only required if valve has special features, omit if ("00")

Dimensions

mm (inch)

Cartridge only
Basic code
NV1-16



Torque cartridge in aluminum housing
108-122 Nm (80-90 ft lbs)

Installation drawing

