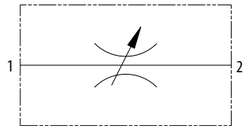
NV1-10 - Flow restrictor valve

Needle
45 L/min (12 USgpm) • 210 bar (3000 psi)



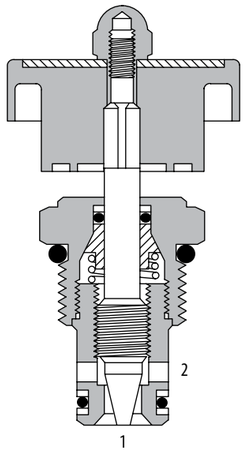
Operation

This needle valve is a variable orifice used to create a pressure drop when flow passes from port 1 to 2 or port 2 to 1. Clockwise rotation of the adjust screw de-creases the orifice size to completely closed and anti-clockwise increases the orifice. The setting can be locked using the lock nut on the adjust screw

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	45 L/min (12 USgpm)
Internal leakage	5 drops/min maximum @ 210 bar (3000 psi)
Temperature range	-40° to 120°C (-40° to 248°F)
Cavity	C–10–2
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	0,11 kg. (0.24 lbs)
Seal kit	565806 (Buna-N) 889627 (Viton®)

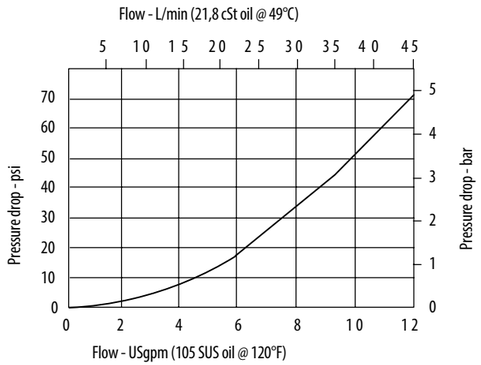
Viton is a registered trademark of E.I. DuPont

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

Cartridge only



Fully open port 1 to port 2 or port 2 to port 1

Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

NV1-10 - Flow restrictor valve

Needle
45 L/min (12 USgpm) • 210 bar (3000 psi)

Model code

NV1 – 10 (V) – * – ** – 00

1 2 3 4 5 6

1 Function

NV1 - Needle valve

2 Size

10 - 10 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		
3B	3/8" BSPP	02–175462	–
6T	SAE 6	566151	–
2G	1/4" BSPP	–	876702
3G	3/8" BSPP	–	876703
6H	SAE 6	–	876700
3G	SAE 8	–	876701

See section J for housing details.

6 Special features

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

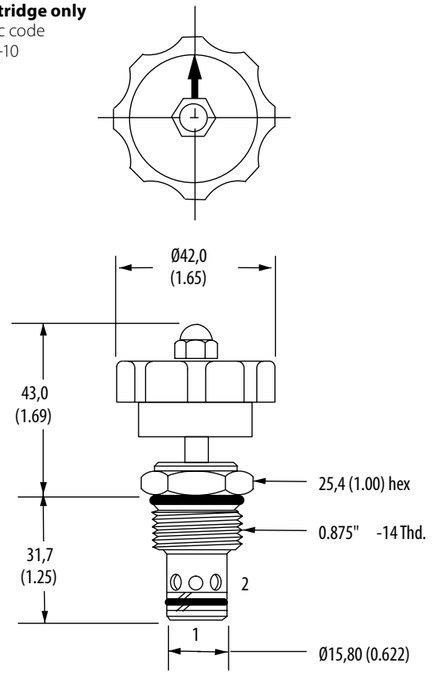
Dimensions

mm (inch)

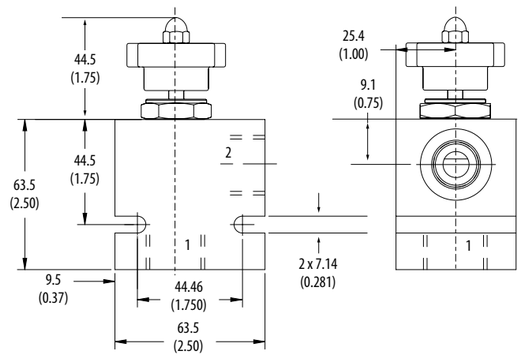
Torque cartridge in aluminum housing
47-54 Nm (35-40 ft lbs)

Cartridge only

Basic code
NV1-10



Installation drawing



Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.