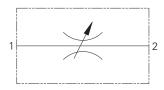
## Needle

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

NV1-10 - Flow Restrictor Valve



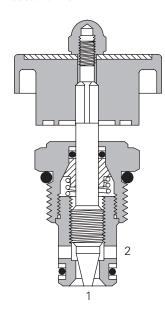
## Operation

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** 

natings 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

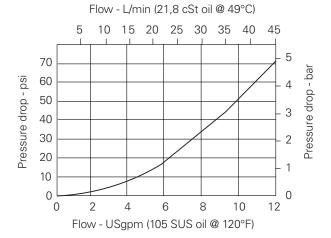
## Description

Н

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

**Function** 

NV1 - Needle valve

Size 10 - 10 size

3 Seal Material Blank - Buna-N ٧-Viton®

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

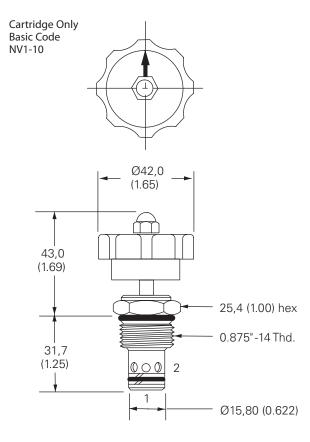
00 - None

(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)



# Installation Drawing

