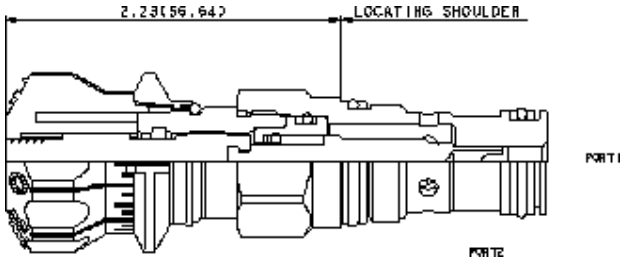
MODEL
**NFCC**

Fully adjustable needle valve
**SERIES 1 / CAPACITY: 7 gpm (.19 inch) / CAVITY: T-13A**

snhy.com/NFCC


## CONFIGURATION

| | | |
|---|---|---|
| **H** | Control | Calibrated Handknob with Detent Lock |
| **C** | Maximum Orifice Diameter | .19 in. (4,8 mm) |
| **N** | Seal Material | Buna-N |
| **(none)** | Material/Coating | Standard Material/Coating |

Needle valves are fully adjustable orifices used to regulate flow. They are infinitely adjustable from fully closed up to the maximum orifice diameter. They are not pressure-compensated. They may be used as flow controls or as shutoff valves.

## TECHNICAL DATA

| | |
|---|---|
| Maximum Operating Pressure | 5000 psi |
| Adjustment - Number of Counterclockwise Turns - Fully Closed to Fully Open | 5 |
| Locknut Hex Size | 9/16 in. |
| Locknut Torque | 80 - 90 lbf in. |
| Seal kit - Cartridge | Buna: 990-010-007 |
| Seal kit - Cartridge | Polyurethane: 990-010-002 |
| Seal kit - Cartridge | Viton: 990-010-006 |

**NOTES** For Series 1 cartridges configured with an O control (panel mount handknob), a .75 in. (19 mm) diameter hole is required in the panel.

## CONFIGURATION OPTIONS

**Model Code Example: NFCCHCN**

| CONTROL (H) | MAXIMUM ORIFICE DIAMETER (C) | SEAL MATERIAL (N) | MATERIAL/COATING |
|---|---|---|---|
| **H** Calibrated Handknob with Detent Lock | **C** .19 in. (4,8 mm) | **N** Buna-N | Standard Material/Coating |
| **L** Standard Screw Adjustment | **D** .09 in. (2,3 mm) | **E** EPDM | **/AP** Stainless Steel, Passivated |
| **K** Handknob | | **V** Viton | **/LH** Mild Steel, Zinc-Nickel |
| **Y** Tri-Grip Handknob, Flow Control | | | |

## TECHNICAL FEATURES

- All 2-port flow control cartridges are physically and functionally interchangeable (i.e. same flow path, same cavity for a given frame size). However, cartridge extension dimensions from the mounting surface may vary.
- Because needle valves are non-compensating devices, the fixed orifice size will regulate flow through the valve in proportion to the square root of the pressure differential across ports 1 and 2.
- A balanced adjustment mechanism allows for easy adjustment even at high pressures.
- The sharp-edged orifice design minimizes flow variations due to viscosity changes.
- The flow path through this valve is bi-directional. The preferred path is port 1 to 2, to allow interchangeability with other flow controls.
- There is no leakage when the adjustment mechanism is turned to the shut-off position.
- Cartridges with EPDM seals are for use in systems with phosphate ester fluids. Exposure to petroleum based fluids, greases and lubricants will damage the seals.

## PERFORMANCE CURVES