# Fully adjustable needle valve

Functional Group:
Products : Cartridges : Flow Control : 2 Port : Fully Adjustable Needle Valve
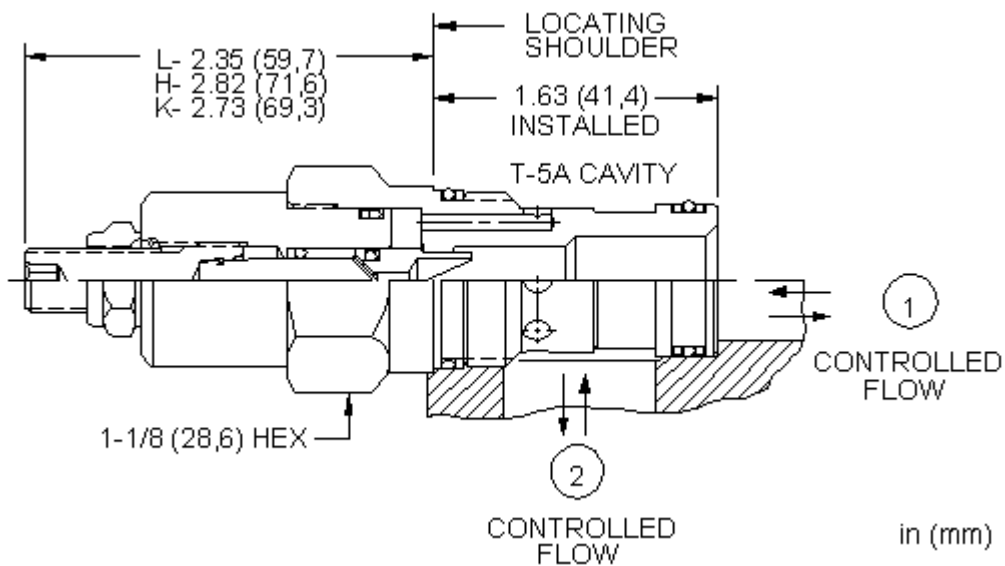
Model:
NFDC-LAV

### Product Description

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.
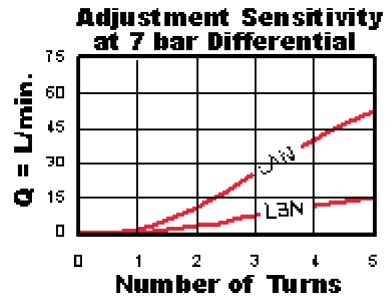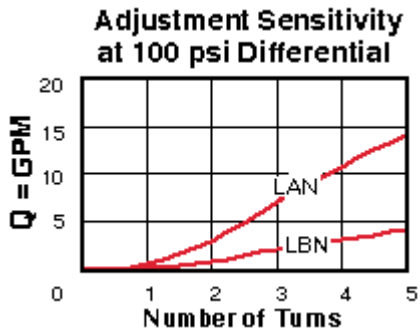


Download



### 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.

- A balanced adjustment mechanism allows for easy adjustment even at high pressures.

- The flow path through this valve is bi-directional. The preferred path is port 1 to 2, to allow interchangeability with other flow controls.

- 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.

- The sharp-edged orifice design minimizes flow variations due to viscosity changes.

- There is no leakage when the adjustment mechanism is turned to the shut-off position.

### Technical Data

|  | U.S. Units | Metric Units |
|---|---|---|
| Model Weight | 0.58 lb. | 0.26 kg. |
| Cavity | T-5A | |
| Capacity | .25 in. | 6,4 mm |
| Adjustment - Number of Counterclockwise Turns - Fully Closed to Fully Open | 5 | |

| Maximum Operating Pressure | 5000 psi | 350 bar |
|---|---|---|
| Series (from Cavity) | Series 2 | |
| Valve Hex Size | 1 1/8 in. | 28,6 mm |
| Valve Installation Torque | 45 - 50 lbf ft | 60 - 70 Nm |
| Adjustment Screw Hex Socket Size | 5/32 in. | 4 mm |
| Adjustment Nut Hex Size | 9/16 in. | 15 mm |
| Adjustment Nut Torque | 108 lbf in. | 12 Nm |
| Seal Kits | Buna: 990-203-007 | |
| Seal Kits | Viton: 990-203-006 | |





## NFDC-LAV

| Control | Maximum Orifice Diameter | External Material/Seal Material |
|---|---|---|
| L Standard Screw Adjustment +0.00 | A .25 in. (6,4 mm) +0.00 | V Viton +3.50 |

Stainless material/seal options not available for this model

- Explanation of Sun cartridge control options - US units.
- Explanation of Sun cartridge control options - metric units.