

Fully adjustable needle valve with reverse flow check

Capacity:
.25 in. (6,4 mm)

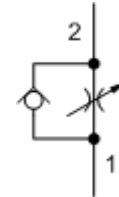
Functional Group:

Products : Cartridges : Flow Control : 2 Port : Fully Adjustable Needle Valve, With Reverse Flow Check

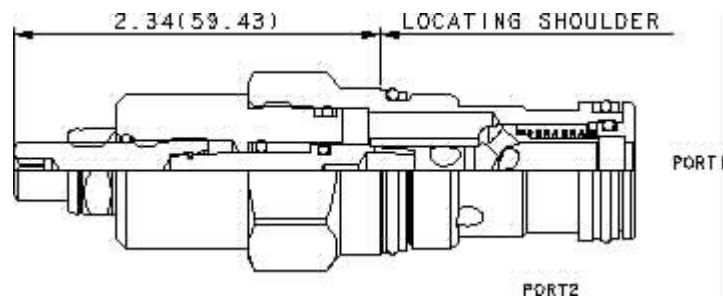
Model:
NCEB-LAV

Product Description

Needle valves with reverse-flow check are fully adjustable orifices used to regulate flow. They are infinitely adjustable from fully closed up to the maximum orifice diameter. An integral high-capacity check valve provides unrestricted flow from port 2 to port 1. They are not pressure-compensated.



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Technical Features

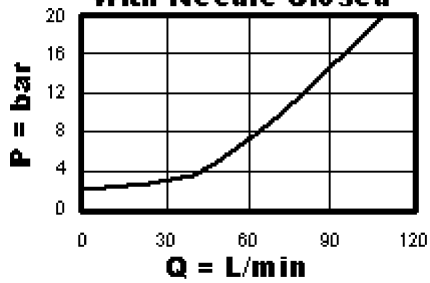
- All 2-port flow control cartridges are physically and functionally interchangeable (i.e. same flow path, same cavity for a given frame size). However, cartridge extension dimensions from the mounting surface may vary.
- A balanced adjustment mechanism allows for easy adjustment even at high pressures.
- Incorporates the Sun floating style construction to minimize the possibility of internal parts binding due to excessive installation torque and/or cavity/cartridge machining variations.
- 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.

Technical Data

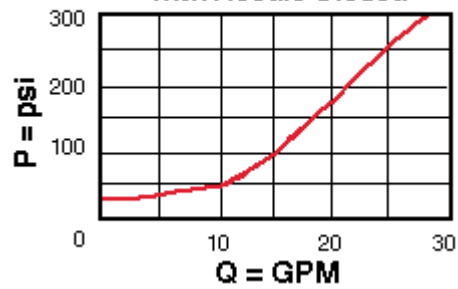
| | U.S. Units | Metric Units |
|--|----------------|--------------|
| Model Weight | 0.59 lb. | 0.27 kg. |
| Cavity | T-5A | |
| Capacity | .25 in. | 6,4 mm |
| Adjustment - Number of Counterclockwise Turns - Fully Closed to Fully Open | 5 | |
| Maximum Operating Pressure | 5000 psi | 350 bar |
| Maximum Valve Leakage at 110 SUS (24 cSt) | 5 drops/min. | 0,4 cc/min. |
| 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 | |

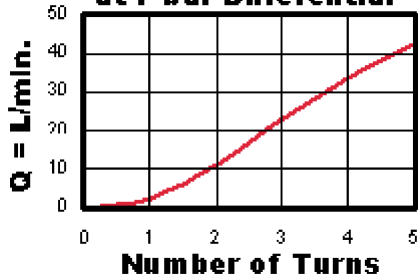
Reverse Flow Pressure Drop with Needle Closed



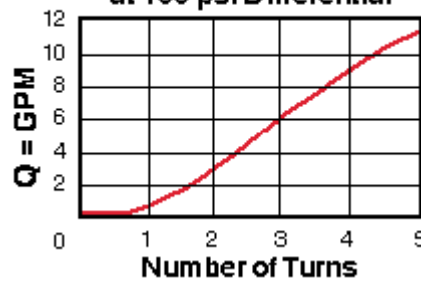
Reverse Flow Pressure Drop with Needle Closed



Adjustment Sensitivity at 7 bar Differential



Adjustment Sensitivity at 100 psi Differential



NCEB-LAV

Control

Reverse Flow Check

External Material/Seal Material

L Standard Screw Adjustment +0.00 A 4 psi (0,3 bar) +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.