



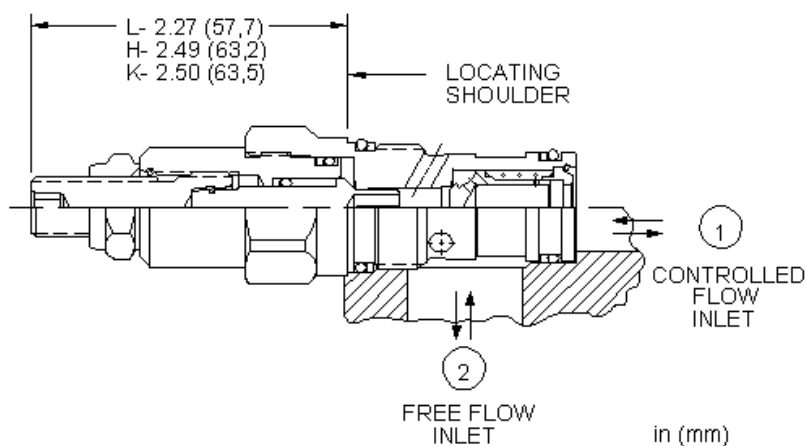
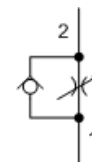
## Fully adjustable needle valve with reverse flow check

Capacity:  
.09 in. (2,3 mm)

Model:  
NCCC

### 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.



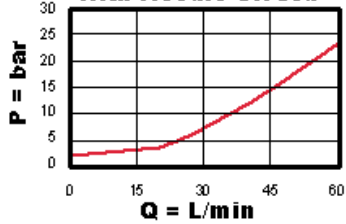
### Technical Features

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

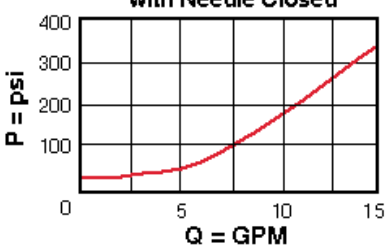
### Technical Data

|                                                                            | U.S. Units         | Metric Units |
|----------------------------------------------------------------------------|--------------------|--------------|
| Cavity                                                                     | T-13A              |              |
| Capacity                                                                   | .09 in.            | 2,3 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.       | 0,3 cc/min.  |
| Series (from Cavity)                                                       | Series 1           |              |
| Valve Hex Size                                                             | 7/8 in.            | 22,2 mm      |
| Valve Installation Torque                                                  | 30 - 35 lbf ft     | 40 - 50 Nm   |
| Adjustment Screw Internal Hex Size                                         | 5/32 in.           | 4 mm         |
| Adjustment Locknut/Cap Hex Size                                            | 9/16 in.           | 15 mm        |
| Adjustment Nut Torque                                                      | 80 - 90 lbf in.    | 9 - 10 Nm    |
| Seal Kits - Cartridge                                                      | Buna: 990-010-007  |              |
| Seal Kits - Cartridge                                                      | Viton: 990-010-006 |              |
| Model Weight                                                               | 0.32 lb.           | 0.15 kg.     |

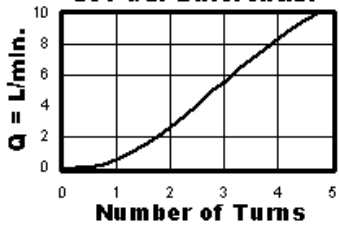
**Reverse Flow Pressure Drop  
with Needle Closed**



**Reverse Flow Pressure Drop  
with Needle Closed**



**Adjustment Sensitivity  
at 7 bar Differential**



**Adjustment Sensitivity  
at 100 psi Differential**



NCCC-LCN

Control

Preferred Options

L Standard Screw Adjustment  
Standard Options

H Calibrated Handknob with  
Detent Lock

K Handknob

O Handknob with Panel Mount

Additional Options

Reverse Flow Check

Preferred Options

C 30 psi (2 bar)  
Standard Options

A 4 psi (0,3 bar)

E 75 psi (5 bar)

Seal Material

Preferred Options

N Buna-N  
Standard Options

V Viton

Control

Reverse Flow Check

Seal Material

B 15 psi (1 bar)  
D 50 psi (3,5 bar)