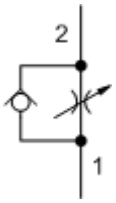

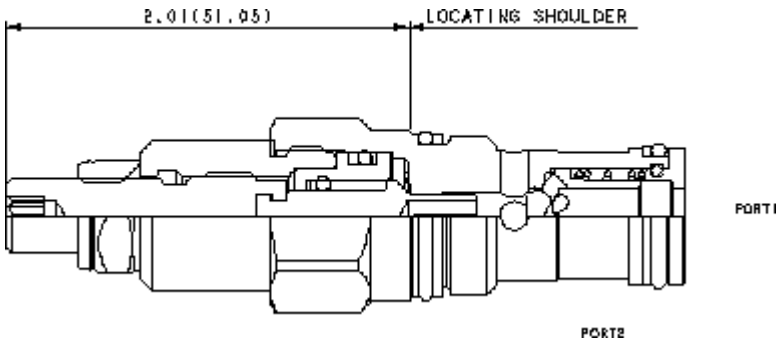

Needle valves with reverse-flow check are fully adjustable orifices used to regulate flow. They are infinitely adjustable from fully closed up to the maximum orifice diameter. An integral high-capacity check valve provides unrestricted flow from port 2 to port 1. They are not pressure compensated.

TECHNICAL DATA

NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Cavity	T-13A
Series	1
Capacity	1 gpm (.06 inch)
Maximum Operating Pressure	5000 psi
Adjustment - No. of CCW Turns from Fully Closed to Fully Open	5
Maximum Valve Leakage at 110 SUS (24 cSt)	5 drops/min.
Valve Hex Size	7/8 in.
Valve Installation Torque	30 - 35 lbf ft
Adjustment Screw Internal Hex Size	5/32 in.
Locknut Hex Size	9/16 in.
Locknut Torque	80 - 90 lbf in.
Model Weight	0.32 lb.
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.

OPTION SELECTION EXAMPLE: NCCDLCN

CONTROL	(L)
L	Standard Screw Adjustment
H	Calibrated Handknob with Detent Lock
K	Handknob
Y	Tri-Grip Handknob

REVERSE FLOW CHECK	(C)
C	30 psi (2 bar)
A	4 psi (0,3 bar)
B	15 psi (1 bar)
D	50 psi (3,5 bar)

SEAL MATERIAL	(N)
N	Buna-N
V	Viton

MATERIAL/COATING	
	Standard Material/Coating
/AP	Stainless Steel, Passivated
/LH	Mild Steel, Zinc-Nickel

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.

PERFORMANCE CURVES