



# CONFIGURATION

L	Control	Standard Screw Adjustment
I	Maximum Orifice Diameter	.85 in. (21,6 mm)
Ν	Seal Material	Buna-N
(nor	ne) 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.

PORT2

### **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: 990-018-007		
Seal kit - Cartridge	Polyurethane: 990-018-002		
Seal kit - Cartridge	Viton: 990-018-006		

## CONFIGURATION OPTIONS

### Model Code Example: NFFDLIN

CONTROL	(L)	MAXIMUM ORIFICE DIAMETER (I	<u>) s</u>	EAL MATERIAL	(N)	MATERIAL/COATING
L Standard Screw Adjustment		I .85 in. (21,6 mm)		N Buna-N		Standard Material/Coating
H Calibrated Handknob with Detent Loc	k			E EPDM		IAP Stainless Steel, Passivated
K Handknob			,	V Viton		
R Capped Screw Adjustment						

Y Tri-Grip Handknob

### **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.