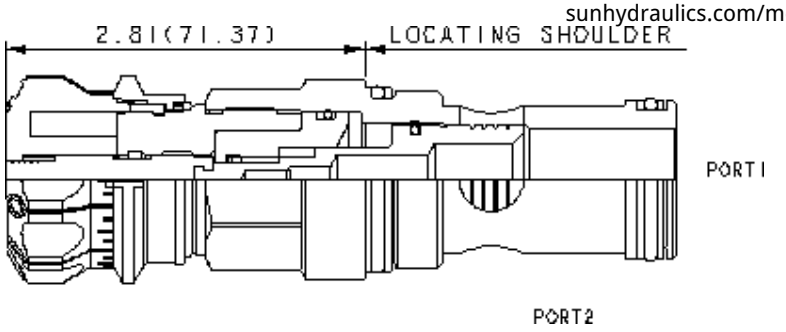
MODEL
NFED

Fully adjustable needle valve
SERIES 3 / CAPACITY: 340 L/min. (17,5 mm) / CAVITY: T-16A

sunhydraulics.com/model/NFED





CONFIGURATION

H	Control	Calibrated Handknob with Detent Lock
H	Maximum Orifice Diameter	.69 in. (17,5 mm)
N	Seal Material	Buna-N
(none)	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 and may be used as flow controls or as shutoff valves.

TECHNICAL DATA

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

Cavity	T-16A
Series	3
Capacity	340 L/min. (17,5 mm)
Maximum Operating Pressure	350 bar
Adjustment - No. of CCW Turns from Fully Closed to Fully Open	5
Valve Hex Size	31,8 mm
Valve Installation Torque	203 - 217 Nm
Adjustment Screw Internal Hex Size	4 mm
Locknut Hex Size	15 mm
Locknut Torque	9 - 10 Nm
Seal kit - Cartridge	Buna: 990016007
Seal kit - Cartridge	EPDM: 990016014
Seal kit - Cartridge	Polyurethane: 990016002
Seal kit - Cartridge	Viton: 990016006
Model Weight	0.68 kg.

CONFIGURATION OPTIONS

Model Code Example: NFEDHHN

CONTROL (H)

- **H** Calibrated Handknob with Detent Lock
- **K** Handknob
- **L** Standard Screw Adjustment
- **Y** Tri-Grip Handknob

MAXIMUM ORIFICE DIAMETER (H)

- **H** .69 in. (17,5 mm)

SEAL MATERIAL (N)

- **N** Buna-N
- **E** EPDM
- **V** Viton

MATERIAL/COATING

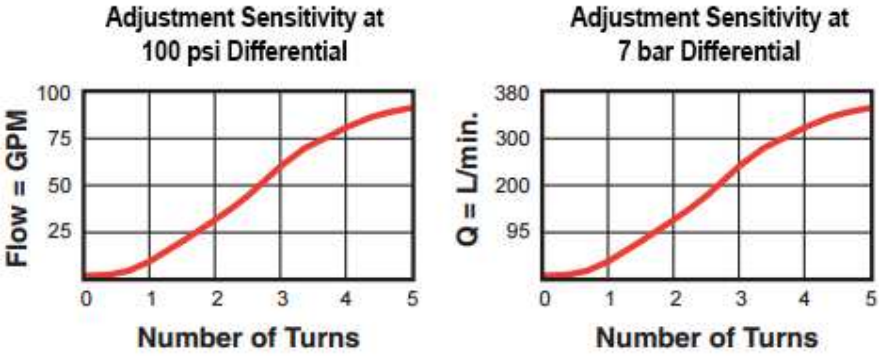
- Standard Material/Coating
- **/AP** Stainless Steel, Passivated
- **/LH** Mild Steel, Zinc-Nickel

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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.
- 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 configured with EPDM seals are for use in systems with phosphate ester fluids. Exposure to petroleum based fluids, greases and lubricants will damage the seals.

PERFORMANCE CURVES



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