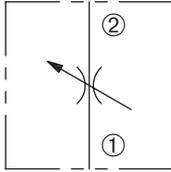


NC

Adjustable,
Needle Valve

SERIES NC



DESCRIPTION

A non-self-contained cartridge valve designed to provide a variable flow restriction with positive shut-off. Valve sizes range from 1/8" to 3/4". Available sizes; SAE 4, SAE 6 and NPTF sizes from 1/8" to 3/4".

OPERATION

The NC series of valves vary flow restriction by adjusting needle in or out and will shut off when fully closed. These valves will meter flow in either direction.

FEATURES and BENEFITS

- Aluminum knob.
- Fully adjustable.
- Adjustment may be locked in place.
- Positive shut-off.
- Compact size.

SPECIFICATIONS

Operating Pressure: 3000 psi (207 bar)

Flow: See FLOW CHARACTERISTICS chart.

Temperature: -15°F to +400°F (-26°C to +204°C)

Recommended Filtration: ISO 20/18/14

Fluids: Mineral-based fluids. For other fluid compatibility, consult factory.

Cavities/Cavity Tools: NC10; NC20; NC25; NC30 & NC35, see page 11.21.1

NC4T, see page 11.21.2

NC6T, see page 11.21.3



FLOW CHARACTERISTICS

MODEL	FLOW MAX. RECOMMENDED gpm (lpm)		CV FLOW FACTOR (FULL OPEN)
NC-04-S	13.5	(51.1)	.78
NC-06-S	22.5	(85.2)	1.24
NC-10-S	3.2	(12.1)	.19
NC-20-S	7.0	(26.5)	.43
NC-25-S	13.5	(51.1)	.78
NC-30-S	22.5	(85.2)	1.24
NC-35-S	34.0	(128.7)	1.78

DIMENSIONS Inches [Millimeters]

CLOSED STATE **OPEN STATE**

NPT SIZES
MALE THREAD SUPPLIED
WITH PRE-APPLIED
THREAD LOCKER FOR
POSITIVE SEAL

SAE SIZES
USES AN O-RING

SAE SIZES ONLY

MODEL	A (WIDTH ACROSS HEX. FLATS)	B (WIDTH ACROSS HEX. FLATS)	C (DIA.)	D (CLOSED)	E (FULL OPEN)	INSTALLATION TORQUE
NC-04-S	.44 [11.2]	.56 [14.2]	1.03 [26.2]	1.02 [25.9]	1.24 [31.5]	135 IN-LBS [15.3 Nm]
NC-06-S	.50 [12.7]	.69 [17.5]	1.03 [26.2]	1.20 [30.6]	1.45 [36.9]	
NC-10-S	.38 [9.7]	.38 [9.7]	.78 [19.8]	.75 [19.1]	.88 [22.4]	
NC-20-S	.44 [11.2]	.50 [12.7]	.78 [19.8]	.86 [21.8]	1.00 [25.4]	
NC-25-S	.44 [11.2]	.50 [12.7]	1.03 [26.2]	.97 [24.6]	1.19 [30.2]	
NC-30-S	.50 [12.7]	.56 [14.2]	1.03 [26.2]	1.19 [30.2]	1.44 [36.6]	
NC-35-S	.69 [17.5]	.75 [19.1]	1.03 [26.2]	1.31 [33.3]	1.63 [41.4]	

HOW TO ORDER

NC - ****** - **S**

Needle Valve Size Carbon Steel

Size	Flow - Maximum	Cavity	Seals	Seal Kit (external)
04	SAE 4 13.5 gpm (51.1 lpm)	NC4T	Viton	(1) 10031-20
06	SAE 6 22.5 gpm (85.2 lpm)	NC6T	Buna N	(1) 10031-22
10	1/8" NPT 3.2 gpm (12.1 lpm)	NC10	Viton (internal)	Thread Locker
20	1/4" NPT 7.0 gpm (26.5 lpm)	NC20		
25	3/8" NPT 13.5 gpm (51.1 lpm)	NC25		
30	1/2" NPT 22.5 gpm (85.2 lpm)	NC30		
35	3/4" NPT 34.0 gpm (128.7 lpm)	NC35		

All variations may not be configurable. Minimum order quantities may be required on other models. Contact Deltrol Fluid Products for complete details.

SOLENOID
CHECK
MOTION CONTROL
FLOW CONTROL
RELIEF
PRESSURE CONTROL
SEQUENCE
SHUTTLE
DIRECTIONAL VALVES
HAND PUMPS
TECHNICAL DATA