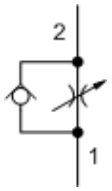
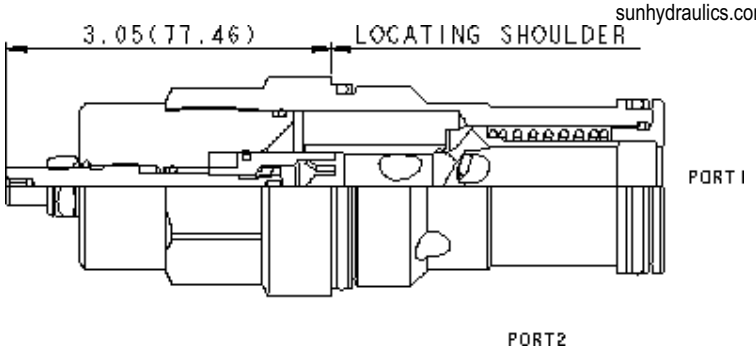
MODEL
NCGB

Fully adjustable needle valve with reverse flow check
SERIES 4 / CAPACITY: 60 gpm (.56 inch) / CAVITY: T-18A

sunhydraulics.com/model/NCGB





CONFIGURATION

L	Control	Standard Screw Adjustment
C	Reverse Flow Check	30 psi (2 bar)
N	Seal Material	Buna-N
(none)	Material/Coating	

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-18A
Series	4
Capacity	60 gpm (.56 inch)
Maximum Operating Pressure	5000 psi
Maximum Valve Leakage at 110 SUS (24 cSt)	10 drops/min.
Adjustment - No. of CCW Turns from Fully Closed to Fully Open	5
Valve Hex Size	1 5/8 in.
Valve Installation Torque	350 - 375 lbf ft
Adjustment Screw Internal Hex Size	5/32 in.
Locknut Hex Size	9/16 in.
Locknut Torque	80 - 90 lbf in.
Seal kit - Cartridge	Buna: 990018007
Seal kit - Cartridge	EPDM: 990018014
Seal kit - Cartridge	Polyurethane: 990018002
Seal kit - Cartridge	Viton: 990018006
Model Weight	2.68 lb.

CONFIGURATION OPTIONS

Model Code Example: NCGBLCN

CONTROL (L)	REVERSE FLOW CHECK (C)	SEAL MATERIAL (N)	MATERIAL/COATING
L Standard Screw Adjustment	**C** 30 psi (2 bar)	**N** Buna-N	Standard Material/Coating
H Calibrated Handknob with Detent Lock	**A** 4 psi (0,3 bar)	**E** EPDM	**/AP** Stainless Steel, Passivated
K Handknob	**E** 75 psi (5 bar)	**V** Viton	**/LH** Mild Steel, Zinc-Nickel
Y Tri-Grip Handknob			

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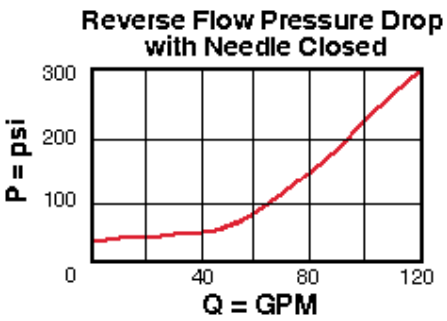
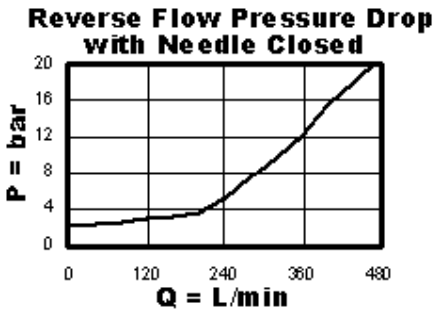
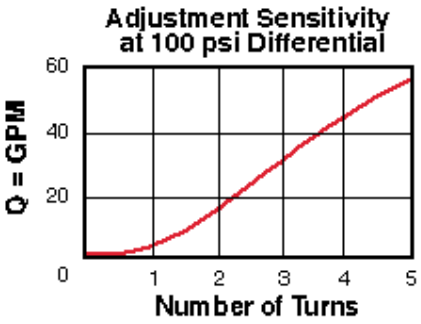
TECHNICAL FEATURES

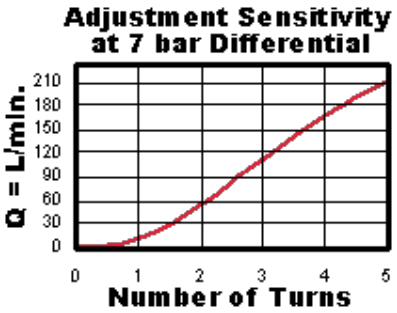
- All 2-port flow control cartridges are physically and functionally interchangeable (i.e. same flow path, same cavity for a given frame size). However, cartridge extension dimensions from the mounting surface may vary.
- Because needle valves are non-compensating devices, the fixed orifice size will 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.
- 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.
- Incorporates the Sun floating style construction to minimize the possibility of internal parts binding due to excessive installation torque and/or cavity/cartridge machining variations.

PERFORMANCE CURVES









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