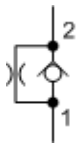
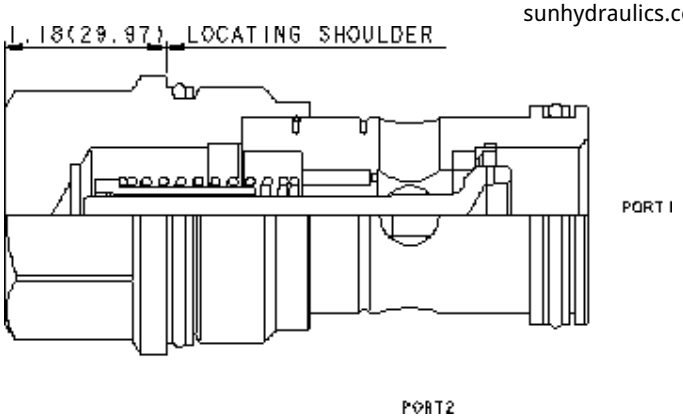
MODEL
CNIC

# Fixed-orifice, non-pressure compensated, flow control valve with reverse flow check

## SERIES 4 / CAPACITY: 120 gpm / CAVITY: T-18A

sunhydraulics.com/model/CNIC




## CONFIGURATION

| | | |
|---|---|---|
| **X** | Control | Not Adjustable |
| **C** | Setting Range | 30 psi (2 bar) Cracking Pressure, .016 - .218 in. (0,4 - 5,5 mm) |
| **N** | Seal Material | Buna-N |

This valve is a fixed-orifice, non-pressure-compensated flow control with a reverse flow check. The flow setting is specified by the user and is set at the factory.

## TECHNICAL DATA

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

| | |
|---|---|
| Cavity | T-18A |
| Series | 4 |
| Capacity | 120 gpm |
| Maximum Operating Pressure | 5000 psi |
| Orifice Range | .016 - .218 in. |
| Valve Hex Size | 1 5/8 in. |
| Valve Installation Torque | 350 - 375 lbf ft |
| Seal kit - Cartridge | Buna: 990018007 |
| Seal kit - Cartridge | Polyurethane: 990018002 |
| Seal kit - Cartridge | Viton: 990018006 |
| Model Weight | 2.00 lb. |

## CONFIGURATION OPTIONS

**Model Code Example: CNICXCN**

### CONTROL (X)

- **X** Not Adjustable

### SETTING RANGE (C)

- **C** 30 psi (2 bar) Cracking Pressure, .016 - .218 in. (0,4 - 5,5 mm)
- **A** 4 psi (0,3 bar) Cracking Pressure, .016 - .218 in. (0,4 - 5,5 mm)
- **B** 15 psi (1 bar) Cracking Pressure, .016 - .218 in. (0,4 - 5,5 mm)
- **D** 50 psi (3,5 bar) Cracking Pressure, .016 - .218 in. (0,4 - 5,5 mm)
- **E** 75 psi (5 bar) Cracking Pressure, .016 - .218 in. (0,4 - 5,5 mm)
- **F** 100 psi (7 bar) Cracking Pressure, .016 - .218 in. (0,4 - 5,5 mm)

### SEAL MATERIAL (N)

- **N** Buna-N
- **V** Viton

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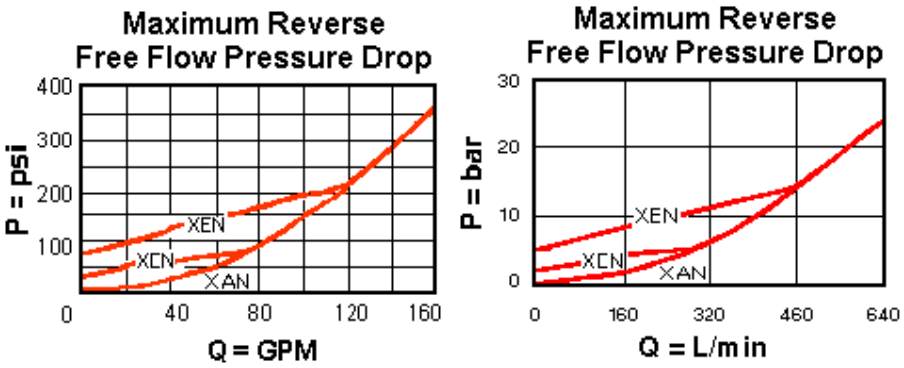
## TECHNICAL FEATURES

- Customer must specify the orifice diameter.
- 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.
- These are essentially check valves with bypass orifices. The flow path matches Sun's flow controls and can be used in any flow control manifolds. Valves with the opposite direction of flow can be found under check valves with bypass orifices.
- Because these 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 customer specified orifice diameter is stamped on one of the cartridge's hex faces.
- 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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