



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-13A |
| Series | 1 |
| Capacity | 28 L/min. (4,8 mm) |
| Maximum Operating Pressure | 350 bar |
| Maximum Valve Leakage at 110 SUS (24 cSt) | 0,7 cc/min. |
| Adjustment - No. of CCW Turns from Fully Closed to Fully Open | 5 |
| Valve Hex Size | 22,2 mm |
| Valve Installation Torque | 41 - 47 Nm |
| Adjustment Screw Internal Hex Size | 4 mm |
| Locknut Hex Size | 15 mm |
| Locknut Torque | 9 - 10 Nm |
| Seal kit - Cartridge | Buna: 990010007 |
| Seal kit - Cartridge | EPDM: 990010014 |
| Seal kit - Cartridge | Polyurethane: 990010002 |
| Seal kit - Cartridge | Viton: 990010006 |
| Model Weight | 0.14 kg. |

CONFIGURATION

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

NOTES

For Series 1 cartridges configured with an O control (panel mount handknob), a .75 in. (19 mm) diameter hole is required in the panel.

CONFIGURATION OPTIONS
Model Code Example: NCCBLCN

| 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 |
| 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.
- 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.

PERFORMANCE CURVES

