



Counterbalance valves with pilot assist are meant to control an overrunning load. The check valve allows free flow from the directional valve (port 2) to the load (port 1) while a direct-acting, pilot-assisted relief valve controls flow from port 1 to port 2. Pilot assist at port 3 lowers the effective setting of the relief valve at a rate determined by the pilot ratio. Other names for this valve include motion control valve and over-center valve.

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

| | |
|---|---------------------------|
| Pilot Ratio | 10:1 |
| Maximum Recommended Load Pressure at Maximum Setting | 3850 psi |
| Maximum Setting | 5000 psi |
| Adjustment - No. of CCW Turns from Min. to Max. Setting | 3.75 |
| Factory Pressure Settings Established at | 2 in ³ /min. |
| Maximum Valve Leakage at Reseat | 5 drops/min. |
| Reseat | >85% of setting |
| Locknut Hex Size | 9/16 in. |
| Locknut Torque | 80 - 90 lbf in. |
| Seal kit - Cartridge | Buna: 990-011-007 |
| Seal kit - Cartridge | EPDM: 990-011-014 |
| Seal kit - Cartridge | Polyurethane: 990-011-002 |
| Seal kit - Cartridge | Viton: 990-011-006 |

CONFIGURATION OPTIONS

Model Code Example: CBCHLJN

CONTROL
(L) Standard Screw Adjustment

FUNCTIONAL SETTING RANGE **(J)**

J 2000 - 5000 psi w/25 psi Check (140 - 350 bar w/ 1,7 bar Check), 3000 psi (210 bar) Standard Setting

C 2000 - 5000 psi w/4 psi Check (140 - 350 bar w/ 0,3 bar Check), 3000 psi (210 bar) Standard Setting

D 1000 - 2500 psi w/4 psi Check (70 - 175 bar w/ 0,3 bar Check), 2000 psi (140 bar) Standard Setting

K 1000 - 2500 psi w/25 psi Check (70 - 175 bar w/ 1,7 bar Check), 2000 psi (140 bar) Standard Setting

SEAL MATERIAL **(N)**

N Buna-N

E EPDM

V Viton

MATERIAL/COATING

Standard Material/Coating

/AP Stainless Steel, Passivated

/LH Mild Steel, Zinc-Nickel