



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 | 1.5:1 |
| Maximum Recommended Load Pressure at Maximum Setting | 215 bar |
| Maximum Setting | 280 bar |
| Factory Pressure Settings Established at | 30 cc/min. |
| Maximum Valve Leakage at Reseat | 0,3 cc/min. |
| Adjustment - Number of Counterclockwise Turns to Increase Setting | 3.75 |
| Reseat | >85% of setting |
| Locknut Hex Size | 15 mm |
| Locknut Torque | 9 - 10 Nm |
| Seal kit - Cartridge | Buna: 990017007 |
| Seal kit - Cartridge | Polyurethane: 990017002 |
| Seal kit - Cartridge | Viton: 990017006 |

CONFIGURATION OPTIONS

Model Code Example: CBFBLHN

| CONTROL | (L) FUNCTIONAL SETTING RANGE (H) | SEAL MATERIAL | (N) MATERIAL/COATING |
|---|--|-----------------------------------|--|
| L Standard Screw Adjustment C Tamper Resistant - Factory Set | H 1000 - 4000 psi w/25 psi Check (70 - 280 bar w/ 1,7 bar Check), 3000 psi (210 bar) Standard Setting A 1000 - 4000 psi w/4 psi Check (70 - 280 bar w/ 0,3 bar Check), 3000 psi (210 bar) Standard Setting B 400 - 1500 psi w/4 psi Check (28 - 105 bar w/ 0,3 bar Check), 1000 psi (70 bar) Standard Setting I 400 - 1500 psi w/25 psi Check (28 - 105 bar w/ 1,7 bar Check), 1000 psi (70 bar) Standard Setting | N Buna-N V Viton | N Standard Material/Coating /LH Mild Steel, Zinc-Nickel |