



Vented 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. Backpressure at port 2 does not affect the valve setting because the spring chamber references the vent (port 4). 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	2:1
Maximum Recommended Load Pressure at Maximum Setting	4615 psi
Maximum Setting	6000 psi
Adjustment - No. of CCW Turns from Min. to Max. Setting	5
Check Cracking Pressure	25 psi
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: 990-022-007
Seal kit - Cartridge	Polyurethane: 990-022-002
Seal kit - Cartridge	Viton: 990-022-006

CONFIGURATION OPTIONS

Model Code Example: CWELLN

CONTROL

(L) SEAL MATERIAL

(N) MATERIAL/COATING

L Standard Screw Adjustment

N Buna-N

Standard Material/Coating

C Tamper Resistant - Factory Set

V Viton

/AP Stainless Steel, Passivated

/LH Mild Steel, Zinc-Nickel