



Fixed-setting, 3-port counterbalance valves with pilot-assist function similarly to the adjustable versions except the fixed setting is pre-set to a nominal value. These fixed-setting valves 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	4.5:1
Maximum Recommended Load Pressure	See Technical Features
Check Cracking Pressure	25 psi
Factory Pressure Settings Established at	2 in ³ /min.
Maximum Valve Leakage at Reseat	5 drops/min.
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: **CBBDXMNV**

FIXED PRESSURE RANGE

(M)

SEAL MATERIAL

(V)

MATERIAL/COATING

- M** 4700 - 5600 psi (325 - 390 bar)
- V** 3200 - 3800 psi (220 - 260 bar)
- X** 3500 - 4200 psi (245 - 290 bar)
- Z** 4125 - 4900 psi (285 - 340 bar)

- V** Viton
- E** EPDM
- N** Buna-N

- Standard Material/Coating**
- /AP** Stainless Steel, Passivated