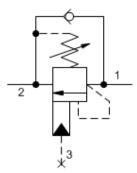
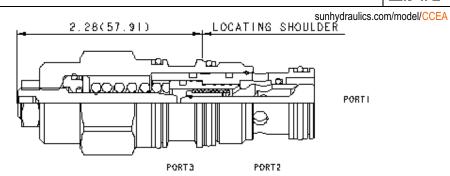


CONFIGURATION







Counterbalance valves without 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 relief valve controls flow from port 1 to port 2.

TECHNICAL DATA

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

L	Control	Standard Screw Adjustment		
Η	Functional Setting Range	1000 - 4000 psi w/25 psi Check (70 - 280 bar w/ 1,7 bar Check), 3000 psi (210 bar) Standard Setting	Cavity	T-2A
			Series	2
			Capacity	30 gpm
Ν	Seal Material	Buna-N	Pilot Ratio	Zero
(none) Material/Coating		Standard Material/Coating	Maximum Recommended Load Pressure at Maximum Setting	3075 psi
			Maximum Setting	4000 psi
			Factory Pressure Settings Established at	2 in ³ /min.
			Maximum Operating Pressure	5000 psi
			Maximum Valve Leakage at Reseat	5 drops/min.
			Adjustment - No. of CCW Turns from Min. to Max. Setting	3.75
			Operating Characteristic	Standard
			Reseat	>85% of setting
			Valve Hex Size	1 1/8 in.
			Valve Installation Torque	45 - 50 lbf ft
			Adjustment Screw Internal Hex Size	5/32 in.
			Locknut Hex Size	9/16 in.
			Locknut Torque	80 - 90 lbf in.
			Seal kit - Cartridge	Buna: 990202007
			Seal kit - Cartridge	Polyurethane: 990002002
			Seal kit - Cartridge	Viton: 990202006
			Model Weight	0.62 lb.
				•

CONFIGURATION OPTIONS

Model Code Example: CCEALHN

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	Standard Material/Coating /LH Mild Steel, Zinc-Nickel

TECHNICAL FEATURES

- Counterbalance valves should be set at least 1.3 times the maximum load induced pressure.
- Turn adjustment clockwise to decrease setting and release load.
- Full clockwise setting is less than 200 psi (14 bar).
- These valves are modified versions of our pilot assisted counterbalance valves. The pilot assist area has been nullified internally. There is no connection to port 3.
- Backpressure at port 2 is directly additive to the relief setting of the valve.
- Lower pilot ratios (pilot gain) promote machine stability. This valve has a pilot ratio of zero. Stability is gained at the expense of efficiency.
- Reseat exceeds 85% of set pressure when the valve is standard set. Settings lower than the standard set pressure may result in lower reseat percentages.
- Sun counterbalance cartridges can be installed directly into a cavity machined in an actuator housing for added protection and improved stiffness in the circuit.
- Two check valve cracking pressures are available. Use the 25 psi (1,7 bar) check unless actuator cavitation is a concern.
- All 3-port counterbalance, load control, and pilot-to-open check cartridges are physically interchangeable (i.e. same flow path, same cavity for a given frame size).
- Incorporates the Sun floating style construction to minimize the possibility of internal parts binding due to excessive installation torque and/or cavity/cartridge
 machining variations.

PERFORMANCE CURVES

