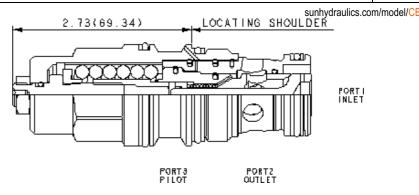


3-Port Non-vented

## CONFIGURATION

L	Control	Standard Screw Adjustment
J	Functional Setting Range	2000 - 5000 psi w/25 psi Check (140 - 350 bar w/ 1,7 bar Check), 3000 psi (210 bar) Standard Setting
N	Seal Material	Buna-N

(none) Material/Coating Standard Material/Coating



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.

Cavity	T-17A		
Series	3		
Capacity	240 L/min.		
Pilot Ratio	4.5:1		
Maximum Recommended Load Pressure at Maximum Setting	270 bar		
Maximum Setting	350 bar		
Factory Pressure Settings Established at	30 cc/min.		
Maximum Valve Leakage at Reseat	0,3 cc/min.		
Adjustment - No. of CCW Turns from Min. to Max. Setting	3.75		
Operating Characteristic	Standard		
Reseat	>85% of setting		
Valve Hex Size	31,8 mm		
Valve Installation Torque	203 - 217 Nm		
Adjustment Screw Internal Hex Size	4 mm		
Locknut Hex Size	15 mm		
Locknut Torque	9 - 10 Nm		
Seal kit - Cartridge	Buna: 990017007		
Seal kit - Cartridge	EPDM: 990017014		
Seal kit - Cartridge	Polyurethane: 990017002		
Seal kit - Cartridge	Viton: 990017006		
Model Weight	0.62 kg.		

### **CONFIGURATION OPTIONS**

CONTROL

L Standard Screw C Tamper Resistar

# Model Code Example: CBGGLJN

	(L) FL	INCTIONAL SETTING RANGE	(J)	SEAL MATER
Adjustment	J	2000 - 5000 psi w/25 psi Check (1	40 -	N Buna-N
nt - Factory Set		350 bar w/ 1,7 bar Check), 3000 p	si	E EPDM
		(210 bar) Standard Setting		V Viton
	C	2000 - 5000 psi w/4 psi Check (14	0 -	
		350 bar w/ 0,3 bar Check), 3000 p	si	
		(210 bar) Standard Setting		
	г	1000 - 2500 psi w/4 psi Check (70	_	

- 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

### rial

(N) MATERIAL/COATING

Standard Material/Coating
/AP Stainless Steel, Passivated
/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).
- Backpressure at port 2 adds to the effective relief setting at a ratio of 1 plus the pilot ratio times the backpressure.
- 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.
- Cartridges configured with EPDM seals are for use in systems with phosphate ester fluids. Exposure to petroleum based fluids, greases and lubricants will damage the seals.
- 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.
- This valve has positive seals between all ports.
- 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

