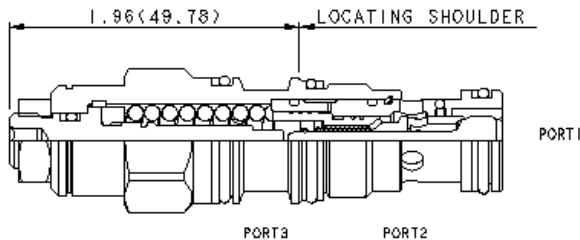
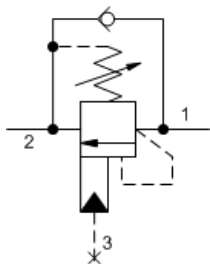


MODEL
CCCA

Standard capacity counterbalance valve without pilot assist
CAPACITY: 60 L/min. | CAVITY: T-11A



CONFIGURATION

L	Control	Standard Screw Adjustment
H	Functional Setting Range	1000 - 4000 psi w/25 psi Check (70 - 280 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 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

Cavity	T-11A
Series	1
Capacity	60 L/min.
Pilot Ratio	Zero
Maximum Recommended Load Pressure at Maximum Setting	215 bar
Maximum Setting	280 bar
Factory Pressure Settings Established at	30 cc/min.
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at Reseat	0,3 cc/min.
Adjustment - Number of Counterclockwise Turns to Increase Setting	3.75
Operating Characteristic	Standard
Reseat	>85% of setting
Valve Hex Size	22,2 mm
Valve Installation Torque	41 - 47 Nm
Adjustment Screw Internal Hex Size	4 mm
Locknut Hex Size	15 mm
Locknut Torque	9 - 10 Nm
Seal kit - Cartridge	Buna: 990-011-007
Seal kit - Cartridge	Polyurethane: 990-011-002
Seal kit - Cartridge	Viton: 990-011-006
Model Weight	0.16 kg.

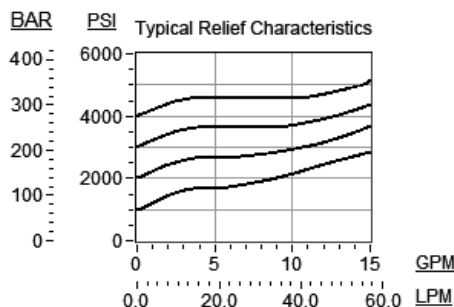
SYMBOLS



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 reseal percentages.
- 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).
- 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.
- Corrosion resistant cartridge valves are intended for use in corrosive environments and are identified by the model code suffix /AP for external stainless steel components, or /LH for external zinc-nickel plated components. See the CONFIGURATION section for all options. For further details, please see the Materials of Construction page located under TECH RESOURCES.
- 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



CONFIGURATION OPTIONS

CONTROL

Standard Options	C	Tamper Resistant - Factory Set
	J	Capped Screw Adjustment
	L	Standard Screw Adjustment

FUNCTIONAL SETTING RANGE

Standard Options	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
	H	1000 - 4000 psi w/25 psi Check (70 - 280 bar w/1,7 bar Check), 3000 psi (210 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

SEAL MATERIAL

N	Buna-N
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Standard Options	V	Viton
MATERIAL/COATING		
Standard Options	/AP	Standard Material/Coating Stainless Steel, Passivated

RELATED MODELS

CCCAX

Fixed setting standard capacity counterbalance valve without pilot assist

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