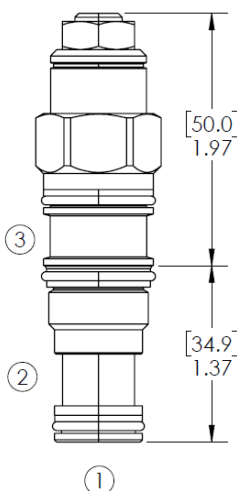
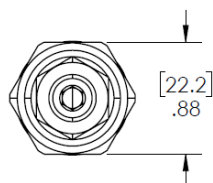
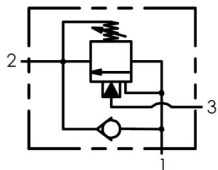


## Counterbalance Valve, Hydraulic Cartridge

### Functional Symbol



### Description:

A screw-in, cartridge counterbalance valve with internal Check Valve. For use as a blocking or load-holding device in your Hydraulic system.

### Operation:

The DCBE allows unrestricted flow passage from port 2 to port 1, while blocking flow in the opposite direction. Pressure to Port 3 will release the flow from Port 1 to Port 2. A counterbalance, or load-holding, valve is a mechanism typically located near the actuator that uses hydraulic pressure to keep a load from moving. Generally, these valves have three related functions: support, control and safety.

When required for load support, these valves prevent a hydraulic actuator or motor under load from drifting in position. When lowering loads, the counterbalance controls the rate or speed of motion of the load on the actuator or motor.

### Features:

- The setting of the balance valve should be at least 1.3 times of the load pressure value.
- 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 reseal percentages.
- Compact size for space requirement consideration.
- Cartridge design for ease of installation and maintenance.
- Cavity T-11A

### Ratings:

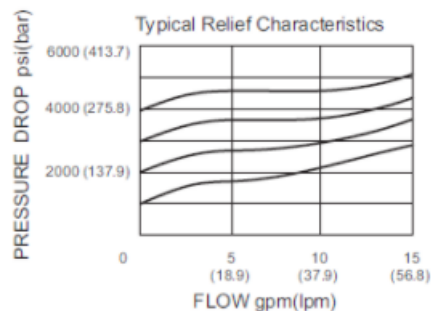
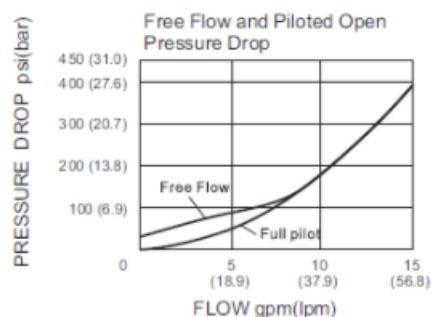
Rated Flow: 15 GPM (60 LPM)

Max. Inlet Pressure: 4,000 PSI (280 bar)

Operating Temperature: -31° to 250°f (-35° to 121°c)

Leak Rate: < 5 drops per minute

### Performance Curve Pressure Drop vs. Flow



### Ordering Information:

DCBE A T11 - B N

Model	Pilot Ratio	Cavity		Adjustment Range	Seal Material			
DCBE	A 3:1 Pilot Ratio	T11	T-11A Cavity	A 400-1500 psi (28-105 bar) Preset: 1000 psi (70 bar) Check: 4 psi (0.3 bar)	N	Buna-N		
	B 4.5:1 Pilot Ratio			B 1000-4000 psi (70-280 bar) Preset: 3000 psi (210 bar) Check: 4 psi (0.3 bar)			V	Viton
	D 10:1 Pilot Ratio			C 400-1500 psi (28-105 bar) Preset: 1000 psi (70 bar) Check: 25 psi (1.7 bar)				
				D 1000-4000 psi (70-280 bar) Preset: 3000 psi (210 bar) Check: 25 psi (1.7 bar)				