Phone: 320-743-2276
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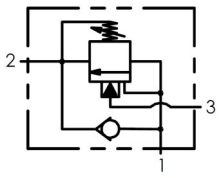
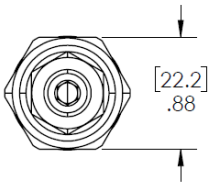
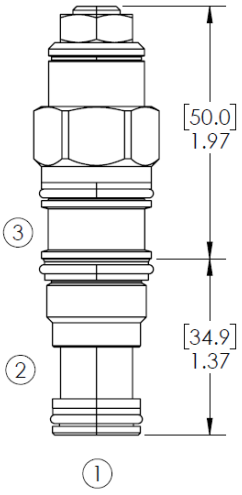
Counterbalance Valve, Hydraulic Cartridge

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.

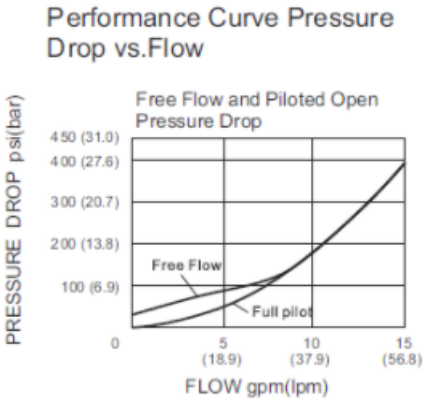
Operation:

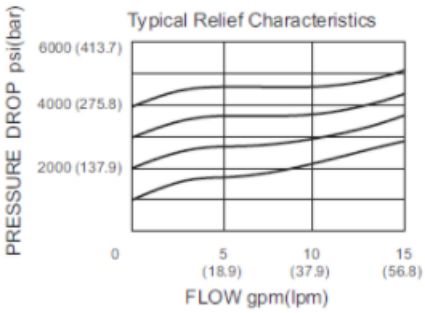
The DCBE allows unrestricted flow passage from port 2 to port 1, while blocking flow in the opposite direction. Pressure to Port 3 will release the flow from Port 1 to Port 2. A counterbalance, or load-holding, valve is a mechanism typically located near the actuator that uses hydraulic pressure to keep 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 reseat 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

Ordering Information:

DCBE A T11 - B N

Model	Pilot Ratio	Cavity	Adjustment Range	Seal Material
DCBE	A 3:1 Pilot Ratio B 4.5:1 Pilot Ratio D 10:1 Pilot Ratio	T11 T-11A Cavity	A 400-1500 psi (28-105 bar) Preset: 1000 psi (70 bar) Check: 4 psi (0,3 bar) B 1000-4000 psi (70-280 bar) Preset: 3000 psi (210 bar) Check: 4 psi (0,3 bar) 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)	N Buna-N V Viton