

••••• **INNOVATION AT WORK FOR YOU** •••••

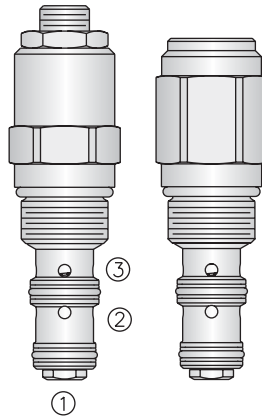
New CB10-30 Motion Control Valve for Smooth, Accurate Control

Motion Control valves are used to provide smooth and accurate control of moving loads and to prevent over-running load conditions in many applications. These are sometimes referred to as over-center or counterbalance valves.

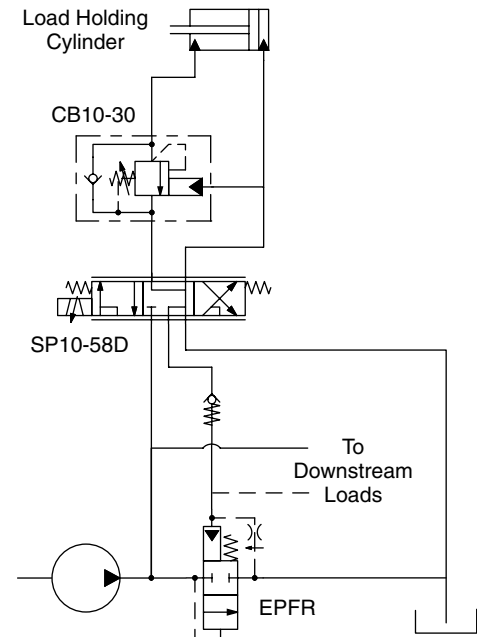
The CB10-30 is a low leakage, poppet-style control valve designed to restrict flow from port 2 to port 3 in relation to the pilot signal supplied at port 1. Additionally this valve provides reverse free flow and thermal relief protection at port 2. If the load threatens to run ahead of the pump the poppet will close preventing a runaway load.

For maximum safety, motion control valves are designed to be screwed into an actuator or actuator mounted housing; but according to user specifications they can be incorporated into other manifold configurations. Motion control valves are mounted between the actuator and the main directional control in circuits where the load can overrun or run away from the inlet flow. Typically these will be situations where you have to resist gravity such as in a ground drive when descending a grade, a boom or bucket swing when on a slope or any other load-lowering function.

The CB10-30 was specifically designed for low flow applications rather than being a restrictive version of a higher flow valve as is common throughout the industry. It has a 7-to-1 pilot ratio which allows the load to be smoothly controlled with minimum energy loss, and makes it ideal for applications where the load remains relatively constant. In addition, its low leakage rate of 10 drops per minute at 85% of max pressure, and three standard spring settings ranging from 17 to 152 bar (250 to 2200 psi), 0 to 172 bar (0 to 2500 psi) and 55 to 207 bar (800 to 3000 psi), make it suitable for a variety of applications.



This innovative new valve is another example of our commitment to developing products that offer better features and improved system performance. HydraForce continues to be the leader in design, manufacturing and applications of hydraulic cartridge valves and electro-hydraulic systems in the heavy duty mobile equipment OEM markets.



Features	Benefits
Flow rate to 5 gpm (19 lpm) at 3000 psi (207 bar) with three standard spring ranges available up to 207 bar (3000 psi).	Ability to specify the valve to your applications requirements.
7:1 Pilot ratio with low 10 drop per minute internal leakage at up to 85% of pressure setting.	High pilot ratio and low leakage ensures greater stability and control of moving loads with minimal drooping.
Designed for low-flow applications.	Optimized for low-flow conditions, not a modified or restrictive version of a higher flow valve.
Adjustments cannot be backed out of the valve.	You can safely adjust the A option while under pressure.
Mechanical stop prohibits spring from going solid	Cannot over-adjust valve disabling the relief function of the valve.
HydraForce will soon release a full range of standard models with three standard seal options.	Standard models can be used in a variety of applications and medias, eliminating the need for special products.
VC10-3, Variation 'A' Cavity	Easily incorporated in manifold design. No new tooling.
Tested to 1 million cycles at full rated pressure.	Long life without wear or decreased performance over time.
Designed, inspected and tested to HydraForce Quality standards with 5-year warranty. (See full warranty statement in the catalog.)	Reduce warranty and return costs as well as peace of mind that the product will perform right from the start and will last.

[go to CB10-30 catalog page](#)

HYDRAFORCE, INC.

500 Barclay Blvd. • Lincolnshire, IL 60069 USA
 Ph: 847 793 2300 • Fx: 847 793 0086
 Web: www.hydraforce.com • E-Mail: sales@hydraforce.com
 ISO 9001 & QS 9000 • Member: National Fluid Power Assn.

HYDRAFORCE HYDRAULICS, LTD.

St. Stephens Street • Birmingham B6 4RG England
 Ph: 0121 333 1800 • Fx: 0121 333 1810
 Web: www.hydraforce.com • E-Mail: sales@hydraforce.com
 ISO 9001 & ISO 14001 • Member: British Fluid Power Assn.