5006-4

Counterbalance Valve

DESCRIPTION

A cartridge-style, counterbalance valve

OPERATION

Counterbalance valves with pilot assist are meant for control on overrunning load. The check valve allows free flow from port ② to 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.

FEATURES

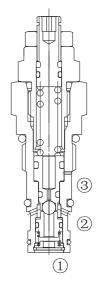
- Counterbalance valves should be set at least 1.3 times the maximum load induced pressure.
- Backpressure at port ② adds to the effective relief setting at a ratio of 1 plus the pilot ratio times the backpressure.
- Reseat exceeds 85% of set pressure when the valve is standard set. Setting lower than the standard set pressure may result in lower reseat percentages.
- Factory pressure setting established at 30cc/min(2 in3/min).

SYMBOL

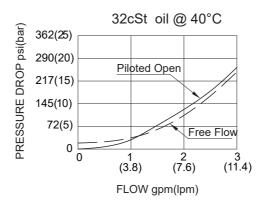


SPECIFICATIONS

Max. Operating Pressure	350bar	
Max. Recommended Load Pressure at Max. Setting		
Flow	See PRESSURE DROP VS.FLOW graph.	
Internal Leakage	5 drops/min max.	
Pilot Rate	4:1	
Standard Spring Ranges	13.8 to 350 bar; preset: 228bar	
Cracking Pressure	1.7bar	
Temperature	-40°F to +250°F(-40°C to +120°C)	
Filtration	See Page N-1	
Fluids	Mineral-based fluids with viscosities of 7.4 to 420 cSt.	
Cavity	HYDAC FC06-3,See page M- 29	
Housing Material	Steel & Ductile iron rated to 350bar	



PRESSURE DROP VS.FLOW





TO ORDER

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	50 06 - 4 - **** - * *	
1 Function 50=Counterbalance Cartridge	3 Pilot Ratio 4=4:1	5 Port Size Omit= None
Valve 2 Size	4T=SAE4 6T=SAE6 Omit=Stundard Setting (228bar) 2G=G 1/4	6T=SAE6
06 =06 Size	Example:0160=160Bar	3G =G 3/8

XOther port sizes are available

INSTALLATION DIMENSIONS

Unit=Millimeters

