11/07



DUAL COUNTERBALANCE VALVE POPPET TYPE, FREE REVERSE FLOW WITH CROSS-LINE PILOTS 1.67" [42,4]V2 3.50" [88,9] [20,7] 1.90" [48,3] 1.63" 4.50" [41,3] [114,3] 5.00" [127] L/M (28,5 cSt) DCBA-12-X-X-XX 151 35,0 38 76 114 500 BASIC -€ 400 27,6 PRESSURE RANGE \triangleleft SIZE -15 = 100 TO 1500 PSI 30 = 300 TO 3000 PSI 12 = 1.062"-12 UNF DROP 40 = 600 TO 4000 PSI20,7 300 SEALS -PILOTED OPEN PORTS N = BUNA "N"06BX = G 3/4" BSPPPRESSURE V = VITON10TX = SAE - #10 12TX = SAE - #12200 13,8 ADJUSTMENT -S = ADJUSTING SCREW T"A" — ALUM. HOUSING "S" — STEEL HOUSING C = CAPPED100 6,9 T = TAMPERPROOFFREE FLOW **PSI BAR** 40 FOR ADJUSTMENT CONTROL OPTIONS SEE PAGE 0-050.0 G.P.M.(135 SUS) 8-063.0

DUAL COUNTERBALANCE VALVE POPPET TYPE. FREE REVERSE FLOW WITH CROSS-LINE PILOTS.

DESCRIPTION

This unit consists of two CBPA cartridges in an inline housing. The cartridges are direct acting, screw in cartridge style, poppet type, adjustable, pilot assisted, hydraulic counterbalance valves.

OPERATIONS

This valve controls moving load and preventing it from running ahead of the pump, locking the load in any position, it also provides static overload and thermal expansion protection.

This valve is a MODULATING DEVICE that allows free flow from port V1 to port C1 and V2 to C2 then blocks reverse flow until a pilot pressure INVERSELY PROPORTIONAL to the load pressure is sensed at pilot ports which are connected to ports V1 and V2 therefore modulating flow from port C1 or port C2.

FEATURES AND BENEFITS

Leakproof screw adjustment.

Adjustment screw can not be backed out of the valve.

Overset protection — spring can not go solid.

Hardened precision fitted poppet & cage provides reliable, long life. A unibody cage construction and with no dynamic seals on all moving parts provides very low hysteresis (1.5%) and reliable operation. Minor internal leakage past the pilot piston purges the air from the pilot line thus improving stability.

All external carbon steel parts are plated for longer life against the elements. Valve is available with screw, tamperproof and capped adjustments. All cartridge valves are 100% functionally tested.

SPECIFICATIONS

OPERATING PRESSURE: 4,000 PSI [276 Bar]

PROOF PRESSURE: 10,000 PSI [700 Bar] FLOW: 35.0 GPM [132 L/M] nominal. See performance chart.

PILOT RATIO: 4 to 1

INTERNAL LEAKAGE: 5 drops/min @ 90% of crack pressure. DEFINITION OF CRACK: evident at 0.06 GPM [0.25 LPM]

VALVE HOUSINGS: 2500 PSI [175 Bar] = Aluminum - Anodized. 5000 PSI [350 Bar] = Steel - Unplated.

OPERATING TEMPERATURE: -40° to $+250^{\circ}$ F. $[-40^{\circ}$ to $+120^{\circ}$ C.] OPERATING MEDIA: All general purpose hydraulic fluids such as

MIL-H-5606, SAE-#10, SAE-#20, etc.

INSTALLATION: No restriction.

FILTRATION: 25 microns or better.

SEAL KIT NUMBER: SKN-1228 for Buna "N".

SKV-1228 for Viton.

WEIGHT: 2.65 lbs [1.21 kg] Aluminum. 5.25 lbs [2.38 kg] Steel.