

OPERATION

The VCB12-CN-DL is a dual counterbalance HIC, 12-size metric, nose to nose design with atmospheric vent. This catalog HIC allows free flow from the V ports to the C ports and blocks flow in the reverse direction until the relief setting is reached, or until adequate pilot pressure has been applied to the opposite V port.



APPLICATIONS

Atmospherically vented valves are applied when it is not practical to connect a separate vent line to the tank. Use dual counterbalance HIC's for controlling loads in bidirectional motion such as wheel motor applications or for cylinders going over center.

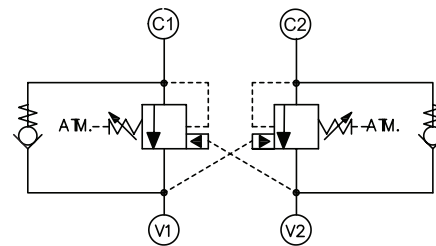
CB - Counterbalance Valves

SPECIFICATIONS

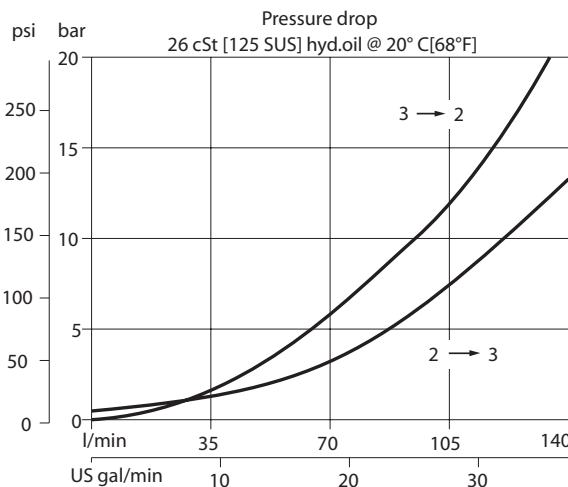
Rated pressure	350 bar [5075 psi]*
Rated flow at 22 bar (319 psi)	140 l/min [37 US gal/min]
Weight	2.92 kg [6.45 lb]
Pilot ratio	4.7:1, 5.9:1, 6.9:1
Cavity	CIB

* 350 bar with steel housing
 210 bar with aluminum housing

SCHEMATIC

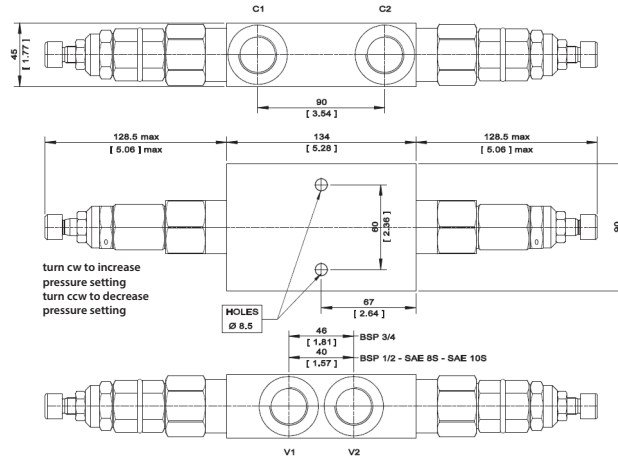


PERFORMANCE



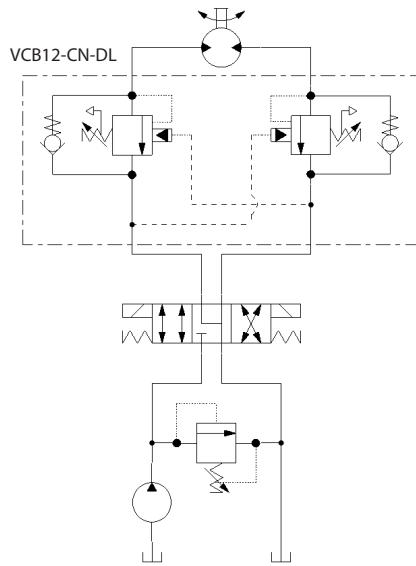
DIMENSIONS

mm [in]

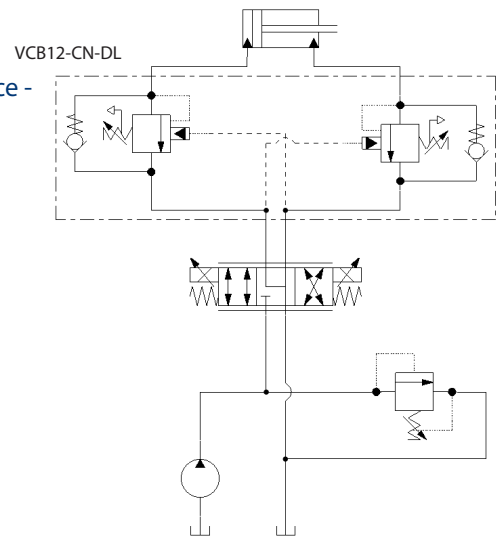


EXAMPLE CIRCUITS

Bi-directional Motion Control



Counterbalance - Double Actuator



CB - Counterbalance Valves

ORDERING INFORMATION

VCB12 - CN - 2 - A - 00 - B - XXX

VCB12-CN:
 Counterbalance Valve, Pilot Port 1, 12 size (metric), internal adjustment, atmospheric vent

Code	Pilot Ratio
A	6.9:1
B	4.7:1
C	5.9:1

Code	Seal Material
B	Buna-N
V	Viton

Crack Pressure Setting [in bar]

XXX: No factory setting / no stamping

For customer specified settings, enter value in bar (Example 70 bar = 70; 125 bar = 125 etc.)

Pressure Range		
Code	Pilot Ratio A,C bar [psi]	Pilot Ratio B bar [psi]
1	25-140 [363-2031]	25-120 [363-1740]
2	70 - 250 [1015-3625]	60-200 [870-2900]
3	105 - 350 [1523-5075]	90-280 [1305-4060]

Housing & Ports	Housing Nomenclature
00: Cartridge Only	No Body
SE4B: AL, 1/2 BSP	NCS12-3-SE4B
SE6B: AL, 3/4 BSP	NCS12-3-SE6B
SES6B: Steel, 3/4 BSP	NCS12-3-SES6B
SE8S: AL, #8 SAE	NCS12-3-SE8S
SE12S: AL, #12 SAE	NCS12-3-SE12S