

OPERATION

This dual valve, internally piloted HIC is a low leakage counterbalance assembly with hydraulic vent. The CP448-2 uses two CP448-1 8-size cartridges and 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

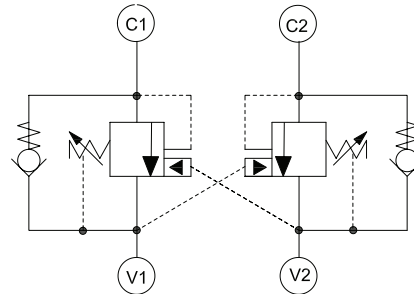
Dual counterbalance HIC's are used for controlling loads in bidirectional motion such as wheel motor applications or for cylinders going over center. They are also suitable for use on the boom and dipper cylinder on an excavator.

SPECIFICATIONS

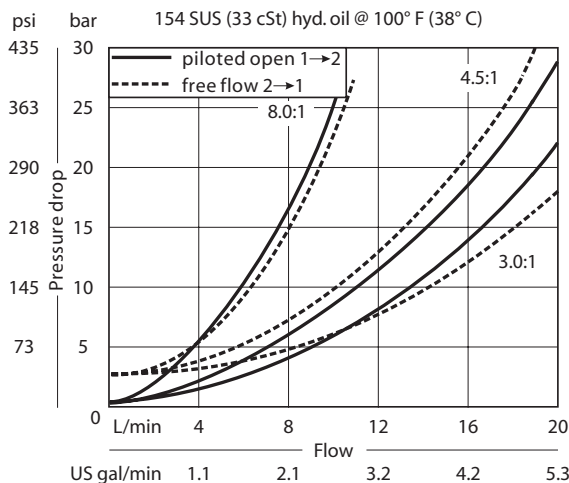
| | |
|---------------------------------------|-------------------------|
| Rated pressure | 350 bar [5075 psi]* |
| Rated flow at 22 bar (319 psi) | 20 l/min [5 US gal/min] |
| Weight | 0.78 kg [1.72 lb] |
| Pilot ratio | 3:1, 4.5:1, 8:1 |
| Cavity | CIB |

* 350 bar with steel housing
 210 bar with aluminum housing

SCHEMATIC

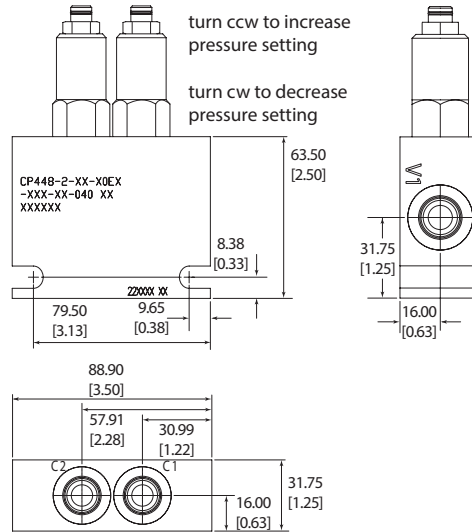


PERFORMANCE



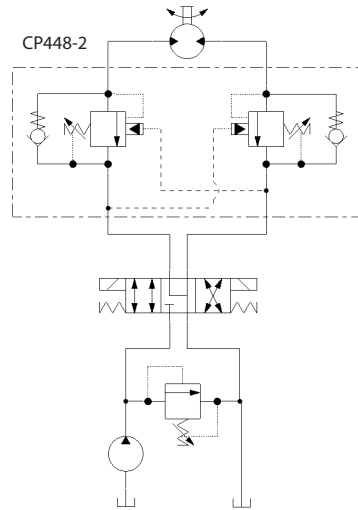
DIMENSIONS

mm [in]

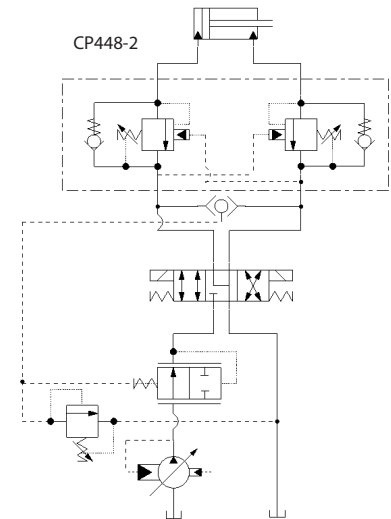


EXAMPLE CIRCUITS

Bi-directional Motion Control



Bi-directional Load Holding



ORDERING INFORMATION

CP448 - 2 - 6S - B - E - B - XXX - 4.5 - 040

CP448-2:
 Dual Counterbalance
 valve, 8 size,
 hydraulic vent

| Housing & Ports | Housing P/N |
|--------------------|-------------|
| 3B AL, 3/8 BSP | CP448-2-3B |
| S3B Steel, 3/8 BSP | CP448-2-S3B |
| 4S AL, #4 SAE | CP448-2-4S |
| 6S AL, #6 SAE | CP448-2-6S |

E:
 External
 Adjustment

| Code | Pilot Ratio |
|------|-------------|
| 3.0 | 3.0:1 |
| 4.5 | 4.5:1 |
| 8.0 | 8.0:1 |

Free flow check crack
 pressure in psi

Code psi [bar]
 040 = 40 2.8

Pressure Setting [in psi]
 XXX - Standard setting with no stamping

For customer specified setting,
 code x 10 = total psi
 Example: 150 x 10 = 1500 psi (insert 150 above)

Pressure Range

| Code | Pilot Ratio 3.0 psi [bar] | Pilot Ratio 4.5 psi [bar] | Pilot Ratio 8.0 psi [bar] |
|------|--|---|--|
| A | 600-1500 [41-103] Std. Setting 1000 [69] | 363-1740 [55-172] Std. Setting 1500 [103] | 1500-5000 [103-345] Std. Setting 2500 [172] |
| B | 1000-3000 [69 - 207] Std. Setting 1500 [103] | 870-2900 [103-345] Std. Setting 2500 [172] | |
| C | 1800-5000 [124 - 345] Std. Setting 2500 [172] | | |

| Code | Seal Material | Seal Kit |
|------|---------------|----------|
| B | Buna-N | 120238 |
| V | Viton | 120239 |