



Cartridge Valves Technical Information

Counterbalance valves

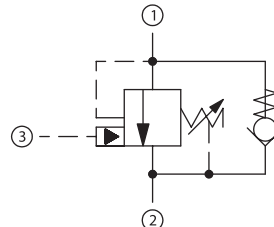
Hydraulic Vent

CP441-1

OPERATION

This is a pilot-operated counterbalance valve.

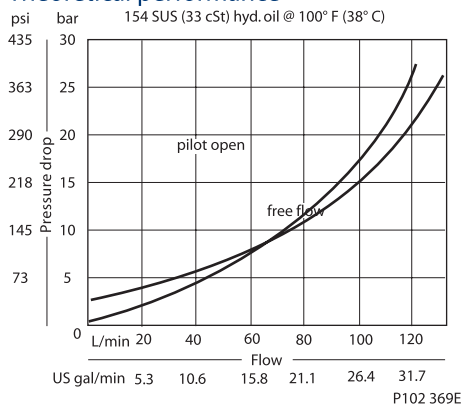
Schematic



P102 376E

SPECIFICATIONS

Theoretical performance



P102 369E

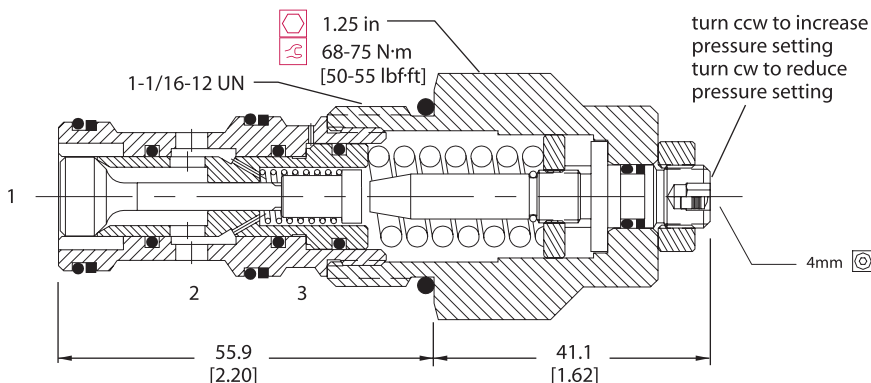
Specifications

Rated pressure	350 bar [5000 psi]
Rated flow at 22 bar [319 psi]	115 l/min [30 US gal/min]
Leakage	10 drops/min @ 70% of crack pressure
Weight	0.22 kg [0.48 lb]
Pilot ratio	3:1, 4.5:1, 10:1
Cavity	CP12-3S

DIMENSIONS

mm [in]

Cross-sectional view



P102 355E

ORDERING INFORMATION

CP441-1-B-0-E-A-115-4.5-005

CP441 - 1 - B - 12S - E - B - 250 - 4.5 - 015

Seals

B = Buna-N
V = Viton

Housing and ports

0 = No Housing
4B = AL, 1/2 BSP
6B = AL, 3/4 BSP
10S = AL, #10 SAE
12S = AL, #12 SAE
Other housings available

Adjustment option

E = External adjustment

Seal kit
120335
120336

Housing P/N

No Housing
CP12-3S-4B/2B
CP12-3S-6B/2B
CP12-3S-10S/4S
CP12-3S-12S/4S

Pilot ratio
3.0:1
4.5:1
10.0:1

Free flow check Crack Pressure

	bar	[psi]
005 =	.34	[5]
015 =	1.03	[15]

Crack pressure

Code x 10 = psi
Example: 250 = 2500 psi
XXX=Std. setting w/no stamping

Pressure range

	bar	[psi]
A =	34-103	[500-1500]
Std. setting	69	[1000]
B =	103-207	[1500-3000]
Std. setting	172	[2500]

	bar	[psi]
A =	34-138	[500-2000]
Std. setting	103	[1500]
B =	103-345	[1500-5000]
Std. setting	207	[3000]

	bar	[psi]
A =	69-345	[1000-5000]
Std. setting	172	[2500]

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