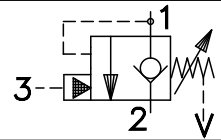


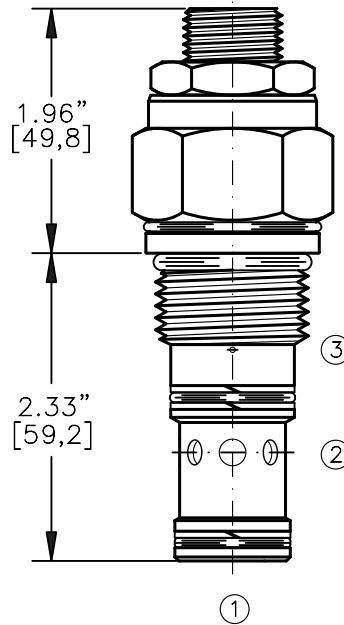
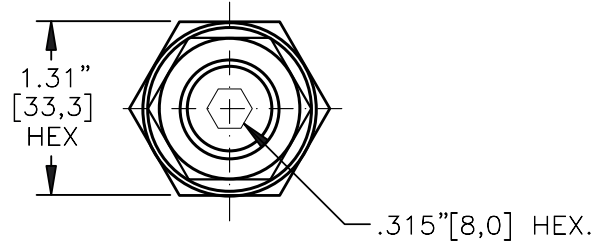
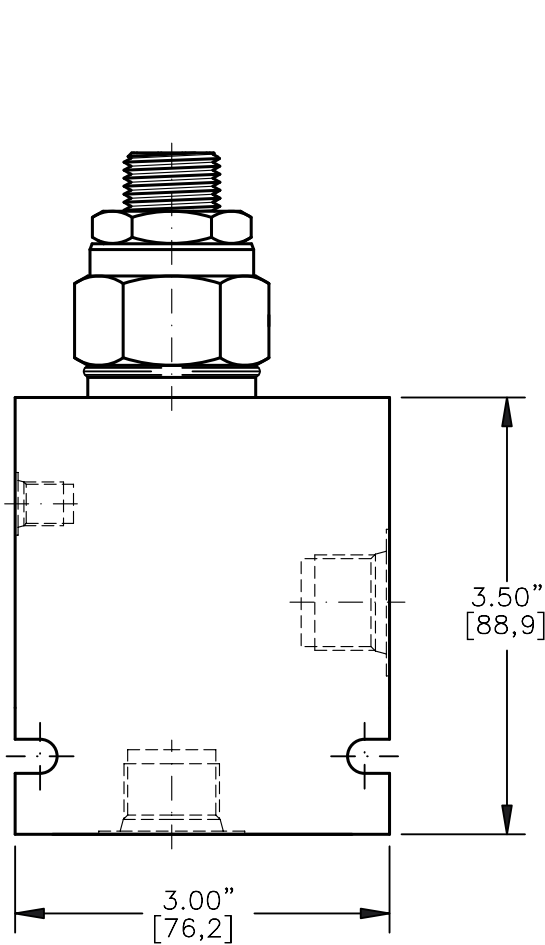
COUNTERBALANCE VALVE POPPET TYPE,  
FREE REVERSE FLOW & SEALS ON THE PISTON



TORQUE:

Steel = 70/75 Ft-Lb. [95/102 Nm]

Aluminum = 55/60 Ft-Lb. [74/81 Nm]



FOR ALUMINUM OR STEEL VALVE HOUSING CONFIGURATIONS SEE PAGE 0-023-1.

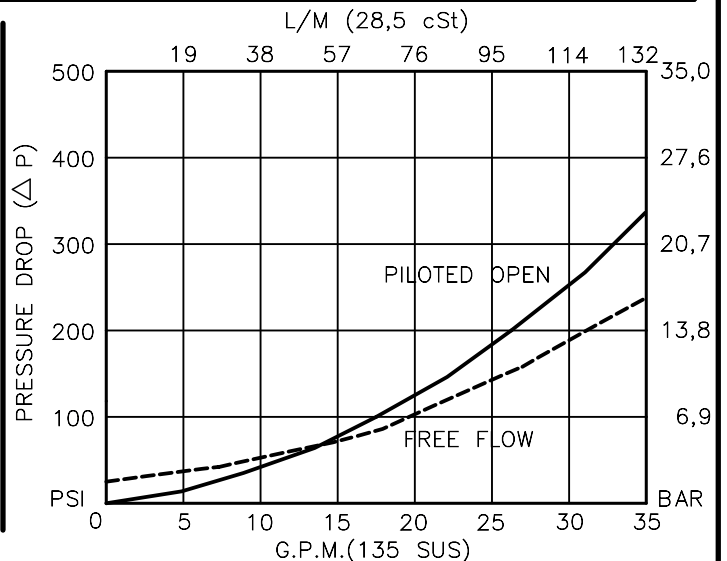
**CBPG-12-X-X-X-XX**

- BASIC
- SIZE  
12 = 1.062"-12 UNF
- SEALS  
N = BUNA "N"  
V = VITON
- ADJUSTMENT  
S = ADJUSTING SCREW  
C = CAPPED  
T = TAMPERPROOF

- PRESSURE RANGE  
15 = 100 TO 1500 PSI  
30 = 300 TO 3000 PSI  
40 = 600 TO 4000 PSI

- PORTS  
0 = CARTRIDGE ONLY  
04BX = G 1/2" BSPP  
06BX = G 3/4" BSPP  
10TX = SAE - #10  
12TX = SAE - #12
- "A" - ALUM. HOUSING  
"S" - STEEL HOUSING

FOR ADJUSTMENT CONTROL  
OPTIONS SEE PAGE 0-050.0



## COUNTERBALANCE VALVE POPPET TYPE, WITH FREE REVERSE FLOW & VENTED PISTON

### DESCRIPTION

This unit is a DIRECT ACTING, SCREW IN CARTRIDGE STYLE, POPPET TYPE, ADJUSTABLE, PILOT ASSISTED, HYDRAULIC COUNTERBALANCE VALVE.

### 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 2 to port 1 and then blocks reverse flow until a pilot pressure INVERSELY PROPORTIONAL to the load pressure is sensed at port 3 modulating flow from port 1 to port 2.

### 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 adapter cage construction provides very reliable operation.

Vented pilot piston spring chamber to atmosphere allows this valve to be used with a re-generative circuit.

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.

**COUNTERBALANCE VALVE POPPET TYPE,  
WITH FREE REVERSE FLOW & VENTED PISTON****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. <sup>^J</sup>

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° F. [-40° to +120° 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: 0.84 lb [0,38 kg] cartridge only.

VALVE CAVITY: #C1225, See Page 0-023.0.

[info.el@bucherhydraulics.com](mailto:info.el@bucherhydraulics.com)

[www.bucherhydraulics.com/commoncavity](http://www.bucherhydraulics.com/commoncavity)

© 2015 by Bucher Hydraulics, Inc., 2545 Northwest Parkway, Elgin, Illinois 60124, USA

All rights reserved.

The technical information in this catalog, may contain calculated figures (for reference only) and not actual performance data for this product.

Data is provided for the purpose of product description only, and must not be construed as warranted characteristics in the legal sense.

The information does not relieve users from the duty of conducting their own evaluations and tests. Because the products are subject to continual improvement, we reserve the right to amend the product specifications contained in this catalogue.