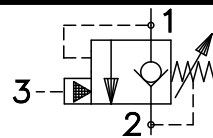


# CBPS-10

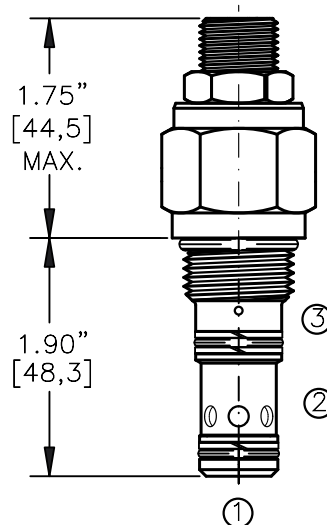
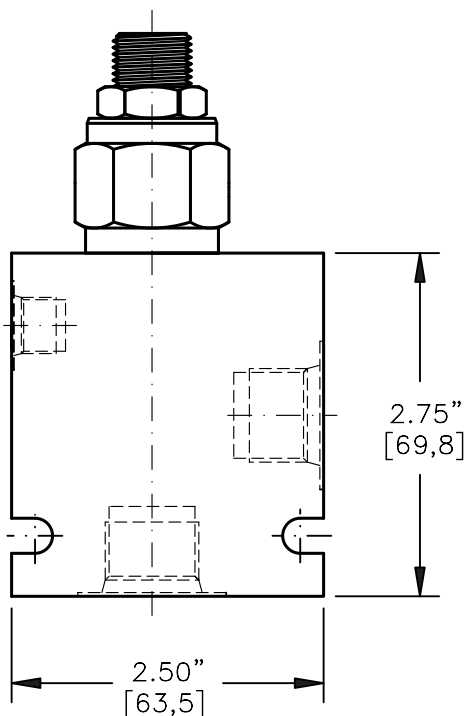
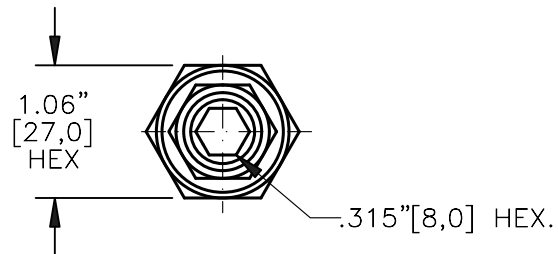
## COUNTERBALANCE VALVE POPPET TYPE, FREE REVERSE FLOW & SEALS ON THE PISTON.



### TORQUE:

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

Aluminum = 35/40 Ft-Lb. [47/54 Nm]



FOR ALUMINUM OR STEEL VALVE HOUSING CONFIGURATIONS SEE PAGE 0-022-1.

### CBPS-10-X-X-X-XX

#### BASIC

#### SIZE

10 = 7/8"-14 UNF

#### SEALS

N = BUNA "N"

V = VITON

#### ADJUSTMENT

S = ADJUSTING SCREW

C = CAPPED

T = TAMPERPROOF

K = HANDKNOB

M = METAL HANDKNOB

#### PRESSURE RANGE

15 = 100 TO 1500 PSI

30 = 300 TO 3000 PSI

50 = 500 TO 5000 PSI

#### PORTS

0 = CARTRIDGE ONLY

03BX = G 3/8" BSPF

04BX = G 1/2" BSPF

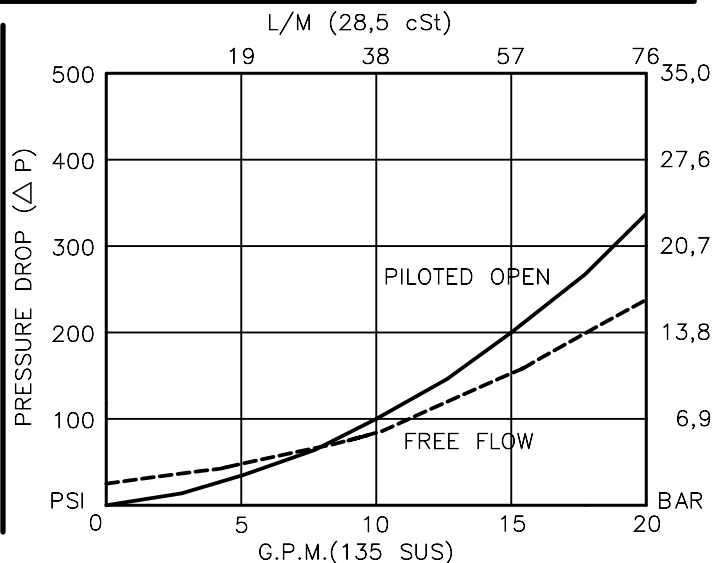
08TX = SAE - #8

10TX = SAE - #10

"A" - ALUM. HOUSING

"S" - STEEL HOUSING

FOR ADJUSTMENT CONTROL  
OPTIONS SEE PAGE 0-050.0



## COUNTERBALANCE VALVE POPPET TYPE WITH FREE REVERSE FLOW & SEALS ON THE 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.

Seals on the pilot piston assures no interflow of fluid between port #2 and port #3.

All external carbon steel parts are plated for longer life against the elements.

Valve is available with screw, tamperproof, capped and handknob adjustments.

All cartridge valves are 100% functionally tested.

Industry common cavity.

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

**SPECIFICATIONS**

OPERATING PRESSURE: 5,000 PSI [350 Bar]

PROOF PRESSURE: 10,000 PSI [700 Bar]

FLOW: 20.0 GPM [76 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-1028 for buna "N".

SKV-1028 for viton.

WEIGHT: 0.46 lb [.21 kg] cartridge only.

VALVE CAVITY: #C1025, See Page 0-022.0.