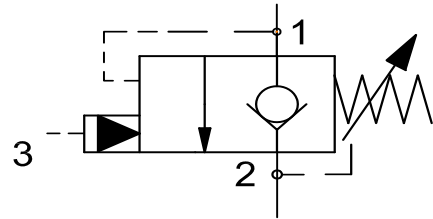
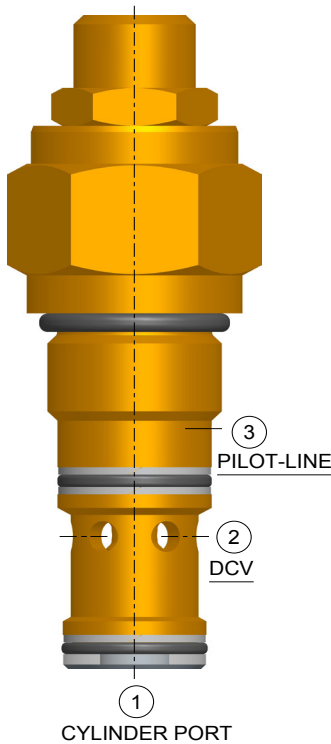


Counterbalance Valve Poppet Type



- $Q_{(max)} = 120 \text{ lpm}$, $P_{(max)} = 280 \text{ bar}$, Pilot Ratio- 4.1:1
- Screw -in Cartridge,
- Direct Acting , Poppet Design ,Pilot Assisted ,Counterbalance Valve



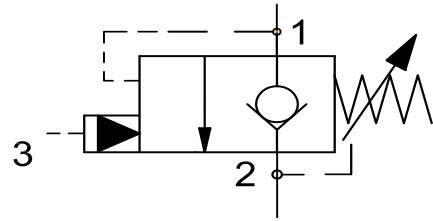
- Smooth, **Modulated motion control** when load is in lowering/run-away condition.
- **Leak free load holding.**
- **Overset Protection** -Spring cannot go solid.
- **Protection** against Hydraulic line failure.
- Available in **Leakproof screw adjustment / Fixed setting cap.**
- Can be fitted in **line mounting bodies.**
- All external parts are **zinc plated ,chromated (CrVI-Free).**
- Designed in accordance to **Industry common Cavities.**

1. Description -

SPCB series cartridge valves are **Screw-in, Direct Acting, Poppet type, Pilot assisted** high performance Counterbalance valves. This cartridge controls moving load and prevent it from moving ahead, locking the load at a definite position. It also provides cavitation free motion control to match speed to pump flow when the load could cause loss of control of a cylinder or motor.

This Counterbalance Valve can be used in manifold blocks & line mounting bodies. All external parts of this cartridge are Zinc-plated and chromated (CrVI-free), poppet is hardened and thus suitable to be used in harshest environmental conditions and also provides long life to cartridge.

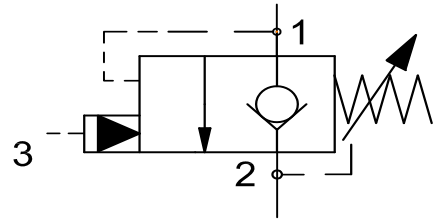
Counterbalance Valve Poppet Type



2. Technical Data :

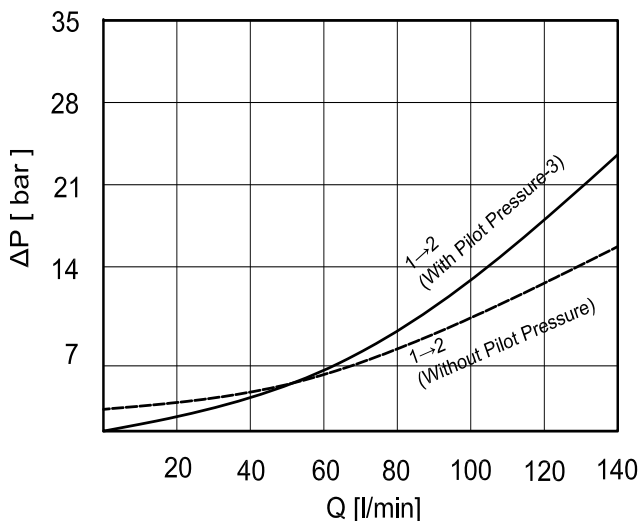
S.no.	General Specification	Values
1.	DESIGNATION	COUNTERBALNCE VALVE
2.	MOUNTING METHOD	SI2-2.5 CAVITY
3.	MAXIMUM OPERATING PRESSURE	280 BAR
4.	MAXIMUM FLOW	120 LPM
5.	MAXIMUM INTERNAL LEAKAGE	6 DROPS/MIN @ 90% OF CRACK PRESSURE
6.	VALVE HOUSING	$P_{Hydraulic\ system} \leq 210 \text{ BAR}$ -ALUMINUM HOUSING-ANODISED $P_{Hydraulic\ system} > 210 \text{ BAR}$ -STEEL HOUSING -ZINC PLATED
7.	OPERATING TEMPERATURE	-35° TO +120° C
8.	HYDRAULIC FLUID	MINERAL OILS WITH LUBRICATING PROPERTIES AT 15.....250 MM ² /SEC
9.	MINIMUM FLUID CLEANINESS	ISO CLASS 20/18/15
10.	WEIGHT	0.40 KG
11.	INSTALLATION TORQUE	90-100 N/M

Counterbalance Valve Poppet Type

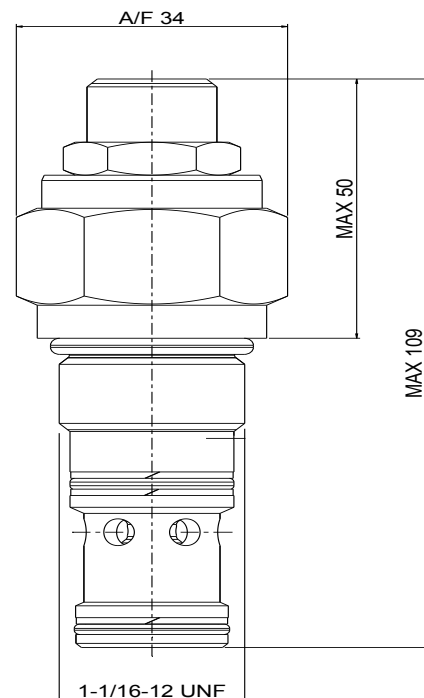


3. P-Q Characteristics :

Note: The Performance Chart shows Flow handling capacity at specific pressure setting P/Q Curve is recorded at Temp_{oil} = 40° C at 46 cst.



4. Dimensioning :



5. Ordering Code :

SPCB - 12 - X - X - X - XXX

VALVE BASIC CODE

CAVITY TYPE = 1-1/16"-12 UNF

METRIC CAVITY AVAILABLE ON
REQUEST

ADJUSTMENT :

C = CAPPED

A = ADJUSTMENT SCREW

HOUSING & PORTS

C : Cartridge only

XA4 : 1/2" BSP

XA5 : 3/4" BSP

XB10 : SAE #10

XB12 : SAE #12

A : Aluminium Housing

S : Steel Housing

PRESSURE SETTING (bar)

000 = for no specific setting

SPRING RANGE :

A = 10-100 bar

B = 20-200 bar

C = 30-300 bar