

Motion Control Valves

1SEB90

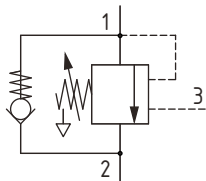
Overcenter Valve, Fully Balanced, Direct Acting, Atmospheric Vent, Port 3 Pilot

350 bar [5000 psi] • 90 l/min [24 US gpm]

DESCRIPTION AND OPERATION

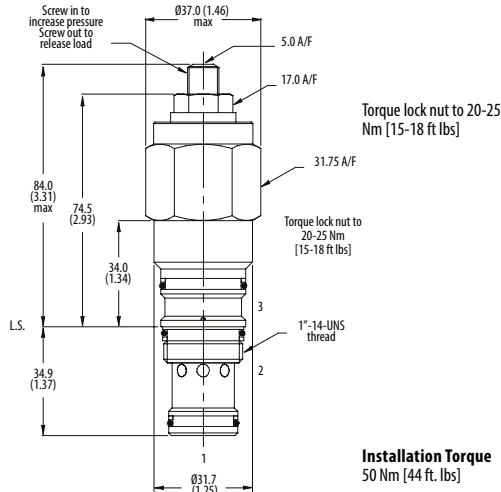
This is a direct acting overcenter valve, which is a pilot assisted relief valve with a free flow check. With the relief valve set at around 1.3 times the maximum load induced pressure, the valve will prevent flow from taking place between ports 1 and 2. When pilot pressure is applied to port 3 the valve will meter the flow from port 1 to 2 compensating for any change in pilot pressure due to over-running or unstable loads. Free flow from port 2 to port 1 can take place freely through the check portion of the valve. These valves are ideal in most applications bringing stability, load holding, and hose failure protection when the valve is mounted onto or into the actuator. The spring chamber is connected to atmosphere, so any back pressure will have no effect on the opening of the valve. Over time, there may be leakage past the seals to atmosphere. For valves with a separate drain port, reference the 1CEBD products.

SCHEMATIC



DIMENSIONS

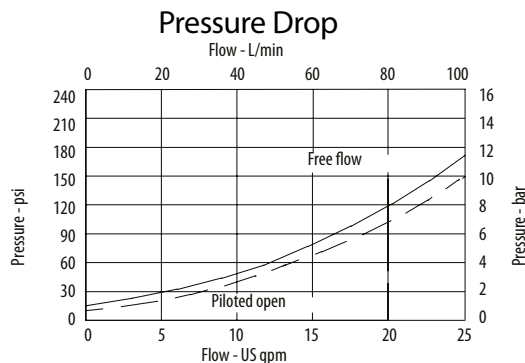
mm [in]



PERFORMANCE DATA

Rated pressure	350 bar [5000 psi]
Rated flow	90 l/min [24 US gpm]
Max total relief pressure	350 bar [5000 psi]
Max recommended load pressure at max setting	270 bar [3900 psi]
Pilot Ratio	4:1
Leakage	0.3 ml/min nominal [5 drops/min]
Weight	0.42 kg [0.92 lb]
Cavity	A20092-T2A

PERFORMANCE CURVES



MODEL CODE

1SEB90 - F - 35 - S - 4 - 210

Adjustment Option

F - External
N - Non-adjustable option, contact technical support.

Pressure Range

Code	Bar	Psi
20	70-225	[1015-3260]
Standard Setting	100	[1450]
35	75-350	[1090-5000]
Standard Setting	210	[3000]

Std setting made at 4.5 l/min

Pressure Setting

Code Pressure setting in bar (10 bar increments within specified Pressure Range)
XXX-Standard setting (see Pressure Range for value). Example:

Code	Bar	Psi
210	210	[3000]

Pilot Ratio

4 - 4:1

Seal Option

Code	Seal kit
S-Buna-N	SK1096
SV-Viton	SK1096V