# **Motion Control Valves**

# 1CEB120

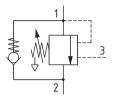
Danfoss

Overcenter Valve, Fully Balanced, Differential Area, Atmospheric Vent, Port 3 Pilot 350 bar [5000 psi] • 120 l/min [32 US qpm]

### **■ DESCRIPTION AND OPERATION**

This is a differential area 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. At some point there will be leakage past the seals to atmosphere so the 4 ported valve should be considered as the best option. This is also available in a dual housing for bi-directional control.

#### **■**SCHEMATIC

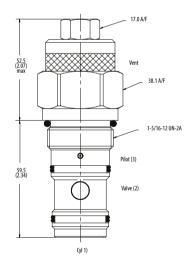


### **■ PERFORMANCE DATA**

Rated pressure	350 bar [5000 psi]
Rated flow	120 l/min [32 US gpm]
Max total relief pressure	350 bar [5000 psi]
Max recommended load pressure at max setting	270 bar [3900 psi]
Pilot Ratio	3:1, 8:1
Leakage	0.3 ml/min nominal [5 drops/min]
Weight	0.59 kg [1.30 lb]
Cavity	A877

#### DIMENSIONS

mm [in]

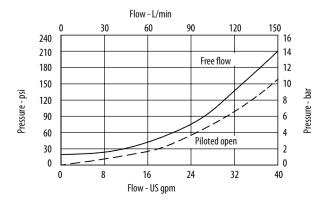


Turn CW to increase pressure setting and CCW to decrease pressure setting Torque lock nut to 20-25 Nm [15-18 ft lbs  $\,$ 

Installation Torque 100 Nm [74 ft. lbs]

### **PERFORMANCE CURVES**

### **Pressure Drop**



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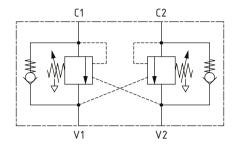
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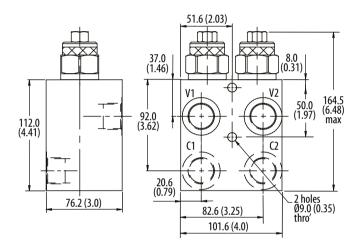
#### **■SCHEMATIC**

1CEEB150 (dual)



#### **DIMENSIONS**

mm [in]



#### **■ MODEL CODE**

