# **Motion Control Valves**

## **1CERH90**

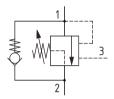
Overcenter Valve, Part Balanced, Direct Acting, Internal Drain, Port 3 Pilot

430 bar [6200 psi] • 90 l/min [24 US gpm]

## **■ DESCRIPTION AND OPERATION**

This is a direct acting overcenter valve, which is a pilot assisted relief 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 the valve port 2 so any back pressure will increase the pilot pressure required to keep the valve open. However, the balanced poppet design allows the relief valve to remain open provided the inlet pressure is higher than the setting. This is also available in a dual housing for bi-directional control.

#### **SCHEMATIC**

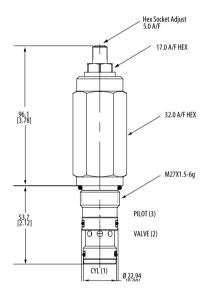


## **■ PERFORMANCE DATA**

Rated pressure	430 bar [6200 psi]
Rated flow	90 l/min [24 US gpm]
Max total relief pressure	430 bar [6200 psi]
Max recommended load pressure at max setting	350 bar [5000 psi]
Pilot Ratio	4:1
Leakage	5 drops/min @ 85% of Cracking
Weight	0.6 kg [1.32 lb]
Cavity	A12336

### **DIMENSIONS**

mm [in]



Turn CW to increase pressure setting and CCW to decrease pressure setting

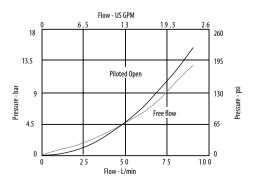
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Torque lock nut to 20-25 Nm [15-18 ft lbs]

Installation Torque 100-110 Nm [73-81 ft. lbs]

#### **PERFORMANCE CURVES**

## **Pressure Drop**



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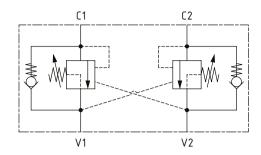
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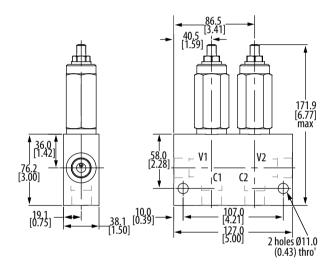
#### **■SCHEMATIC**

1CEERH95 (dual)



#### **DIMENSIONS**

mm [in]



## **■** MODEL CODE

