

# Motion Control Valves

## 1CE30

Overcenter Valve, Standard, Direct Acting, Internal Drain, Port 3 Pilot

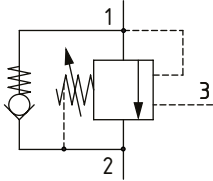
350 bar [5000 psi] • 30 l/min [8 US gpm]



### 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 approximately 1.3 times the maximum load induced pressure, the valve will prevent flow from port 1 to 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 takes place from port 2 to port 1 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 and the pressure at which the valve will open as a relief valve. This is also available in a dual housing for bi-directional control.

### SCHEMATIC

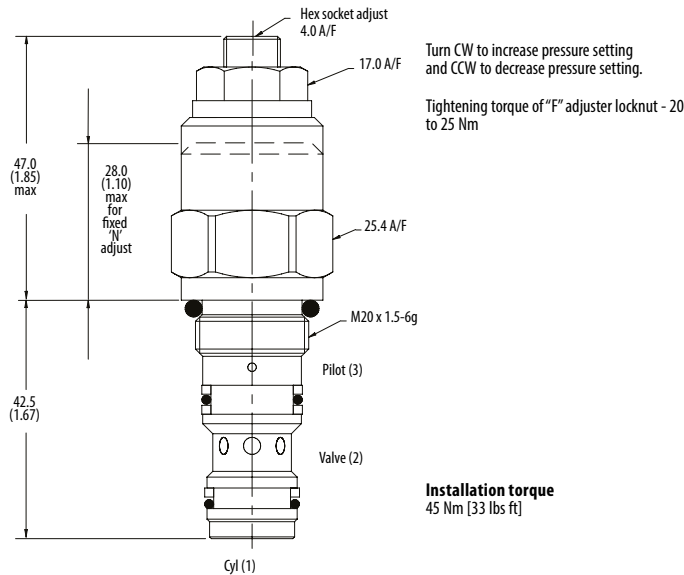


### PERFORMANCE DATA

Rated pressure	350 bar [5000 psi]
Rated flow	30 l/min [8 US gpm]
Max total relief pressure	350 bar [5000 psi]
Max recommended load pressure at max setting	270 bar [3900 psi]
Pilot Ratio	2.5:1, 5:1, 10:1
Leakage	0.3 ml/min nominal [5 drops/min]
Weight	0.15 kg [0.33 lb]
Cavity	A6610

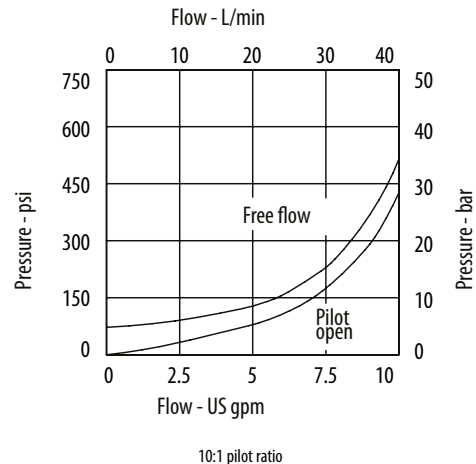
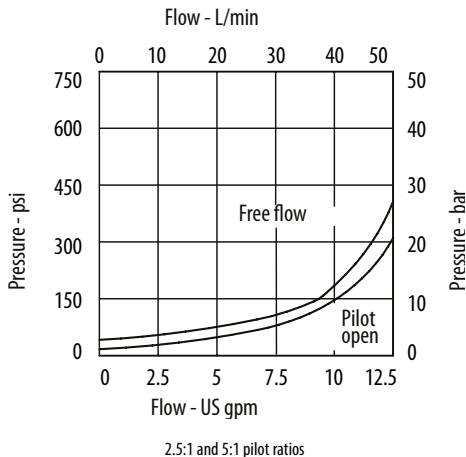
### DIMENSIONS

mm [in]



### PERFORMANCE CURVES

#### Pressure Drop



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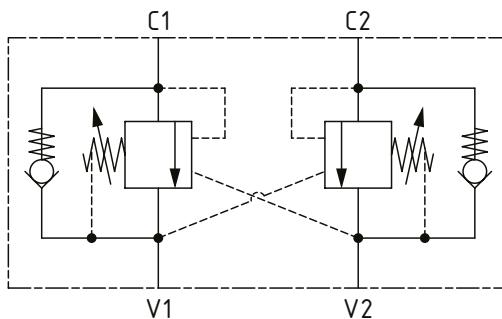
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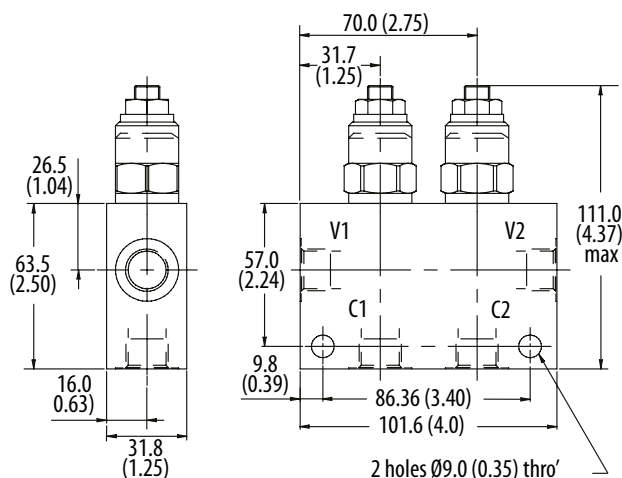
### ■ SCHEMATIC

1CEE34 (dual)



### ■ DIMENSIONS

mm [in]



### ■ MODEL CODE

**1CE35 - F - 3W - 35 - S - 5 - 377 - 210**

#### Basic Code

- 1CE30 - No housing
- 1CE35 - Cartridge and housing
- 1CEE34 - Cartridge and dual housing

#### Adjustment Option

- F - External
- G - Tamper Resistant
- N - Non-adjustable option, contact technical support

#### Housing

Code	Ports	Aluminum single	Steel single	Aluminum dual	Steel dual
Omit	No housing				
3W	3/8" BSP	B6743	B12823	B6836	B13803
6T	#6 SAE	B10536		B10805	
8T	#8 SAE	B7884		B30237	

- \* Aluminum bodies are to be used for pressures less than 210 bar [3000 psi].
- \* Additional housings available

#### 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]

#### Housing Material

- Omit - Aluminum/No housing
- 377 - Steel

#### Pilot Ratio

- 2 - 2.5:1
- 5 - 5:1
- 10 - 10:1

#### Seal Option

Code	Seal kit
S-Buna - N	SK395
SV-Viton	SK395V

#### Pressure Range

Code	Pilot Ratio 2		Pilot Ratio 5		Pilot Ratio 10	
	Bar	Psi	Bar	Psi	Bar	Psi
20	70-210	[1015-3000]	70-120	[1015-3000]	100-210	[1450-3000]
Standard setting	100	[1450]	100	[1450]	100	[1450]
35	100-350	[1450-5000]	100-350	[1450-5000]	120-350	[1740-5000]
Standard setting	210	[3000]	210	[3000]	210	[3000]

Std setting made at 4.5 l/min