Counterbalance Valve

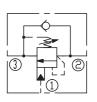
## DESCRIPTION

A cartridge-style standard capacity counterbalance valve

#### **OPERATION**

When pressure at ③ rises above the spring bias pressure, the check seat is pushed away from the piston and flow is allowed from ③ to ②. When load pressure at ② rises above the pressure setting, the direct-acting, differential area relief function is activated and flow is relieved from ② to ③. With pilot pressure at ①, the pressure setting is reduced in proportion to the stated ratio of the valve, until fully open with free-flow from ② to ③. The spring chamber is drained to ③, and any back-pressure at ③ is additive to the pressure setting in all functions.

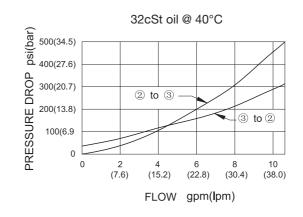
### SYMBOL

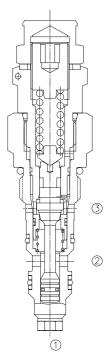


# SPECIFICATIONS

Max.Operating Pressure	350bar	
Flow	See PRESSURE DROP VS.FLOW graph.	
Pressure Setting	Factory pressure setting established at 5 l/min.	
Pilot Ratio	4.1:1	
Check Cracking Pressure	2.7bar	
Temperature	-40°F to +250°F(-40°C to +120°C)	
Filtration	See page N-1	
Fluids	Mineral-based fluids with viscosities of 7.4 to 420 cSt.	
Cavity	10-3,See page M-2	
Housing Material	Steel & Ductile iron rated to 350bar	

## PRESSURE DROP VS.FLOW





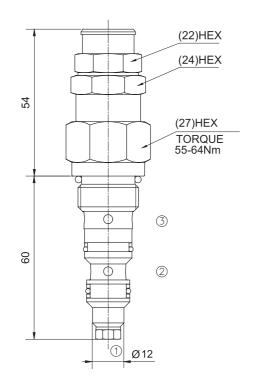


### **TO ORDER**

	LCBRC78 - * * - * * 1 2 3	
1 <b>Function</b> LCBRC78= Counterbalance Cartridge Valve	2 <b>Spring Ranges</b> 50=1450-5000psi(100-350bar) Preset:3000psi(210bar) (Q=5L/min)	3 Port Size Omit=None 6T=SAE6 8T=SAE8 2G=G 1/4 3G=G 3/8 X See page K-5 for detail of
		housing XOther port sizes are available

### **INSTALLATION DIMENSIONS**

Unit=Millimeters



G