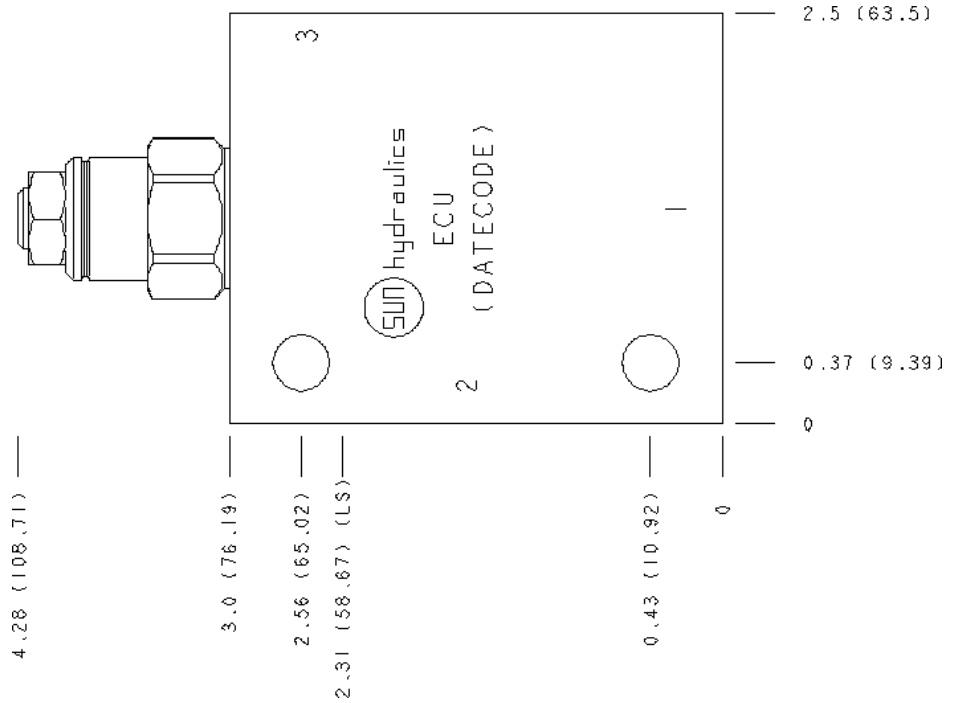
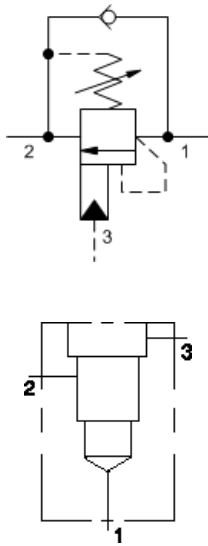


**MODEL**  
CBBALHN-ECU

**3:1 pilot ratio, restrictive counterbalance valve**  
**CAPACITY: 20 L/min. | CAVITY: T-11A**



### CARTRIDGE CONFIGURATION

<b>L</b>	Control	Standard Screw Adjustment
<b>H</b>	Functional Setting Range	1000 - 4000 psi w/25 psi Check (70 - 280 bar w/ 1,7 bar Check), 3000 psi (210 bar) Standard Setting
<b>N</b>	Seal Material	Buna-N
<b>(none)</b>	Material/Coating	Standard Material/Coating

Counterbalance valves with pilot assist are meant to control an overrunning load. The check valve allows free flow from the directional valve (port 2) to the load (port 1) while a direct-acting, pilot-assisted relief valve controls flow from port 1 to port 2. Pilot assist at port 3 lowers the effective setting of the relief valve at a rate determined by the pilot ratio.

Other names for this valve include motion control valve and over-center valve.

### MANIFOLD CONFIGURATION

<b>(none)</b>	Modifier	6061-T651 Aluminum, Buna-N
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### PORT HEADINGS AND SIZES

Modifiers	Ports
ECU, /S	Ports 1 & 2: 3/8" BSPP; Port 3: 1/4" BSPP;

### NOTES

**Important:** Carefully consider the maximum system pressure. The pressure rating of the manifold is dependent on the manifold material, with the port type/size a secondary consideration. Manifolds constructed of aluminum are not rated for pressures higher than 3000 psi (210 bar), regardless of the port type/size specified.

### CARTRIDGE TECHNICAL DATA

Cavity	T-11A
Series	1
Capacity	20 L/min.
Pilot Ratio	3:1
Maximum Recommended Load Pressure at Maximum Setting	215 bar
Maximum Setting	280 bar
Factory Pressure Settings Established at	30 cc/min.
Maximum Valve Leakage at Reseat	0,3 cc/min.
Adjustment - Number of Counterclockwise Turns to Increase Setting	3.75
Operating Characteristic	Restrictive
Reseat	>85% of setting
Valve Hex Size	22,2 mm
Valve Installation Torque	41 - 47 Nm
Adjustment Screw Internal Hex Size	4 mm
Locknut Hex Size	15 mm
Locknut Torque	9 - 10 Nm
Seal kit - Cartridge	Buna: 990-011-007

Seal kit - Cartridge	Polyurethane: 990-011-002
Seal kit - Cartridge	Viton: 990-011-006
Model Weight	0.00 kg.

#### MANIFOLD TECHNICAL DATA

Body Type	Line mount
Interface	None
Body Features	Ninety degree
Mounting Hole Diameter	8.6 mm
Mounting Hole Depth	Through
Mounting Hole Quantity	2
Open Cavities	1
Cavity	T-11A
Port Size	3/8" BSPP
Model Weight	0.33 kg.

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