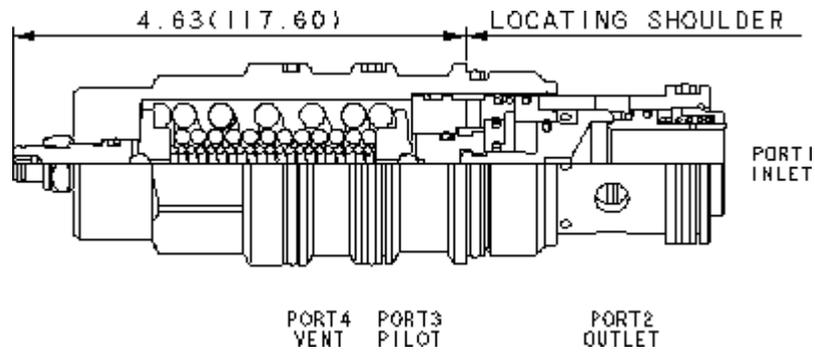


**Model:** CWIGLGN

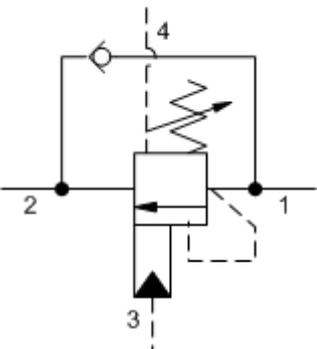
**5:1 pilot ratio, vented counterbalance valve**

**Capacity:** 120 gpm480 L/min. | **Cavity:** T-24A

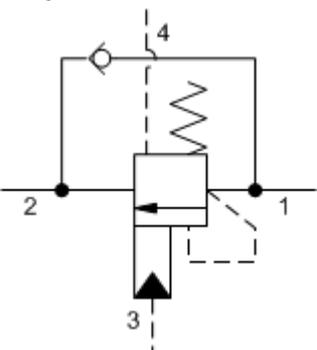


## Symbols for CWIG

### 4-Port Vented



### 4-Port Vented, Non-adjustable



## Technical Features

Vented 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. Backpressure at port 2 does not affect the valve setting because the spring chamber references the vent (port 4).

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

- Counterbalance valves should be set at least 1.3 times the maximum load induced pressure.
- Turn adjustment clockwise to decrease setting and release load.
- Full clockwise setting is 200 psi (14 bar).
- All 4-port counterbalance, load control, and pilot-to-open check cartridges are physically interchangeable (i.e. same flow path, same cavity for a given frame size).
- Reseat exceeds 85% of set pressure when the valve is standard set. Settings lower than the standard set pressure may result in lower reseat percentages.
- Pressure at port 4 is added to the effective relief setting at a rate of 1 plus the pilot ratio times the pressure.
- Sun counterbalance cartridges can be installed directly into a cavity machined in an actuator housing for added protection and improved stiffness in the circuit.
- This valve has positive seals between all ports.
- With vented valves, a lower pilot ratio may be required to achieve machine stability compared to non-vented valves.
- Incorporates the Sun floating style construction to minimize the possibility of internal parts binding due to excessive installation torque and/or cavity/cartridge machining variations.

## Technical Data

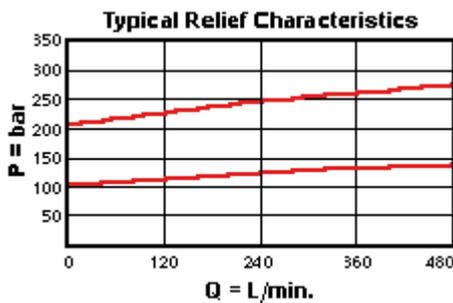
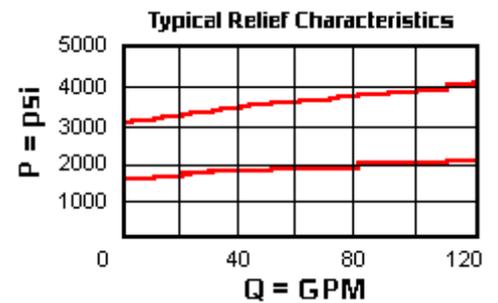
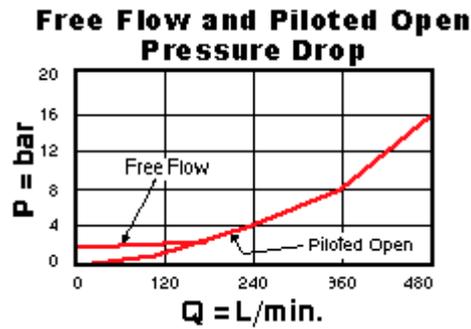
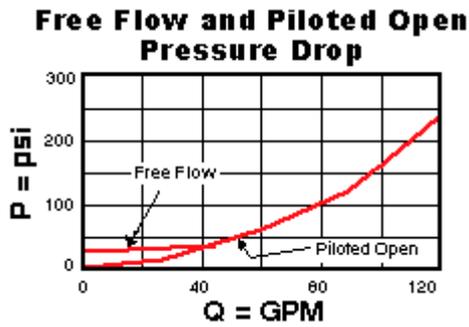
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**Note: Data may vary by configuration. See CONFIGURATION section.**

Cavity	<a href="#">T-24A</a>
Series	<a href="#">4</a>
Capacity	120 gpm/480 L/min.
Pilot Ratio	5:15:1
Maximum Recommended Load Pressure at Maximum Setting	4615 psi/320 bar
Minimum Setting	6000 psi/420 bar
Leakage Pressure Settings Established at	2 in <sup>3</sup> /min./30 cc/min.

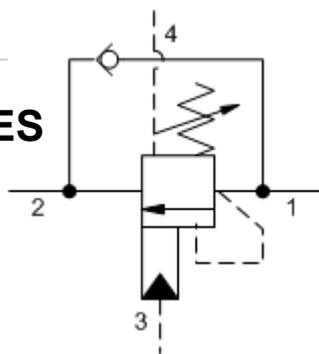
Maximum Valve Leakage at Reseat	5 drops/min.0,3 cc/min.
Check Cracking Pressure	20 psi1,5 bar
Adjustment - No. of CCW Turns from Min. to Max. Setting	55
Operating Characteristic	StandardStandard
Reseat	>85% of setting>85% of setting
Valve Hex Size	1 5/8 in.41,3 mm
Valve Installation Torque	350 - 375 lbf ft474 - 508 Nm
Adjustment Screw Internal Hex Size	5/32 in.4 mm
Locknut Hex Size	9/16 in.15 mm
Locknut Torque	80 - 90 lbf in.9 - 10 Nm
Model Weight	3.52 lb.1.60 kg.
Seal kit - Cartridge	Buna: <a href="#">990024007</a>
Seal kit - Cartridge	Polyurethane: <a href="#">990024002</a>
Seal kit - Cartridge	Viton: <a href="#">990024006</a>

## Performance Curves



**MODEL**  
CWIGLGN

4-Port Vented



**CONFIGURATION RULES**

CONTROL

**L** Standar

FUNCTIONAL SETTING RANGE

**G** 2000 -

SEAL MATERIAL

**N** Buna-N

MATERIAL/COATING

(None)

Standard

If the modifier is /AP, the control must be C or L

If the modifier is /LH, the control must be L

Customer specified setting stamped on hex: \$2.00. No charges apply when a setting is required. This model has required settings (specify at time of order) for:

Control C

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