

Vented, 1.5:1 pilot ratio, load reactive, load control valve

Capacity: 30 gpm (120 L/min.)

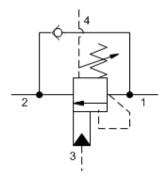
Functional Group:

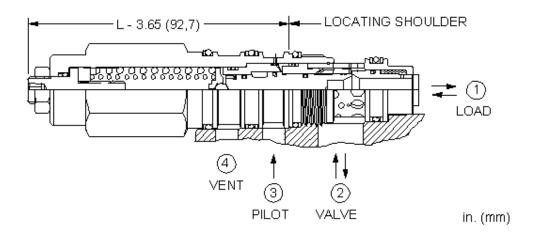
Products: Cartridges: Load Control Valve, Load Reactive: 4 Port, Vented: 1.5:1 Pilot Ratio

Model: **MWEB**

Product Description

Vented, load reactive load control valves with pilot assist combine two valves; a check valve and a relief valve. 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).





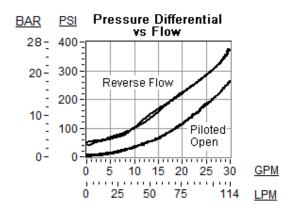
Technical Features

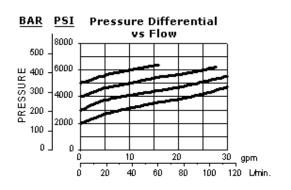
- Load reactive load control valves should be set at least 1.3 times the maximum load induced pressure.
- Turn adjustment clockwise to decrease setting and release load.
- Full clockwise setting is 1000 psi (70 bar) for the H range and 2000 psi (140 bar) for the J range.
- This valve has positive seals between all ports.
- These valves are capable of modulating over a broader range of flows than the pure poppet designs. The longer stroke allows us to incorporate a uni-directional damping device that smooths the opening and lets the valve close quickly.

- This valve is functionally a 4 port counterbalance valve. It seats as a poppet valve and modulates as a spool valve offering the best of both worlds.
- This valve has full relief capacity.
- Sun load control cartridges can be installed directly into a cavity machined in an actuator housing for added protection and improved stiffness in the circuit.
- 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

| Technical Data | U.S. Units | Metric Units |
|-------------------------------------------------------------------|----------------------|--------------|
| Cavity | T-22A | |
| Capacity | 30 gpm | 120 L/min. |
| Pilot Ratio | 1.5:1 | |
| Maximum Recommended Load Pressure at Maximum Setting | 3760 psi | 260 bar |
| Maximum Setting | 5000 psi | 350 bar |
| Adjustment - Number of Counterclockwise Turns to Increase Setting | 5 | |
| Check Cracking Pressure | 25 psi | 1,7 bar |
| Factory Pressure Settings Established at | 2 in³/min. | 30 cc/min. |
| Maximum Valve Leakage at Reseat | 5 drops/min. | 0,3 cc/min. |
| Series (from Cavity) | Series 2 | |
| Reseat | >85% of Set Pressure | |
| Valve Hex Size | 1 1/8 in. | 28,6 mm |
| Valve Installation Torque | 45 - 50 lbf ft | 60 - 70 Nm |
| Adjustment Screw Internal Hex Size | 5/32 in. | 4 mm |
| Adjustment Locknut/Cap Hex Size | 9/16 in. | 15 mm |
| Adjustment Nut Torque | 80 - 90 lbf in. | 9 - 10 Nm |
| Seal Kits - Cartridge | Buna: 990-022-007 | |
| Seal Kits - Cartridge | Viton: 990-022-006 | |
| Model Weight | 0.96 lb. | 0.44 kg. |





MWEB-LHN

Control Functional Setting Range Seal Material
Standard Options Standard Options Standard Options

L Standard Screw Adjustment

H 1000 - 4000 psi (70 - 280 bar), 3000 psi (210 bar) Standard Setting

J 2000 - 5000 psi (140 - 350 bar), 3000 psi (210 bar) Standard Setting

N Buna-NV Viton

Customer specified setting stamped on hex.