

Compu-Spread Power-Float Manifold Assembly

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- **Power Float Manifold Assembly to reduce effective plow force on road surfaces, with integral pressure control, counterbalance, check and solenoid valves**

The Power Float Manifold incorporates the controls required to apply a counterforce to a hydraulically positioned plow, thereby reducing the effective weight of the plow on the road surface.

This function significantly reduces wear of the plow edge and plow shoes, as well as reducing truck fuel consumption since the plow friction on the road is correspondingly less.

In addition to the cost savings afforded to the truck and plow, this feature can lower general road maintenance costs. By reducing the plow weight on the road surface less damage occurs to it, to any paint line stripping, as well as any road surface access covers.

The Power Float Manifold is a secondary control, to be connected between a control valve with a 'motor spool' function and the plow or wing cylinder.

With all solenoids in this manifold de-energized, the integrated counterbalance valve affects the cylinder lowering. The cylinder counterforce, as well as a bleed-down function, are electrically activated. The appropriate safety logic is integral to the available Compu-Spread electronic control architecture.

The plow position could be monitored with a sensor and interlock before the float function is energized to prevent uncontrolled cylinder movement.

The Power Float Manifold is configured for optimum performance in Rexroth load sense systems.

Set-up and adjustment of all controls is facilitated by clearly marked gauge ports on the assembly.

Technical Data

Specifications	
Maximum Operating Pressure	210 bar (3000 psi)
Adjustable Plow Lift Pressure	4 to 100 bar (50 to 1500 psi)
Maximum Inlet Flow Rate	57 L/min (15 US GPM)
Fluid	Mineral Oil
Fluid Cleanliness Recommendation	per ISO 4406 (c): 18/15/12

Fluid Connections	
Cylinder, Valve and Tank Ports	#8 SAE "O" Boss
Load Sense Port	#6 SAE "O" Boss
Gauge Ports	Various, all SAE "O" Boss

Dimensions	
Overall	147 x 135 x 173 mm (5.8 x 5.3 x 6.8 inches)
Manifold Only	140 x 127 x 102 mm (5.5 x 5 x 4 inches)
Weight (Assembly)	5.5 kg (12 pounds)

Environmental

Manifold is made of aluminum, anodized after machining. All cartridge valves are suitable for outdoor use. Installation in a suitable enclosure will extend the life of all external surfaces exposed to the harsh environment found in snow and ice control applications.

N.B. All dimensions are approximate, intended for illustrative purposes only. Request a certified drawing before beginning construction or installation.

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