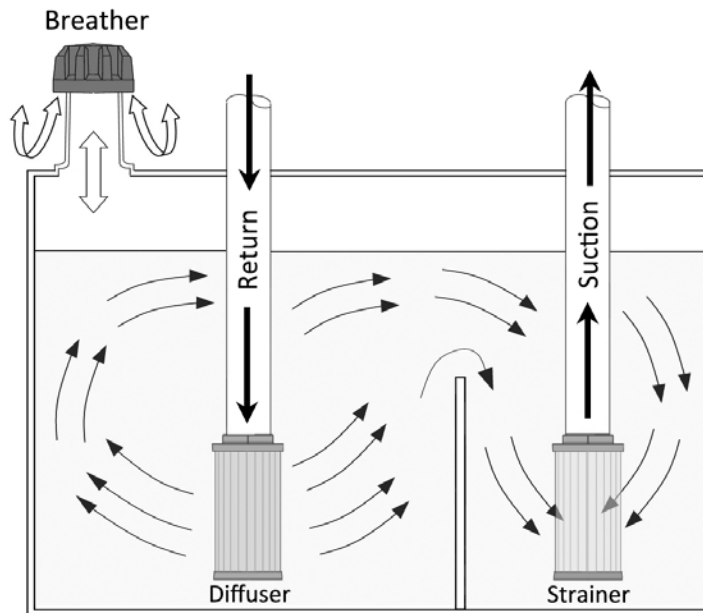


Guide Lines / Formulas / Conversions



Diffusers & Suction Strainers

Using tank diffusers helps prevent air entrainment in hydraulic systems. With the proper placement of a baffle between a diffuser and a suction strainer pump, cavitation can be curtailed. It is recommended to install diffusers and strainers in the bottom 1/3 of the reservoir.

Filler Breathers

Ingression of contaminants through the air can be reduced by using a breather with a filtration rating equal to or better than the hydraulic system rating.

On systems with a fairly constant fluid level in the reservoir, a pressurized filler breather can increase the pump inlet pressure. Generally, the more pressure a pump has at its inlet, the quieter it will run.

Useful Formulas & Conversions

$\text{Pipe Velocity (fps)} = \frac{.3208 \times \text{Flow Rate (GPM)}}{\text{Internal Area (in}^2\text{)}}$		
$\text{Pump Outlet Flow (gpm)} = \frac{\text{RPM} \times \text{Pump Displacement} \frac{\text{in}^3}{\text{rev}}}{231}$		
1 bar = 14.5 PSI	1 PSI = 2.04 in. Hg	1 ft H₂O = .433 PSI
1 cm³ = 0.06102 in³	1 L = 61.0234 in³	1 gal (US) = 231 in³

Consult Manufacturer for Ordering Information