

MR SERIES

Medium Duty Sanitary Pumps for the Food and Beverage Applications

DESIGN ADVANTAGES

- Powerful suction for viscous products
- Low pulsation for smooth, consistent flows
- Low shear for fragile and shear-sensitive products
- Single shaft for simple, economical maintenance
- Replaceable wear parts for maintenance in the field
- 3A certified



TYPICAL APPLICATIONS

- Cheese, Curd & Whey, Cottage Cheese, Butter, Yogurt
- Fruit Concentrates, Syrups, Beer, Wort, Yeast
- Batter, Frosting, Fillings, Slurries
- Soups, Stews, Deli Salads
- Chocolate, Caramel, Fillings, Syrups

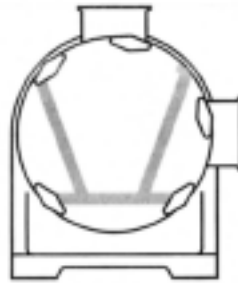
MR SERIES SPECIFICATIONS								
Model	Displacement per Revolution Gallons - Liters	Max Speed	Pressure to PSI - Bar	Capacity GPM - M3/HR	Particulate Size to Inches - MM	Inlet Outlet	Temp Range °F - °C	Weight LB - KG
MR120	.03 GAL (.106 liters)	600 RPM	150 PSI (10.3 BAR)	18 GPM (4.1 M3/HR)	.25 IN (6.5 MM)	2"	-40F TO 300F (149C)	68 LB (31 KG)
MR125	.06 GAL (.224 liters)			36 GPM (8.2 M3/HR)	.50 IN (12.5 MM)	2.5"		125 LB (57 KG)
MR130	.12 GAL (.470 liters)			74 GPM (16.8 M3/HR)	.75 IN (19 MM)	3"		240 LB (109 KG)
MR135	.23 GAL (.875 liters)			138 GPM (31.3 M3/HR)	1.25 IN (31 MM)	3"		270 LB (123 KG)
MR150	.47 GAL (1.78 liters)			282 GPM (63.9 M3/HR)	2 IN (50 MM)	4"		460 LB (209 KG)
MR160	.67 GAL (2.50 liters)		100 PSI (6.9 BAR)	402 GPM (91.2 M3/HR)	2.5 IN (63 MM)	6"		750 LB (340 KG)



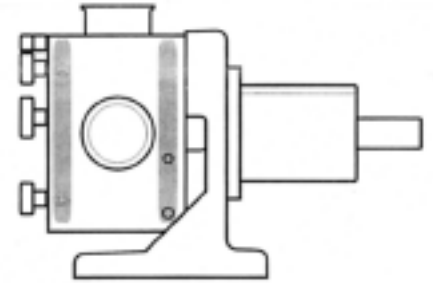
OPTIONS

- Jacketing**

Sine Pump's unique single shaft design lends itself to a more effective heating and cooling jacket system. Sine Pump's housing jacket is buried deep within the pump body, providing fast response when maintaining stringent temperature profiles or in molten product applications. For additional temperature control in molten applications, Sine Pump also offers a front cover jacket to keep the product totally surrounded in heat transfer fluid.



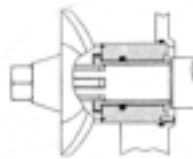
Front Cover



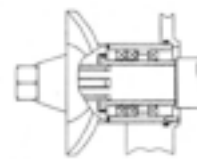
Front Cover & Pump Housing

- Seal Systems**

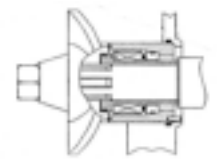
Unlike conventional rotary lobe pumps using two shafts and two seals, Sine Pump's single shaft design reduces seal concerns in half. Sine Pump's standard triple lipseal system is the seal system of choice for most food and beverage applications. Single o-ring and single mechanical seal systems are available as required.



Single O-Ring



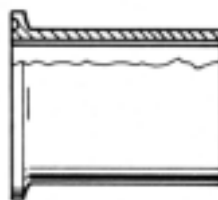
Lipseal



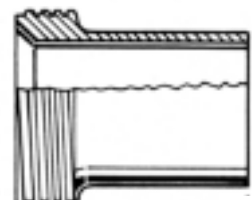
Mechanical Seal

- Nozzles**

Sine Pump comes standard with either Tri-Clamp or Bevel Seat connections. I-Line, European DIN, SMS, ANSI flanges are available upon request.



Tri-Clamp®



Bevel Seat

- Nozzle Orientation**

Sine Pump's nozzles are oriented 90 degrees to each other and may be easily located at 45 degree increments to fit your exact piping requirements. The Sine Pump may be operated in a clockwise or counter-clockwise direction.

