

ECOSINE PUMPS

Sanitary pumps for pressures to 90 psi and bi-directional operation



Watson-Marlow...Innovation in Full Flow

MasoSine EcoSine Pumps: Applications



Food products

The EcoSine pump is well-established in the food industry for transferring fluids containing soft solids. Typical applications include chicken breasts, ready meals, soups, sauces, frozen foods, salads and sausage meat. Loading filling machines is a MasoSine speciality.



Beverages

The high suction capacity of the EcoSine pump, over 80% vacuum, is valuable to the beverage industry. Orange juice concentrates with temperatures down to 14°F and other fruit juices are transferred without damaging the product.



Dairy products

MasoSine EcoSine pumps are ideal for transferring sensitive cheese curd, yogurt, cream cheese, cottage cheese and cream. They are also perfect for adding fruit preparations and handling butter.



Cosmetics and pharmaceuticals

EcoSine pumps are successful in the cosmetics industry for gentle transfer of shampoos, creams, pastes and lotions.



Fine chemicals

EcoSine pumps stand out from the competition for handling shear-sensitive suspensions, solutions, soaps and detergents, as well as very viscous media such as silicones.



Confectionery

In the confectionery industry, EcoSine pumps transfer chocolate glazes and fillings, glucose, fats and many other products.

MasoSine EcoSine Pumps: Sanitary pumps

MasoSine's EcoSine pump satisfies demanding processing requirements cost-effectively, using the unique MasoSine pumping principle. This model is a sanitary pump for pressures to 90 psi and bi-directional operation.

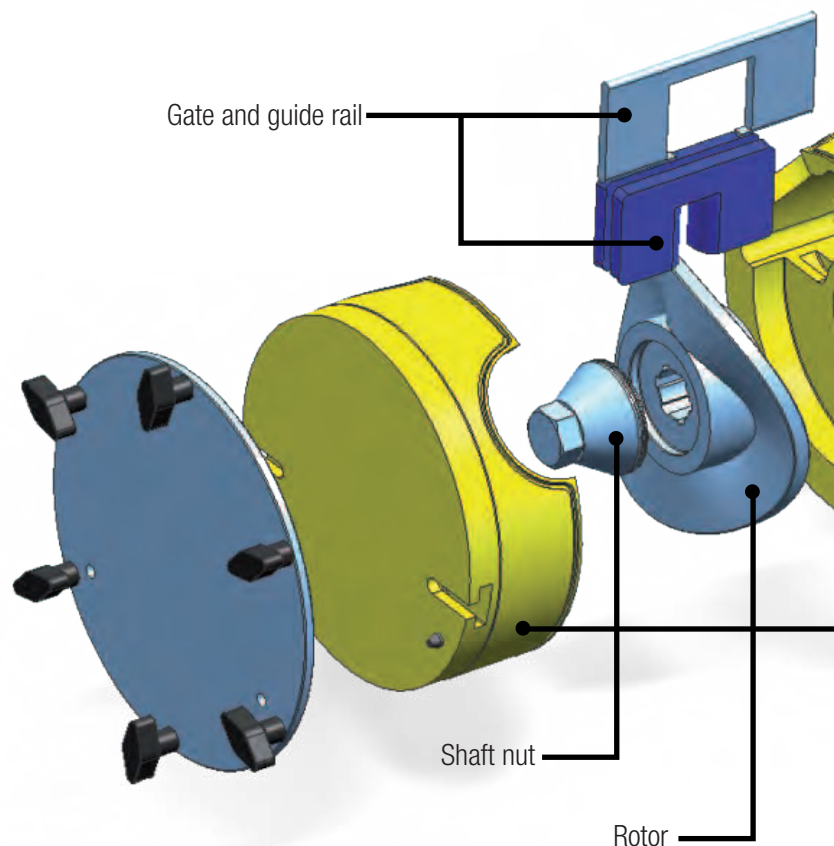
The sine-wave-shaped rotor creates four moving chambers which gently convey the duty fluid from the inlet port to the higher-pressure discharge port. The gate prevents any fluid passing back from the discharge side to the lower-pressure suction side of the pump.



The EcoSine functional principle

Like peristaltic pumping, the MasoSine pumping principle requires no valves. The four chambers are sealed. The system is ideal for fluids carrying soft solids such as fruit, and viscous media such as sauces and silicones.

Anything that is really good and functional usually comprises only a few parts – just like the MasoSine EcoSine pump.

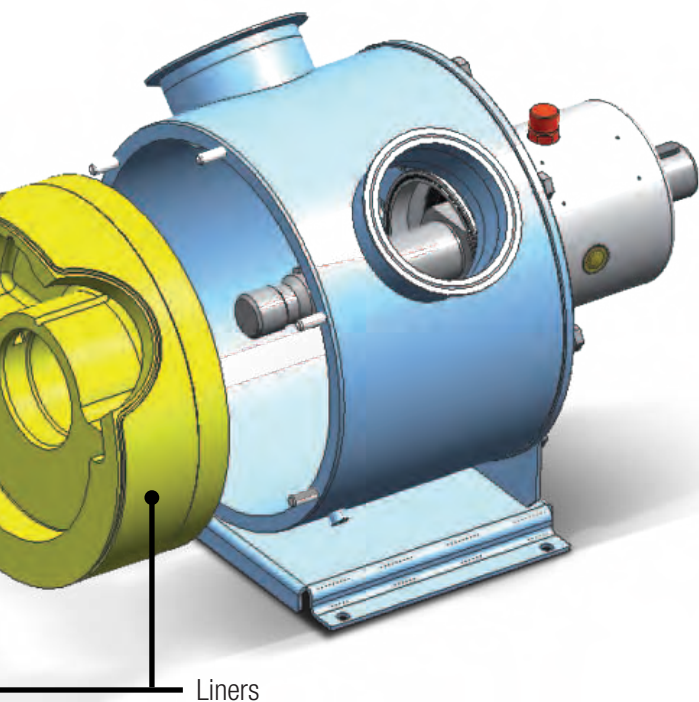


MasoSine EcoSine Pumps: Features and benefits



MasoSine EcoSine mobile unit

The EcoSine pump is available on a static, stainless steel base with adjustable feet. The drive can be in-line or offset, as dictated by the application. Units can be mounted on castors, making the pump a very flexible piece of process equipment.



Hygienic construction

The EcoSine pump is built from stainless steel and high-performance plastics. The motor and gearbox is cast iron and is finished with polyurethane coating.

Gentle product handling

The gentle pumping action means no damage to shear-sensitive fluids.

High suction

The EcoSine pump can pull over 80% vacuum.

Low pulsation

The low-pulsation performance of the EcoSine pump prevents vibration in pipelines and ensures rapid, smooth discharge. Flow meter readings are more accurate and heat exchanger performance is more efficient.

Space saving

The EcoSine pump is a compact, space-saving design, ideal for space-critical installations.

Energy saving

The EcoSine pump's low torque requirement makes it far more economical to run than air-operated diaphragm pumps. It needs less power than rotary lobe pumps.

Bi-directional

The EcoSine pump is truly bi-directional and can run clockwise or counter-clockwise without modification.

No aeration or foaming

The low-shear, gentle pumping action causes no aeration or foaming during product transfer.

Quick and easy maintenance

Stripping the pump for inspection or to change a part takes less than 10 minutes and needs no special skills or training: a short briefing is sufficient. The EcoSine minimizes downtime.

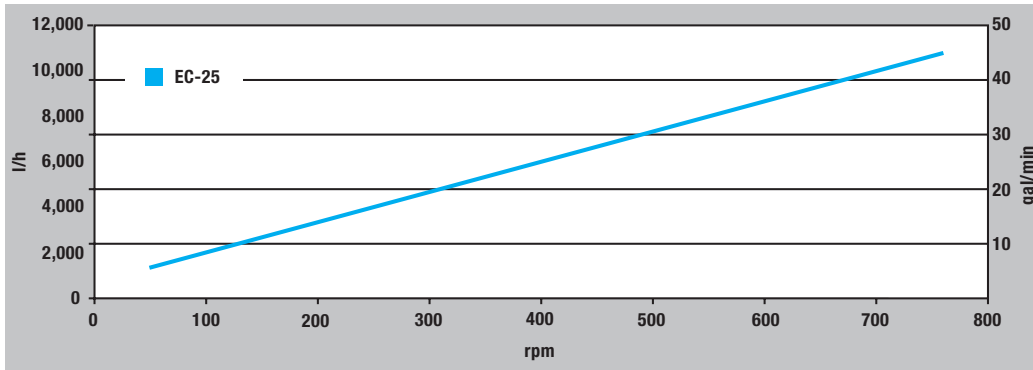
High viscosity

Viscosities up to 10,000,000 cps are easily handled by the EcoSine pump.

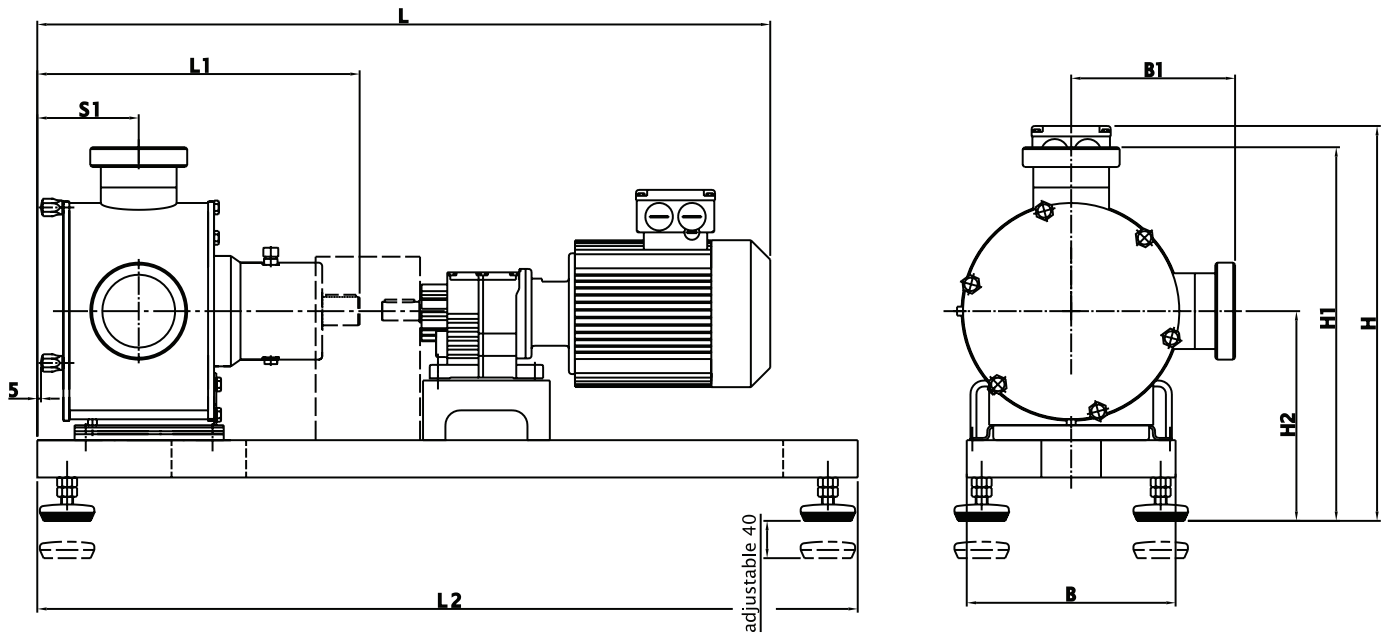
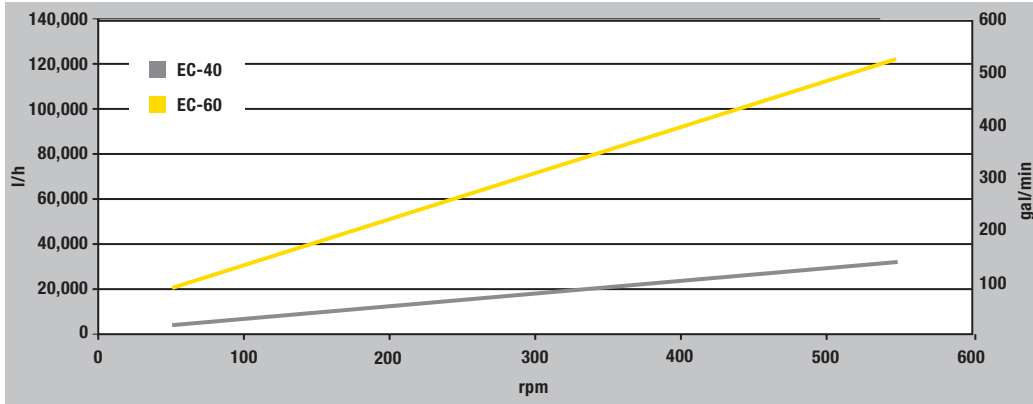
24 hour service and back up

Essential spare parts can be delivered on the day the order is received. Standard pumps can be despatched within 24 hours.

MasoSine EcoSine Pumps: Performance tables and dimensions



These curves are theoretical. Actual performance may be affected by pressure and viscosity.



Dimension (inches)														
model	L		L1	L2	S1	B	B1		H		H1		H2	
	min.	max.					min.	max.	min.	max.	min.	max.	min.	max.
EC-25	32.8	36.0	13.4	31.5	4.1	8.3	5.2	6.3	15.1	18.1	15.6	15.6	9.2	9.2
EC-40	38.7	42.1	17.0	43.3	5.4	11.1	7.1	8.7	17.9	21.6	18.5	20.0	11.3	11.3
EC-60	51.4	67.0	26.6	53.4	8.4	15.0	11.6	12.4	25.1	30.1	25.4	26.2	13.8	13.8

Technical Data						
model	flow per revolution	max. particle size	max. speed	inlet outlet*	shaft diameter	shaft height
EC-25	0.06 gal	0.87 in	800 rpm	2.5 in	28 mm (1.10 in)	119 mm (4.69 in)
EC-40	0.23 gal	1.42 in	600 rpm	4 in	38 mm (1.50 in)	173 mm (6.81 in)
EC-60	0.90 gal	2.36 in	600 rpm	6 in	50 mm (1.97 in)	234 mm (9.21 in)

*Note: Sizes listed are stocked items. Additional port options available upon request.

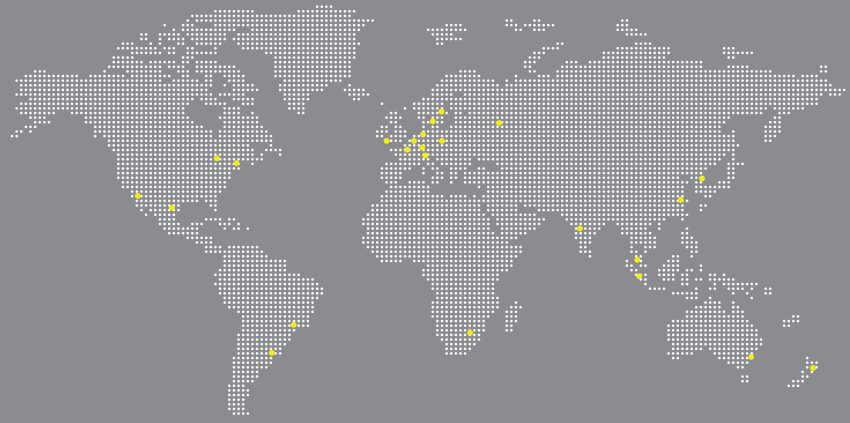


Watson-Marlow Pumps Group

The Watson-Marlow Pumps Group has five world-class factories supported by direct sales operations in 24 countries and distributors in more than 50 countries.

For contact details visit our website:

www.wmpg.com



MasoSine Watson-Marlow Bredel Alitea Flexicon



Watson-Marlow online

Our engineers around the world can help you choose the perfect pump and tubing for your needs.

More information? Our brochures are on our website - www.wmpg.com



HB0320 - Issue 02

Watson-Marlow...Innovation in Full Flow

Tel: 800-282-8823
support@wmpg.us

Watson-Marlow Pumps Group
37 Upton Technology Park
Wilmington, MA 01887

The information in this document is believed to be correct, but Watson-Marlow Pumps Group accepts no liability for any errors it contains and reserves the right to alter specifications without notice. WARNING: These products are not designed for use in and should not be used for, patient-connected applications. Watson-Marlow, is registered a trademark of Watson-Marlow Limited.