

Jabsco 24 Series
rotary lobe pumps
for the food, dairy,
beverage,
pharmaceutical
and general
chemical industries.

Capabilities Include:

- **Positive displacement with gentle pumping action**
- **Proven reliability**
- **Hygienic design in 316 stainless steel**
- **Non-contacting rotors**
- **Approved by U.S. 3A Council and U.S. Department of Agriculture**
- **Modular design with interchangeable options**
- **Easily maintained**

24 Series Rotary Lobe Pumps

24 Series rotary pumps are widely used in the food, dairy, beverage, pharmaceutical and general chemical industries wherever viscous, delicate and particle laden fluids need to be pumped.

Being hygienic, easy to maintain and available in a wide range of sizes and options, Jabsco 24 series pumps easily meet the needs of modern industry.

Principal Benefits

- **Gentle Pumping Action:** For delicate, particulate and viscous fluids.
- **Positive Displacement:** To handle viscous fluids and high pressures.
- **Non-Contacting Rotors:** Ideally suited for abrasive and crystallizing liquids.
- **Hygienic Design:** 316 stainless steel and easy clean features.
- **Approvals:** U.S. 3A Council and U.S. Department of Agriculture.
- **Sealed Rotor Drive:** Suits both directions of rotation.
- **Easily Maintained:** Fully interchangeable components between options, and modular construction makes it even easier to fit, thus reducing down time.
- **Worldwide Distribution:** Pumps and spares are available from the network of distributors.
- **Solids Handling Ability:** This inherent feature of the rotary lobe type pump is made especially effective by use of the large port diameters.
- **Metering and Dosing:** Medium to high viscosity products can be accurately metered simply by controlling the pump speed, avoiding the cost and complexity of separate flow metering systems.



Product Features

- 316 stainless-steel wet end components
- Smooth, easy-clean exterior
- Sealed rotor bolts and drive splines
- Heavy duty roller type bearings for long life and precise rotor location
- Bolt-on ports of generous size eliminate cavitation
- Bolt-on relief valve, to protect pump
- Motorized units, variable-speed drives and systems

Typical Applications

- Food Ingredients
- Confectionery and Bakery
- Meat Products
- Brewing and Soft Drinks
- Milk and Dairy Products
- Cosmetics and Drugs
- Chemicals, Plastics, etc.
- Transfer
- Process
- Filling
- Metering
- Filtration
- Circulation
- Tankers

Performance Guidelines

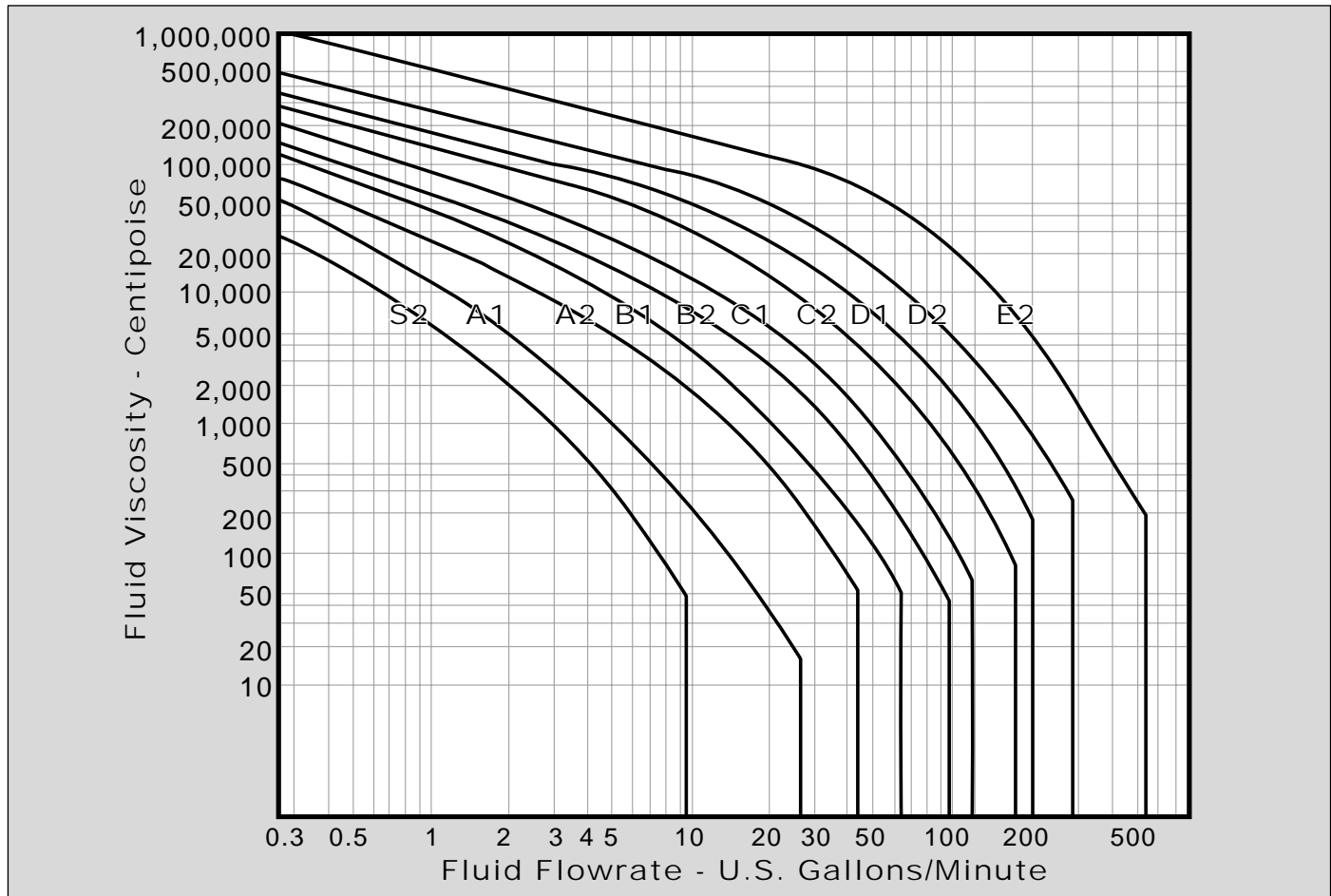
| Pump Size | | S2 | A1 | A2 | B1 | B2 | C1 | C2 | D1 | D2 | E2 |
|--|--------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Basic pump no. | | 24950 | 24000 | 24050 | 24100 | 24150 | 24200 | 24250 | 24300 | 24350 | 24450 |
| Flow, at max. speed | l/m | 35 | 100 | 180 | 240 | 360 | 450 | 655 | 790 | 1000 | 2100 |
| | US gpm | 10 | 25 | 45 | 65 | 95 | 120 | 175 | 210 | 265 | 550 |
| Pressure, max. differential (depending upon choice of rotors) | bar | 7 | 15 | 10 | 15 | 10 | 14 | 10 | 12 | 9 | 12 |
| | psi | 100 | 220 | 150 | 220 | 150 | 200 | 150 | 175 | 130 | 175 |
| Port size, standard | mm | 25 | 25 | 38 | 38 | 50 | 50 | 76 | 76 | 100 | 150 |
| | inches | 1 | 1 | 1-1/2 | 1-1/2 | 2 | 2 | 3 | 3 | 4 | 6 |
| Port size, enlarged | mm | – | 38 | 50 | 50 | 76 | 76 | 100 | 100 | – | – |
| | inches | – | 1-1/2 | 2 | 2 | 3 | 3 | 4 | 4 | – | – |
| Displacement per 100 revs | liters | 3.6 | 10.4 | 18.6 | 24.5 | 37.7 | 62.3 | 93.6 | 122 | 161 | 350 |
| | US gal | 0.95 | 2.75 | 4.90 | 6.45 | 9.95 | 16.4 | 24.7 | 32.2 | 42.5 | 92.4 |
| Max. soft particle size | mm | 5 | 10 | 10 | 13 | 13 | 18 | 18 | 20 | 20 | 27 |
| | inches | 0.2 | 0.4 | 0.4 | 0.5 | 0.5 | 0.7 | 0.7 | 0.8 | 0.8 | 1.1 |



Hygienic Lobe Pumps

24 Series Rotary Lobe Pumps

| Pump Size | | S2 | A1 | A2 | B1 | B2 | C1 | C2 | D1 | D2 | E2 |
|--------------------------------|----------------------------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Flow, Maximum | U.S. Gallons/minute | 9.4 | 25 | 47 | 62 | 96 | 119 | 173 | 209 | 263 | 555 |
| Pressure, Differential | Maximum p.s.i. | 102 | 218 | 145 | 218 | 145 | 203 | 145 | 174 | 130 | 174 |
| Displacement | U.S. Gallons/revs | 0.0094 | 0.028 | 0.049 | 0.065 | 0.10 | 0.17 | 0.25 | 0.32 | 0.43 | 0.92 |
| Speed, maximum | rpm | 1000 | 960 | 960 | 960 | 960 | 720 | 700 | 650 | 620 | 600 |
| Soft Particles | Max size inches | 0.2 | 0.4 | 0.4 | 0.5 | 0.5 | 0.7 | 0.7 | 0.8 | 0.8 | 1.1 |
| Port Size - standard | Inches | 1 | 1 | 1-1/2 | 1-1/2 | 2 | 2 | 3 | 3 | 4 | 6 |
| Port Size - Enlarged | Inches | — | 1-1/2 | 2 | 2 | 3 | 3 | 4 | 4 | — | — |
| Seal | Single Mechanical | • | • | • | • | • | • | • | • | • | • |
| | Flushed Mechanical | | • | • | • | • | • | • | • | • | • |
| Option | Double Mechanical | | | • | • | • | • | • | • | • | • |
| Availability | Packed Gland | • | • | • | • | • | • | • | • | • | • |
| | Single O Ring | | • | • | • | • | • | • | • | • | • |
| Rotor | 3-lobe rotors | • | • | • | • | • | • | • | • | • | • |
| Option | 2-lobe rotors | | • | • | • | • | • | • | • | • | |
| Availability | Rubber Rotors | | • | • | • | • | | | | • | |
| Other | Relief Valve | | • | • | • | • | • | • | • | • | |
| Option | Heating Jackets | | • | • | • | • | • | • | • | • | |
| Availability | Rectangular Inlet | | • | • | • | • | • | • | • | • | • |
| | Integral Reduction Gearbox | | • | • | • | • | • | • | • | • | |
| Basic Pump Model Number | | 24950 | 24000 | 24050 | 24100 | 24150 | 24200 | 24250 | 24300 | 24350 | 24450 |
| Weight (Pump Only) | Without Relief Valve | 21 | 30 | 40 | 63 | 73 | 153 | 166 | 247 | 262 | 660 |
| | (lb) With Relief Valve | — | 36 | 46 | 70 | 80 | 171 | 184 | 269 | 284 | — |



This graph is an approximate selection guide based on fluid at atmospheric pressure fed to pump inlet through 1-1/2 feet of pipe. Full details of fluid flow, viscosity characteristics, vapor pressure and pipework are required to enable accurate pump selections to be made.