

ROTARY LOBE PUMPS – HYGIENIC

24 SERIES Hygienic Positive Displacement Pump

Design Features

- **Adaptability**

This is the key design concept. The pump utilises 'bolt on' features which allow quick and easy interchange of parts to enable exact specification of the pump to suit any application.....from stock!

- **Rugged Design**

The bearing frame design utilises large shaft diameters mounted in high specification taper roller bearings, fitted into rigid pillars which form an integral part of the high grade alloy housing. These ensure maximum shaft stiffness in order to avoid premature pump failure due to overpressure or other abuse.

- **Low Maintenance**

The shaft, bearing and gear assemblies are fully immersed in an oil bath to give maximum life even at extremes of operating conditions. The timing gears are easily accessible at the rear of the pump in the unlikely event that re-timing should become necessary. Rotors are all fully interchangeable avoiding the need to re-time which is a problem associated with so many other rotary lobe and circumferential piston pumps.

- **Improved Hygienic Technology**

Fully swept pump chamber together with sealed rotor spline, accessible seals, and approved sealing components ensure that the pump meets the stringent requirements of major international customers

Options

- **Seals**

Single mechanical seals are of hygienic design. Materials include carbon, stainless steel, tungsten carbide and silicon carbide.

Low pressure flushed seals utilise the same single mechanical seal with an additional housing. A low pressure flush liquid washes away crystallising products or liquids which 'skin over'.

Double mechanical seals utilise all the components from single seals. For hazardous, toxic, highly abrasive or sterile products.

Gland packing - a cost effective general purpose seal for non-hazardous liquids. Used on either a stainless steel or hard chrome plated anti-wear sleeve.

O-Ring seals - another low cost seal option used primarily for self lubricating products such as dairy products.

- **Certification**

3A Variants with Nitrile or EPDM elastomers and port options - Tri-clamp, IDF, 3A, DIN11851.

- **Rotors**

Tri-lobe rotors in stainless steel handle 90% of all applications. The traditional rotor shape gives an excellent combination of efficiency, solids handling, low and high viscous product capability.

Bi-lobe rotor in stainless steel for exceptional handling of delicate, soft solids such as fruit pieces and vegetables.

Rubber covered tri-lobe rotor to cope with small hard solids such as small bone fragments or ice crystals.

- **Connections**

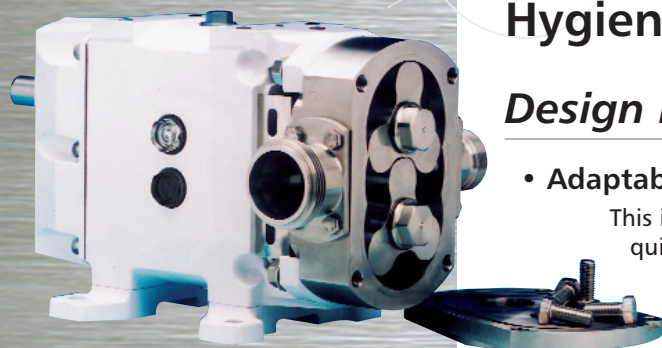
All US and European standards including DIN, SMS, RJT, IDF, Tri-Clamp & BSP. Most pumps available with 2 different sizes, all fully interchangeable.

- **Elastomers**

Nitrile, Viton, EPDM, PTFE or Kalrez product contact joints are available.

- **Other options**

Pump head temperature control jackets.
Integral pressure relief valve.
Enlarged suction ports for highly viscous product.

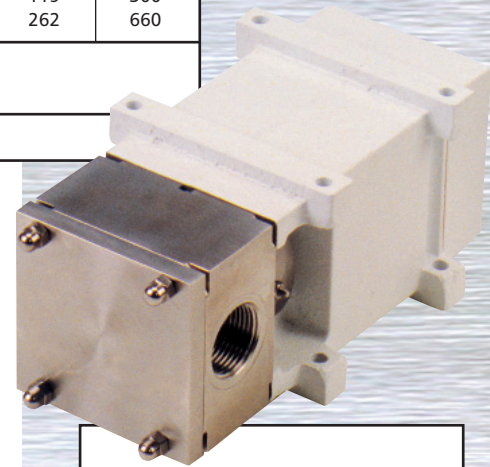


The 24 Series range of positive displacement rotary lobe pumps is a proven design spanning over 20 years. With thousands of pumps in use around the world users agree that it is one of the best designed hygienic pumps on the market today. The 316 Stainless Steel 24 Series pump range incorporates improved technology in hygienic pump design and manufacturing techniques, yet utilises the traditional tri-lobe rotor concept which is so well accepted by the world's leading suppliers of Food, Personal Care and Chemical products.



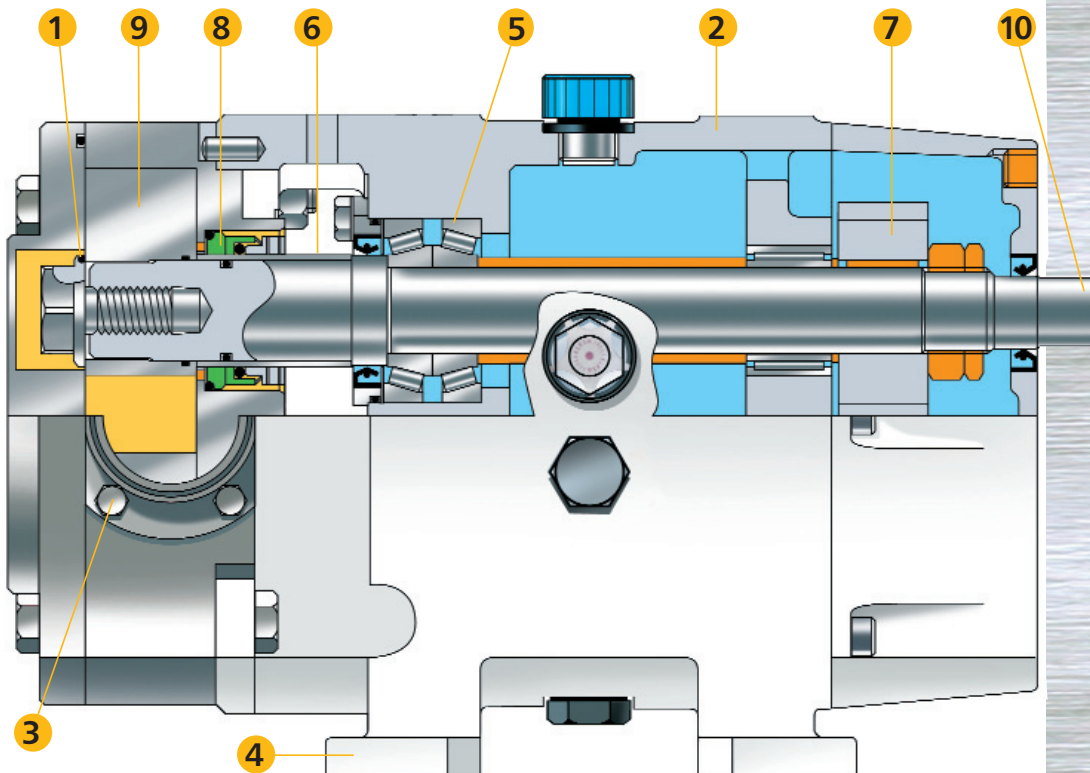
02-10

24 Series										
Pump Model	S2	A1	A2	B1	B2	C1	C2	D1	D2	E2
Port Size (mm) (inch)	25 1	25 or 38 1 or 1½	25 or 38 1½ or 2	38 or 50 1½ or 2	38 or 50 2 or 3	50 or 76 2 or 3	50 or 76 3 or 4	76 or 100 3 or 4	76 or 100 4	152 6
Displacement (litre) (100 revs) (US gal)	3.6 0.92	10.4 2.75	18.6 4.91	24.5 6.47	37.7 9.96	62.3 16.46	93.6 24.72	122 32.23	161 42.53	350 92.46
Max Flow (litre) (per min) (US gal)	36 9.2	100 27.5	177 49.1	237 64.7	362 99.6	448 118	655 173	793 209.5	1000 264.2	2100 554.8
Max Pressure (bar) (psi)	7 101	15 217	10 145	15 217	10 145	14 203	10 145	12 174	9 130	12 174
Max Speed (RPM)	1000	960	960	960	960	720	700	650	620	600
Size LxBxH (mm) (inch)	261x146x106 10.25x5.75x4.25	335x204x188 13.25x8x7.5	355x204x188 14x8x7.5	408x226x227 16x9x9	428x236x227 16.75x9.25x9	538x288x319 21.25x11.25x12.5	564x296x319 22.25x11.75x12.5	623x322x355 24.5x12.75x14	647x346x355 25.5x13.75x14	770x425x438 30.25x16.75x17.25
Bareshaft Weight (kg) (lbs)	10 22	14 31	18 40	29 64	33 73	70 154	75 165	112 246	119 262	300 660
Temp (°C) (°F)	-30 to +150 -22 to 302	-40 to +200 -40 to 392								
Viscosity (cP)	1 to 1 million									



Model S2

Construction Details



- 1 Sealed rotor splines ensure improved cleanability.
- 2 Rugged, high grade alloy bearing frame for low weight and high strength.
- 3 Detachable ports for maximum flexibility in connection type and size.
- 4 Removable feet allow quick change for pump mounting in the ideal orientation.
- 5 High specification tapered roller bearings give over one million hours life on a typical duty.
- 6 Shaft sleeves under seals ensure minimised maintenance costs.
- 7 Precision cut helical timing gears for reduced noise and ease of maintenance.
- 8 Wide variety of interchangeable seal types to suit many applications.
- 9 Fully interchangeable rotor options can be fitted without the need of re-timing thus reducing downtime.
- 10 Heavy duty shafts for high pressure capability and minimum deflection.

24 Series