

"A Trusted Partner in Pump Solutions"

# ROTECH'S OTHER PRODUCTS

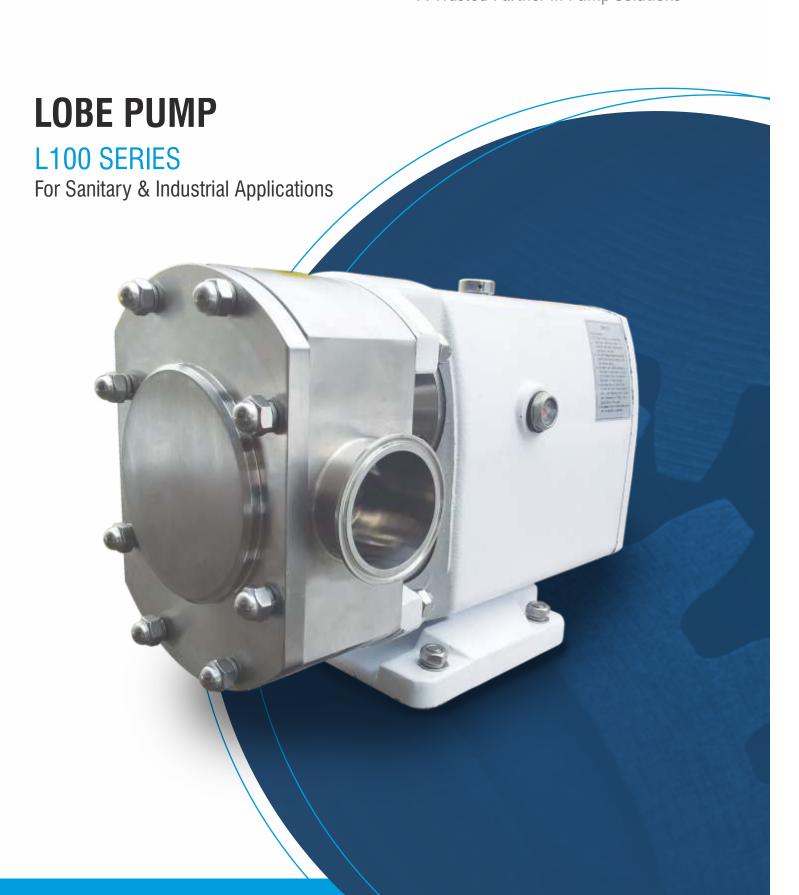
- ▶ DNJ Series End Suction Close Coupled Pumps
- ▶ DN Series End Suction Frame Mounted Pumps
- ▶ 1196 Series ANSI Chemical Process Pumps
- ▶ 1196LF series Low Flow ANSI Pumps
- ▶ 1296 Series ANSI Close Coupled Pumps
- ▶ 1796 Series ANSI Self Priming Pumps
- ▶ RCP Series End Suction Pumps
- ▶ RST Series Stainless Stamped End Suction Pumps
- ▶ RVMS Series Vertical Multistage Centrifugal Pumps
- ▶ RVI80 Series Vertical Inline Pumps
- ▶ SPT/SPU Series Self Priming Trash Pumps
- ▶ SCP/SFP Series Self Priming Pumps
- ▶ S100 Series Sanitary Centrifugal Pumps
- ▶ RDSL Series Horizontal Multistage Centrifugal Pumps
- ▶ 3100 Series NPT & 5100 Series Flanged Ball Check Valves
- ▶ Various Mechanical Seals

Apart from the listed above, we offer an array of other products too. Contact us for further details.



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# **HYGIENIC LOBE PUMP**



### **DESIGN & FEATURES**

- Horizontal RLH Vertical RLV
- Bare-Shaft Construction
- Butterfly Rotor (Standard)
- Sanitary Mechanical Seal, Internal Assembly
- Easy Cleaning and Maintenance
- Connections: Clamp (Standard)
- Applied to CIP Cleaning and SIP Sterilization

#### **OPTIONS**

- ▶ Mechanical Seal: SIC/SIC/EPDM or TC/TC/EPDM
- ▶ Flushed Single or double Mechanical Seal
- Gasket: FPM(Viton),NBR,EPDM
- ▶ Relief valve at the front cover or external by-pass
- Built-in Safety Valve
- ▶ End-Face Heat Jacket
- Complete Heat Jacket
- Vertical RLV series or Horizontal RLH series
- Assembly on a Stainless Steel Base-Plate
- ▶ Connections: Clamp, Thread, Butt Weld and Flange

- ▶ Motor Type: NEMA or IEC 50HZ,60HZ
- Voltage: 208-230v, 380v, 415v, 460v, 575v

### **TECHNICAL SPECIFICATIONS**

- Max. Flow: 90m3/h/395 GPM
- Max. Pressure: 12bar/174 PSI
- Max. Working Temperature: 150°C/302°F
- Max. Rev: 1750 rpm

### **APPLICATIONS**

- Sanitary Food Applications
- ▶ High viscous fluid like Cheese, Sugar, Honey, Chemicals, Chemical Waste, Lime Slurry, etc.

# **WIDE INPUT RANGE MOTOR**

| POWER | VOLTAGE                          |  |  |  |  |
|-------|----------------------------------|--|--|--|--|
| 0.75  | 0.4514.00014/5014                |  |  |  |  |
| 1.1   | 215V-230V/50Hz<br>380V-415V/50Hz |  |  |  |  |
| 1.5   | 230V-460V/60Hz                   |  |  |  |  |
| 2.2   | 575V/60Hz                        |  |  |  |  |
| 3     |                                  |  |  |  |  |
| 4     | 0457/0007//5011                  |  |  |  |  |
| 4.5   | 215V-230V/50Hz<br>380V-415V/50Hz |  |  |  |  |
| 7.5   | 230V-460V/60Hz                   |  |  |  |  |
| 11    | 575V/60Hz                        |  |  |  |  |
| 15    | , , , ,                          |  |  |  |  |

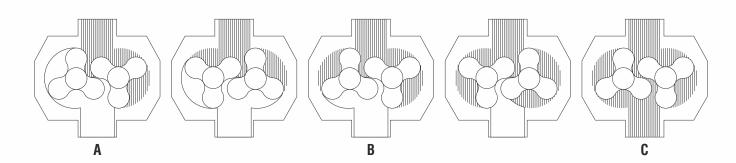


Vertical (RLV) Lobe Pump



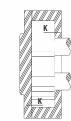
Horizontal (RLH) Lobe Pump

# **OPERATING PRINCIPLES**



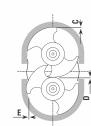
- A. As the Lobes Rotate, the space on the suction side increases as one lobe is distanced from another, thus creating a partial vacuum which draws the fluid into the pump chamber.
- B. As they are rotated by the shafts, each lobe is consecutively filled and the fluid is displaced to the delivery side. The small gaps between the lobes and the walls of the pump body ensure that the spaces are duly filled.
- C. The pump housing is completely filled and the fluid escapes through the teeth of the lobes and is forced against the walls of the spaces, which contributes to the pump action.

### **ROTECH GAP TOLERANCE**









### **MATERIALS**

- Investment Casting Body: AISI 316/AISI 304
- Gaskets: Standard EPDM
- Mechanical Seal (Standard): SIC/SIC/EPDM
- ► Internal Surface finish: Ra≤0.6 μ m
- ▶ External Surface finish: Mirror Polish

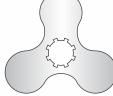
## LOBE ASSEMBLING CLEARANCE RECOMMEND TABLE

| SIZE       | C (mm)          | D (mm)          | E (mm)          | K (mm)          | SIZE        | C (mm)          | D (mm)          | E (mm)          | K (mm)          |
|------------|-----------------|-----------------|-----------------|-----------------|-------------|-----------------|-----------------|-----------------|-----------------|
| RLH/RLV 20 | 0.25±0.05       | 0.20±0.05       | 0.20±0.05       | 0.20±0.03       | RLH/RLV 60  | $0.30 \pm 0.05$ | $0.30 \pm 0.05$ | 0.30±0.05       | 0.40±0.03       |
| RLH/RLV 23 | $0.25 \pm 0.05$ | 0.20±0.05       | 0.20±0.05       | $0.20 \pm 0.03$ | RLH/RLV 70  | 0.40±0.05       | $0.40 \pm 0.05$ | $0.50 \pm 0.05$ | $0.50 \pm 0.03$ |
| RLH/RLV 25 | $0.25 \pm 0.05$ | $0.20 \pm 0.05$ | $0.20 \pm 0.05$ | $0.20 \pm 0.03$ | RLH/RLV 80  | $0.40 \pm 0.05$ | $0.40 \pm 0.05$ | $0.50 \pm 0.05$ | $0.50 \pm 0.03$ |
| RLH/RLV 30 | $0.30 \pm 0.05$ | $0.30 \pm 0.05$ | $0.30 \pm 0.05$ | $0.30 \pm 0.05$ | RLH/RLV 100 | $0.40 \pm 0.05$ | $0.40 \pm 0.05$ | $0.50 \pm 0.05$ | $0.50 \pm 0.03$ |
| RLH/RLV 35 | $0.30 \pm 0.05$ | $0.30 \pm 0.05$ | $0.30 \pm 0.05$ | $0.30 \pm 0.05$ | RLH/RLV 125 | $0.40 \pm 0.05$ | $0.40 \pm 0.05$ | $0.50 \pm 0.05$ | $0.50 \pm 0.03$ |
| RLH/RLV 55 | 0.30+0.05       | 0.30+0.05       | 0.30+0.05       | 0.30+0.05       |             | 0.40+0.05       | 0.40+0.05       | 0.50+0.05       | 0.50+0.03       |

### LOBE PUMP WITH FLANGE CONNECTION

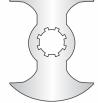


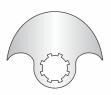




3 - Leaves Rotor







**Butterfly Rotor** 

Single Butterfly Rotor

2 - Leaves Rotor