



**ROTASERVE®**

MECHANICAL SEALS

# ROTASERVE MECHANICAL SEALS

QUALITY MEANS, DOING IT RIGHT  
WHEN NO ONE IS LOOKING.

# RODELTA ROTASERVE



Rotaserve is the service department of Rodelta pumps based in The Netherlands and part of the Kirloskar Brothers Group of companies and take care of all pump installation activities. The team consists of highly skilled service engineers, who have all the required knowledge and experience at hand. Furthermore, they are widely qualified for on-site jobs and API pumps for instance. Rotaserve is capable handling a wide range of pump service jobs, including aligning and balancing, on-site inspection and preventive and corrective maintenance as well as pump upgrades and efficiency improvements.

Rotaserve applied their knowledge and experienced gained to develop a state-of-the-art cartridge mechanical seal range of products focusing on durability, serviceability and ease of installation.

## SERVED INDUSTRIES

- Oil & Gas Down stream
- Oil & Gas Up stream
- Chemical Industry
- Power generation
- Dry dock
- Marine application
- District Heating
- General Industry
- Mining & Minerals
- Fire Fighting
- Pulp and paper
- Waste Water
- Water Treatment
- Drinking water
- Irrigation
- Flood control



## ROTASERVE

Your partner for Upgrade, Overhaul, Service and Repair activities for products from Rodelta, Kirloskar and also for competitor pumps.

- Based in the Netherlands
- Serving our customers in over 60 countries
- Certified to ISO 9001

## What has Rotaserve to do with Rodelta?



Rodelta Pumps International is the OEM for Rotaserve in case of pumps. Rodelta can deliver API and non-API pumps. Rodelta Pumps International has a team of hydraulic and mechanical specialists who can assist with any pump related problem.



**CARTRIDGE  
MECHANICAL  
SEAL**

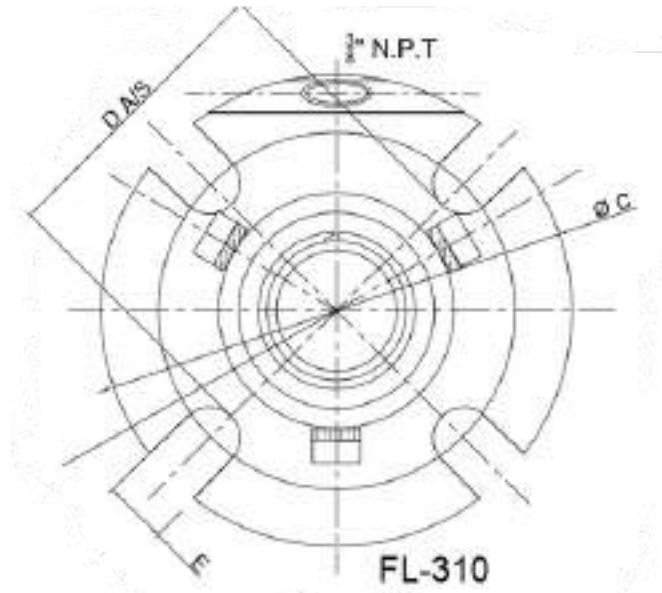
VS.

**COMPONENT  
MECHANICAL  
SEAL**

	Advantage	Disadvantage
<p><b>CARTRIDGE</b></p> 	<ul style="list-style-type: none"> <li>• Reduced installation costs and time</li> <li>• Easy installation</li> <li>• Seals are pre-assembled with sleeve and flange in one unit.</li> <li>• No measurements during installation.</li> <li>• Avoid the possibility of axial misplacement and resulting seal performance issues</li> <li>• Shaft or sleeve is not affected by wear .</li> <li>• Minimum maintenance</li> <li>• In the long term, cartridge seals are more cost-effective.</li> </ul>	<ul style="list-style-type: none"> <li>• The higher initial cost</li> <li>• Structure is more complex</li> <li>• To design cartridge seal much information is necessary upfront.</li> </ul>
<p><b>COMPONENT</b></p> 	<ul style="list-style-type: none"> <li>• Component seals are best-suited for users who place a higher priority on a lower upfront cost.</li> <li>• Reduced spares costs as the individual components can be stocked</li> </ul>	<ul style="list-style-type: none"> <li>• If component is installed incorrectly, the risk of seal failure will increase significantly.</li> <li>• Must be installed by an experienced pump technician.</li> </ul>

Component or cartridge seal may be interchanged, depending on the application. By understanding the advantages and disadvantages of each, you can ensure the optimal performance of your pump.

# PUSHER CARTRIDGE MECHANICAL SEALS



## CARTRIDGE MECHANICAL SEALS

**FL-310**  
Single Multi Spring Stationary Cartridge Seal

Rang : 25 to 100 mm  
Pressure : 0 to 20 bar  
Temperature: Elastomer Limit  
Speed : 0 to 23m/s

**FL-310R**  
Single Multi Spring Rotary Cartridge Seal

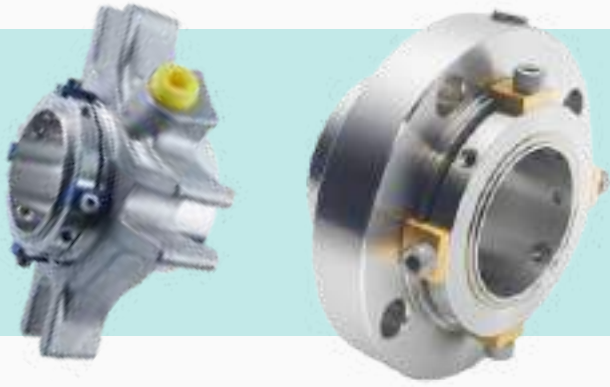
Rang : 25 to 100 mm  
Pressure : 0 to 20 bar  
Temperature: Elastomer Limit  
Speed : 0 to 23m/s

**FL-320**  
Double Multi Spring Stationary Cartridge Seal

Rang : 25 to 100 mm  
Pressure : 0 to 20 bar  
Temperature: Elastomer Limit  
Speed : 0 to 23m/s

**FL-320R**  
Double Multi Spring Stationary Cartridge Seal

Rang : 25 to 100 mm  
Pressure : 0 to 20 bar  
Temperature: Elastomer Limit  
Speed : 0 to 23m/s



## CARTRIDGE SEAL TYPE RCSS

### SHAFT SIZE

**25MM TO 100MM**  
**"1.000 TO 4.000"**

### PRESSURE

**25KG/SQ.CM**  
**(MAX)**

### TEMPERATURE

**-40 TO 220 °C**  
(Check 'O' ring resistance)

### RECCOMENDED APPLICATION

Water, Chemical, Light Hydro Carbon, Powerplant, Petrochemical Industries, Pulp & Paper, Food & Beverage, Universal application, Oil & Gas Industries.

### FEATURES

- Single Seal
- Cartridge type
- Balanced seal
- Trouble-free Installation
- Plan11 for proper cooling to faces
- Plan62 for external cooling with Throttle Bush

### ADVANTAGES

- No dimensional modification of the seal chamber
- No damage of the pump shaft by dynamical loaded 'O' ring
- Installation faults are avoided, cost-effective
- Ideal seal for standardization
- Can use at High Speed(3000rpm)
- Can use in mild slurry application also because Spring was not coming in contact directly to media

# SEMI COMPONENT SEAL TYPE RHJ92

## SHAFT SIZE

**18MM TO 100MM**  
**"0.7 TO 4.000"**

## PRESSURE

**25KG/SQ.CM**  
**(MAX)**

## TEMPERATURE

**-40 TO 220°C**  
(Check 'O' ring resistance)

## RECCOMENDED APPLICATION

Water, Chemical, Light Hydro Carbon, Power plant, Petrochemical Industries, Pulp & Paper, Food & Beverage, Oil & Gas Industries.

## FEATURES

- Single Seal
- Wave spring Seal
- Balanced seal
- Trouble-free Installation

## ADVANTAGES

- Can use in Viscous Media and slurry application
- Wave spring were out of contact with media protected by elastomers
- Installation faults are avoided, cost-effective
- Ideal seal for standardization
- Can use at High Speed(3000rpm)
- No damage of the shaft by dynamically loaded O-ring.

# SEMI CARTRIDGE SEAL

## TYPE ROCART SE

### SHAFT SIZE

**25MM TO 100MM**  
**"1.000 TO 4.000"**

### PRESSURE

**25KG/SQ.CM**  
**(MAX)**

### TEMPERATURE

**-40 TO 220°C**  
(Check 'O' ring resistance)

### RECCOMENDED APPLICATION

Water, Chemical, Light Hydro Carbon, Power plant, Petrochemical Industries, Pulp & Paper, Food & Beverage, Universal application, Oil & Gas Industries.

### FEATURES

- Single Seal
- Cartridge type
- Balanced seal
- Trouble-free Installation
- Plan11 for proper cooling to faces

### ADVANTAGES

- No dimensional modification of the seal chamber
- No damage of the pump shaft by dynamical loaded 'O' ring
- Installation faults are avoided, cost-effective
- Ideal seal for standardization

# ROTASERVE MECHANICAL SEAL

## SUPPORT SYSTEMS FOR MECHANICAL SEALS

" Depending on the design,application and mode of operation,supply systems are needed to flush, cool and pressurize mechanical seals and magnetic couplings and provide leakage compensation. Rotaserve supplies a complete range of solutions from a single source including design, production,commissioning and service and a variety of accessories."

### SUPPLY TANK



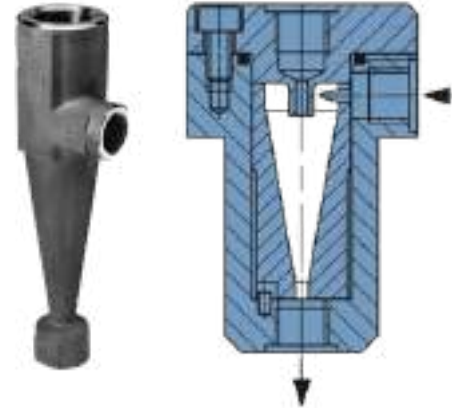
- Thermosyphon System Tank with Cooling coil
- Capacity: 10Lts/15 Lts./28 Lts
- SS316 Coils and SS304 Shell as Standard
- Meets various International Standards

### COOLER



- Seal cooler with SS coils and M.S tank as standard and various option available as per requirement

### CYCLONE SEPERATOR



- Model: CS-001- Standard Model for light Duty Application- Full Stainless Steel
- Model: CS-002- Standard Model for Heavy Duty Application- Stainless Steel/Ceramic/Hard Metal Options



**Rotaserve is represented by our Group company**

**Kirloskar Brothers (Thailand) Limited for the Asia market.**

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