

ROTAMAC

ROTAMAC RCI / RCIT

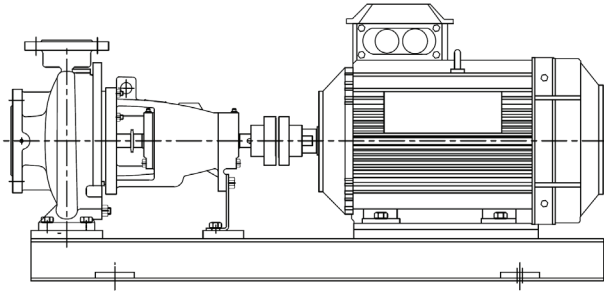
End suction process pumps acc. to ISO2858 / ISO5199



ROTAMAC

INTRODUCTION

This data booklet deals with RCI/RCIT model, horizontal end suction centrifugal pumps for chemical process.



ROTAMAC RCI/RCIT are standardised pumps, metallic centrifugal, single stage, foot mounted, centerline discharge. They comply with DIN EN 22858 and ISO 2858. This means that in terms of their external and connection dimensions and overall performance data (different in details design and individual performance) they are interchangeable with every other ISO2858 pumps of the same size.

Conveyance requirements can be flexibly, variety and economically met with a wide range of pump sizes with capacities of up to 900 m³/h. The material and pump size will be selected to meet your requirements.

Whether exposed to crystallising, hot or solid bearing media, ROTAMAC mechanical shaft seals contain the medium without leaking. An optimised design ensures that seals can be easily installed and removed and are economic in use. We use standard components in the seal system so you are independent of any particular manufacturer.

ROTAMAC RCIT - THERMIC FLUID PUMPS

The thermal oil and hot water pumps that are reliable by ISO 5199 with some deviations. Whenever things get hot, you need specialists on hand. The RCIT offer high levels of operating reliability.



STANDARDISED

- Pump designed and manufactured in accordance with ISO2858 / ISO5199 (with some deviations for RCIT thermic fluid pumps)
- Balanced impeller according to ISO1940 grade G6.3, ensures smooth operation.
- Full compliance with ISO9908 / ISO5199 shaft run-out and ISO10816-7 vibration requirement.
- Performance test of pumps based on ISO9906 and ANSI/HI14.6 grade 2B

ADVANTAGES

- Improved efficiency and NPSHr by verified hydraulic design of impellers.
- Low vibration levels and excellent smooth running characteristics.
- Variety of materials and shaft seal to meet any corrosive fluids and difference applications.
- Back pull out design facilitates fast and easy to maintain without any special tool.
- A robust bearing bracket ensures only minor deflection on the shaft and a long working life for the bearings and the mechanical seal.

WORKING CONDITION

- Liquid pumping temperature up to 175 °C for standard version, 260 °C for special version and 350 °C for RCIT thermic fluid pumps.
- Maximum permissible pressure: 16 or 25 barg
- Flow rate: up to 900 m³/h for standard version and up to 300 m³/h for RCIT thermic fluid pumps.
- TDH: up to 175 m
- Speed: 1450 / 2900 rpm for frequency 50 Hz, 1750 / 3500 rpm for frequency 60 Hz

MATERIAL AND CONSTRUCTION

- Pump casing & impeller: 304/316/316L/duplex stainless steel, carbon steel, alloy20, hastelloy C
- Shaft: carbon steel, 316 stainless steel
- Sleeve: 316/316L/duplex stainless steel, alloy20, hastelloy C
- Shaft seal: packing seal, single or double mechanical seal
- Nozzles: DIN or drilled to ASME B16.5

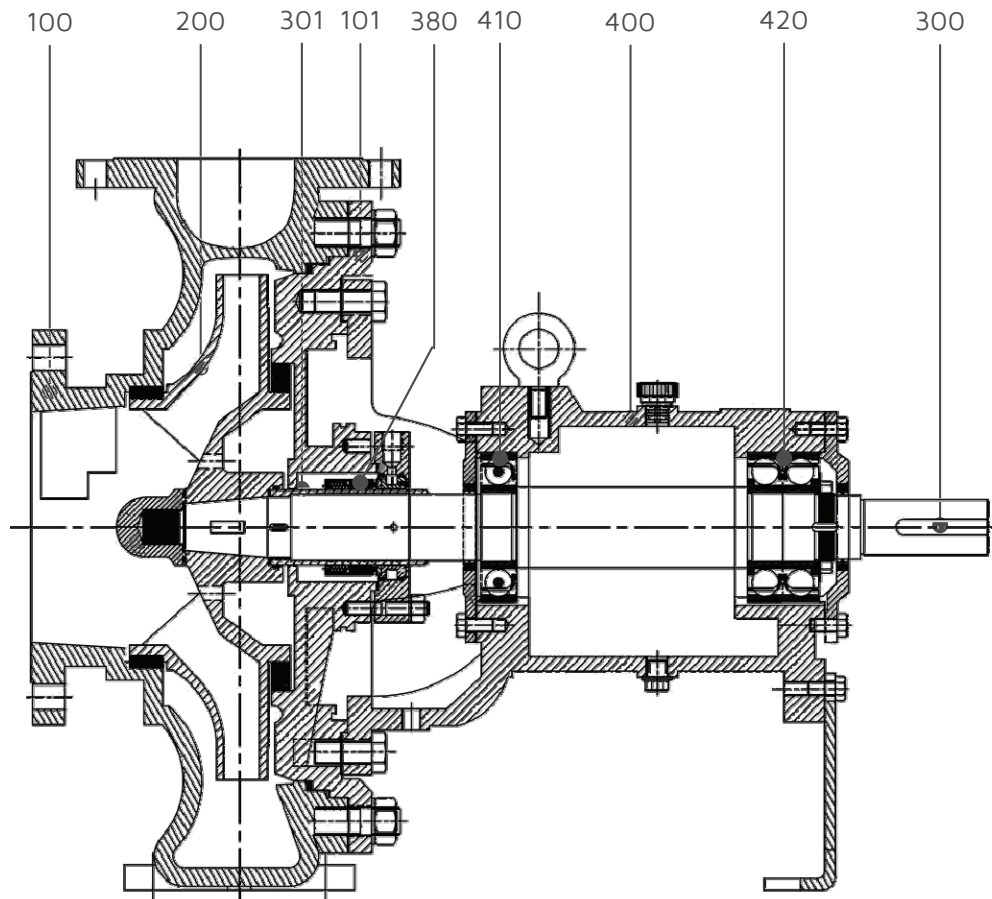
The pump is driven by foot mount motor and transmitted through a standard or spacer coupling.

The baseplate is fabricated from steel, drill and tap bases, secure pump and motor to base, made more rigid and pre-alignment before delivery.

RCI / RCIT Series, ISO 2858 - ISO5199 Pumps

PUMP SECTIONAL DRAWING AND PARTS LIST - RCI MODEL

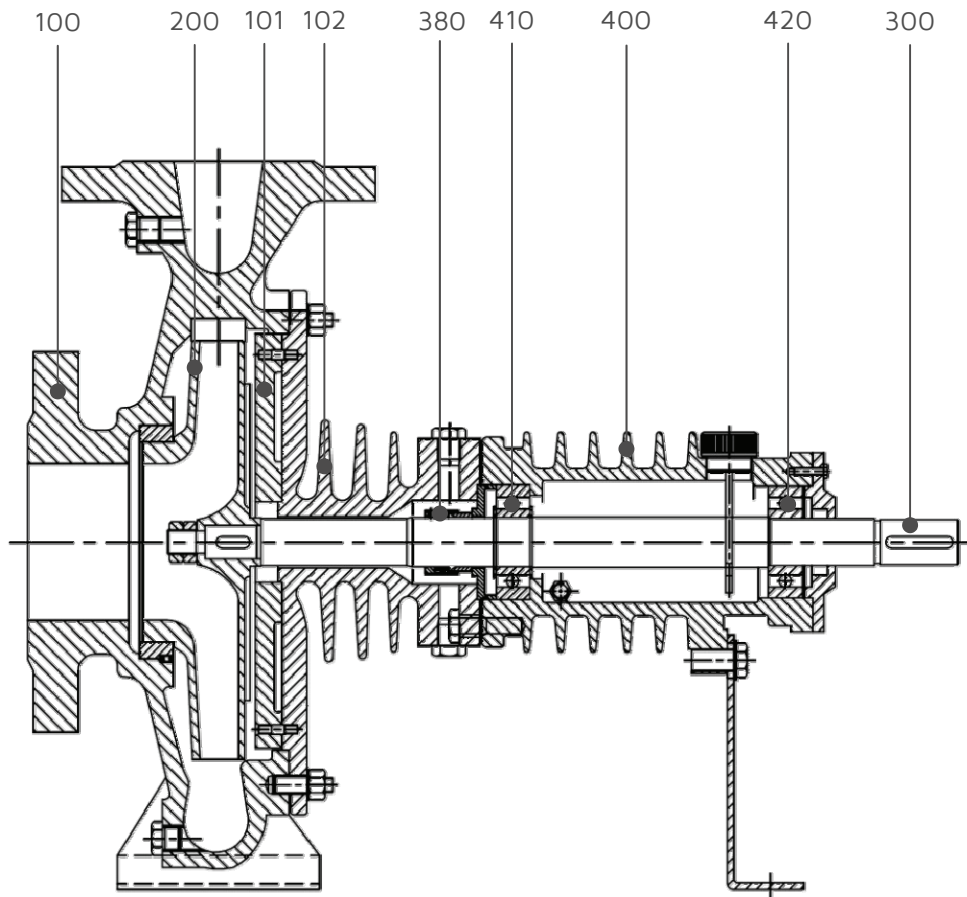
Pump construction is a little different depending on size



Item no.	Part name	Materials / Construction
100 101	Casing Casing Cover	carbon steel, 304/316/316L/duplex stainless steel, alloy20, hastelloy C
200	Impeller	carbon steel, 304/316/316L/duplex stainless steel, alloy20, hastelloy C
300	Shaft	carbon steel, 316 stainless steel
301	Shaft Sleeve	316/316L/duplex stainless steel, alloy20, hastelloy C
380	Mechanical Seal	packing seal, single mechanical seal, double mechanical seal, cartridge seal
400	Bearing Housing	cast iron
410	Inboard Bearing	single row ball bearing, roller bearing
420	Outboard Bearing	double row ball bearing

PUMP SECTIONAL DRAWING AND PARTS LIST - RCIT MODEL (THERMIC FLUID PUMPS)

Pump construction is a little different depending on size

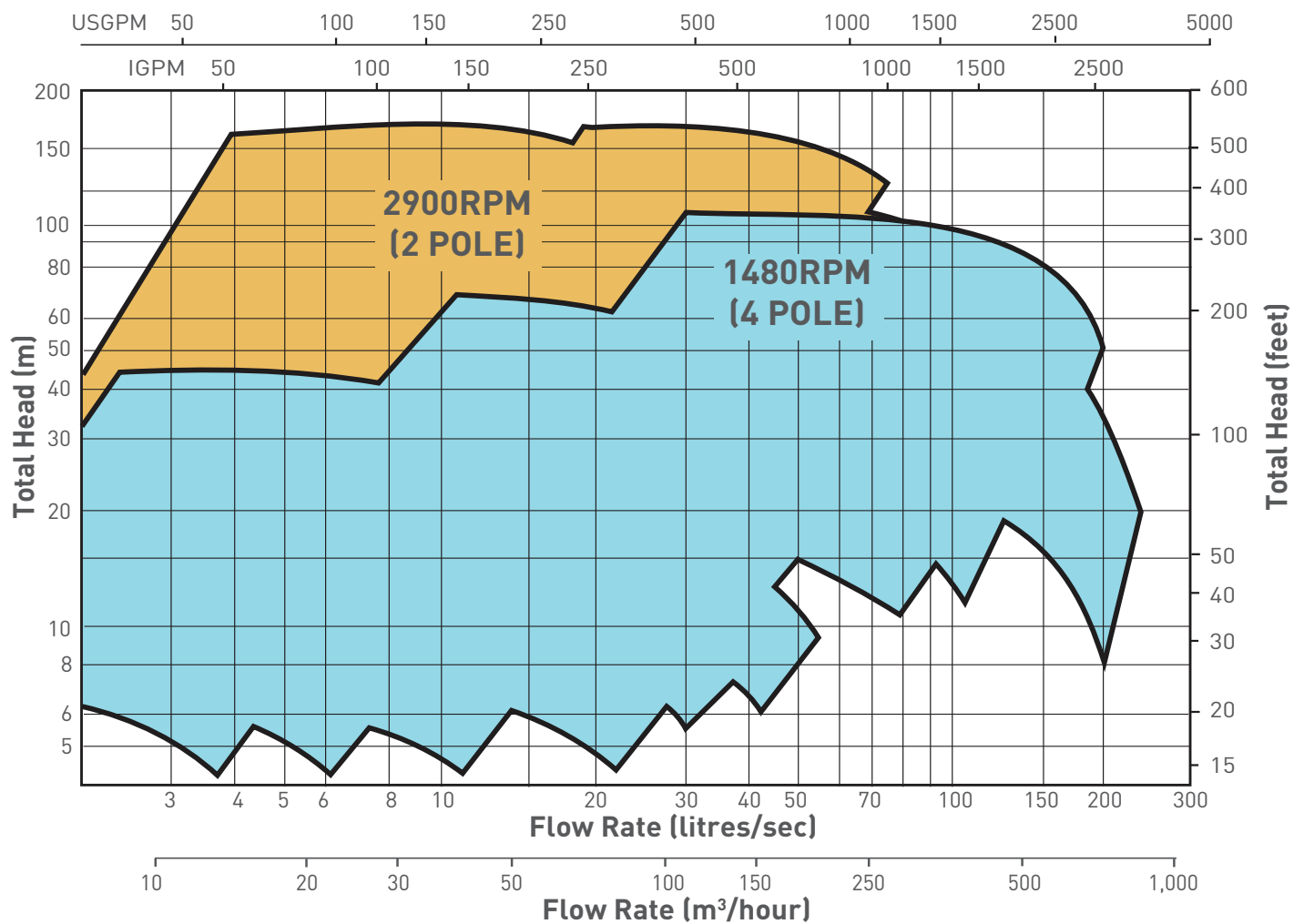


Item no.	Part name	Materials / Construction
100 101	Casing Casing Cover	ductile iron, carbon steel, 316 stainless steel
102	Stuffing Box Seal Cover	ductile iron, carbon steel, 316 stainless steel
200	Impeller	ductile iron, carbon steel, 316 stainless steel
300	Shaft	316 stainless steel
380	Mechanical Seal	single mechanical seal
400	Bearing Housing	cast iron, ductile iron
410	Inboard Bearing	single row ball bearing
420	Outboard Bearing	single row ball bearing

RCI / RCIT Series, ISO 2858 - ISO5199 Pumps

Selection Charts

Curves on this page are for guidance only.
Refer to the performance curves on each model.



PUMP DIMENSIONS ACCODING TO ISO 2858 :

RCI / RCIT : 50x32-125, 50x32-160, 50x32-200, 50x32-250, 65X40-160, 65X40-200, 65X40-250, 65X40-315, 80X50-160, 80X50-200, 80X50-250, 80X50-315, 100X80-160, 100X65-200, 100X65-250, 100X65-315, 125X100-200, 125X100-250, 125X100-315

RCI : 65X40-125, 125X80-200, 125X80-250, 125X100-400, 150X125-250, 150X125-315, 150X125-400, 200X150-315, 200X150-400

COMPLEMENTED RANGE :

RCI : 250x200-315, 250x200-400

FLANGES DESIGN :

EN 1092-1, PN 16, EN 1092-1, PN 16 OR drilled to ASME B16.5

FORCES AND MOMENTS :

RCI/RCIT pumps are designed for handling forces and moments in accordance with ISO 5199.

ROTAMAC

- Standardized End Suction Pumps
EN733/DIN24255, ISO2858/ISO5199
ASME B73.1, API610
- Split Casing Double Suction Pumps
- Solid Handling Pumps
Slurry/Vortex/Semi-open/Open/Non clog
- High Pressure Multi-Stage Pumps
- Self-Priming Pumps
- Submersible Pumps
- Close Coupled Pumps
- Vertical Multi-Stage / Immersible Pumps
- Vertical Sump Pumps
- Vertical Turbine Pumps
- Mixed / Axial Flow Pumps
- Liquid Ring Vacuum Pumps
- Chemical Process Plastic Pumps
- Fire Fighting Pump Packages (NFPA20)
- Booster Pump Packages
- Trailer Mounted Pumps

436 Soi On-Nuch 39, Sukhumvit Rd.,
Suanluang, Bangkok 10250 - Thailand

T : +66 2721 3860

F : +66 2721 3869

E : sales@energytechnology.co.th

www.energytechnology.co.th

ROTAMAC can help relieve the stresses and reduce the life cycle costs associated with the most important aspects of plant operation.

Dedicated to delivering the highest quality support, ROTAMAC services and solutions integrates hydraulic, mechanical and materials engineering knowledge with creative solutions to improve equipment reliability and system performance, reduce energy consumption and improve the safety and environmental impact of operations.

Pump Services and Repair



Capabilities Overview

Design

- Equipment Selection and Optimization
- Material Selection
- System Design
- System Optimization

Start-up

- Equipment Installation
- Laser Alignment
- Commissioning and Running test
- Operator Training
- On-site Project Supervision
- On-site Troubleshooting

Operation and Maintenance

- Equipment Inspection
- Repair & Overhaul
- Advanced Diagnostics
- Service Maintenance Contracts