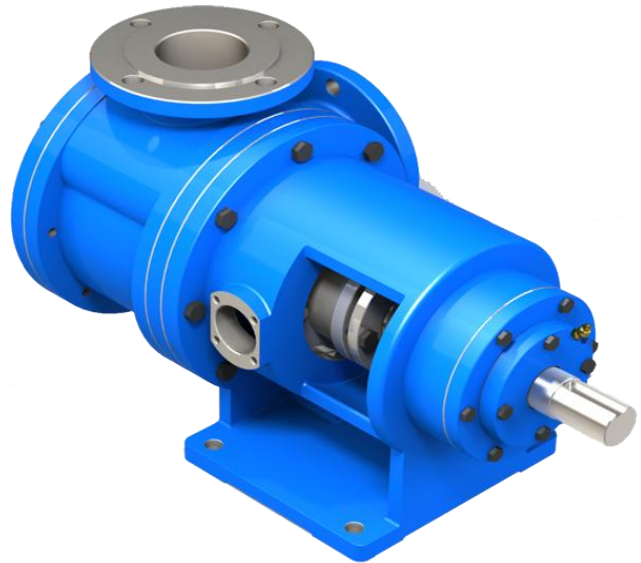


Data Sheet: SRA-01-05

Issued : April-2013

Replaced : Nov-2024

FLOTAN-SRA Series



INTERNAL GEAR ROTOR PUMP

KEY FEATURES

FLOTAN-SRA Internal gear rotor pumps offer several key advantages, making them highly suitable for industrial fluid handling. They provide **smooth, low-pulsation flow** at high viscosities, ensuring gentle handling of sensitive liquids. **SRA self-priming capability** and ability to operate in both directions make them versatile for a wide range of applications. With **high volumetric efficiency**, they can deliver accurate, consistent flow rates across varying pressures. These pumps are also known for their **compact design, quiet operation, and long service life**, thanks to fewer moving parts and robust construction, making them reliable and cost-effective solutions for transferring fuels, oils, chemicals, and other viscous fluids.

Designed for:
High Viscosity Fluids

Introduction:

FLOTAN-SRA Series internal gear pump is a kind of new positive displacement pump and is designed according to the different fields requirements of petroleum, chemical industry, paint, medicine, foodstuff and so on. It widely applies to a variety of mediums with different property and viscosity because of special structure and selected different pumps materials.

Proper medium temperature: -10°C~200°C

Proper medium viscosity:

1.0cSt~300,000 cSt

Work principle:

Driving gear (outside rotor) with internal tooth drives the internal rotor and turns in the same direction in the full closed pump body. The pump casing and crescent of the front cover separate the inlet from the outlet. when it turns, negative pressure formed at the suction port, the liquid inhaled and being take to the outlet by rotor, then the liquid is expelled from the discharge port as the gears mesh. The transportation of liquid finished.

Structure:

- The pumps are mainly composed of internal rotor, outside rotor, shaft, pump casing, front cover, seal, bearing etc.
- The pump seal adopts packing seal or mechanical seal. When the delivered medium is high temperature, high viscous or strong corrosion, packing seal should be adopted.
- When the delivered medium is ease crystalline, we can design the heat preservation jacket in the pump casing and front cover in order to melt the medium with steam when working. The pump can be also fitted with the safety valve.
- The pump set is composed of the pump, motor and baseplate. the direction way is belt wheel driving or coupling driving.
- The direction of rotation is clockwise viewed from coupling end.

Advantages:

- Steady delivery without pulsation, little vibration & noise and outstanding self-priming ability.
- The pump can deliver the varied corrosive medium fluids if suitable material of constructions are selected. In addition, the working temperature can bear up to 200°C easily.
- The same rotary direction of internal rotor and outside rotor results in little wear and long operational life.
- The pump's flow capacity can be changed through adjusting the speed.
- It's suited to deliver high viscous medium.
-

Drivers Options:



Diesel engine drive



Insulated jacket



Belt drive



Magnetic coupling



Stainless steel material



With safety valve



Pump Body

1.Port:

Side in side out(180) Pump Body Rotatable

Right angel(90) Pump Body Rotatable

Hread

Flange

2. Material: HT200, Stainless steel

Internal and external rotor

2

In order to reduce the impact of wear, several components provide a variety of hard materials, include Tungsten Carbide, Carborundum, Ceram, Carbon Steel, Stainless Steel, all kinds of hard coating.





Seal

3

The pump can be equipped with packing seal, single end face mechanical seal, double end face mechanical seal, assembly type mechanical seal, no sealing magnetic drive.

4

It can be configured for thin liquid and viscous liquid to obtain the best performance.

It can convey high viscosity media such as asphalt, paint, glue, resin, etc.





Heavy duty reducer

5

Equipped with reduction motor, operate steadily, with low noise, low loss power, safe and reliable, energy saving and power saving.

100% Copper core motor

6

High viscosity pump is equipped with copper cable, with stable operation, less heat, standard output power and long service life.

