

Hygienic progressive cavity pump is a special kind of positive displacement pump. Its main working parts are a screw (called a rotor) in the shape of an eccentric helix and a screw bush (called a stator) with a double helical inner surface.

When the motor drives the pump shaft to rotate, the screw rotates around its own axis on the one hand, and on the other hand it rolls along the inner surface of the bushing, thus forming the sealed chamber of the pump. The liquid in the sealing cavity advances one pitch for each revolution of the screw. With the continuous rotation of the screw, the liquid is pressed from one sealing chamber to the other sealing chamber in a spiral shape, and finally squeezed out of the pump body.

SeFluid's hygienic progressive cavity pump series has the advantages of simple structure, safe and reliable operation, convenient use and maintenance, continuous and uniform liquid discharge, and stable pressure.

Features of Hygienic Progressive Cavity Pump

- Low inertial force of the rotating parts, ideal for very high speeds
- Less sensitive to incoming gas and dirt than other rotary pumps;
- Uniform and continuous flow, small vibration and low noise;
- No end-flow pulsation and pulsation; Smooth operation and stable flow rate.
- Fluid can be conveyed in forward and reverse directions.
- Ability for multi-phase mixed transportation of liquid, gas and solid;
- Good suction performance and self-priming ability;
- Solid structure, easy installation and maintenance.
- Sanitary design with flash protection cover.
- The spiral sealing line completely separates the suction cavity and the discharge cavity, so that the pump has the same isolation function as a valve;
- Wide range of pressure and flow. The pressure is about 3.4-340 kgf/cm², and the flow rate can reach 18600cm³/min;
- Viscosity of the pumped fluid can reach 50.000Mpa·s and the solid content can reach 50%; Can pump fluid with fibers.

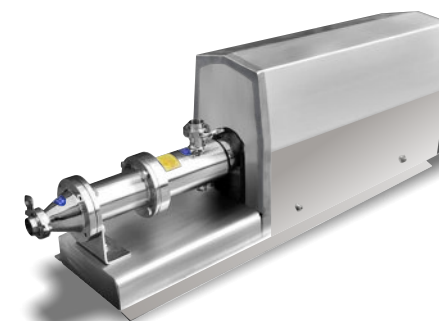
Advantages of Hygienic Progressive Cavity Pump

Compared with centrifugal pumps, hygienic progressive cavity pumps do not need to install valves, and the flow is a stable linear flow;
 Compared with the plunger pump, hygienic progressive cavity pump has strong self-priming ability and higher suction height;

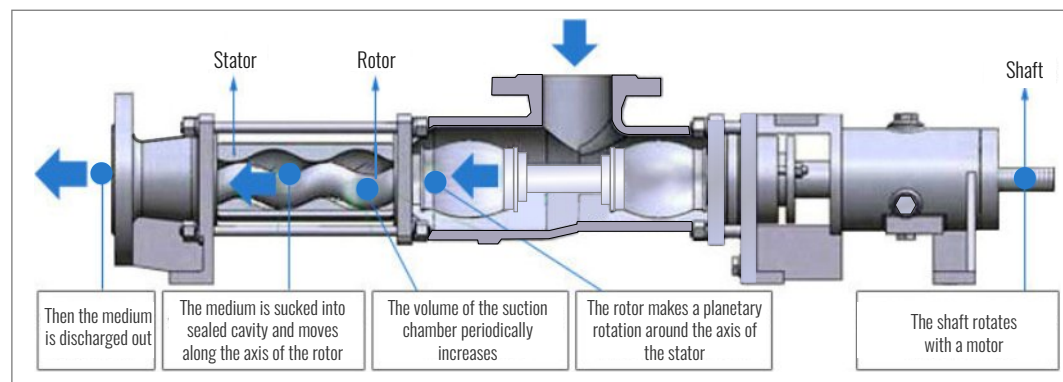
Compared with diaphragm pumps, it can transport various mixed impurities, such as media containing gas and solid particles or fibers, and can also transport various corrosive substances;

Compared with gear pumps, it can transport substances with high viscosity.

Furthermore, unlike plunger pumps, diaphragm pumps and gear pumps, hygienic progressive cavity pumps can be used for pharmaceutical filling and metering.



Working Principle



Technical Specifications

MODEL	CALIBER	SPEED	FLOWRATE	POWER	MODEL	CALIBER	SPEED	FLOWRATE	POWER
SESP10	20MM	1400 RPM	0.5 m ³ /h	0.37kw	SESP45A	50MM	960 RPM	9 m ³ /h	4kw
SESP15	25MM	960 RPM	1 m ³ /h	0.55kw	SESP45B	50MM	720 RPM	7 m ³ /h	3kw
SESP20	32MM	960 RPM	1.5 m ³ /h	0.75kw	SESP50A	65MM	960 RPM	13 m ³ /h	5.5kw
SESP25	32MM	960 RPM	2 m ³ /h	1.1kw	SESP50B	65MM	720 RPM	10 m ³ /h	4kw
SESP30	40MM	960 RPM	3 m ³ /h	1.5kw	SESP55A	65MM	960 RPM	18 m ³ /h	7.5kw
SESP35	50MM	960 RPM	5 m ³ /h	2.2kw	SESP55B	65MM	720 RPM	13 m ³ /h	5.5kw
SESP40A	50MM	960 RPM	7 m ³ /h	3kw	SESP65	80MM	720 RPM	30 m ³ /h	11kw
SESP40B	50MM	720 RPM	5.5 m ³ /h	2.2kw	SESP86	100MM	720 RPM	60 m ³ /h	15kw