



LOBE PUMP

Lobe pump type



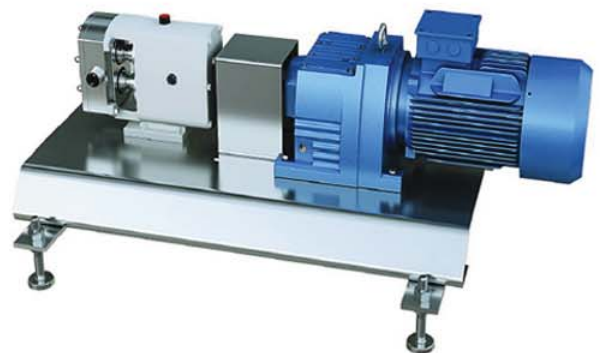
Frequency converter lobe pump



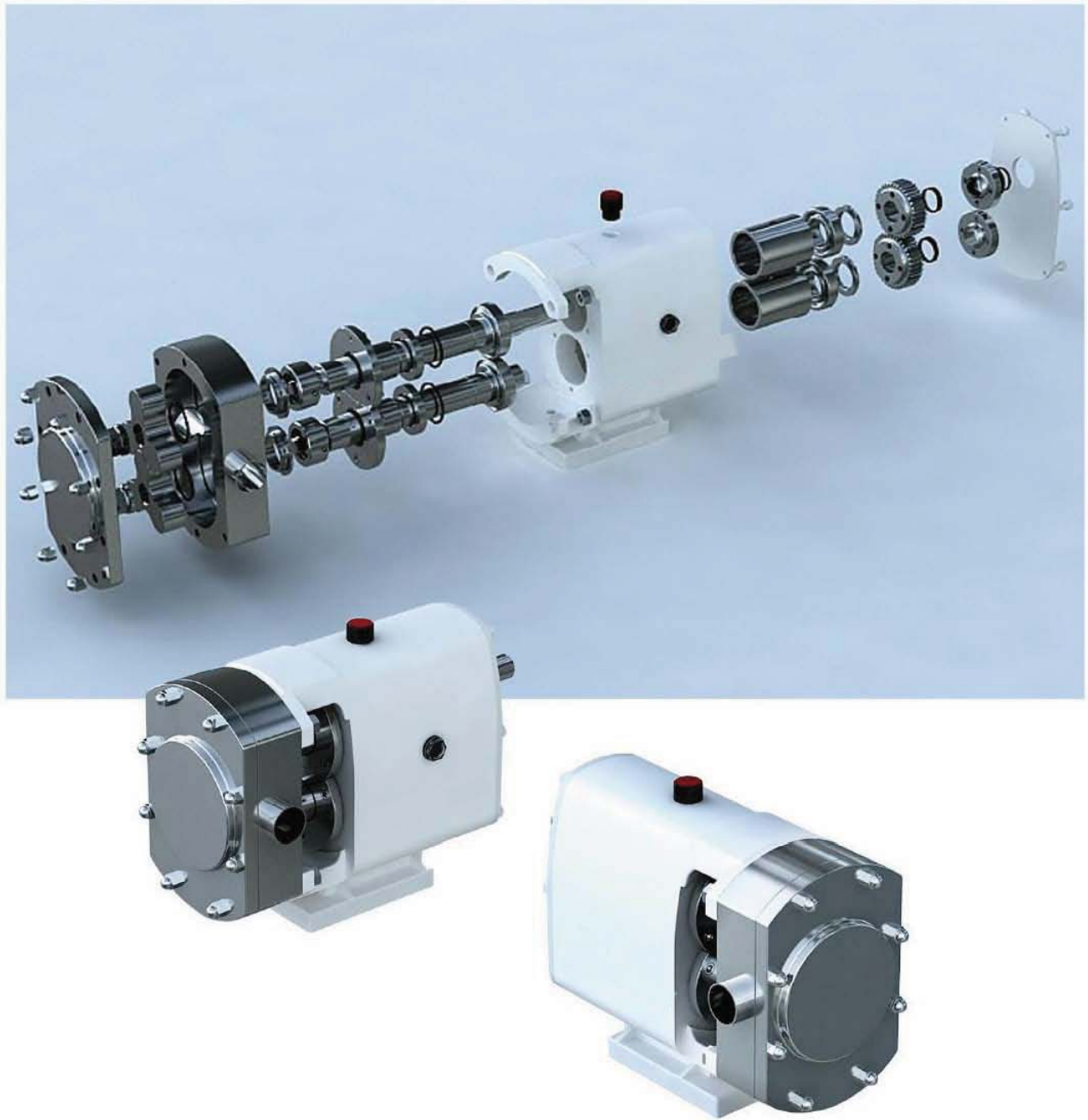
Mobile Lobe Pump



Lobe pump with protective cover



Converter motor lobe pump



**Hygienic Lobe Pump
(Rotor Pump)**

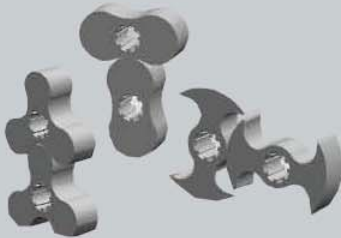
Hygienic Lobe Pump (Rotor Pump)



Horizontal FS-L Series



Vertical FS-R Series



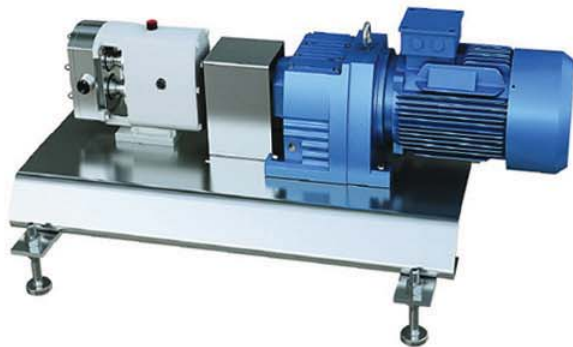
Different rotor shapes

Applications

- * The pump is a positive displacement lobe rotor pump designed according to
- * 3A standard with a very strict hygienic requirements to equipment and processes.
- * The pump is ideal for the transfer of viscous as well as low-viscous media in the food-processing , cosmetics and pharmaceutical industries.

Operating Principles

- * The pump basically consists of two lobe rotors which rotate inside the casing without touching each other.
- * As the rotors rotate, the space between the lobes and the casing is successively filled with the product which is driven to the displacing a fixed amount of product.
- * The pumped product forms a continuous stream due to the adjusted tolerances of the lobecasing thus ensuring an efficient pumping



Manual adjust Continuously
Variable Transmission

Design and features

- * Horizontal FS-L Series
- * Bare-Shaft construction.
- * Tri-lobe rotors.
- * Hygienic design of the attachment of the rotors.
- * Sanitary mechanical seal, internal assembly.
- * Easy cleaning and maintenance.
- * Connections: Clamp (standard).
- * Applied to CIP cleaning and SIP sterilization



Options

- * SiC/SiC, TgC/Sic Mechanical seal: SiC/SiC, TgC/Sic Tgc/Tgc
- * Flushed single or double mechanical seal
- * Gasket: FPM(VitonR) or PFE
- * Relief valve at the front cover or external by-pass
- * Vertical FS-R series or Horizontal FS-L series
- * Different drives and fixes:
 - * (1) Manual adjust Continuously Variable Transmission
 - * (2) frequency converter adjust motor gear box
 - * (3) fixed speed output transmission
- * Assembly on a stainless steel baseplate
- * Adjustable feed
- * Connection : Clamp(DIN32676,3A,ISO), Thread(DIN,SMS,RJT,IDF)
- * Material certificates(3.1), roughness certificate.
- * Motor type B5, Motor frequency 50HZ,60HZ
- * Voltage(V) 220-240,360-400,420-460,630-690

Material

- * Investment casting casing : AISI 316L (1.4404)/AISI304(1.40301)
- * Cast iron support and gear box : QT450-10
- * Gaskets (standard): EPDM according to FDA 177.2600
- * Internal surface finish : $Ra \leq 0.6 \mu m$
- * External surface finish : mirror polish

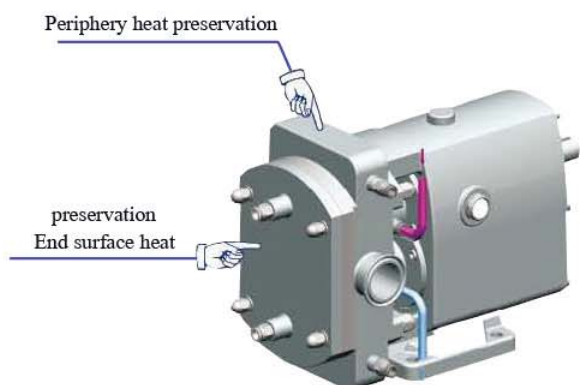
Converter motor frequency adjust
Lobe pump

Please advise the type of reducer when ordering

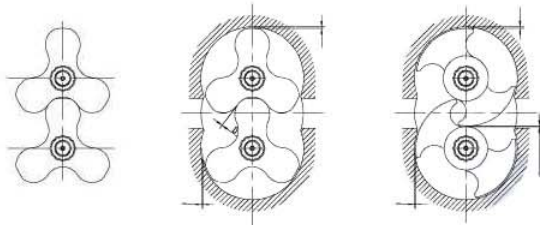


Heat retaining lobe pump

Insulation of the rotor pump configuration is widely used in transportation of chocolate, candy, gum, etc. which materials will freeze at room temperature or perishable materials at high temperatures, according to press requirements, with the front cover or around the heat insulation structure.



Rotor Gap Tolerance



model	C ± 0.05 mm	D ± 0.05 mm	E ± 0.05 mm
FS-R/FS-L20	0.20	0.20	0.40
FS-R/FS-L23	0.20	0.20	0.40
FS-R/FS-L25	0.25	0.20	0.40
FS-R/FS-L30	0.25	0.25	0.50
FS-R/FS-L35	0.30	0.25	0.50
FS-R/FS-L55	0.30	0.25	0.60
FS-R/FS-L60	0.35	0.30	0.60
FS-R/FS-L70	0.45	0.40	0.95
FS-R/FS-L80	0.45	0.40	0.95
FS-R/FS-L100	0.55	0.45	1.10
FS-R/FS-L125	0.70	0.50	1.30

Water-cooled mechanical seal rotor pump

Used in high temperature and high viscosity such as syrup, tomato paste and other materials



The lobe pump is FS-L / FS-R 70 / 80 / 100 / 125

Power(kW)	Voltage
0.75	210V ~ 230V/50HZ 360V ~ 400V/50HZ 420V ~ 460V/60HZ
1.1	
1.5	
2.2	
3	
4	360V ~ 400V/50HZ 630V ~ 690V/50HZ 420V ~ 460V/60HZ
4.5	
7.5	
11	
15	

Fixed-speed-type output lobe pump

Please specify the speed when ordering.



Technical specifications

* Max.flow : 62m³ /h 272 GMP

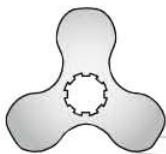
* Max.pressure : 12 bar /174 PSI

* Max.working temperature : 120°C /248° F

* Max.rev.: 1450 rpm



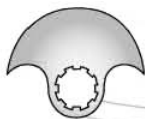
2-leaves rotor



3-leaves rotor

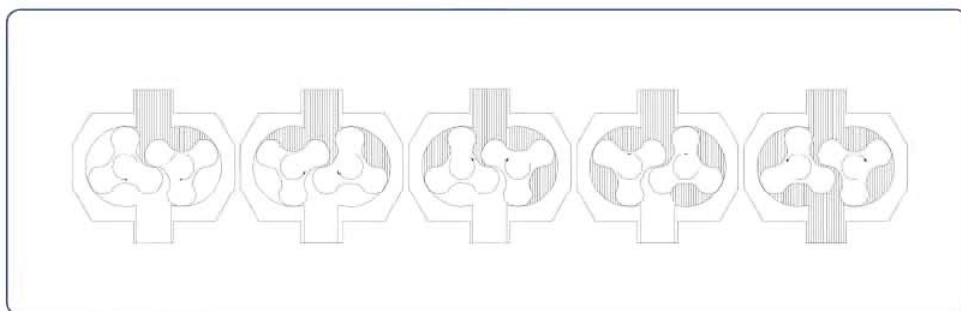


butterfly rotor



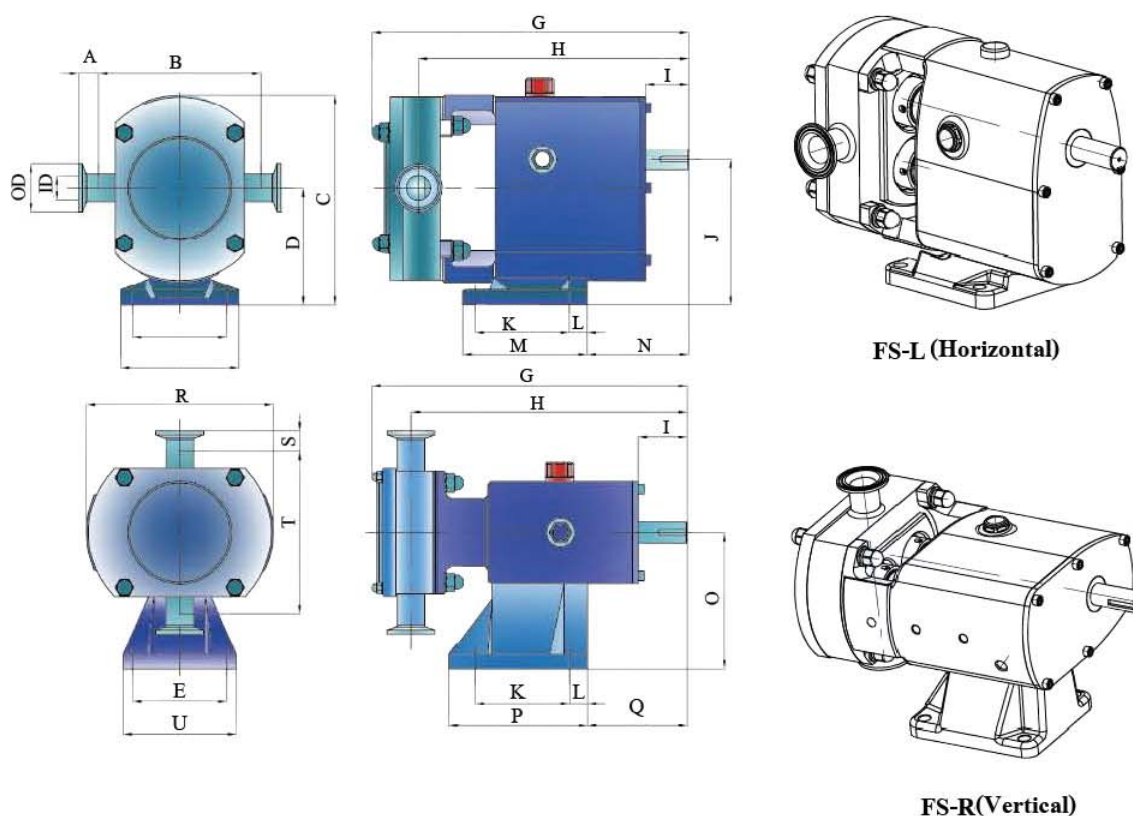
signal butterfly rotor

Water-cooled mechanical seal



- A. As the lobe rotate , the space on the suction side increases as one lobe is distanced from another , thus creating a partial vacuum
- 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 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.

Assembly Dimension Drawing without Motor



Attention : Please refer to selection table for details of next page, The size in the following form is the reference value, the actual size is according to practicality.

Series	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	OD	ID
FS-L/FS-R20	21	172	222	123	100	125	332	291	52	153	100	19	132	107	145	146	105	198	21	172	120	50.5	25
FS-L/FS-R23	21	172	222	123	100	125	346	291	52	153	100	19	132	107	145	146	105	198	21	172	120	50.5	35
FS-L/FS-R25	21	172	222	123	100	125	356	291	52	153	100	19	132	107	145	146	105	198	21	172	120	64	47.5
FS-L/FS-R30	25	184	226	149	125	155	457	381	60	146	125	30	181	140	175	210	146	234	25	184	155	64	47.5
FS-L/FS-R35	25	184	226	149	125	155	468	381	60	146	125	30	181	140	175	210	146	234	25	184	155	77.5	59.5
FS-L/FS-R55	21.5	184	226	149	125	167	474	381	60	146	125	30	181	140	175	210	146	234	21.5	184	155	91	66
FS-L/FS-R60	21.5	184	226	149	125	167	476	381	60	146	125	30	181	140	175	210	146	234	21.5	184	155	91	72.2
FS-L/FS-R70	21.5	260	387	221	193	233.5	540	464	80	281	207	32.8	275	149.4	256	275	129	332	21.5	255	233.5	91	72.2
FS-L/FS-R80	21.5	260	387	221	193	233.5	540	469	80	281	207	32.8	275	149.4	256	275	129	332	21.5	255	233.5	106	81
FS-L/FS-R100	21.5	260	387	221	193	233.5	540	479.5	80	281	207	32.8	275	149.4	256	275	129	332	21.5	255	233.5	119	97.4
FS-L/FS-R125	21.5	260	387	221	193	233.5	540	492.5	80	281	207	32.8	275	149.4	256	275	129	332	21.5	255	233.5	144.5	125