TMXFLOW

SLA Rotary Lobe Pump

Application

SLA range of rotary lobe pumps combines cost effective simplicity and easy maintenance with TMX quality and reliability.

SLA range has been developed for general applications within the Dairy, Beverage, Food, home, chemical and personal care industries.

Fully with CIP cleanable. This pump is also perfect for handling any liquid with low or high viscosity.

When it comes to filtration and bottling applications. Products containing brittle solids such as curd.

Thanks to specially designed lobes, it can be pumped without damage. Easy inspection or replacement without the need for pipework disassembly.

SLA pump is a bare shaft rotary lobe pump. It is made of a stainless steel.

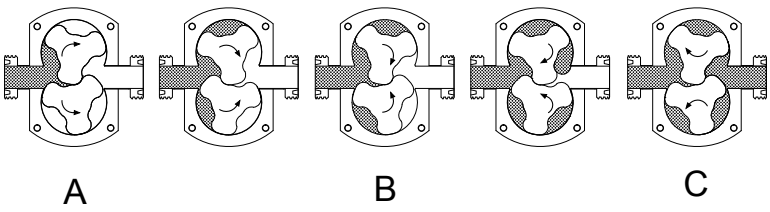
Pump casing and cover, and two-lobe rotors with sanitary attachment.

SLA rotary lobe pump is provided with an internal mechanical seal approved EHEDG. The seal is balanced and has a hygienic design. When required, other materials can be used.

SLA pump range is compact, efficient and capable of flow rates up to 122m3/h and pressures up to 12 bar.

Operation

The positive displacement of the Series SLA pump is provided by non-contacting, contra-rotating two or tri-lobe rotors within a fully swept pump chamber.



User Benefits

High efficiency
Low energy consumption
Compact size
Smooth flow
Reversible operation
Low shear pumping
Minimal pumped media agitation
Easy maintenance
Hygienic design

Technical Specifications

Materials

Pump Head Housing .....AISI 316L
Gaskets .....EPDM or FPM
Gear Box GG25
Shafts.....Duplex Stainless Steel
Shaft Seal .....Single,Double Mechanical Seal
Surface Finish.....Ra<0,8 µm
Connections .....DIN 11851, SMS, ISO, Clamp
Base Plate .....Stainless Steel
Coupling Guard.....Stainless Steel

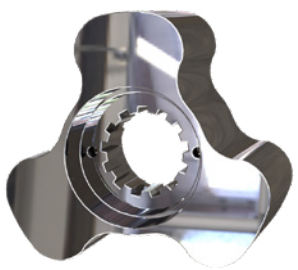
Operating Limits

Maximum flow.....122 m³/h
Maximum differential pressure.....12 bar
Maximum working pressure.....12 bar
Temperature range (EPDM).....-10 °C to +120 °C
Temperature CIP, max. 30 min .....+140 °C
Maximum speed.....950 rpm

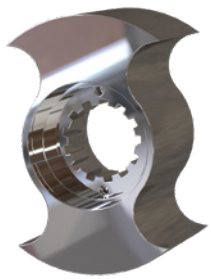
Operating Data

Model	Tri-Lobe max(m³/h)	Bi-Wing max(m³/h)	Max Bar	Tri-Lobe Volume at 100 rpm/lt	Bi-Wing Volume at 100 rpm/lt	Max Speed(rpm)
SLA+ 1-25	7,98	9,12	12bar	14	16	950
SLA+ 1-40	8,55	9,69	12bar	15	17	950
SLA+ 1-50	10,83	12,54	10bar	19	22	950
SLA+ 2-40	15,96	18,81	12bar	28	33	950
SLA+ 2-50	19,38	23,37	10bar	34	41	950
SLA+ 2-65	25,08	30,21	10bar	44	53	950
SLA+ 3-65	30,24	36,72	12bar	70	85	720
SLA+ 3-80	35,85	43,2	10bar	83	100	720
SLA+ 3-100	43,63	53,13	10bar	101	123	720
SLA+ 4-100	72,36	79,2	8bar	201	220	600
SLA+ 4-125	90	98,64	8bar	250	274	600
SLA+ 4-150	107,28	117,72	8bar	298	327	600

Lobes Type



Tri-Lobe



Bi-Wing

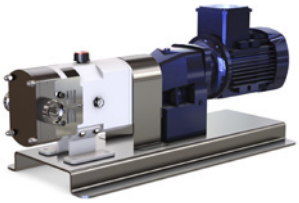
SLA rotary lobe pumps basically consist of two lobe rotors which rotate synchronously inside a casing without touching each other.

As the rotors rotate, the spaces between the lobes and the casing are filled with the product, which is transported to the discharge nozzle with a fixed amount of displacement.

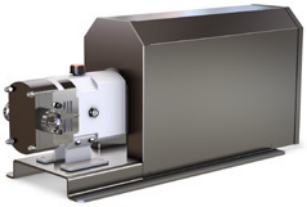
The pumped fluid forms a continuous stream thanks to the tolerances between the lobes and the pump casing, thus ensuring an efficient pumping.

Configurations

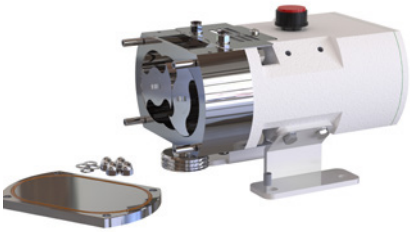
With bare shafts



With geared motor and coupling mounted on stainless steel base frame

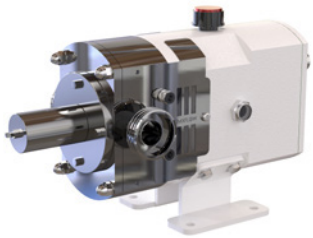


With stainless steel motor shroud



Rectangular inlet

With vertical ports

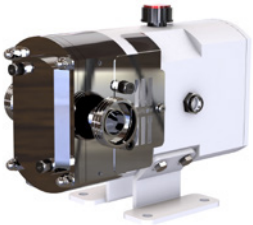


Pressure Relief valve

Positive displacement rotary lobe pumps will continue to build up pressure when operating against a closed valve.

With this in mind,it is very important to add in safety device to prevent accidental over-pressurization and subsequent damage to the pump or system.

SLA pumps can be equipped with an integrated pressure relief valve to avoid these damages. Design and cleanability.

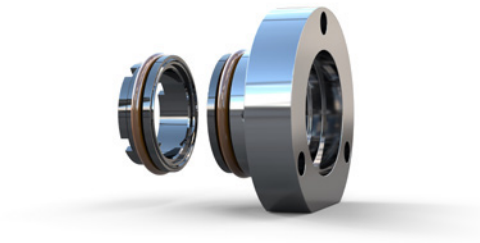


Heating Jackets

Heating jackets are available for all pump sizes.
This option makes it possible to heat the pump chamber and to ensure that products which solidify at ambient temperature are kept liquid.

Alternatively,the heating jackets for SLA are available for the rotor case and the front cover.

Due to the integrated design in the pump, it is a highly efficient system without any compromise in the hygienic design and cleanability.

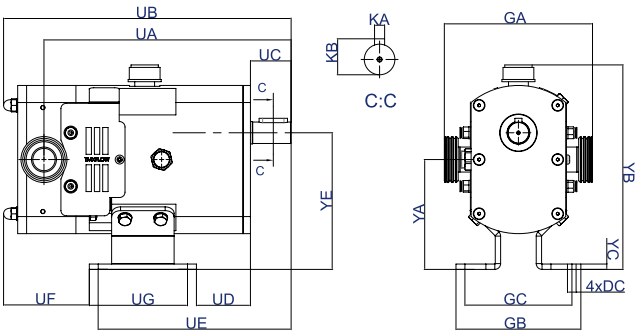


Mechanical Seals

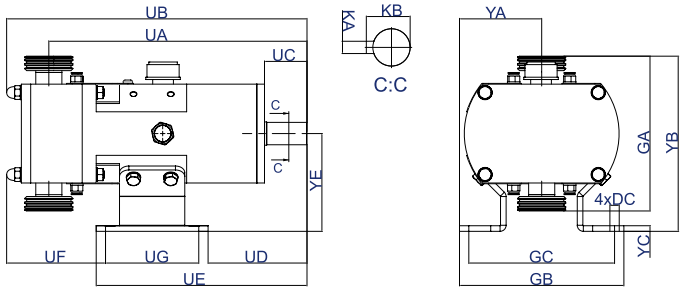
Single Mechanical Seal
Double Mechanical Seal
Flushing
Sic/Sic/EPDM or Viton
Tungsten/Tungsten/EPDM or Viton
Knife-Edge
Gaskets-EPDM, Viton, NBR, Kalrez, PTFE FEP

Dimensions

Horizontal Configuration



Vertical Configuration



Horizontal Dimensions

TYPE	UA	UB	UC	UD	UE	UF	UG	GA	GB	GC	YA	YB	YC	YE	KA	KB	DC
SLA+ 1-25	277	322				66		166									
SLA+ 1-40	277	326	45	106,5	226,5	66	90	174	140	110	123	229	6	100	8	28,3	12
SLA+ 1- 50	283	338				72		178									
SLA+ 2-40	327	385				59		195									
SLA+ 2-50	333	395	55	128	288	65	120	199	163	133	138	262	6	120	8	32	14
SLA+ 2-65	341	412				73		209									
SLA+ 3-65	430	510				81		244									
SLA+ 3-80	432	517	85	175	375	88	150	254	194	154	176	327	8	150	10	41	16
SLA+ 3-100	442	536				98		272									
SLA+ 4-100	525	627				108		313									
SLA+ 4-125	538	653	103	222	442	121	170	323	213	173	220	405	12	200	14	48,5	16
SLA+ 4-150	550	668				133		343									

Vertical Dimensions

TYPE	UA	UB	UC	UD	UE	UF	UG	GA	GB	GC	YA	YB	YC	YE	KA	KB	DC
SLA+ 1-25	277	322				66		166				187					
SLA+ 1-40	277	326	45	106,5	226,5	66	90	174	176	146	88	191	12	150	8	28,3	12
SLA+ 1- 50	283	338				72		178				197					
SLA+ 2-40	327	385				59		195				219					
SLA+ 2-50	333	395	55	128	288	65	120	199	196	166	98	220	15	180	8	32	14
SLA+ 2-65	341	412				73		209				226					
SLA+ 3-65	430	510				81		244				275					
SLA+ 3-80	432	517	85	175	375	88	150	254	236	196	118	280	18	220	10	41	16
SLA+ 3-100	442	536				98		272				290					
SLA+ 4-100	525	627				108		313				357					
SLA+ 4-125	538	653	103	222	442	121	170	323	254	214	127	361	21	280	14	49,5	16
SLA+ 4-150	550	668				133		343				371					