

I Application

The TLS pump is a positive displacement lobular rotating pump of a sanitary design providing high performance and maximum reliability with a reduced size. This pump is perfect for managing all kinds of fluid, of either low or high viscosity, in the food-processing, dairies, and cosmetic industries as well as for filtering and bottling applications. Fluids containing fragile solids such as junket, can be pumped without damage thanks to the specially designed lobes.

I Operating principle

The TLS 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 successively filled with fluid, 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.

I Design and features

- Close-coupled construction.
- Casing and cover in stainless steel (investment casting).
- Tri-lobe rotors.
- Sanitary design of the attachment of the rotors.
- DIN connections.
- Sanitary mechanical seals.
- Easy cleaning and maintenance.



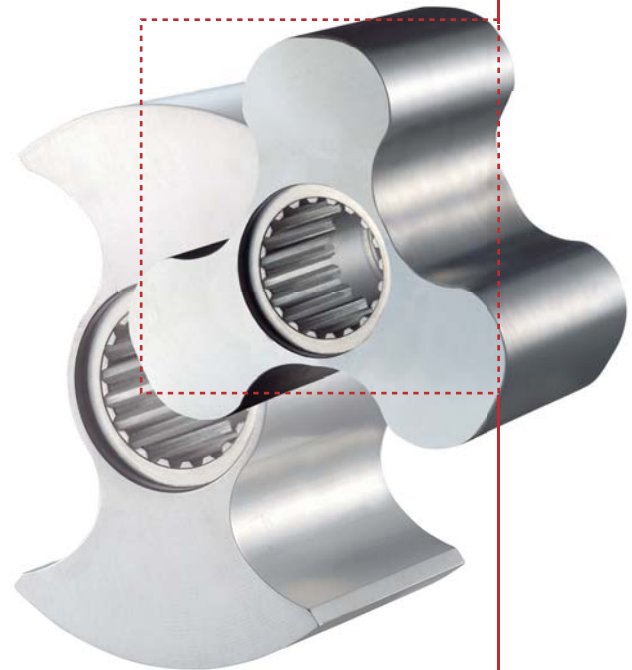
I Materials

Parts in contact with the product	AISI 316L
Other parts	AISI 304
Support	GG-15
Gaskets	EPDM in compliance with FDA
Mechanical seals	C/SiC/EPDM
Internal surface finish	Ra < 0.8 µm
External surface finish	bright polish



I Options

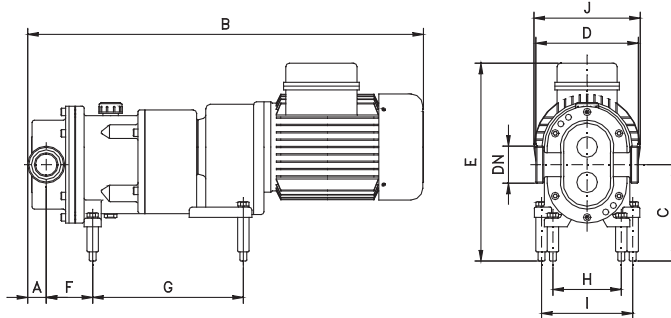
- Mech.seals in SiC/SiC, TgC/SiC, C/StSt.
- Packing with lip seal.
- Gaskets: FPM.
- External by-pass.
- Bi-wing lobes.
- AISI 304 drive shroud.
- Several kinds of drives and protections (gearbox drive with optional frequency converter pulley drive speed selector).
- Trolley and/or switchboard.
- Connections: Clamp, SMS, RJT, etc.



I Technical specifications

Max. flow	41 m ³ /h	180 GPM
Max. pressure	12 bar	174 PSI
Max. working temperature	120 °C	248°F
Max. speed	950 rpm	
Max. differential pressure:		
TLS 1-25, 2-40, 3-50	12 bar	174 PSI
TLS 1-40, 2-50, 3-80	7 bar	102 PSI

I General dimensions



TYPE	Motor gear		DN	A	B	C	D(*)	E	F	G	H	I	J
	kW	Size											
TLS 1-25	0,55 - 0,75	SK 01/80	25	26	600	150	158	295	71	275	105	105	181
	1,1 - 1,5	SK 01/90	1"		650			300					
TLS 1-40	0,75	SK 01/80	40	33	615	170	166	295	77	265	120	160	203
	1,1 - 1,5	SK 01/90			665			300					
TLS 2-40	1,1 - 1,5	SK 20/90	1½"	39	695	227	190	325	82	427	160	175	266
	2,2	SK 20/100			725			355					
TLS 2-50	1,5	SK 20/90	50	39	705	277	194	325	87	427	160	175	266
	2,2	SK20/100			735			355					
TLS 3-50	2,2 - 3	SK25/100	2"	55	840	277	239	435	97	413	160	175	266
	4	SK25/112			863			445					
TLS 3-51	5,5	SK33/132	80	55	920	277	256	470	108	348	160	185	228
TLS 3-80	3	SK30/100			865			435					
TLS 3-81	4	SK30/112	80	55	890	277	256	445	108	413	160	175	266
TLS 3-81	5,5 - 7,5	SK33/132	3"	945	470								

(*) Dimensions with DIN 11851 connections



The information contained in this brochure is for guidance only. We reserve the right to modify any material or feature without notice in advance. For further information, please, consult our web site. www.inoxpa.com

