

#### **I Applications**

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 cosmetics 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 principles

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.

Health-safe design of the attachment of the rotors.

DIN connections (standard).

Sanitary mechanical seals.

Easy cleaning and maintenance.



Parts in contact with pumped media	AISI 316L
Other parts	AISI 304
Support	GG-15
Gaskets (standard)	EPDM (FDA)
Mechanical seals (standard)	C/SiC/EPDM
Internal surface finish	Ra < 0.8 μm
External surface finish	polished







# **I Options**

Mech.seals in SiC/SiC, TgC/SiC, C/St.St.

Packing with lip seal.

Gaskets in FPM (Vitón<sup>®</sup>).

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.

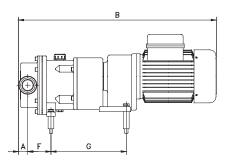
Connections: Clamp, SMS, RJT, etc.

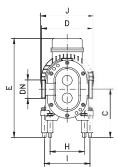
## I Technical specifications

Max. flow41 m³/h / 180 GPMMax. pressure12bar / 174PSIMax. working temperature120 °C / 248 °FMax. speed950 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





ТҮРЕ	Gear Motor							I	I			<u> </u>	
	kW.	SIZE	DN	A	В	С	D (*)	E	F	G	Н	1	J
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"	20	650			300					
TLS 1-40	0,75	SK 01/80			515		166	295 300	77	215			
	1,1 – 1,5	SK 01/90	40	33	665		100						
TLS 2-40	1,1 - 1,5	SK 20/90	1½"	33	695	170	190	325	82	82 265 87	120	160	203
	2,2	SK 20/100			725			355					
TLS 2-50	1,5	SK 20/90	50 2"	39	705		194	325	07				
	2,2	SK20/100			735		194	355	67				
TLS 3-50	2,2 - 3	SK25/100			840	- 227	239	435	97	427	- - 160	155	228
	4	SK25/112			863			445					
TLS 3-51	5,5	SK33/132			920			470		413		175	266
TLS 3-80	3	SK30/100	- 80 - 3"	55	865		256	435	108	348		185	228
	4	SK30/112			890			445					
TLS 3-81	5,5 - 7,5	SK33/132			945			470		413		175	266

(\*) Dimensions with DIN 11851 connections

