Lobe Rotor Pump





I Application

The SLR pump is a positive displacement lobe rotor pump of a sanitary design suitable for use in the dairies, food-processing, beverage, cosmetics, pharmaceutical and fine chemicals industries.

This pump is perfect for managing all kinds of fluid, of either low or high viscosity, as well as for filtering and bottling applications. Products containing fragile solids such as junket can be pumped without damage thanks to the specially designed lobes.

I Operating principle

The SLR 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 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.

I Design and features

Horizontal support.

Bare-shaft construction. Stainless steel casing and lobes. Tri-lobe rotors. Sanitary design of the attachment of the rotors. Sanitary mechanical seals. Easy cleaning and maintenance. Standard connections: DIN 11851. 3A certified pump.

I Materials

Parts in contact with the product Bearing support Gaskets Mechanical seal Internal surface finish External surface finish AISI 316L GG 25 EPDM according to FDA 177.2600 SiC/C/EPDM $Ra \le 0.8 \ \mu m$ bright polish





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I Options

Mechanical seals: SiC/SiC or TuC/SiC. Cooled mechanical seal, pressurised double mechanical seal, lip seal or O-ring seal. Gaskets in FPM and PTFE. Relief valve on the front cover or external by-pass. Bi-wing lobes. Heating chamber. Isolation can. Vertical support. Rectangular nozzle. Various kinds of drives and protections (gearbox drive with optional frequency converter, pulley/mechanical drive speed selector). Trolley and/or control panel. Connections: clamp, SMS, RJT, etc. ATEX version available.

I Technical specifications

Max.flow Max.differential pressure Max.working pressure Max.working temperature 160 m³/h 12 bar 16 bar -10 °C - +120 °C (EPDM) +140 °C (SIP, max. 30 min)

950 rpm

705 US GPM 174 PSI 232 PSI 1) 14 ºF - 248 ºF in) 284 ºF

Max.speed

I General dimensions



SLR	DN	da	db	dc	de	ea	eb	ec	ed	sp	tb	vb	vc	vd	ve	vf	vh	zc	ze
0-20	20-3/4"	160	80	40	138	30	5	16,2	14	64	261	102	118	9	50	9	65	216	60
0-25	25-1"									68	269							220	60
1-25	25-1"	187	112	62	186	40	6	21,6	19	64	280	115	135	9	85	10	145	218	87
1-40	40-1 ½"									70	292							224	
2-40	40-1 ½"	221	140	78	224	50	8	27	24	74	337	125	150	11	105	12	169	261	100
2-50	50-2"									80	349							267	109
3-50	50-2"	297	190	97	289	80	10	41,4	38	91	430	170	210	13	130	14	214	348	143,5
3-80	80-3"									101	452							360	
4-100	100-4"	433	240	120	366	110	16	58,9	55	92	627	260	290	18	280	15	320	505	180
4-150	150-6"									117	677							530	
5-125	125-5"	507	350	178	508	140	18	64,3	60	118	793	380	420	18	373	29	423	660	264
5-150	150-6"	100								130	818							672	



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