



Alfa Laval OptiLobe Rotary Lobe Pump

Competitive Reliability

Application

The OptiLobe range of rotary lobe pumps combines cost-effective simplicity and easy maintenance with Alfa Laval quality and reliability. The OptiLobe range has been developed for general applications within the Dairy, Beverage, Food, home and personal care industries.

The OptiLobe pump range has been certified by EHEDG (European Hygienic Equipment Design Group) as fully CIP cleanable to their protocol, and therefore is ideally suited for applications where cleanability is paramount.

Also the OptiLobe pump range conforms to 3A Hygienic Standard and all media contacting components are FDA compliant.

The pump features the "EasyFit" front loading seal which allows quick and easy inspection or replacement without the need for pipework disassembly.

The OptiLobe pump range is compact, efficient and capable of flow rates up to 77 m³/h and pressures up to 8 bar.



TECHNICAL DATA

Standard materials

Pump head W. 1.4404 (316L)
Product wetted elastomers: . . . EPDM or FPM
Other elastomers: FPM
Shaft seal Single, Carbon/Stainless Steel
Shafts Duplex stainless steel
Gear canister Stainless steel
Base plate Stainless steel
Coupling guard Stainless steel

Motors

Gear motor, 4 poles, to IEC metric standard, 50/60 Hz, suitable for frequency conversion, IP55, insulation class F.

Warranty

Extended 3-years warranty on Alfa Laval OS pumps. The warranty covers all non-wear parts on the condition that genuine Alfa Laval Spare Parts are used.

Shaft seals

EasyFit single and single flush available. All options are fully front loading and interchangeable.

Flush connection, OptiLobe 12-43: . . . Rp 1/8"
Flush connection, OptiLobe 52-53: . . . Rp 1/4"
Max flush pressure: 0.5 bar
Flush flow rate: 30 l/h

Pressure

Max discharge pressure 8 bar

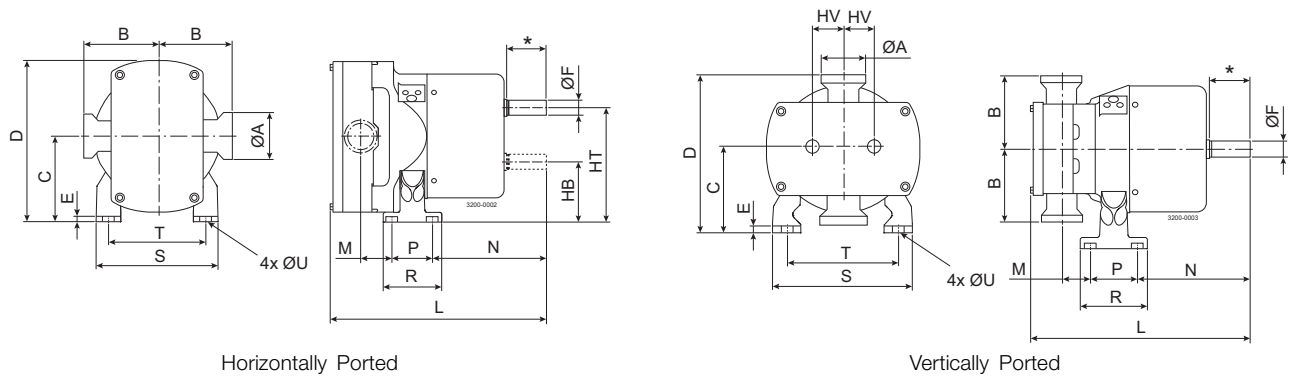
Temperature

Max temperature 130°C

Operating data

	Displacement			Inlet/Outlet		Diff. Pressure		Max Speed
	Litres/ rev	Imp gall/ 100 rev	US gall/ 100 rev	mm	inch	bar	psi	rpm
OptiLobe 12	0.06	1.23	1.48	25	1	8	115	1000
OptiLobe 13	0.10	2.18	2.61	40	1.5	8	115	1000
OptiLobe 22	0.17	3.74	4.49	40	1.5	8	115	1000
OptiLobe 23	0.21	4.62	5.55	40	1.5	8	115	1000
OptiLobe 32	0.32	7.04	8.45	50	2	8	115	1000
OptiLobe 33	0.40	8.80	10.57	50	2	8	115	1000
OptiLobe 42	0.64	14.08	16.91	65	2.5	8	115	1000
OptiLobe 43	0.82	18.04	21.66	80	3	8	115	1000
OptiLobe 52	1.17	25.74	30.89	80	3	8	115	750
OptiLobe 53	1.72	37.84	45.41	100	4	8	115	750

Dimensions (mm)



Horizontally Ported

Vertically Ported

* Shaft length G; Key width K; Key length J.

	Pump Model	A (FLANGE <O>)	B (Port Width Dim)	C (Port Height Dim)	D (Overall Height)	E (Foot Thickness)	F (Shaft <O>)	G (Shaft Length)	HB (Btm Shaft Height)	HT (Top Shaft Height)	HV (SHAFT OFFSET)
10	12	25	86	95	171	11.5	16	40	68	122	27
	13	40	86	95	171	11.5	16	40	68	122	27
20	22	40	96	120	215.5	14.5	20	50	84	156	36
	23	40	96	120	215.5	14.5	20	50	84	156	36
30	32	50	120	136	251	14.5	24	50.5	92	180	44
	33	50	120	136	251	14.5	24	50.5	92	180	44
40	42	65	130	159	294	19.5	30	56	106	212	53
	43	80	138	159	294	19.5	30	56	106	212	53
50	52	80	162	196	366	20.5	45	89.5	132	260	64
	53	100	162	196	366	20.5	45	89.5	132	260	64

	Pump Model	J (Key Length)	K (Key Width)	L (Overall Length)	M (Front Bolt Hole to Port)	N (Back Bolt Hole to End of Shaft)	P (Bolt Hole Length)	R (Foot Length)	S (Foot Width)	T (Bolt Hole Width)	U (Bolt Hole <O>)
10	12	30	5	230.5	27.5	107.5	60	84	126	94	10
	13	30	5	243.5	34.5	107.5	60	84	126	94	10
20	22	32	6	277	35	139.5	60	90	162	124	12
	23	32	6	286	44	139.5	60	90	162	124	12
30	32	40	8	304	35	157	64	95	192	150	12
	33	40	8	316	47	157	64	95	192	150	12
40	42	40	8	371	51.3	161	100	145	235	180	14
	43	40	8	387	60.5	161	100	145	235	180	14
50	52	70	14	408.5	62	221	120	170	285	210	14
	53	70	14	508.5	79.5	221	120	170	285	210	14

Options

- A. Single mechanical shaft seal with flush.
- B. Silicon Carbide/Carbon seal faces.
- C. Silicon Carbide/Silicon Carbide seal faces.
- D. Product wetted elastomers in FPM.
- E. Heating and cooling front cover.
- F. Horizontal or vertical porting.
- G. Stainless steel shroud covering coupling and motor.
- H. Baseplate fitted with adjustable stainless steel ball feet.

Pump sizing

In order to correctly size a rotary lobe pump some essential information is required. Provision of this information listed below enables our Technical Support personnel to obtain the optimum pump selection.

Product/Fluid Data

- Fluid to be pumped
- Viscosity
- Pumping temperature, minimum, normal and maximum
- Cleaning in Place temperature(s), minimum, normal and maximum

Performance Data

- Flow rate, minimum, normal and maximum
- Discharge head/pressure (closest to pump outlet)
- Suction condition

Alfa Laval reserves the right to change specifications without prior notification.

How to contact Alfa Laval

Contact details for all countries
are continually updated on our website.
Please visit www.alfalaval.com to
access the information direct.