

# 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 383 US gallons/minute and pressures up to 115 psi



### 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 NEMA standard, premium efficiency, suitable for frequency conversion.

#### 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: . . . NPT 1/8"

Flush connection, OptiLobe 52-53: . . . NPT 1/4"

Max flush pressure: . . . . . 7 psi

Flush flow rate: . . . . . 8 gph

#### Pressure

Max discharge pressure . . . . . 115 psi

#### Temperature

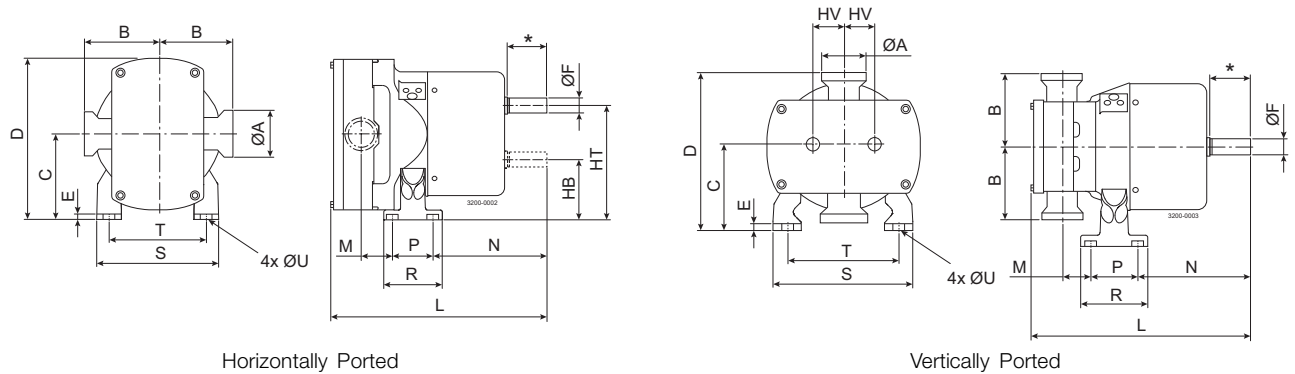
Max temperature . . . . . 266°F



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 (inch)



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	0.98	3.39	3.74	6.73	0.45	0.63	1.57	2.68	4.80	1.06
	13	1.57	3.39	3.74	6.73	0.45	0.63	1.57	2.68	4.80	1.06
20	22	1.57	3.78	4.72	8.48	0.57	0.79	1.97	3.31	6.14	1.42
	23	1.57	3.78	4.72	8.48	0.57	0.79	1.97	3.31	6.14	1.42
30	32	1.97	4.72	5.35	9.88	0.57	0.94	1.99	3.62	7.09	1.73
	33	1.97	4.72	5.35	9.88	0.57	0.94	1.99	3.62	7.09	1.73
40	42	2.56	5.12	6.26	11.57	0.77	1.18	2.20	4.17	8.35	2.09
	43	3.15	5.43	6.26	11.57	0.77	1.18	2.20	4.17	8.35	2.09
50	52	3.15	6.38	7.72	14.41	0.81	1.77	3.52	5.20	10.24	2.52
	53	3.94	6.38	7.72	14.41	0.81	1.77	3.52	5.20	10.24	2.52

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	1.18	0.20	9.07	1.08	4.23	2.36	3.31	4.96	3.70	0.39
	13	1.18	0.20	9.59	1.36	4.23	2.36	3.31	4.96	3.70	0.39
20	22	1.26	0.26	10.91	1.38	5.49	2.36	3.54	6.38	4.88	0.47
	23	1.26	0.26	11.26	1.73	5.49	2.36	3.54	6.38	4.88	0.47
30	32	1.57	0.31	11.97	1.38	6.18	2.52	3.74	7.56	5.91	0.47
	33	1.57	0.31	12.44	1.85	6.18	2.52	3.74	7.56	5.91	0.47
40	42	1.57	0.31	14.61	2.02	6.34	3.94	5.71	9.25	7.09	0.55
	43	1.57	0.31	15.24	2.38	6.34	3.94	5.71	9.25	7.09	0.55
50	52	2.76	0.55	16.08	2.44	4.80	4.72	6.69	11.22	8.27	0.55
	53	2.76	0.55	20.02	3.13	4.80	4.72	6.69	11.22	8.27	0.55



### 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



**CSI**

CONTACT CSI FOR MORE INFORMATION | [CSIDESIGNS.COM](http://CSIDESIGNS.COM) | [SALES@CSIDESIGNS.COM](mailto:SALES@CSIDESIGNS.COM) | 417.831.1411

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.us](http://www.alfalaval.us) to access the information direct.



**CSI**

CONTACT CSI FOR MORE INFORMATION | [CSIDESIGNS.COM](http://CSIDESIGNS.COM) | [SALES@CSIDESIGNS.COM](mailto:SALES@CSIDESIGNS.COM) | 417.831.1411