



Alfa Laval OS Twin Screw Pump

When Process Flexibility is Key

Application

The Alfa Laval OS Twin Screw pump range is able to pump both process media and CIP supply with just one pump.

The Alfa Laval OS range conforms to the 3A standard and is EHEDG certified. Consequently, it is designed for use in applications within the Dairy, Beverage and Food industries where cleanability is paramount.

With a front loading cartridge shaft seal, a rigid stainless steel gearbox with timing gears located between bearings, providing balanced loading of the shaft assembly and an oil chamber design with enhanced lubrication to the bearings and gears the Alfa Laval OS Twin Screw pump is designed for optimal reliability and quick and easy maintenance. The Alfa Laval OS Twin Screw pump is available in nine models based on three frame sizes. Each frame size is available with three different screw profiles for varying pressure, flow and solids handling capabilities.



TECHNICAL DATA

Standard materials

Pump casing	W. 1.4404 (316L), diffusion hardened
Screws, front cover, seal housing:	W. 1.4404 (316L)
Product wetted elastomers:	EPDM
Other elastomers:	FPM
Shaft seal:	Single flush, Silicon Carbide/Silicon Carbide
Gear box:	Stainless steel
Base plate:	Stainless steel
Coupling guard:	Stainless steel

Motors

Direct coupled motor, 4, 6 or 8 poles, or gear motor, 4 poles, 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

Single, Single flush and double mechanical cartridge seals available. All options are fully front loading and interchangeable.

Flushed seals, connections

OS22 – OS36: 1/4" NPT

OS42 – OS46: 1/2" NPT

Max flush pressure

Single flush: 7 psi

Double mechanical: 232 psi (max 87 psi over product pressure)

Flush flow rate 8 gph

Pressure

Max inlet pressure 232 psi

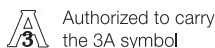
Max discharge pressure 232 psi

Temperature

Process, max 212°F

CIP/SIP, max 302°F

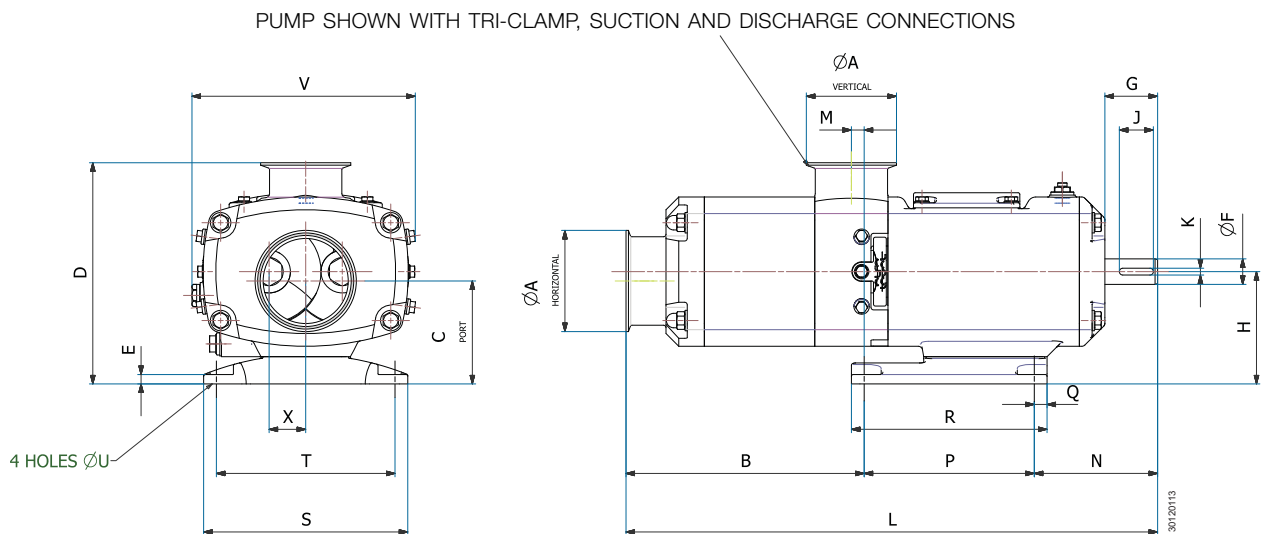
Note: For higher temperatures, please contact Alfa Laval.



Operating data

Model	Max Flow gpm	Max Differential Pressure psi	Max speed		Max Particle Size inch
			Process	CIP	
			rpm	rpm	
OS 22	80	232	2500	3300	0.47
OS 24	107	174	2500	3300	0.63
OS 26	161	116	2500	3300	0.94
OS 32	153	232	2200	3000	0.63
OS 34	205	174	2200	3000	0.83
OS 36	308	116	2200	3000	1.26
OS 42	294	232	1800	2800	0.83
OS 44	394	174	1800	2800	1.14
OS 46	591	116	1800	2800	1.69

Dimension



Model	ØA Vertical Inch	B Inch	D Inch	E Inch	F Inch	G Inch	H Inch	J Inch	K Inch	L Inch	N Inch	P Inch	Q Inch	R Inch	S Inch	T Inch	U Inch	V Inch	X Inch	ØA Horizontal Inch	C (Tri- Clamp) Inch
OS22	1½																			2	3.49
OS24	2 2½	8.27	8.66	0.35	0.79	2.15	4.41	1.57	0.24	19.88	4.63	6.50	0.49	7.48	7.87	6.89	0.43	8.50	1.30	2½	3.74
OS26																				3	3.99
OS32	2½																			3	4.23
OS34	3	10.43	10.24	0.43	1.18	2.44	5.20	1.57	0.31	24.61	5.71	7.87	0.59	9.06	9.45	8.27	0.43	10.43	1.69	4	4.71
OS36																					
OS42	3																			4	5.8
OS44	4	13.39	13.78	0.59	1.77	3.43	7.09	2.76	0.55	31.10	7.09	9.84	0.79	11.42	12.60	11.02	0.69	13.62	2.28	6	6.77
OS46																					

Options

- A. Single mechanical shaft seal.
- B. Double mechanical shaft seal.
- C. Silicon Carbide/Carbon seal faces
- D. Product wetted elastomers in FPM or FFPM.
- E. Diffusion hardened screws.
- F. Heating jacket.
- G. Rectangular inlet.
- H. Hydrostatic testing with certificate.
- I. Reversed flow.
- J. Bottom inlet or outlet.
- K. Baseplate fitted with adjustable stainless steel ball feet.

Pump sizing

In order to correctly size a twin screw pump some essential information is required. Provision of this information listed below enables our Technical Support personnel to obtain the optimum pump selection. Specific CIP data are important as well.

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

Note!

For further details, see also 100000817.

This product has EHEDG certificate

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 to access the information direct.