

Alfa Laval ALS SD

Side mounted agitator with shut down seal

Application

Alfa Laval side mounted agitators with shut down seal offers light particle suspension and agitation for effective heat transfer in large storage tanks (up to Ø30 m/approx. 15.000 m³) typically for vegetable oils or other low viscosity medias.

Working principle

The type ALS-SD agitator is furnished with the high efficient EnSaFoil impeller to secure high flow at low energy consumption. A shut down seal function secures the possibility to replace the shaft seal without emptying the tank. Depending on the tank size one or more agitators can be installed in the tank and based on a unique Alfa Laval installation method, the number of agitators and the power required can be minimized to secure as low energy consumption as possible.

Standard design

The type ALS-SD agitator program consists of 5 main types with different gearmotor and impeller sizes. All sizes have standardized parts so the spare part kit is the same for all main types. All agitators are delivered with simple tools to be used for seal replacement.

Certificates

Compliance with 2.1 Material Certificates according to EN 10204 and FDA. And FDA conformity statement according to 21 CFR 177 on steel/elastomer parts in contact with media. Tool kit included.



TECHNICAL DATA

Finish	
Product wetted surfaces finish:	Ra < 3.2 µm
Impeller finish:	Shot peened
Pressure, media:	max. 3 bar(g)

Voltage and frequency

Up to 2.2 kW:	2x230/400 V, 50 Hz ¹
From 3 kW:	3x400/690 V, 50 Hz ¹

¹ Also available for 60 Hz countries

Gearmotor

Power:	1.1 kW to 4 kW
Energy class:	IE3 or Grade 2
Enclosure:	IP66
Top coat:	Corrosion class C3 acc. to EN 12944, RAL 5010 Blue
Lubricant:	Food grade Oil, CLP H1 220



Different gear and motor sizes available according to configuration.

PHYSICAL DATA

Materials

Steel parts in contact w. media:	316L
Other parts:	304

Seal rubber parts

O-rings:	FPM
Only stationary O-rings:	FEP
Mechanical seal parts:	SiC/SiC

Temperature

Media	max. 90° C
CIP	max. 95° C

Shaft seal

Single mechanical seal with shut down function by use of hook wrench and simple tools.¹

¹ Seal can be replaced with full tank

Flange

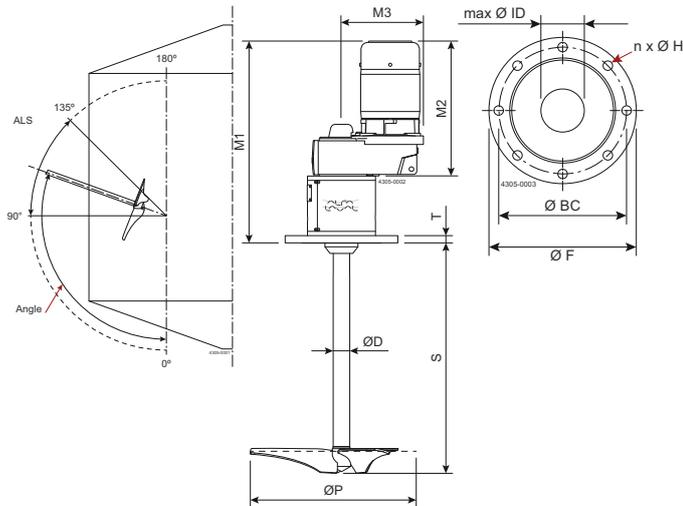
Two in one flange design for both EN1092-1 PN10 DN200 and ASME/ANSI B16.5 Class 150 size 8"

Welding flange to be used: If EN1092-1 PN1 0: Type 1 or 11 If ASME/ANSI Class 150: Type Flat face

Impeller

Type:	EnSaFoil
Number of blades:	3
Impeller mounting:	Screwed, with seal O-ring

Dimensions



Agitator mounting angle 90-135° (mm)

Type	Power (kW)	M1	M2	M3	S	D	P	F ¹	BC	n (pcs)	H ²	T	max. ID	Weight (kg)
ALS-ME-GP-50LF-S3SD-S700-P550D3G	1.1	613	410	247	700	50	550	340	295-298.45	8	22	22	100	86
ALS-ME-GP-50LF-S3SD-S700-P600D3G	1.5	613	410	247	700	50	600	340	295-298.45	8	22	22	100	88
ALS-ME-GP-50LF-S3SD-S700-P650D3G	2.2	643	440	248	700	50	650	340	295-298.45	8	22	22	100	99
ALS-ME-GP-50LF-S3SD-S700-P700D3G	3.0	643	440	248	700	50	700	340	295-298.45	8	22	22	100	100
ALS-ME-GP-50LF-S3SD-S700-P750D3G	4.0	715	512	292	700	50	750	340	295-298.45	8	22	22	100	129

¹ Flange designed to fit both EN1092-1 PN10 DN200 and ASME/ANSI B16.5 Class 150 size 8"

² Holes to fit both M20 and 3/4" bolts

Ordering

The following information is required to ensure correct sizing and configuration for ordering:

- Tank geometry
- Product properties
- Task of agitator
- Enquiry forms are available
- Installation country

This document and its contents are subject to copyrights and other intellectual property rights owned by Alfa Laval AB (publ) or any of its affiliates (jointly "Alfa Laval"). No part of this document may be copied, re-produced or transmitted in any form or by any means, or for any purpose, without Alfa Laval's prior express written permission. Information and services provided in this document are made as a benefit and service to the user, and no representations or warranties are made about the accuracy or suitability of this information and these services for any purpose. All rights are reserved.

How to contact Alfa Laval

Up-to-date Alfa Laval contact details for all countries are always available on our website at www.alfalaval.com