

# Alfa Laval FM-OS

# Centrifugal pumps

#### Introduction

The Alfa Laval FM-OS Centrifugal Pump is a small, economical pump engineered to handle low volumes in hygienic applications.

# Applications

The FM-OS Centrifugal Pump is designed for use in processes that require the use of acid-resistant steel in hygienic applications across the food, dairy, beverage and other industries.

The FM-OS pump can handle capacities up to 30  $\rm m^3/h$  and differential pressures up to 2 bar at 50Hz.

#### Benefits

- Reliable and cost-effective transfer of acidic products.
- Handles low capacities with ease.
- Corrosion resistance for use in aggressive environments.

# Standard design

The Alfa Laval FM-OS Centrifugal Pump consists of a W. 1.4404 (AISI 316L) pump casing, shaft and impeller; stainless steel screws, nuts, yoke and adapter for pump casing.

As standard, the FM-OS pump is equipped with a single mechanical shaft seal, but is also available with a single flushed mechanical shaft seal.



# TECHNICAL DATA

Standard foot-flanged motor acc. to IEC metric standard, 2 pol = 3000/3600 rpm. at 50/60 Hz, IP55 (with drain holes with labyrinth plug), insulation class F.

Motor	size

50 Hz: 1.1 kW. 60 Hz: 1.1 kW.

# **OPERATING DATA**

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_	20	~	 rA

Pressure

Max. inlet pressure: 400kPa (4 bar). Max. outlet pressure: 700kPa (7 bar). Max. water pressure, (flushed seal): Normally atmospheric (max. 1 bar)

# Temperature

Temperature range: -10°C to +140°C (EPDM).

# Water consumption

0.25 - 0.5 l/min. Flushed seal:

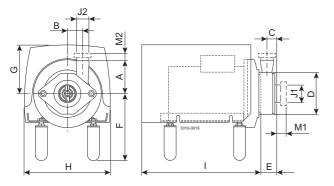
# Impeller diameter

Impeller diameter: 115 mm.

# Weight

Weight: 20 kg.

# Dimensions (mm)



Pump specific measures

Pump Model	FM0S
Α	98
В	45
С	28
D	140
E	54

Motor specific measures

Motor opcome moderate	
Motor IEC	IEC80
Motor kW	1.1
F(max)*	212
G	144
Н	252
1	341

<sup>\*</sup>Possible to reduce dimension F by min. 30 mm for all pump models.

Motor overview

Pump Model	FM0S
Moter range (IEC)	IEC80

Dimensional data are based on 2 pole, ABB motors.

Connections

Pump Model		FM0S
Clamp ISO 2037	M1	21
	M2	21
Union ISO(IDF)	M1	21
	M2	21
Union DIN/ISO	M1	22
	M2	22
Union SMS	M1	20
	M2	20
Union (BS)RJT	M1	22
	M2	22
<u>J1*</u>		51 / 2"
J2*		51 / 2"

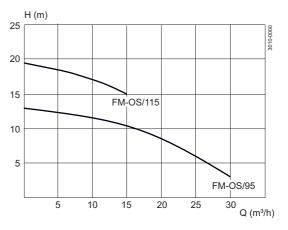
 $<sup>^{\</sup>star}$  Other dimensions available on request.

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# Options

- A. Impeller with reduced diameter.
- B. Flushed shaft seal.
- C. Other voltage or frequency.
- D. Inlet and outlet with flanges.
- E. Product wetted seals of EPDM, FPM or FEP.
- F. Rotating seal ring of Silicon Carbide.

# Volumetric flow



# Ordering

Please state the following when ordering:

- Pump type.
- Voltage and frequency.
- Flow rate, pressure and temperature.
- Density and viscosity of product.
- Options.

# NOTE!

For further details, see also instruction IM 70344.

Inlet and outlet: 51 mm

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

# How to contact Alfa Laval