The Choice for Air and Gas Applications

Alfa Laval MR-166S, -185S, -200S, -300 Liquid-Ring Pump

Application

MR is a liquid-ring pump specially designed for pumping liquids containing air or gas.
The pump is for use in food, chemical, pharmaceutical and similar industries.
The pump is mainly used for CIP-return applications.

Standard design

All product wetted parts, i.e. pump casing, casing cover and impeller are made of acid-resistant steel AISI 316L. Seals are made of EPDM rubber.
Cap nuts, legs, leg brackets, adaptor and shroud are made of stainless steel. The shroud has noise absorbing lining inside.

Shaft seal

On MR-166S, -185S and 200S, the mechanical single seals have stationary seal rings of acid-resistant steel AISI 329 and rotating seal rings of carbon.
The MR-300 has mechanical single seal with stationary seal rings of carbon and rotating seal rings of acid-resistant steel AISI 329.

TECHNICAL DATA

Motor

Standard foot-flanged motor acc. to IEC metric standard 4 pol = 1500/1800 rpm. at 50/60 Hz.
IP55 (with drain holes with labyrinth plug), insulation class F.

Motor sizes

50 Hz	60 Hz
2.2 kW (166S)	2.6 kW (166S)
5.5 kW (MR-185S)	6.3 kW (MR-185S)
7.5, 11 kW (MR-200S)	8.6, 12.5 kW (MR-200S)
15, 18.5 kW (MR-300)	17, 21, 25 kW (MR-300)

OPERATING DATA

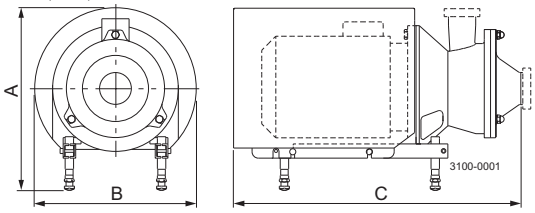
Pressure

Max. inlet pressure: . . . . . 400 kPa (4 bar).

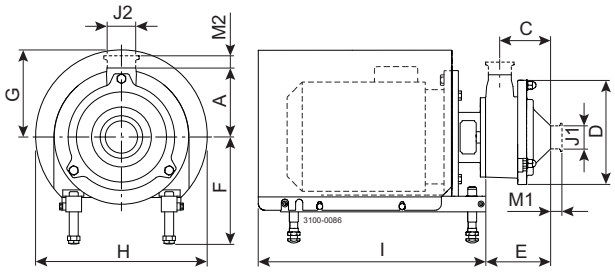
Temperature

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

Dimensions (mm)

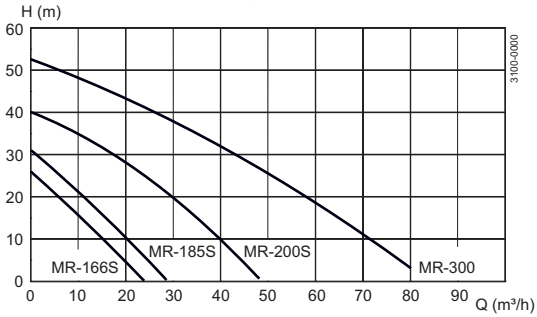


MR-166S/-185S/-200S



MR-300

Volumetric flow MR-166S, -185S, -200S and -300



Pump specific measures

Pump Model	MR-166S	MR-185S/200S	MR-300
A	129	154	205
B	-	-	190
C	117	140	-
D	233	260	350
E	150	173	-

Moter specific measures

Motor IEC	IEC100	IEC132	IEC160	IEC180
Motor kW	2.2	5.5/7.5	11/15	18.5/22
F(max)*	302	304	332	352
G	185	196	262	286
H	323	383	282	533
I	455	533	749	674

*Possible to reduce dimension F by min. XX mm for all pump models. For smaller models it will be possible to reduce dimension F even further.

Moter overview

Pump Model	MR-166S	MR-185S/200S	MR-300
Moter range (IEC)	IEC100	IEC132-IEC160	IEC160-IEC180

Dimensional data are based on 4 pole, ABB motors.

Connections

Pump Model		MR-166S	MR-185S/200S	MR-300
Clamp ISO 2037	M1	21	21	21
	M2	21	12	-
Union ISO(IDF)	M1	21	21	21
	M2	21	21	-
Union DIN/ISO	M1	22	22	30
	M2	22	32	-
Union SMS	M1	20	24	24
	M2	20	24	-
Union (BS)RJT	M1	22	22	22
	M2	22	22	-
J1*		51 / 2"	76,1 / 3"	76,1 / 3"
J2*		51 / 2"	76,1 / 3"	76,1 / 3"

* Other dimensions available on request.

ESE00233/12

Options

A. Other voltage and frequency.
B. Flameproof motors (EEXE and EEXD).
C. Pump without shroud and legs.
D. Pump without shroud.
E. Noise reduction valve.
F. Product wetted seals of Nitrile (NBR) or Fluorinated rubber (FPM).

G. Stationary seal ring with sealing surface of Silicon Carbide (MR-185S and MR-200S only).
H. Rotating seal ring of Silicon Carbide (MR-185S and MR-200S only).

Ordering

Please state the following when ordering:

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

Note!

For further information, see also instruction ESE00675 and ESE02051.

ESE00233EN 1507

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.