



## For High Purity Applications with Air/Gas

### MR UltraPure Liquid-Ring Pump

#### Application

The MR UltraPure is a liquid ring pump specifically designed for pumping liquids containing air/gas. It is ideally suited to CIP return applications whereby complete tank emptying is necessary for avoid any product contamination.

#### Standard design

MR UltraPure pump has product wetted steel parts manufactured from DIN W.nr. 1.4404 (316L) stainless steel. EPDM is the standard elastomer with USP Class VI certification. The internal surface finish is Ra 0.8 and material traceability is supplied as standard for all product wetted steel parts. MR UltraPure is supplied with 1/2 inch drain. Alternative elastomer materials and surface finishes are available as options.

#### Shaft seal

The mechanical single shaft seal have stationary and rotating seal ring of silicon carbide.

#### Materials

Product wetted steel parts: . . . . .DIN W. nr.:1.4404 (AISI 316L)  
with material traceability  
Other steel parts: . . . . .DIN W. nr.: 1.4301 (AISI 304)  
Adaptor . . . . .Mild steel grade.  
Productwettered seals: . . . . .EPDM USP Class VI.

#### Technical data

Surface finish: . . . . .Ra 0.8  
Max. inlet pressure: . . . . .4 bar.  
Temperature range . . . . .-10° C to 140° C (EPDM).

#### 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.

#### Voltage and frequency (MR UltraPure-166)

3~, 50 Hz, 220-240V Δ/380-420VY  
3~, 60 Hz, 250-280V Δ/440-480VY

#### Voltage and frequency (MR UltraPure-185/200)

3~, 50 Hz, 380-420V Δ/660-690VY  
3~, 60 Hz, 440-480V Δ

#### Motor sizes

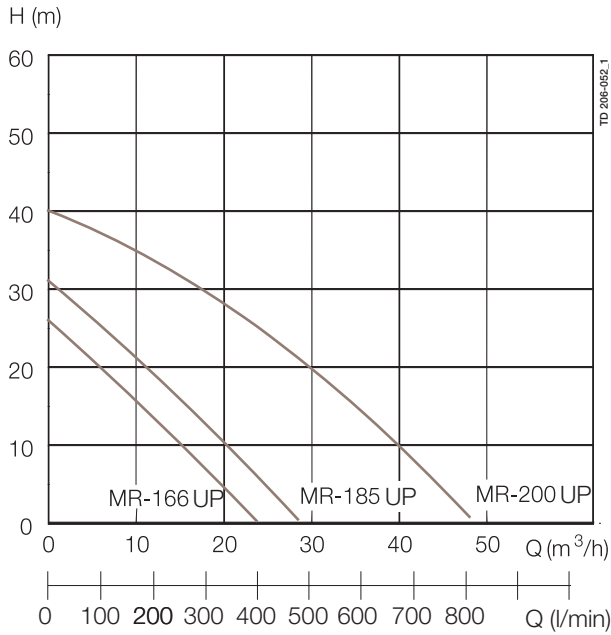
50 Hz	60 Hz
2.2 kW (MR-166 UltraPure)	2.6 kW (MR UltraPure-166)
5.5 kW (MR-185 UltraPure)	6.3 kW (MR UltraPure-185)
5.5-11 kW (MR-200 UltraPure)	6.4-12.3 kW (MR UltraPure-200)



MR UltraPure.



## Volumetric flow MR UltraPure-166/185/200



### Standard documentation package

- 3.1 certificate according to EN10204
- FDA certificate of conformity for product wetted elastomers.
- EPDM with USP class VI certification.
- Pump performance test certificate

### Options

- A. Other voltage and frequency.
- B. Flameproof motors (EEXE and EEXD).
- C. Pump with shroud.
- D. Product wetted seals of Fluorinated rubber (FPM).
- E. Surface finish Ra 0.5.
- F. Electro polishing.
- G. No drain in casing.
- H. With 3/4" drain

### Ordering

Please state the following when ordering:

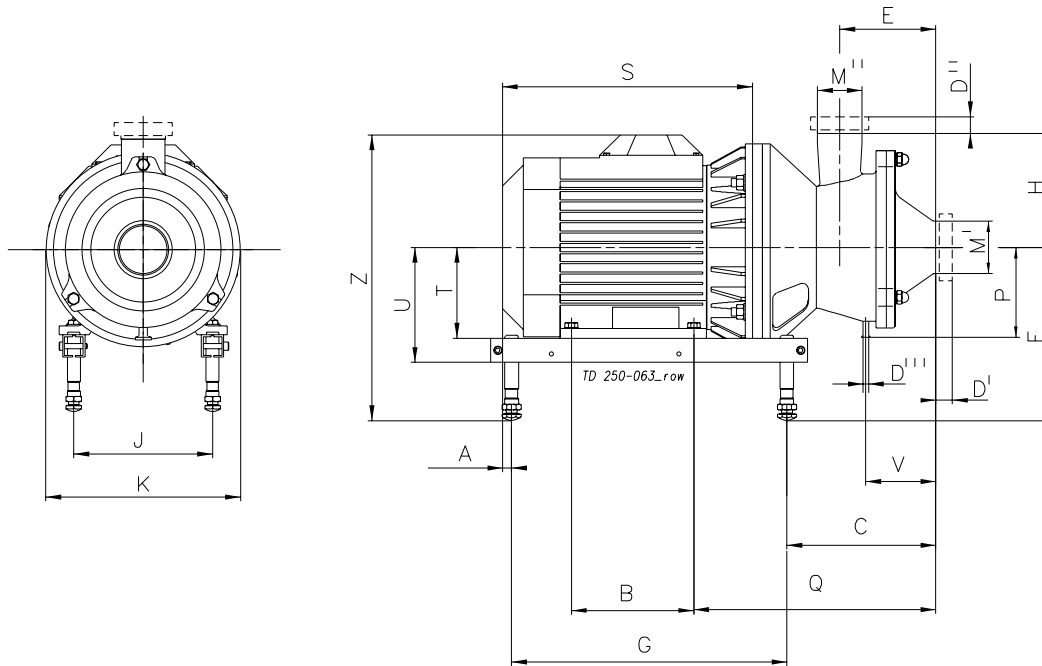
- Pump type.
- Voltage and frequency.
- Connections.
- Surface finish
- Drain option
- Elastomer
- Flow rate, pressure and temperature.
- Density and viscosity of product.
- Options.

### Note!

For further information, see also instruction ESE01753.



**Dimensions (mm)**



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Size	MR UP-166 2.2kW	MR UP-166 5.5/7.5kW
A	3	13
B	140	178
C	189	199
E	117	140
F min.	185	184
F max.	295	317
G	320	400
H	129	154
J	160	216
K	250	300
P 1/2"	126	142
P 3/4"	126	142
Q	284	334
*S	291	402
T	100	132
U	145	167
Z min.	322	348
Z max.	432	481
V	95	101
Weight (kg)	55	77 / 85

Note! \*S for pumps with ABB motor

**Connections (mm)**

**MR UP-166.**

	ISO 1127 Clamp	TC Clamp	ISO 2037 Clamp
D <sup>I</sup>	48.3	50.8	51
D <sup>II</sup>	48.3	50.8	51
M <sup>I</sup>	36	29	29
M <sup>II</sup>	36	29	29

**MR UP-185/200**

	ISO 1127 Clamp	TC Clamp	ISO 2037 Clamp
D <sup>I</sup>	76.1	76.2	76.1
D <sup>II</sup>	60.3	63.5	63.5
M <sup>I</sup>	48	29	29
M <sup>II</sup>	36	29	29

**Drain**

	ISO 1127 Clamp	TC Clamp	ISO 2037 Clamp
DIII 1/2"	13.5	12.7	12.7
DIII 3/4"	17.2	19	19

900591/0



**Gillain & Co**

HYGIENIC EQUIPMENT FOR FOOD & LIFE SCIENCES

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The information contained herein is correct at the time of issue,  
but may be subject to change without prior notice.

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Please visit [www.alfalaval.com](http://www.alfalaval.com) to  
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