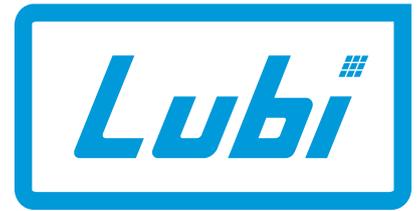


MVR SERIES

Vertical Multi-stage Centrifugal Pumps 50 Hz



Passion for Pumps



INTRODUCTION

The Lubi **MVR** pumps are non-self priming, vertical, multistage, high head centrifugal pumps.

Motor and pump are close coupled in a convenient and compact design for quick installation in limited space.

These pumps are available from 0.75 to 2.20 kW for single phase as well as three phase power supply.

The pumps have radial suction port in the bottom part and radial discharge port in the top part.

Impellers, Guide Vanes, Bowl Casing & Pump Jackets are Stainless Steel AISI 304. Pump Shaft is Stainless Steel AISI 316.

The pump is fitted with a maintenance-free, mechanical shaft seal.

APPLICATIONS

These pumps are widely used in high head duty conditions. The typical applications are as follow:

- Ultra-filtration systems
- Reverse osmosis systems
- Pressure boosting in domestic, civil and industrial water supply systems
- Washing and cleaning
- Hydro-pneumatic systems
- Sprinkler systems
- Irrigation.

FEATURES AND BENEFITS

- State-of-the art compact design
- Quiet running
- Robust construction
- High performance hydraulics
- Easy to install
- Reliable operation
- Supplied with oval flanges
- Easy serviceability.

OPERATING CONDITIONS

Flow range : 0.5 to 4 m³/h
 Head range : Up to 139 metres
 Ambient temperature : Max. +50°C
 Liquid temperature range: 0°C to +90°C

MOTOR

Motor type : TEFC 2-pole motor
 Ratings : 1 phase - 0.75 to 2.20 kW
 : 3 phase - 0.75 to 2.20 kW
 Rated speed : 2900 rpm
 Enclosure class : IP 55
 Insulation class : F
 Nominal voltage : 1 phase 230 V
 (Tolerance ±10%) : 3 phase 415 V
 Supply frequency : 50 Hz
 Duty / Rating : S1 / Continuous
 Direction of rotation : Clockwise as seen from the motor rear end

PUMPED LIQUIDS

MVR pumps are designed for non explosive liquids which are clean and thin without any solid particles. For aggressive liquid please ensure that material of construction is suitable for liquid to be pumped.

If liquids with a viscosity higher than that of water, are to be pumped the power consumption of the pump will increase with increase in viscosity. This will require a larger motor for the pump. Head, discharge and pump efficiency will reduce with increase in viscosity.

When pumping liquids with a density higher than that of water, the power consumption of the pump will increase at a ratio corresponding to increase in density.

SECTIONAL DRAWING & MATERIALS

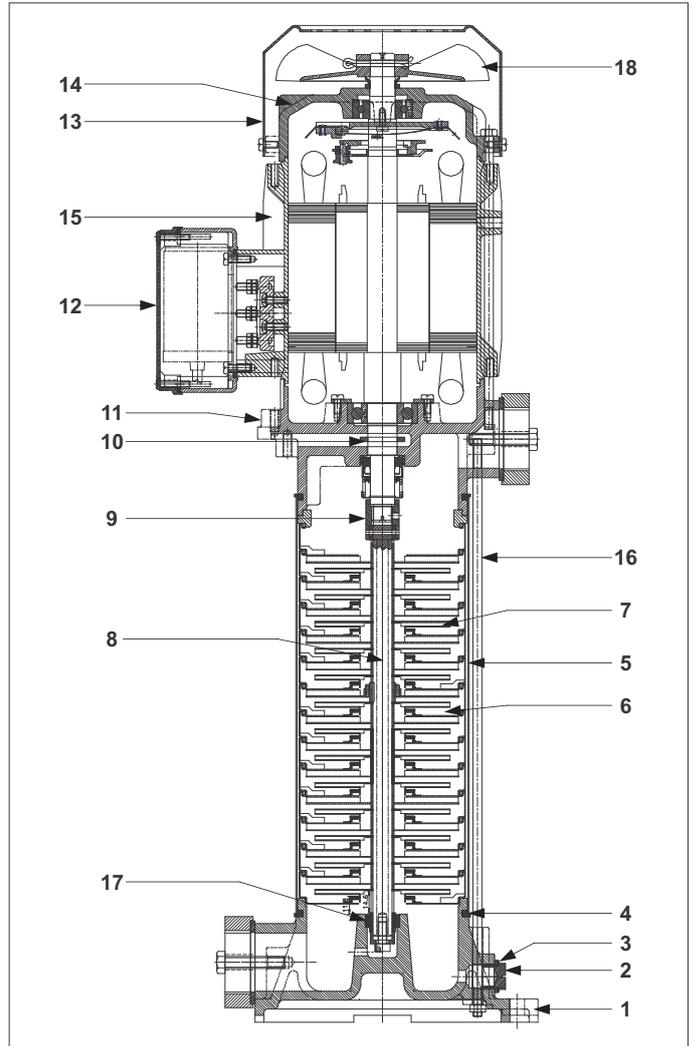
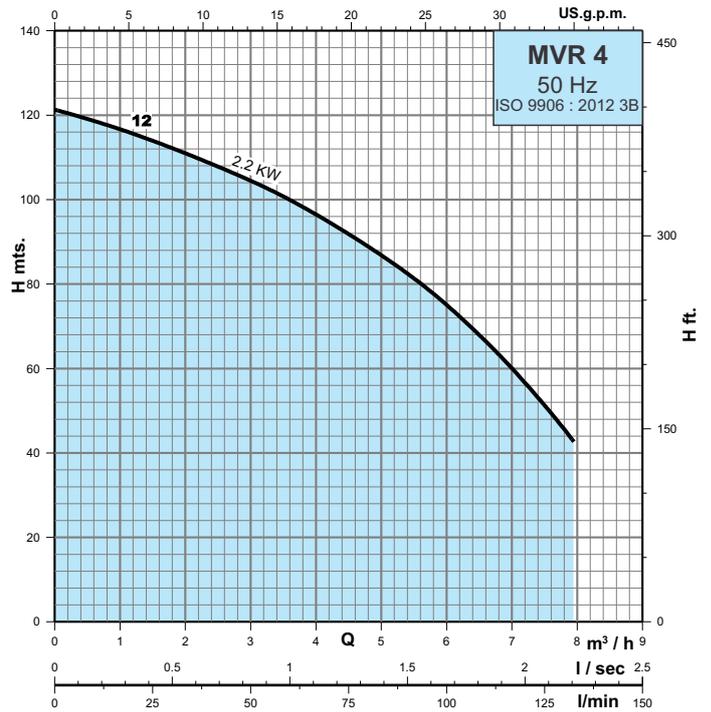
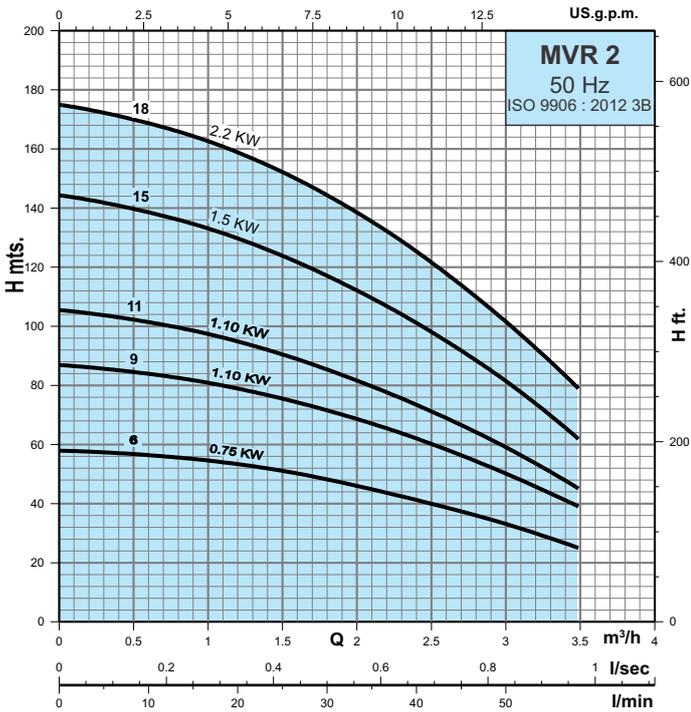


FIG.1 SECTIONAL DRAWING OF MVR PUMP

POS.	COMPONENT	MATERIAL
1	Suction chamber	Cast iron 200 ISO 185
2	Drainage Plug	Brass
3	"O" ring	NBR
4	Rubber ring	NBR
5	Jacket body	Stainless steel AISI 304
6	Casing & Guide vane	Stainless steel AISI 304
7	Impeller	Stainless steel AISI 304
8	Pump Shaft	Stainless steel AISI 316
9	Mechanical shaft seal	Carbon/Ceramic/NBR
10	Water thrower	NBR
11	Delivery chamber with bracket	Cast iron 200 ISO 185
12	Terminal box	Polyamide
13	Fan cover	Steel
14	Endshield	Cast iron
15	Stator body	Aluminum
16	Pump fitting stud	Stainless steel AISI 304
17	Bearing assembly	Ceramic/Tungsten Carbide
18	Motor fan	Polypropylene

PERFORMANCE CURVES



CURVE CONDITIONS:

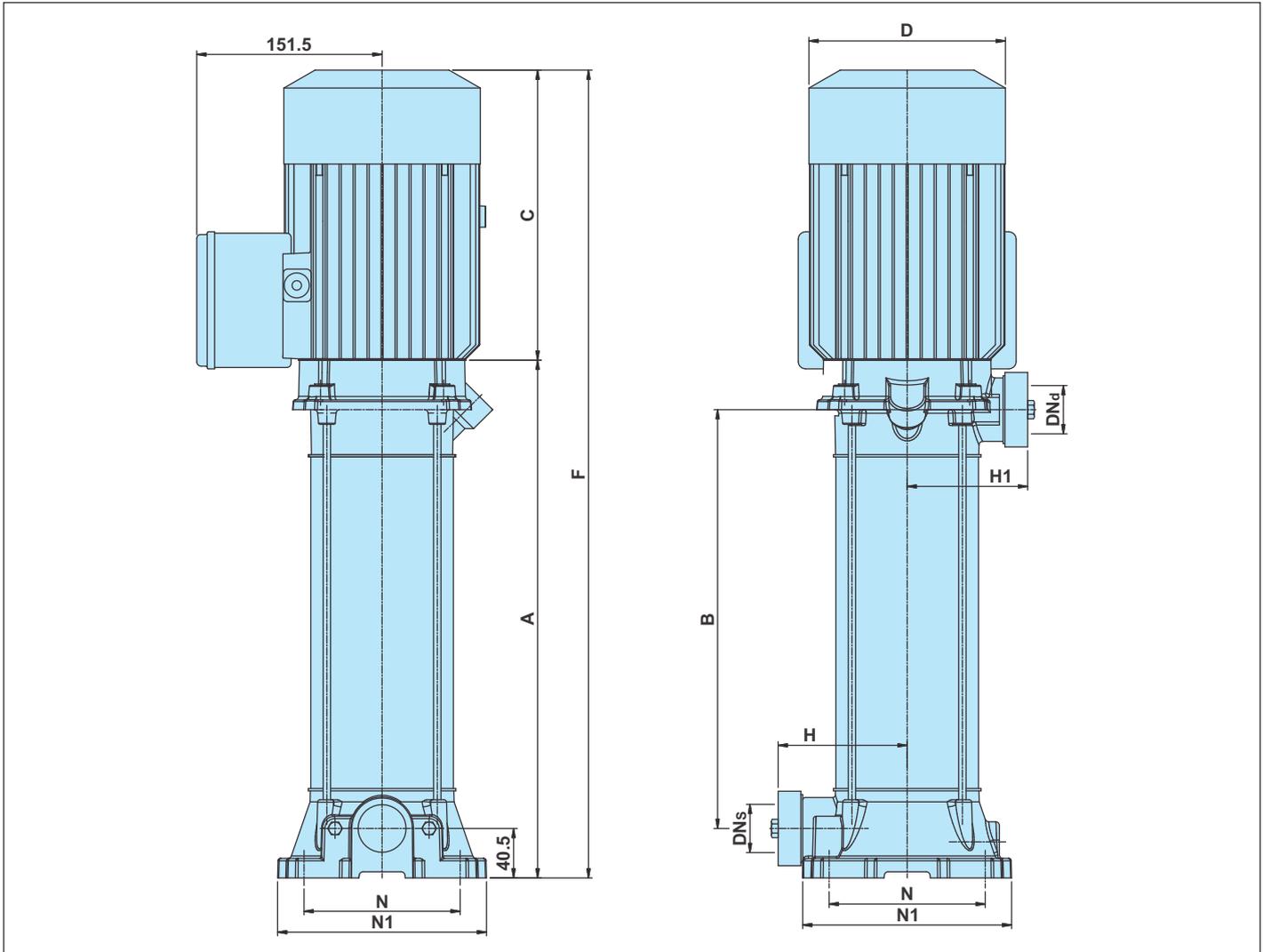
- Tolerances in accordance with ISO 9906, Annex A.
- The motors used for the measurement are standard motors.
- Test results with clean cold water, without gas content. Measurements have been made with airless water at a temperature of 20°C.
- Head and power values valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = \text{max } 1 \text{ mm}^2/\text{s}$ (1 cSt).
- The QH curves apply to a rated motor speed of 2900 min^{-1} .

PERFORMANCE DATA

PUMP TYPE		MOTOR POWER		Q m³/h	1.0	1.6	2.3	3.0	3.5
SINGLE PHASE	THREE PHASE	kW	HP	Q l/min	16.7	26.7	38.3	50.0	58.3
MVR 2-6	MVRT 2-6	0.75	1.00	H m	55	50	43	34	25
MVR 2-9	MVRT 2-9	1.10	1.50		81	74	64	51	39
MVR 2-11	MVRT 2-11	1.10	1.50		98	89	76	60	45
MVR 2-15	MVRT 2-15	1.50	2.00		134	122	105	83	62
MVR 2-18	MVRT 2-18	2.20	3.00		163	150	130	104	79

PUMP TYPE		MOTOR POWER		Q m³/h	1.9	3.4	4.5	5.7	6.8	7.9
SINGLE PHASE	THREE PHASE	kW	HP	Q l/min	31.7	56.7	75.0	95.0	113.3	131.7
MVR 4-12	MVRT 4-12	2.20	3.00	H m	111	101	91	79	63	43

DIMENSIONS & WEIGHT



PUMP TYPE		MOTOR POWER		FRAME SIZE	DNs [BSP]	DNd [BSP]	DIMENSIONS [mm]								GROSS WEIGHT [kg]	GROSS VOLUME [m ³]	
SINGLE PHASE	THREE PHASE	kW	HP				A	B	C	D	F	H	H1	N			N1
MVR 2-6	MVRT 2-6	0.75	1.00	80	1¼	1¼	308	226	238	160	545	105	98	127	170	26.00	0.0675
MVR 2-9	MVRT 2-9	1.10	1.50	80	1¼	1¼	362	280	238	160	599	105	98	127	170	28.00	0.0675
MVR 2-11	MVRT 2-11	1.10	1.50	80	1¼	1¼	398	316	238	160	635	105	98	127	170	28.50	0.0670
MVR 2-15	MVRT 2-15	1.50	2.00	80	1¼	1¼	470	388	238	160	707	105	98	127	170	30.00	0.0670
MVR 2-18	MVRT 2-18	2.20	3.00	90	1¼	1¼	531	441	272	178	802	105	98	127	170	32.50	0.0730

PUMP TYPE		MOTOR POWER		FRAME SIZE	DNs [BSP]	DNd [BSP]	DIMENSIONS [mm]								GROSS WEIGHT [kg]	GROSS VOLUME [m ³]	
SINGLE PHASE	THREE PHASE	kW	HP				A	B	C	D	F	H	H1	N			N1
MVR 4-12	MVRT 4-12	2.20	3.00	90	1¼	1¼	593	450	272	178	811	105	98	127	170	32.00	0.0730

Note: All dimensions in mm unless otherwise noted.

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Product Improvement is a continuous process at 'LUBI'. The data given in this publication is therefore subject to revision.

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ISO 9001



ISO 14001

Customer Care Number : 9824200800