

**MXF SERIES**

**Horizontal Single-stage Centrifugal Pumps  
50 Hz**



**Passion for Pumps**



## INTRODUCTION

The Lubi MXF pumps are non-self priming, horizontal, single-stage, 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 0.37 to 1.50 kW for single phase as well as three phase power supply.

The pumps have axial suction port and radial discharge port.

Pump casing and impellers are made of stainless steel AISI 304. Motor shaft is made of carbon steel and pump shaft is made of stainless steel.

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

## APPLICATIONS

These pumps are suitable for liquids which are thin, clean, slightly aggressive, non-explosive, not containing solid particles or fibers.

- Domestic water supply systems
- Civil & industrial water supply systems
- Sprinkler systems
- Irrigation
- Gardens, farms.

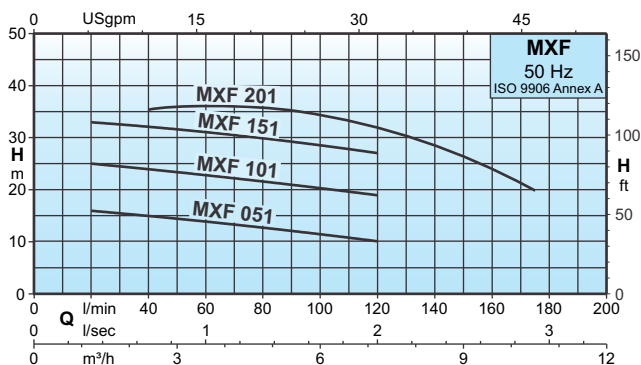
## OPERATING CONDITIONS

Flow range : Up to 10.5 m<sup>3</sup>/h  
 Head range : Up to 36 metres  
 Ambient temperature : Max. +50°C  
 Liquid temperature range: 0°C to +90°C  
 Total suction lift : Up to 7.5 metres

## MOTOR

Motor type : TEFC 2-pole motor  
 Ratings : 1 phase - 0.37 to 1.50 kW  
           : 3 phase - 0.37 to 1.50 kW  
 Rated speed : 2900 rpm  
 Enclosure class : IP 44  
 Insulation class : F  
 Nominal voltage : 1 phase 230 V  
                   : (Tolerance +5% / -15%) 3 phase 415 V  
 Supply frequency : 50 Hz  
 Duty / Rating : S1 / Continuous  
 Direction of rotation : Clockwise as seen from the motor rear end

## PERFORMANCE CURVES & PERFORMANCE DATA



PUMP TYPE	MOTOR POWER		Q m <sup>3</sup> /h	1.2	2.4	3.6	4.8	6	7.2	8.4	9.6
	kW	HP		20	40	60	80	100	120	140	160
MXF 051	0.37	0.50	H m	16	15	13.5	13	11.5	10		
MXF 101	0.75	1.00		25	24	22.5	22	20	19		
MXF 151	1.10	1.50		33	32	31	30	28.5	27		
MXF 201	1.50	2.00		36	37	36	33	32	28	23	

## SECTIONAL DRAWING & MATERIALS

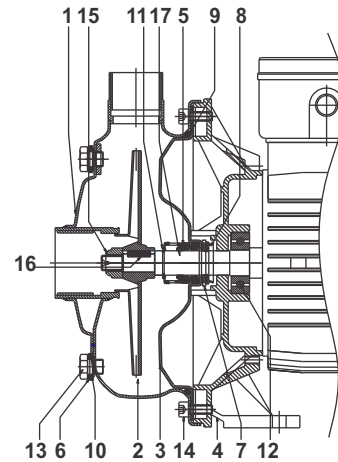
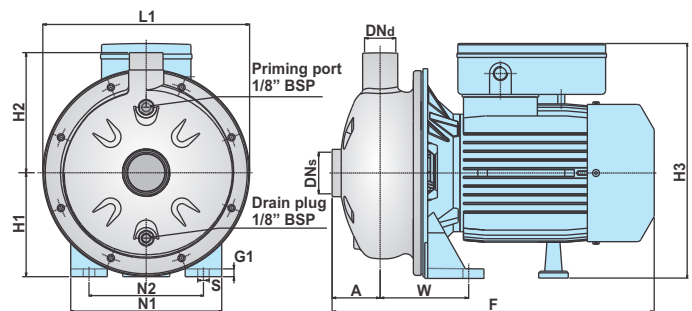


FIG.1 SECTIONAL DRAWING OF MXF PUMP

POS.	COMPONENT	MATERIAL
1	Pump casing	Stainless steel AISI 304
2	Impeller	Stainless steel AISI 304
3	Pump casing cover	Stainless steel AISI 304
4	Adaptor	Aluminium/Cast iron
5	Mechanical shaft seal	Carbon/Ceramic/NBR
6	"O" ring cover washer	Stainless steel AISI 410
7	Water thrower	NBR
8	"V" seal	NBR
9	"O" ring for volute	NBR
10	Plug "O" ring	NBR
11	External circlip	Stainless steel AISI 304
12	Bearing	-
13	1/8" Plug	Stainless steel AISI 410
14	Socket head cap screw	Stainless steel
15	Self lock nut	Stainless steel AISI 410
16	Key	Stainless steel AISI 410
17	Shaft	Pump - Stainless steel AISI 304 Motor - Carbon steel

## DIMENSIONS & WEIGHT



PUMP TYPE	kW	HP	FRAME SIZE	DN <sub>s</sub> [BSP]	DN <sub>d</sub> [BSP]	DIMENSIONS [mm]										GROSS WEIGHT [kg]	GROSS VOLUME [m <sup>3</sup> ]	
						F	H1	H2	H3	A	W	N1	N2	L1	G1			S
MXF 051	0.37	0.50	71	1/2"	1"	335	108	125	239	53	95	157	119	237	8	9	10.5	0.0310
MXF 101	0.75	1.00	71	1/2"	1"	335	108	125	239	53	95	157	119	237	8	9	12.0	0.0310
MXF 151	1.10	1.50	80	1/2"	1"	365	122	137	268	52	95	186	148	237	12	11	21.0	0.0530
MXF 201	1.50	2.00	80	1/2"	1"	365	122	137	268	52	95	186	148	237	12	11	21.5	0.0530

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.

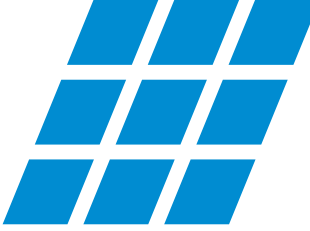
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ISO 9001

ISO 14001

Customer Care Number : 9824200800



## Performance Range

- Flow rate up to 1000 l/min. (60 m<sup>3</sup>/h)
- Dynamic head up to 29 m.

## Applications

- Slushy water, waste water without solids, sump drainage.
- Drainage application, flood control.
- Dewatering for fish pond or basement.

## Features

- New design for light weight, elegant shape with best quality.
- Unfastening the bolts between the oil casing and the upper pump casing allows the body to be separated for easy maintenance.
- All pumps are furnished with double mechanical seal. All pumps up to 0.75 kW have carbon/ceramic sealing faces at both water end and motor end. All pumps starting with 1.5 kW and above have Sic sealing faces at the water end and carbon/ceramic sealing faces at the motor end.
- Available with Sic/Sic mechanical Shaft seal for pumping sandy water for 0.75 kW (optional).

## Special Features on Request

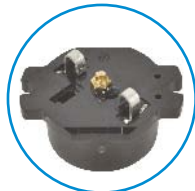
- Other voltages.
- Available in 60Hz.

## Direction of Rotation

- Clockwise as seen from the motor rear end.

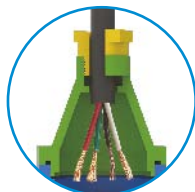
## Thermal overload protector

- Equipped with Automatic reset motor protector, prevents motor from burning due to high temperature/phase failure/voltage drop and lock impeller.



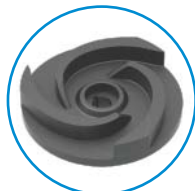
## Cable base

- Epoxy resin seal cable base to prevent water intrusion into motor through the cable wire.



## U Type Impeller

- This impeller can generate rapid rotating vortex to handle fluid mixed with long fiber, the majority of abrasive solids do not touch impeller to minimize impeller wear.



## Float Switch

- Excellent quality float switch Provided with epoxy resin sealed connector.



## Motor

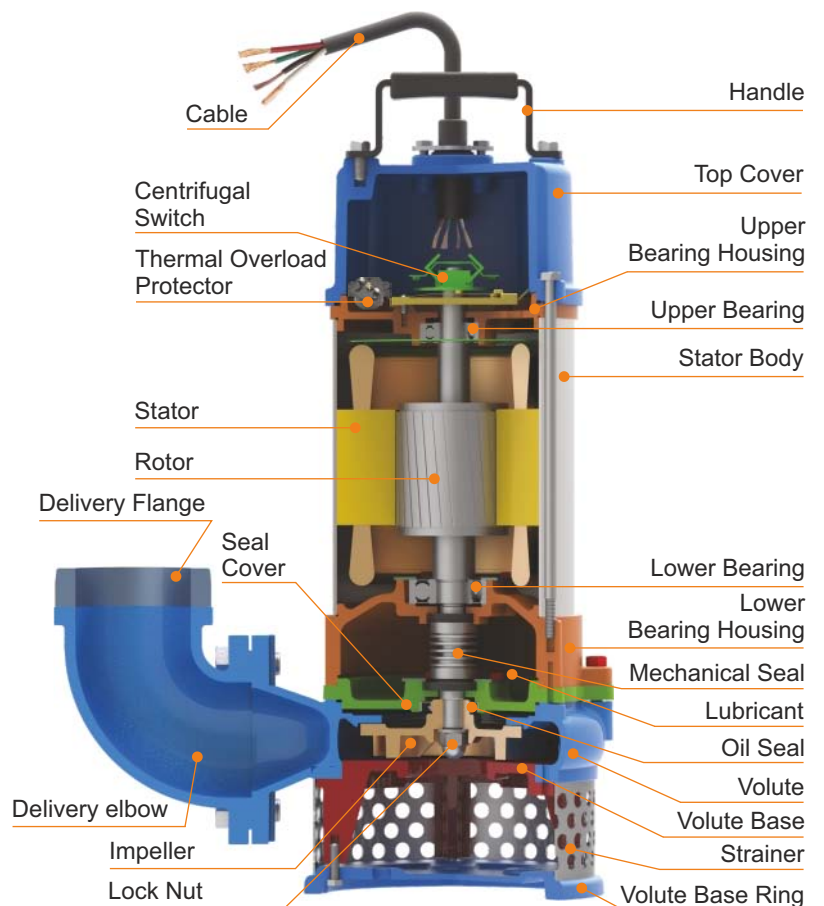
- 2 - pole dry submersible motor
- 50Hz (n = 2900 RPM)
- Single phase : 230V +5 - 15 %
- Three phase : 400V +5 -15 %
- Protection IP 68
- Insulation class : F

## Operating Conditions

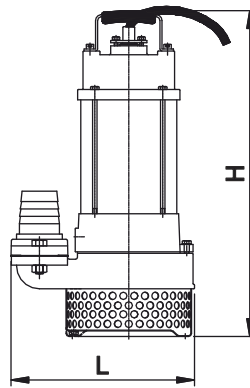
- Ambient temperature : Max. +50°C
- Liquid temperature : 0°C to +50°C
- Max. Starts per hour : 30 at regular intervals.
- Duty Rating :
  - S1 - When pump is completely submerged.
  - S3 - When pump is partially submerged.

## Float Switch Pump

- The pumps are equipped with wide angle on/off level control float switch for easy and simple automatic operation.
- Applications : Slushy water, dewatering, drainage application.
- Type : 0.37 - 2.2 kW Single-phase pumps.  
0.37 - 2.2 kW Three-phase pumps.



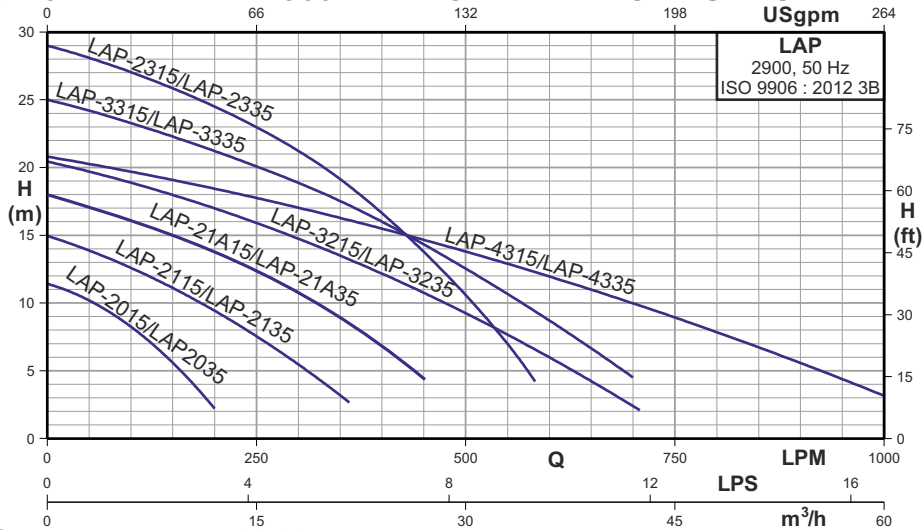
General Pump Features



DIMENSIONS

Model		Disc. mm (inch)	Dimensions (mm)			Solid Passage mm	Net Weight (kg.)	Gross Weight (kg.)	Volume (m <sup>3</sup> )	Cable data cable x core x size (mm <sup>2</sup> ) x length (m) x Material
Single Phase	Three Phase		Length	Width	Height					
LAP-2015/2015F	-	50 (2")	230	161	365	8	15.0	17.0	0.032	1 x 3 x 1.0 x 5 x PVC
-	LAP-2035/2035F		230	161	365		15.0	17.0	0.032	1 x 4 x 1.0 x 5 x PVC
LAP-2115/2115F	-	50 (2")	277	178	440	10	19.0	21.0	0.045	1 x 3 x 1.0 x 5 x PVC
-	LAP-2135/2135F		277	178	440		18.0	20.0	0.045	1 x 4 x 1.0 x 5 x PVC
LAP-3215/3215F	-	80 (3")	412	208	569	11	44.0	69.0	0.146	1 x 3 x 2.0 x 8 x PVC
-	LAP-3235/3235F		412	208	470		40.0	65.0	0.146	1 x 4 x 1.8 x 8 x PVC
LAP-2315/2315F	-	50 (2")	280	216	572	11	46.0	70.0	0.146	1 x 3 x 3.5 x 8 x PVC
-	LAP-2335/2335F		280	216	493		43.0	66.0	0.146	1 x 4 x 1.8 x 8 x PVC
LAP-3315/3315F	-	80 (3")	385	216	575	11	47.0	71.0	0.146	1 x 3 x 3.5 x 8 x PVC
-	LAP-3335/3335F		385	216	495		43.0	67.0	0.146	1 x 4 x 1.8 x 8 x PVC
LAP-4315/4315F	-	100 (4")	390	208	584	11	47.0	72.0	0.146	1 x 3 x 3.5 x 8 x PVC
-	LAP-4335/4335F		390	208	495		43.0	68.0	0.146	1 x 4 x 1.8 x 8 x PVC
LAP-21A15/21A15F	-	50 (2")	277	178	470	10	22.0	25.5	0.050	1 x 3 x 1.5 x 5 x PVC
-	LAP-21A35/21A35F		277	178	470		21.0	24.5	0.050	1 x 4 x 1.0 x 5 x PVC

PERFORMANCE CHART AT n = 2900 RPM FOR DRAINAGE PUMPS



PERFORMANCE DATA AT n = 2900 RPM

Model		Power		Start Method	m <sup>3</sup> /h l/min.	6	9	12	18	24	30	36	45	54
Single Phase	Three Phase	kW	HP			100	150	200	300	400	500	600	750	900
LAP-2015/2015F	-	0.37	0.5	Capacitor	H (m)	8.3	5.5	2.2	-	-	-	-	-	-
-	LAP-2035/2035F			Direct										
LAP-2115/2115F	-	0.75	1.0	Capacitor		12.5	11	9.4	5.5	-	-	-	-	-
-	LAP-2135/2135F			Direct										
LAP-3215/3215F	-	1.50	2.0	Capacitor		19.9	18	17	14.8	12.2	9.2	6	-	-
-	LAP-3235/3235F			Direct										
LAP-2315/2315F	-	2.20	3.0	Capacitor		27	26	24.5	21.2	16.6	10.5	-	-	-
-	LAP-2335/2335F			Direct										
LAP-3315/3315F	-	2.20	3.0	Capacitor		23.3	22.3	21.2	18.9	16	12.5	9	-	-
-	LAP-3335/3335F			Direct										
LAP-4315/4315F	-	2.20	3.0	Capacitor		19.7	19	18.4	17	15.5	13.8	12	9	5.5
-	LAP-4335/4335F			Direct										
LAP-21A15/21A15F	-	1.10	1.5	Capacitor		16.0	15	13.8	10.7	6.9	-	-	-	-
-	LAP-21A35/21A35F			Direct										

Note : Subscript "F" pumps will be provided with a float switch.