4" Submersible Bore Well Pumps With Floating Impeller 50 Hz



PUMPS • MOTORS
ISO 9001 Company



QUALITY • INNOVATION • SUSTAINABILITY

LNF

4" Submersible Bore Well Pumps With Floating Impeller



INTRODUCTION

The Lubi offers **LNF** series multistage, centrifugal submersible bore well pumps with floating impellers, for 4" (DN 100 mm) wells.

State-of-the-art floating impeller-stack design made with glass reinforced PPO impellers, glass reinforced Polycarbonate diffusers and stainless steel bowls offer best sand handling property making the pumps most reliable in sandy bore wells..

These pumps are sized for connection to the motor according to NEMA standards.

Delivery casing with built-in non-return valve.

Lubi offers the following 4" glass reinforced PPO submersible pump models.

LNF45010
 LNF45030
 LNF45015
 LNF45040
 LNF45020
 LNF45050
 LNF45150

Connection:

Screwed pipe connection with BSP thread as standard.

NPT thread pipe connection are available on request.

APPLICATIONS

□ Water supply

□ Irrigation

☐ Civil

Industrial

□ Fire fighting

PERFORMANCE RANGE

Flow range: Max. 6.6 m³/h
Head range: Max. 309 metres

OPERATING CONDITIONS

• Liquid temperature: 0°C to +45°C

· Max. sand content into the water: 150 g/m3.

MOTOR

 Ratings: 1 phase - 0.37 to 4 kW, 3 phase - 0.37 to 4 kW

Rated speed: 2900 rpm
Mounting designation: NEMA

• Enclosure class: IP 68

Insulation class: F (Oil Filled motors)Nominal voltage: 1 phase, 220 V, 230 V

3 phase, 380 V, 400 V, 415 V

Voltage tolerance: +6% / -10%

• Supply frequency: 50 Hz

Water pH: 6.5 - 8

Duty / Rating: S1 / Continuous

· Max. starts per hour: 30 at regular intervals

 Direction of rotation: Clockwise as seen from the motor rear end.

• Maximum submerged depth: 300 metre.

PUMP

- Abrasion-resistant construction. The front wear plate, combined with the floating impellers, ensures optimum resistance to abrasion.
- The upper and lower supports are made of precision cast stainless steel, ensuring resistance to corrosion, durability and a sturdy coupling to the motor.
- Stainless steel oversized pump shaft guarantees an effective impeller drive.
- A stainless steel non-return valve is fitted in the discharge to prevent any back flow of water and alleviate any water hammer to the pump, thus safeguarding impellers & diffusers.
- These pumps can be coupled to either the 4" Oil Filled or 4" Water Filled motors.
- Units have left hand threads and are field serviceable with common tools and readily available repair parts.
- Face clearance, floating impeller stack has proven itself as a superior sand handling, durable pump design.
- Impellers, diffusers and bearing spiders are constructed of glass reinforced engineering composites. They are corrosion resistant and non-toxic.
- The proprietary, engineered polymer bearing material is strong and resistant to abrasion & wear. The enclosed intermediate and upper bearing is mounted in a durable glass reinforced PPO bearing spider for excellent abrasion resistance.
- Easy access to motor mounting nuts using standard open end wrench.
- · Stainless steel casing is strong and corrosion resistant.

MOTOR

4" Oil Filled

- 4" Oil filled submersible motor.
- · Completely rewindable.
- · Cooling and lubrication by non toxic fluid.
- · Stainless steel outer shell and shaft.
- · Maintenance free lubricated ball bearings.
- Mechanical shaft seal (Carbon/Ceramic) provided.
- High efficiency electrical design (lower operating cost).
 Tropicalized design (lower winding temperature).
- All single phase motors will require control box .
- 4" NEMA coupling flange.
- · Pressure compensation diaphragm.
- They are available from 0.37 to 4 kW for single phase and from 0.37 to 5.5 kW for three phase power supply.

4" Water Filled

- 4" Water filled submersible motor.
- Easily rewindable (wet wound) induction motor with PE insulated windings.
- · Corrosion resistant stainless steel stator jacket and shaft.
- · Water lubricated radial and axial thrust bearings.
- · Counter thrust bearing.
- Motors are pre-filled with clean water + Glycol mixture.
- High efficiency electrical design (lower operating cost).
- Tropicalized design (lower winding temperature).
- Single phase motors are capacitor start and run design.
 All single phase motors will require control box.
- · Pressure compensation diaphragm.
- They are available from 0.37 to 4 kW for single phase and from 0.37 to 5.5 kW for three phase power supply.

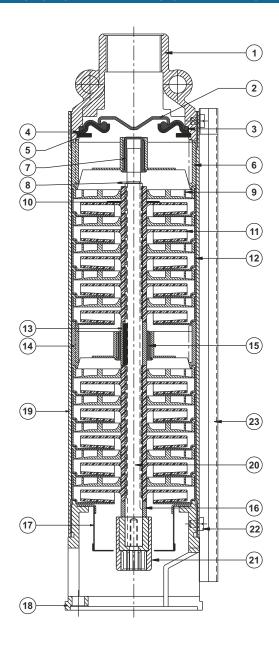
PUMPED LIQUIDS

These pumps are designed for liquids which are thin, clean, non-aggressive, non-explosive, not containing solid particles or fibres.

4" Submersible Bore Well Pumps With Floating Impeller



SECTIONAL DRAWING & MATERIALS



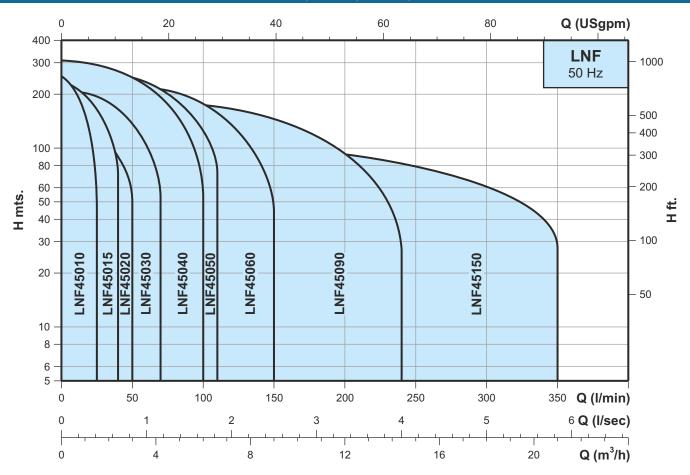
Pos.	Component	Material	Pos.	Component	Material
1	Discharge head	CF 8	13	Intermediate shaft sleeve	Stainless steel AISI 304
2	Check valve poppet	Stainless steel AISI 304	14	Intermediate bearing spider	Glass reinforced PPO
3	Check valve seal	NBR	15	Intermediate bearing	Engineering composite
4	Check valve seat	Stainless steel AISI 304	16	Top shaft sleeve	Stainless steel AISI 304
5	Check valve retaining ring	Stainless steel AISI 304	17	Inlet strainer	Stainless steel AISI 304
6	Upper bearing spider	Glass reinforced PPO	18	Suction case	CF 8
7	Upper bearing	Engineering composite	19	Casing	Stainless steel AISI 202
8	Clipring	Stainless steel AISI 304	20	Shaft	Stainless steel AISI 304
9	Diffuser	Glass reinforced Polycarbonate	21	Coupling assembly	Stainless steel AISI 410
10	Upthrust washer	Stainless steel AISI 304	22	Screw	Stainless steel AISI 304
11	Impeller	Glass reinforced PPO	23	Cable guard	Stainless steel AISI 202
12	Bowl	Stainless steel AISI 304			



4" Submersible Bore Well Pumps With Floating Impeller



PERFORMANCE RANGE

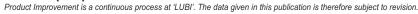


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