IHP™

water, sewage and sludge technology

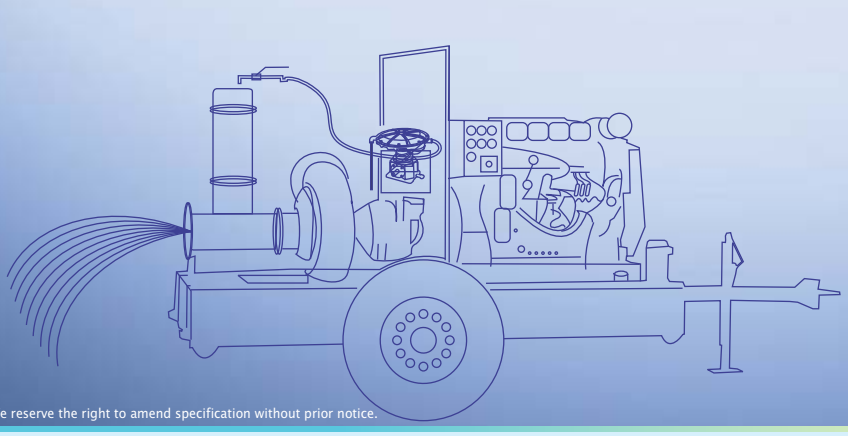
pumps for life ...

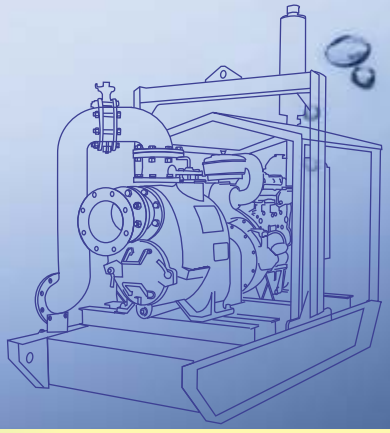
An **ISO 9001:2008** *certified company by*

Instruction Manual

BHS SERIES 4" & 6"
BHP SERIES 4"

BHS SERIES **BHP SERIES**





* We reserve the right to amend specification without prior notice.

INDRA HYDRO TECH PUMPS PVT. LTD.

316, 1st Floor, 8th Cross, 4th Phase, Peenya Industrial Area, Bengaluru - 560 058, Karnataka, India

Tel.: +91 80 2836 2916, Fax: +91 80 2836 3048, Email: contact@ihpindia.in, www.ihpindia.in

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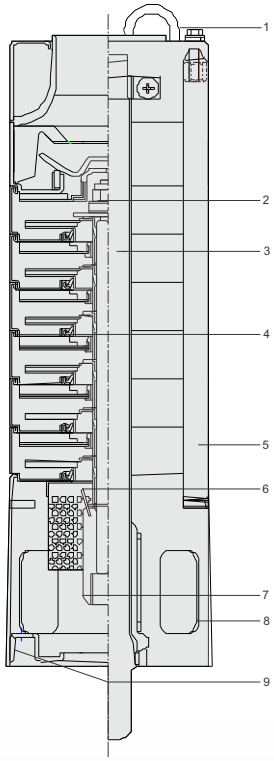
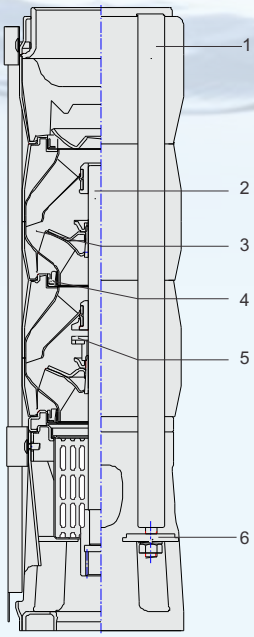
4” Stainless Steel Borehole Pump Features



1. Hook with Ω shape design Non-welding method keeps material not damaged.
2. Top bearings with sand channels design, avoid shaft swing and sand damaged while operating
3. Shaft with flower shaped design(SUS 304) robustness leads superior hydraulics
4. Intermediate chamber with N-shape design, 18kg water pressure resistance to prevent leakage.
5. Strap with HV260 hardness better intensity against pumping pressure
6. Sand flush vane design, leave the sand with the pumped liquid and prevent sand-block inside
7. Coupling with HRC 78 forged coupling increases robustness to avoid abrasion and perfectly fitted into different types of motors
8. Suction inter connector inlet with R-angle design, 200kg tensile strength against outside impacts.
9. Suction inter connector plate with S-shape design, 900kg tensile strength leads better sustainability for pump.

6” Stainless Steel Borehole Pump Features



1. Strap with HV-260 Hardness better intensity against pumping pressure
2. Shaft with round shaped design (SUS-431-QT) robustness leads superior hydraulics
3. Impeller and guide vane with "straight line" design, increase pump in efficiency
4. Neck ring with "inner pressure coarctation" design, special design to prevent water backflow
5. Diffuser vane contains moving bearings with HRC50~55 leads much lower abrasion and better lifespan
6. Interconnector fixer with L-shaped design, tighten the s trap and interconnector and leads strap much more stable

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INSTALLATION AND OPERATING INSTRUCTIONS

- The borewell should fully be developed and flushed free of cutting and sand.
- Determine the maximum depth of well and the draw down level at max pump capacity. Pump setting depth should be atleast one meter below the max draw down level.
- Ensure a minimum velocity of 0.2 m/s part of the motor for proper cooling.
- The motor should be filled with pure drinking water free of any silt or suspended particles. Replace the water filling drain plugs without fail.
- The electrical connections should be carried out by a qualified electrician.
- Earthing should be provided with the motor body.
- Ensure correct size of cable and suitable electrical protection devices like MCB, cut-off relay, contactors, etc. are provided.
- Relay should be set for full load current mentioned and single phasing, dry run protection should be used to avoid coil burning on account of dry running and single phasing.
- Check for free rotation of pump and motor before coupling.
- Check for vertical play before and after coupling.
- Ensure that only recommended size of piping is used and the pump should be gripped by two flats of pipe wrench.
- The threaded joints of pipe must be well cut and fit together tightly to ensure they do not work loosely.
- Ensure the motor cable is not damaged when pump is lowered into the well.
- Ensure the pump is completely submerged in the liquid before starting.
- Ensure the pump is not stopped till the water becomes clearer, free of impurities, otherwise pump parts and check valve gets clogged. Operate pumpset for atleast five minutes daily to avoid pump jamming.
- Ensure no oversize backup fuse wires are used. This will damage the motor winding in case of short circuiting.
- Ensure the valve is throttled to avoid dry running in case of low discharge. Do not test the pumpset outside bore in dry conditions as this damages seals and bearings.
- Do not use pump to handle water containing solid/fibrous substances.

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Fault	Cause	Remedy
1. The pump does not run.	a. The fuses are blown	Replace the blown fuses. If the new fuses too blow, check the electrical installation and the drop cable.
	b. The circuit breaker has tripped	Reset the circuit breaker.
	c. No electricity supply.	Contact the electricity provider.
	d. The motor protection has cut off the electricity supply due to overload.	Check for motor / pump blockage.
	e. The drop cable is defective.	Repair/replace the pump's cable.
	f. Over-voltage has occurred.	Check the electricity supply.
2. The pump runs but gives no water.	a. The discharge valve is closed.	Open the valve.
	b. No water or too low water level in well.	Allow water to get collected.
	c. Check valve is stuck in its closed position.	Pull the pump and clean or replace the valve.
	d. The suction strainer is closed.	Pull the pump and clean the strainer.
	e. The pump is defective.	Repair or replace the pump.
3. The pump runs at reduced capacity.	a. The draw-down is larger than anticipated.	Increase the installation depth of the pump. Throttle the pump or replace it with a smaller capacity model
	b. The valves in the discharge pipe are partly closed/blocked.	Check and clean/replace the valves as necessary.
	c. The discharge pipe is partly chocked by impurities.	Clean/replace the discharge pipe.
	d. The non-return valve of the pump is blocked.	Pull the pump and check/replace the valve.
	e. The pump and the riser pipe are partly chocked by impurities.	Pull out the pump. Check and clean or replace the pump, if necessary. Clean the pipes.
	f. The pump is defective.	Repair/replace the pump.
	g. Hole in discharge pipe.	Check and repair the piping.
	h. The riser pipe is defective.	Replace the riser pipe
	i.Under-voltage has occurred.	Check the electricity supply.
4. Frequent starts and stops.	a. The differential of the pressure switch between the start and the stop pressures is too small.	Increase the differential. However, the stop pressure must not exceed the operating pressure of the pressure tank, and the start pressure should be high enough to ensure sufficient water supply.
	b. The water level electrodes or level switches in the reservoir have not been installed correctly.	Adjust the intervals of the electrodes/level switches to ensure suitable time between the cutting-in or cutting-out of the pump. See installation and operating instructions for automatic devices used. If the intervals between start/stop cannot be changed via the automatics, the pump capacity may be reduced by throttling the discharge valve.
	c. Non return valve is leaking, stuck half-open or damaged	Pull the pump and clean/replace the non-return valve.
	d. The supply voltage is unstable.	Check the electrical supply.
	e. The motor temperature is too high.	Check the water temperature.

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Consumer Warranty

Indra Hydro Tech Pumps (P)Ltd warrants that, when this product is used for the purpose it was designed, is correctly housed and protected from weather, vermin and dust etc, that it will be free from material and manufacturing defects at the time of the original purchase.

Our products comes with guarantee that cannot be excluded under Indian Consumer Laws . You are entitled to a replacement or refund for major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have products repaired or replaced it goods fail to be of acceptable quality and failure doesn't amount to major failure

How to claim warranty

Before doing so, study the instruction booklet provided with the product, and ensure it has been correctly installed. Remember, we as manufacturer has built thousands of identical units , they have been extensively tested and in field use for many years. Failure of this products to work correctly, 99% of the time relates to installation, operating or application faults. In the event of a possible warranty problems, contact nearest distributor or manufacturer

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Peenya Industrial Area
Bangalore - 560 058
Karnataka State
INDIA
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Email: service@ihpindia.in and contact@ihpindia.in

To assist the distributor or Indra Hydro Tech Pumps (P) Ltd to address your request for warranty, could you please provide:

- Product
- The product must be delivery to IHP's authorized distributor or dealer or Indra Hydro Tech Pumps Pvt Ltd (as per above address) inspection / repairs
- Proof of date of original purchase must be supplied
- The serial number of the product if any
- Full contact details including name, full address and telephone or mobile number or SKYPE IDs.

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