

HORIZONTAL SELF PRIMING PUMPS

PUMP TYPE : ESP

APPLICATIONS :

The 'ENTITY' make Self Priming Pump are most suitable for applications such as Sewage and effluent treatment plants; Dewatering swamps, swimming pool, trenches; Loading unloading and transfer applications in process industry; On ships as bilge water, deck wash etc. They are useful for pumping liquids such as Water, Sea Water, Muddy Water, Sewage, Effluent, Solvents, Oils, etc.

RANGE :

Delivery Size	-	upto 80 mm
Rate of Flow	-	60 m ³ /h max
Head	-	50 m max
Temperature	-	70 °C max
Solid Size	-	25 mm Ø max
Working Pressure	-	10 kg/cm ² max
Suction Lift	-	8 m max

(At standard working conditions
i.e. for water at 30°C & at sea level)



DESIGN FEATURES :

ENTITY make Self Priming Pump has back pullout construction. The shaft is supported on two antifriction bearings. Back pullout construction facilitates easy maintenance. The pump is provided with grease packed bearings which are lubricated for lifetime. The pump is normally provided with gland packing arrangement. The stuffing box is provided with lantern ring which is sealed by grease. This arrangement prevents leakage of air into the pump while priming takes place. The wide passages of impeller and casing allow to handle liquid containing solids. The pump can be provided with mechanical seal depending upon the application.

ENTITY HYDRODYNAMICS

Office : Shivganga, Bharati Niwas Colony, 108/23, Erandwane, Pune 411 004.

Tel. : (020) 25438496 Email : entityhydropumps@yahoo.co.in

Website : www.entityhydrodynamics.com

HORIZONTAL SELF PRIMING PUMPS

ALLOWABLE STATIC SUCTION LIFT :

ENTITY Self Priming Pumps are used for pumping various liquids such as water, chemicals, solvents, oils etc. As these liquids have varying properties, the allowable static suction lift also will vary depending upon these properties.

To work out safe allowable static suction lift get following information :

1. Density of the liquid
2. Temperature of the liquid
3. Vapour pressure
4. Atmospheric pressure at site
5. NPSHR value specified by pump manufacturer at duty point.

Based on the above data allowable safe static suction lift can be worked out as under.

$$H_{st} = H_a - NPSHA - H_{vp} - H_f$$

Where,

- H_{st}** = Safe Static Suction Lift.
H_a = Atmospheric Pressure at site expressed in terms of liquid column.
NPSHA = NPSHR + Safety Margin.
H_{vp} = Vapour pressure expressed in terms of liquid column.
H_f = Frictional Head Loss in the suction pipe line.

MATERIAL OF CONSTRUCTION :

As the 'ENTITY' pumps are used for pumping wide range of corrosive and abrasive liquids, they are offered in different materials of constructions such as Grey Cast Iron, Alloyed Cast Iron, Alloy Steels in grades CF8 / AISI 304, CF8M / AISI 316, CN7M (Alloy 20), Bronze, Cast Steel Gr WCB

QUALITY CONTROL :

All the raw materials which go into the 'ENTITY' Pumps are tested thoroughly for chemical and physical properties. Material tests such as magnetic particle test, dye penetration test, ultrasonic tests etc. are also offered as optional tests. All the parts manufactured on machines are thoroughly checked for dimensional accuracies with the help of standard measuring equipment. Each and every pump is tested rigorously in the testing laboratory where the parameters like rate of flow, head and power are measured. The pumps are cleared for the dispatch only when they produce satisfactory hydraulic and mechanical performance.

OTHER PRODUCTS

We also manufacture pumps in following types -

Horizontal Back Pullout Chemical Process Pumps

Horizontal Self Aligned Chemical Process Pumps

Horizontal Multistage Pumps

Barrel Pumps

Vertical Submerged Pumps for Chemical Process Applications

Vertical Submerged Steam Jacketed Pumps

Vertical Submerged Coolant Pumps

Vertical Floor Mounting Pumps

Designed & Manufactured by :

Entity Hydrodynamics

3, Sonar Industrial Estate,
S. No. 13, Nanded Phata,
Off. Sinhagad Road,
Pune 411041.

Tel. : 25438496, Telefax : 24394871

Represented By