

## **IMPORTANT NOTES :**

- 1 Install proper size of pipes as recommended.
- 2 To avoid Elbow Suction & Delivery pipeline. (bend only used)
- 3 Reduce number of bends in delivery pipe line.
- 4 Do not use more than one bend in suction line.
- 5 Use ISI Marketed Friction less foot valves.
- 6 For pumps having 25x25 pipe sizes do not use 20 mm or 12.7 mm for delivery It will affect the performance of the pump due to pipe friction.
- 7 To avoid over loading select proper pumps by the help of our performance chart
- 8 To avoid over loading and cavitation install suction lift within 10 to 17 feet.
- 9 Use 1.5Sq mm copper wire for ½ HP, 2.5Sq mm copper wires for 1 HP and 4.0Sq mm copper Wires for 1.5 HP and 2 HP Monobloc Pumps.
- 10 Cable used as per our cable selection chart.

## **TOTAL HEAD CALCULATION:**

**Total Head = suction Head + Delivery Head** 

Suction Head calculation = Suction vertical Height (From Foot valve to Pump Centre) + Horizontal pipe line used + No of Bend (or) Elbow used in suction pipe line

Delivery Head calculation = Delivery vertical Height (From Pump Centre to Over head Tank) + Horizontal pipe line used + No of Bend (or) Elbow used in Delivery pipe line + NRV

|                           |   | Actul                             | Head Conversion             |
|---------------------------|---|-----------------------------------|-----------------------------|
| Example :-                |   | Runnin                            | Feet                        |
| Suction Head calculation  | - Suction vertical Height   | 10 Feet                           | 10 Feet                     |
|                           | - Horizontal pipe line used   | 5 Feet (2%) of running feet       | 1 Feet                      |
|                           | - No of Bend  | 3 Nos (1 Bend = 1 Feet)           | 3 Feet                      |
| Delivery Head calculation | <ul> <li>Delivery vertical Height</li> <li>Horizontal pipe line used</li> <li>Horizontal Height difference</li> </ul> | 27 Feet<br>50 Feet (2%)<br>7 Feet | 27 Feet<br>1 Feet<br>7 Feet |
|                           | - No of Bend  | 5 Nos (1 Bend = 1 Feet)           | 5 Feet                      |
|                           |   | Actul Total Head                  | 54 Feet                     |