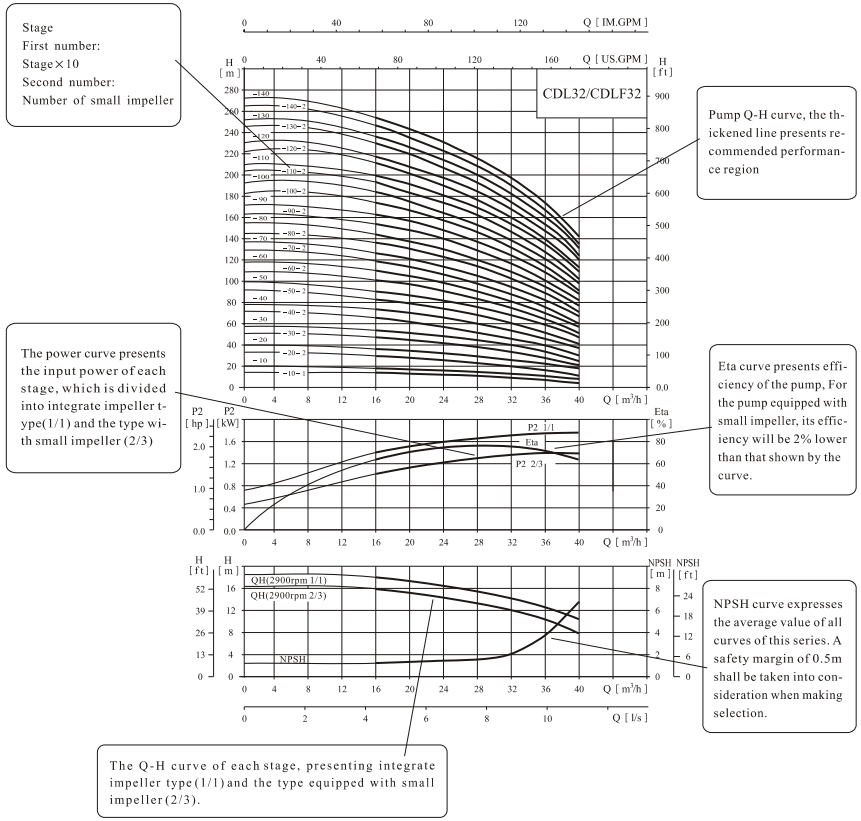
Curve illustration



Performance curve

Following conditions are suitable for the performance curves shown bellow:

1、All curves are based on the measured values of 50Hz: constant motor speed 2900rpm or 2950rpm.

2、Curve tolerance in conformity with ISO9906 Annex A.

3、Measurement is done with 20℃ air-free water, kinematic viscosity of 1mm²/sec.

4、The operation of pump shall refer to the performance region indicated by the thickened curve to prevent overheating due to too small flow rate or overload of motor due to too large flow rate.

Minimum inlet pressure NPSH

In case that the pressure in pump is lower than the steam pressure used to convey liquid, the cavitations will occur. To avoid cavitations, a minimum pressure at the inlet side of the pump shall be guaranteed. The maximum suction stroke can be calculated with following formula:

H=Pb×10.2-NPSH-Hf-Hv-Hs

Pb=atmosphere pressure [bar]

(can be set as 1bar)

In a closed system, Pb means system pressure [bar]

NPSH=Net positive suction head [m]

(It can be read out from the point of possible max. flow rate shown on NPSH curve)

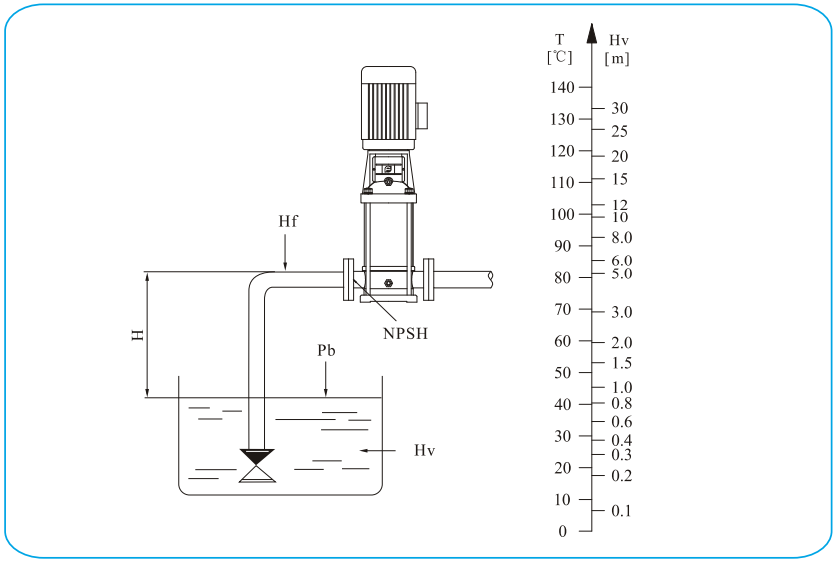
Hf=Pipeline loss at the inlet [m]

Hv=Steam pressure [m]

Hs=Safety margin=Minimum 0.5m delivery head

If the calculated result H is positive, the pump may run under the max. Suction stroke H.

In case the calculated result H is negative, a delivery head of min. Inlet pressure is necessary.



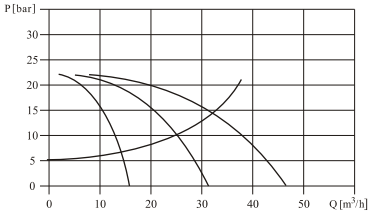
Check and ensure that the pump is not at cavitations state.

Operation in parallel

Connecting several pumps in parallel running will benefit much more than running a single large pump.

● Applicable to different working states necessary in a variable flow system.

● Increasing the possibility of water supply when the pump is in failure. Because in case of pump failure, only part of the system flow is effected.



Two pumps or more can be connected in parallel running if necessary.