



ROTARY TWIN GEAR PUMPS

Model : JKRN

PUMPING SOLUTIONS FOR LIQUID TRANSFER...



“We Believe in Quality”

Mfgd. By : **JK PUMP INDUSTRIES**
Ahmedabad (Guj.) INDIA.

ADVANCED TECHNOLOGY FOR PUMPING VISCOUS LIQUID



PUMP CHARACTERISTIC

Gear pump is a rotary positive displacement pump with positive pressure characteristic. The capacity of the pump varies directly with speed but remain constant against pressure, however due to running clearance between the casing & impeller some liquid always by passes to suction causing sleep, which depends upon the differential pressure, viscosity of the liquid & ofcourse the workman-ship. The pumps are capable of handling any viscosity, the sleep reduces with viscosity but the viscous power increases. The pump has a self priming capability however some net positive suction head (NPSH) is always required to avoid cavitations depending upon the viscosity of the liquid to be pumped & the pump speed.

INTERNAL POWER LOSSES

The power losses in rotary pumps are of two types. The mechanical losses is the power necessary to overcome frictional drag of all the moving part within the pump while viscous losses is power required to overcome fluid viscous drag & shearing action of the fluid, this can be computed from the graph on the opposite side.

H.P. CALCULATION

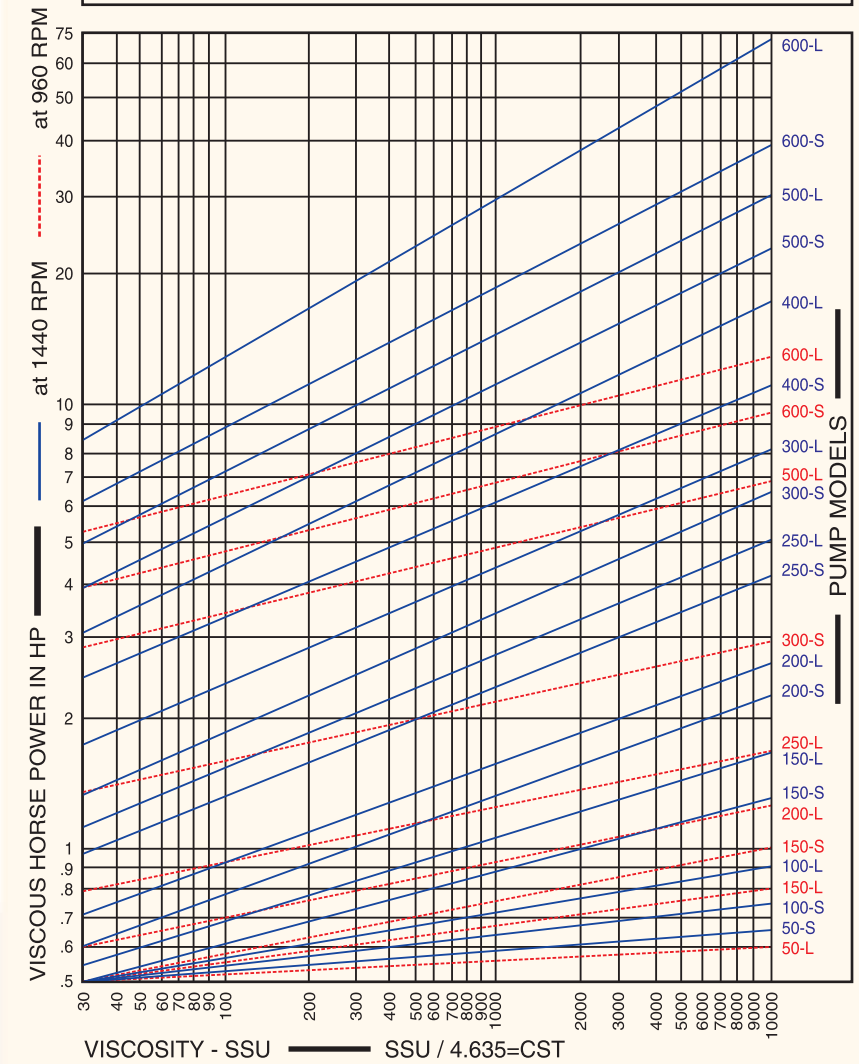
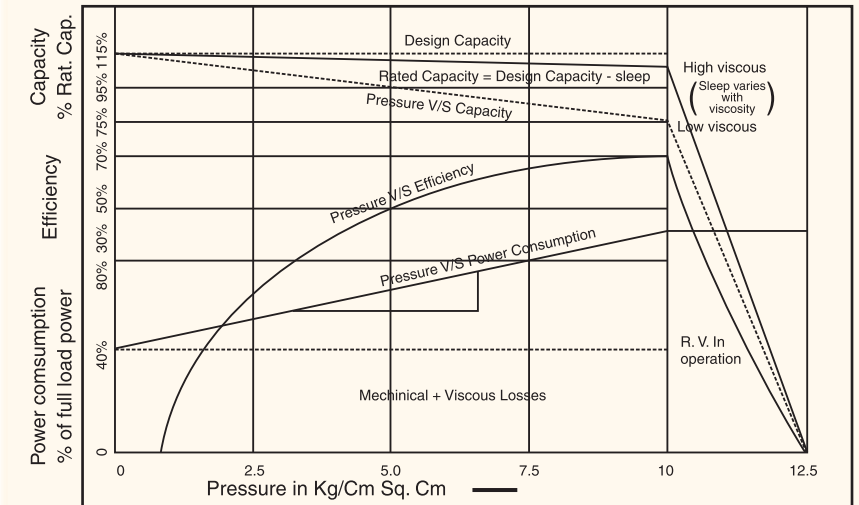
The break horse power required to drive a rotary pump is sum of the theoretical HP & internal power losses. The theoretical horse power is the actual work done in moving the fluid from inlet port to out let pressure condition & is product of Constant C=0.037(capacity-LPM, Pressure kg/cm²) or C=2.3(capacity-GPM, pressure PSI)

PUMP SELECTION & USES

The bush bearing type of pump can be used for clean viscous liquid having sufficient lubricating value such as clean lube oil, Vegetable oil, Fish & Animal oil, Gear oil, Glycerine, Hydraulic oil, Honey, ASTM & SAE lubricating oil for intermitting duty. However for continues duty pump with needle roller bearing in “JKRN” series should be selected. For liquid having low viscosity, poor lubricating values or Containing dirt or impurities such as Crude oil, Dirty lube oil, HSD, Kerosene, LDO, Paints, Sugar solution, Turpentine, Varnish, Wood Plup, Pump with independtly lubricated bearing should be selected. For liquid which tends to solidify at room temperature such as Ashphalt, Bituman, Furnace oil, Tar, Cellulose, Starch, LSHS, HPS, Molasses, Naptha, Phenol resin, RFO, Silicate, Soap solution, Viscous, Wax etc. Jacketing construction should be selected to facilitate the heating or the pump by steam or thermic fluid.

INSPECTION & TESTING

All Pumps are individually tested for its performance as per JIS B-8312-1976.



* All dimensions are in millimeters. Unless otherwise stated, Specifications are subject to change without prior notice as improvements are made from time to time.

Mfgd. By :

JK PUMP INDUSTRIES
Ahmedabad (Guj.) INDIA.

Dealers :

