Technical Information

BRINKMANN PUMPS

Hydraulic Features

BRINKMANN's program of coolant pumps offers appropriate design approaches for different applications.

Based upon the **centrifugal pump system**, we offer **immersion pumps with open**, **semi-open** and **closed impellers** for different coolants.

Patented quick suctioning pumps **series TL, SAL, SFL, SGL and SZG** are provided **for handling** of air entrained coolants.

Vortex pumps series SFT and lifting pumps series SFL **are suitable for coolants with heavy chip loads**.

Suction immersion pumps Series TAS/STS make it possible to connect to vacuum filters because of their single connection on the suction side (for instance, with a wedge wire).

Lifting pumps series TAA pump are for foam-sensitive cooling lubricants.

Immersion pumps series (S)TC, (S)TH for medium pressure get **optimal hydraulic efficiency** due to their **closed impellers**; simple pre-filtration is recommended.

High pressure in coolant systems is provided by **screw pumps using** longwearing **silicon carbide housings.** Please contact us to provide additional information about working conditions in your devices.

Please note that with all immersion pumps, the **highest fill level of coolant should stay a few inches below** the **mounting flange. The pump characteristics, shown in this catalog, apply to water at 68 °F (20° C) at 4.6 SSU (1 mm²/s).** Higher viscosities need larger motors. Coolants with specific weight of less than 1 need less power and with more than 1 need more power.

Centrifugal pump pressure is stated as delivery head in Feet, (m) and PSI.

The diagrams of immersion pump types STA404; with semi-open impellers, and STC63S560, with closed impellers, show the rates for coolants of different viscosities and different specific weights in ft (m) and PSI (bar) respectively.

The viscogram shows examples of common oils. Upon request, oil curves for specific pumps can be provided.

STA404
with semi-open impellers
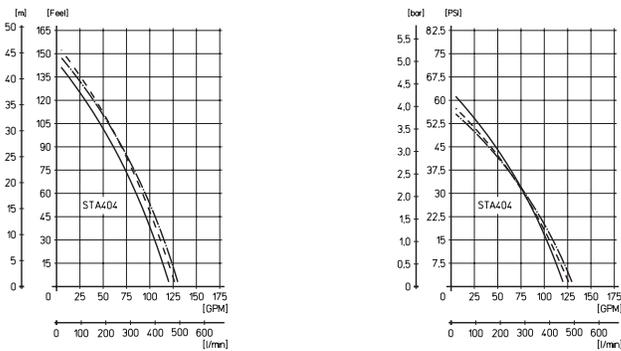
(S)TC63
with closed impellers
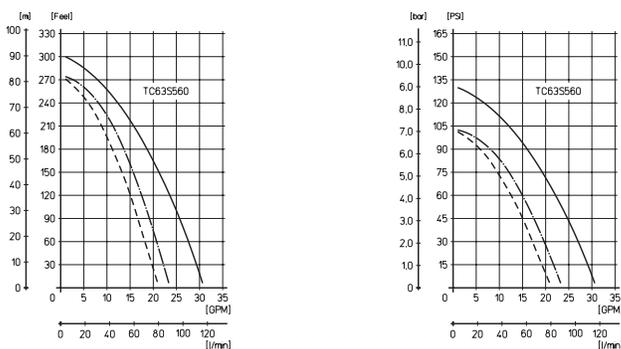
Water _____
Oil _ . _ . _ 210 SSU spec. weight
Oil _ _ _ _ _ 415 SSU 0.87