

725.1A300

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(Sup. 8/13/99)

SEAL CHAMBER AND STUFFING BOX PRESSURE

Approximate Pressure at stuffing box or seal chamber (PSB) in pounds per square inch gauge

Nomenclature:

- C = Pressure Coefficient
 DMAX = Maximum Diameter of Impeller in inches
 DR = Diameter of Impeller in Inches Required for Rating
 HD = Discharge Head in Feet of Liquid = $H_T - H_s$
 HS = Suction Lift in Feet of Liquid
 HS = Total Dynamic Head in Feet of Liquid
 Ps = Suction Pressure in Pounds per Square inch Gauge
 SG = Specific Gravity of Liquid at Pumping Temperature

When suction pressure exceeds zero pounds per square inch gauge:

$$Ps8 = Ps + C(0.433 HT SG)$$

When suction pressure is less than zero pounds per square inch gauge:

$$PsB = C(0.433 H_D SG)$$

