

How do I figure a pump's "head" or pressure output?

Head produced by a pump is the difference between suction pressure and discharge pressure plus the difference in velocity heads (sometimes negligible) typically represented as feet differential.

$$h = (P_d - P_s) + (V_{hd} - V_{hs})$$

$$P_d = \text{PSI discharge pressure needs to be converted to feet Ft} = \frac{2.31(\text{psi})}{SG}$$

$$P_s = \text{PSI suction pressure (needs to be converted to feet)} \quad \text{Ft} = \frac{2.31(\text{psi})}{SG}$$

$$V_{hd} = \text{velocity head discharge} = \frac{V^2}{2g} \quad \text{where } V \text{ is the velocity in the pipe and "g" is gravity} \\ \text{(typically } 32.2\text{ft/sec}^2\text{).}$$

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