



HVAC Tech Note #1 – December 2002

Reading Pump Head for Fluids Other Than Water at 60 °F

It is common to estimate pump performance by using a pressure gauge or gauges to measure the pump head in psi, convert it into feet of head, and then refer to the pump curve. The conversion factor normally used is 2.31 feet of head per psi. That conversion, however, is only accurate for water at 60° F. If the water is hot and/or the fluid is a glycol solution, the conversion factor must be adjusted for the fluid specific gravity. If you don't do that, you can be out by several feet of head and will get a false flow reading. For a pump with a flat curve, the error can be a whopper!

For a more detailed explanation, an example, and correction factors, see the 1999 ASHRAE Applications handbook, pages 36.11 and 12.

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