

“Pipe flow” experiment

- Device: Transport a liquid without leaking!
- Water or a light HC oil is pumped in circular pipes (and packed bed, etc.) of different sizes
- You measure: pressure change over fixed distances, read/calibrate flow rates
- You can vary: Flow rates and can select different pipes
- Main results: f - Re diagram (all data on one or two plots, with error bars), compared to expected theory/correlation; determination of scaling of “losses” for some fittings, viscosity of the oil (if we can’t get a separate measurement of this)

