TOPIC

Fluids – Section X – Question 10

QUESTION

It is desired to transport 1 kg/s of a viscous liquid ($\mu = 0.01$ kg/m s, $\rho = 950$ kg/m³) from one location to another through a round pipe. To not mechanically degrade the fluid, it is desirable to maintain the flow as laminar. In order not to exceed a Reynolds number of 2000, the minimum pipe diameter (m) is most nearly

(A)0.020

(B) 0.064

(C) 0.24

(D)2.2

CONTRIBUTOR

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