Answer on Question #72318-Physics-Other

A tuning fork, frequency 385/sec produces resource with a closed tube 20cm long and 4cm in diameter what is the speed of sound?

Solution

The wavelength is

$$\lambda = 4L.$$

The speed of sound is

$$v = f\lambda = 4Lf = 4(0.2)(385) = 308\frac{m}{s}.$$

Answer: $308\frac{m}{s}$.