

Homework Problem H15.A

Given: A flotation device is made up of two hollow cylindrical bodies joined together along a common longitudinal axis. A cable attached the device to the bottom of the water container. The water in which the float is placed has a mass density of ρ . The weight of the flotation device is to be considered negligible compared to the water that it displaces.

Find: Determine the tension in the cable for $H = 3d$.

Leave your answer in terms of, at most: d , g and ρ .

