Homework 01

Question 01

An aluminum cylinder (E=70 GPa, ν=0.33) with outer diameter of 300 mm and inner diameter of 100 mm is to be press-fitted over a solid steel shaft (E=200 GPa, ν=0.29).
Maximum diametral interference at the interface between aluminum cylinder and steel shaft is 0.093 mm. Calculate the resulting contact pressure at the interface.