3.152 Information and assumptions

Provided in problem statement

Find

Stability

Solution

$$GM = I_{00}/\forall - CG$$
$$= \left(3H\left(2H\right)^3 \big/ \left(12 \times H \times 2H \times 3H\right)\right) - H/2$$
$$= -H/6$$

Not stable about longitudinal axis

$$GM = I_{00}/\forall - CG$$
$$= \left(2H\left(3H\right)^3 \big/ \left(12 \times H \times 2H \times 3H\right)\right) - H/2$$
$$= H/4$$

Stable about transverse axis

Not stable.