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Single shear Example 1

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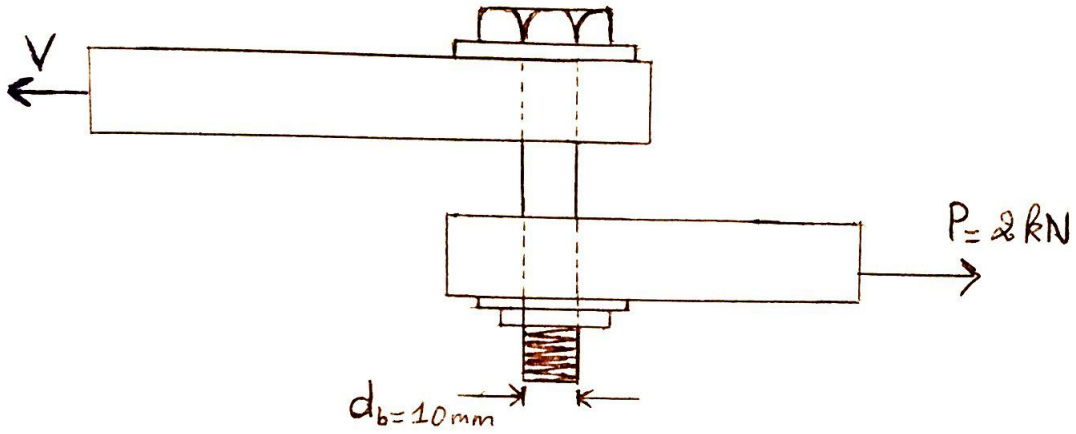

$$A_b = \frac{\pi}{4}(d_b)^2 = \frac{\pi}{4}(0.010m)^2 = 7.854 * 10^{-15}\ m^2$$

$$\pm\rightarrow \sum F_x = 0 \Rightarrow P = V = 2\ kN$$

$$\tau_{allow} = \frac{V}{A_b}$$

$$= \frac{2\ kN}{(7.854 * 10^{-15}\ m^2)}$$

$$= 25,464.79\ kPa$$

$$\tau_{allow} = 25.5\ MPa$$