



ASSUMING F IS THE EXTERNAL FORCE ACTING CENTRALLY BETWEEN THE BOLTS AND PARALLEL TO THE CABLES/PIPE.

I WOULD PROCEED AS FOLLOWS:-

$$F \times a = 2\mu x^2$$

2 BOLTS

ASSUME $F = 20\text{N}$

$a = 25\text{mm}$

$c = 8\text{mm}$

$$20 \times 25 = 2\mu \times 8^2$$

$$\therefore \mu = \frac{20 \times 25}{128} = \frac{500}{128} = 3.9$$

MAY BOLT LOAD DUE TO MOMENT = $8\text{mm} \times 3.9 = \underline{\underline{31.25\text{N}}}$

~~MAX BOLT LOAD~~
~~ON BOLT~~
~~DUE TO~~

μ = LOAD ON BOLT DUE TO APPLIED MOMENT AT UNIT DISTANCE FROM EDGE 'P'