Pressure after throttling = 7.27 bar = 0.727 MN/m²

Pressure before throttling = 6.33 × 10³ N/m

From Steam Tables

h_f and h_{fg} at 0.633 MN/m²

$h_f = 670.4$ KS/kg $\quad h_{fg} = 2085$ KS/kg

$h_1 = h_f + x h_{fg} = 670.4 + 0.867(2085)$

$h_1 = 2478.1$ KS/kg $= h_2$

From Tables ~~$h_f = h_2$~~ 27 kN/m²

$h_f = 163.4$ $\quad h_{fg} = 2409.2$

$$x_2 = \frac{h_2 - h_f}{h_{fg}} = \frac{2478.1 - 163.4}{2409.2} = 0.961$$

$$x = x_1 \cdot x_2 = (0.78)(0.961)$$

$$x = \underline{0.75}$$