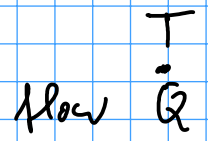


Connector Heat Port:



Heat Capacitor:

$$dQ = \frac{mc_p dT}{C} \quad | : dt$$

$$\dot{Q} = C \cdot \dot{T}$$

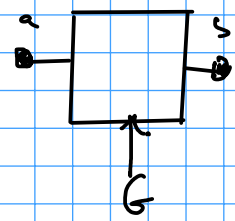
Thermal Conductor

$$\dot{Q}_a + \dot{Q}_b = 0$$

$$\dot{Q} = \frac{1}{R_{th} G} (T_a - T_b)$$

Convection:

wie Thermal Conductor, aber G ist T -abhängig

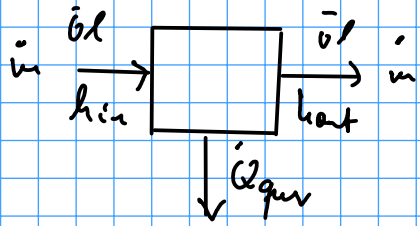


Body Radiation:

$$\dot{Q} = G_r \sigma (T_a^4 - T_b^4)$$

Festlegung der Temperatur bzw. des Wärmestrom

Modellieren der Längs-Strömung



$$\dot{H} = \dot{Q}_{\text{gew}} + \underbrace{\dot{m} h_{\text{in}} - \dot{m} h_{\text{out}}}$$

$$\underbrace{\dot{m} c_p (T_{\text{in}} - T_{\text{out}})} \hat{=} \dot{G} (T_{\text{in}} - T_{\text{out}})$$

ÖR - Ausdrucksparameter:

Separkolon 315 K

Mischkon 320 K