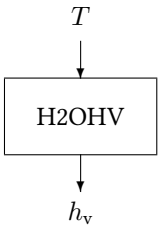
Block H2OHV

The H2OHV block calculates the enthalpy of water vapor as a function of temperature.





Name	H2OHV
Function	st0010
Inputs	1
Outputs	1
Parameters	0
Strings	0
Group	S

Inputs

1 Temperature T / °C

Outputs

1 Enthaply of water vapor h_v / kJ kg^{-1}

Parameters

None

Strings

None

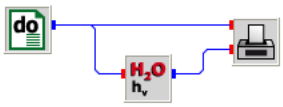
Description

The enthalpy of water vapor h_v is calculated after the empirical correlation

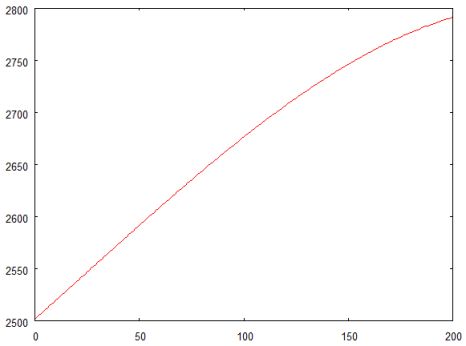
$$h_v = 2501.482 + 1.789736\,T + 8.957546 \cdot 10^{-4}\,T^2 - 1.300254 \cdot 10^{-5}\,T^3$$

The correlation is accurate within ± 0.04 % for a temperature range between 0 °C and 200 °C.

h2ohv.vseit



The PLOT block displays the enthalpy of water vapor as a function of temperature which is varied between 0 and 200 °C in steps of 1 °C, as defined through a DO block.



See also

Blocks H2OHE and H2OHL.