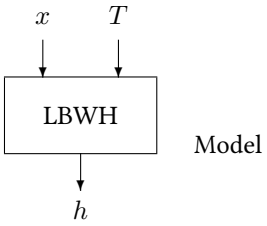
Block LBWH

The LBWH block returns the enthalpy of a lithium-bromide-water dilution as a function of concentration and temperature.





Model

Name	LBWH
Function	st0025
Inputs	2
Outputs	1
Parameters	2
Strings	0
Group	S

Inputs

1 Lithium-bromide concentration x / kg LiBr kg^{-1} H_2O
2 Temperature T / °C

Outputs

1 Enthaply of lithium-bromide-water dilution h / kJ kg^{-1}

Parameters

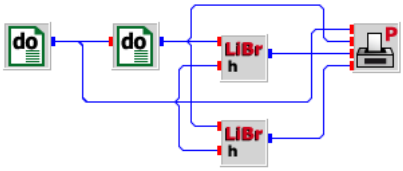
1 Model
- 0 Mc Neely 1979
- 1 Kaita 1991

2 Outside-range value. If set to zero ($|\text{PARAMS}(2)| < 10^{-5}$) data are extrapolated.

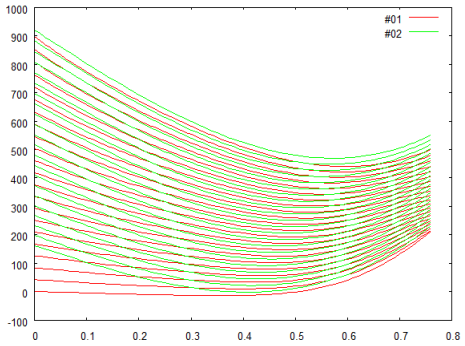
Strings

None

lbwh.vseit



The enthalpy of lithium-bromide-water dilution is calculated after two different approximations and plotted by a PLOTP block as a function of concentration and temperature (McNeely: red, Kaita: green).



The concentration and temperature are varied by two nested DO blocks between 0 and 210 °C in steps of 10 °C (outer block) and 0 and 0.76 kg LiBr per kg water in steps of 0.01 (inner block).