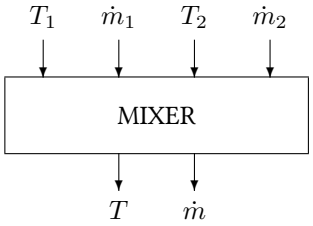
Block MIXER

The MIXER block simulates a mixing valve for two fluids of different temperature and mass flow but with the same specific heat capacity.





Name	MIXER
Function	st0034
Inputs	4
Outputs	2
Parameters	0
Strings	0
Group	S

Inputs

1	Temperature fluid 1 / °C
2	Mass flow fluid 1 / kg s^{-1}
3	Temperature fluid 2 / °C
4	Mass flow fluid 2 / kg s^{-1}

Outputs

1	Mixed temperature / °C
2	Total mass flow / kg s^{-1}

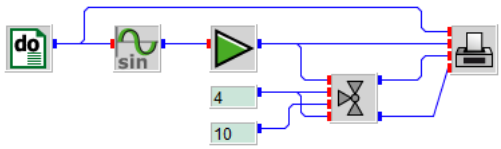
Parameters

None

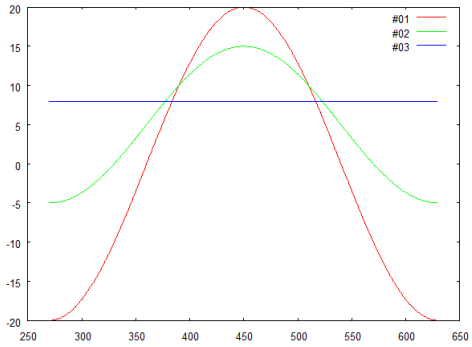
Strings

None

mixer.vseit



Two fluids at a constant mass flow of 4 kg/s each are mixed by a MIXER block. While the one is held constant at 10 °C the other follows a sine wave between −20 and +20 °C. The result can be observed by the PLOT block.



The total mass flow is 8 kg/s, of course.