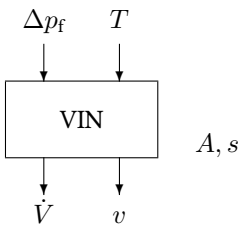


Block VIN

The VIN block calculates the volume flow from free space into a channel or tube.



Name	VIN
Function	st0019
Inputs	2
Outputs	2
Parameters	2
Strings	0
Group	S

Inputs

- 1 Pressure drop Δp_f / Pa
- 2 Air temperature T / °C

Outputs

- 1 Volume flow $\dot{V}$ / m³ h⁻¹
- 2 Flow velocity v / m s⁻¹

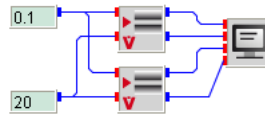
Parameters

- 1 Channel area A / m²
- 2 Edge sharpness s
 - 0 Sharp edge
 - 1 Broken edge
 - 2 Round edge
 - 3 Smooth, round edge

Strings

None

vin.vseit



Two different channel inlets with an area of 1 m^2 each, the upper one with a sharp edge, the lower one with a broken edge are simulated for a pressure drop of 0.1 Pa and an air temperature of $20 \text{ }^\circ\text{C}$, as defined by two **CONST** blocks.

The resulting volue flows and flow velocities are displayed by a **SCREEN** block.

2496.5774	0.69349372	4453.3076	1.2370299
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