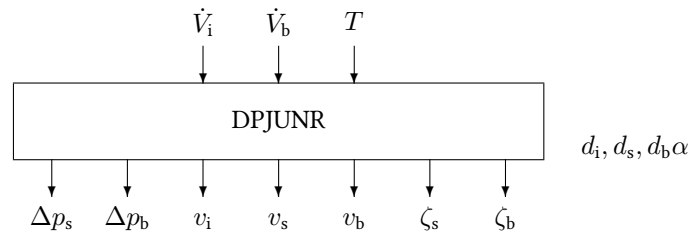


Block DPJUNR

The DPJUNR block calculates the pressure drop of a round junction.



Name	DPJUNR
Function	st0023
Inputs	3
Outputs	3
Parameters	4
Strings	0
Group	S

Inputs

- 1 Inlet volume flow $\dot{V}_i / \text{m}^3 \text{h}^{-1}$
- 2 Branch volume flow $\dot{V}_b / \text{m}^3 \text{h}^{-1}$
- 3 Air temperature $T / ^\circ\text{C}$

Outputs

- 1 Pressure drop $\Delta p_s / \text{Pa}$
- 2 Pressure drop $\Delta p_b / \text{Pa}$
- 3 Flow velocity $v_i / \text{m s}^{-1}$
- 4 Flow velocity $v_s / \text{m s}^{-1}$
- 5 Flow velocity $v_b / \text{m s}^{-1}$
- 6 Zeta value ζ_s
- 7 Zeta value ζ_b

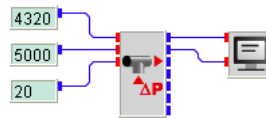
Parameters

- 1 Inlet tube diameter d_i / m
- 2 Straight tube diameter d_s / m
- 3 Branch tube diameter d_b / m
- 4 Branch angle $\alpha / ^\circ$

Strings

None

dpjunr.vseit



A round junction with inlet and straight tube diameter 0.9098 m and a branch tube diameter of 0.2764 m is simulated for an inlet volume flow of 4320 m³/h and a branch volume flow of 5000 m³/h of air at a temperature of 20 °C, as defined through three [CONST](#) blocks.

The resulting pressure drops in Pascal are displayed by a [SCREEN](#) block.

98.187 261.715