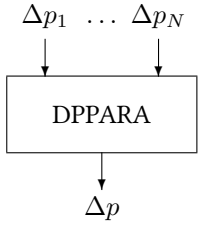
Block DPPARA

The DPPARA block calculates the pressure drop of channels connected in parallel.





Name	DPPARA
Function	st0024
Inputs	2 . . . [10]
Outputs	1
Parameters	0
Strings	0
Group	S

Inputs

1	Pressure drop of channel 1 Δp_1 / Pa
2	Pressure drop of channel 2 Δp_2 / Pa
N	Pressure drop of channel N Δp_N / Pa

Outputs

1	Overall pressure drop Δp / Pa

Parameters

None

Strings

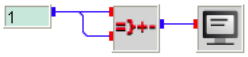
None

Description

The overall pressure drop Δp is calculated from the parallel connected input pressure drops $\Delta p_1, \Delta p_2, \ldots \Delta p_N$ by

$$\frac{1}{\Delta p} = \sum_{i=1}^{N} \frac{1}{\Delta p_i}$$

dppara.vseit



The most trivial application of the DPPARA block is that two channels with a pressure drop of 1 Pa each are connected in parallel so that the resulting pressure drop becomes 0.5 Pa as displayed by the SCREEN block.

```
0.50
```