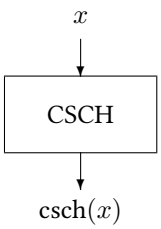
Block CSCH

The CSCH block returns the hyperbolic cosecant of its input.





Name	CSCH
Function	fb0068
Inputs	1
Outputs	1
Parameters	0
Strings	0
Group	S

Inputs

1 Any signal x

Outputs

1 Hyperbolic cosecant

Parameters

None

Strings

None

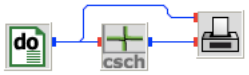
Description

The hyperbolic cosecant is defined as

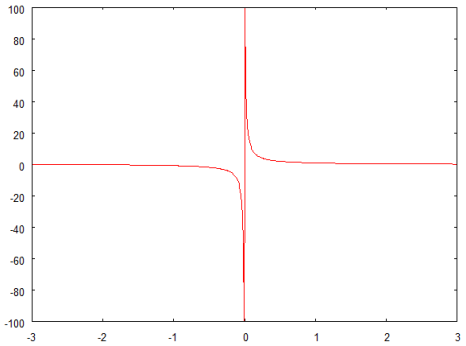
$$\text{csch}(x) = \frac{2}{\exp(x) - \exp(-x)}$$

In order to avoid division by zero, csch(x) is set to zero for $|x| < 10^{-5}$.

csch.vseit



A DO block varies x from -3 to 3 in steps of 0.01. The CSCH block calculates csch(x) and the PLOT block displays the graph on screen.



See also Blocks COSH, COTH, SCH, SINH, TANH.