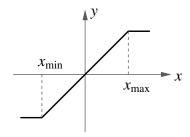# limiter.xbe

Attributes

```
xbe name=limiter evaluate=yes
Jacobian: variable
input_vars: x
output_vars: y
aux_vars:
iparms:
sparms:
rparms: xmin=-1 xmax=1
stparms:
igparms:
outparms: x y
```

Description

`limiter.xbe` limits the value of the output variable `y` if the input variable `x` is outside a certain range. Specifically,

$$y \quad = \text{xmin} \qquad \text{if } \text{x} < \text{xmin},$$
$$\quad = \text{xmax} \qquad \text{if } \text{x} > \text{xmax},$$
$$\quad = \text{x} \qquad \text{otherwise}.$$

The input-output relation is shown in the figure.