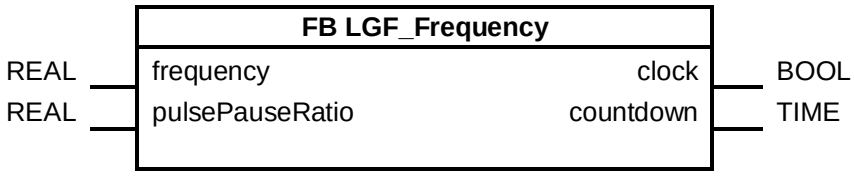
LGF_Frequency

Short description

The block generates a signal that changes between the values “0” and “1” depending on a defined frequency and a pulse pause ratio.

Block



Input parameters

Parameters	Data type	Description
frequency	REAL	Clock frequency in Hz
pulsePauseRatio	REAL	Pulse pause ratio (standard: 1.0 corresponds to 1:1)

Output parameters

Parameters	Data type	Description
clock	BOOL	Output changes with defined frequency
countdown	TIME	Remaining time of the current “clock” state

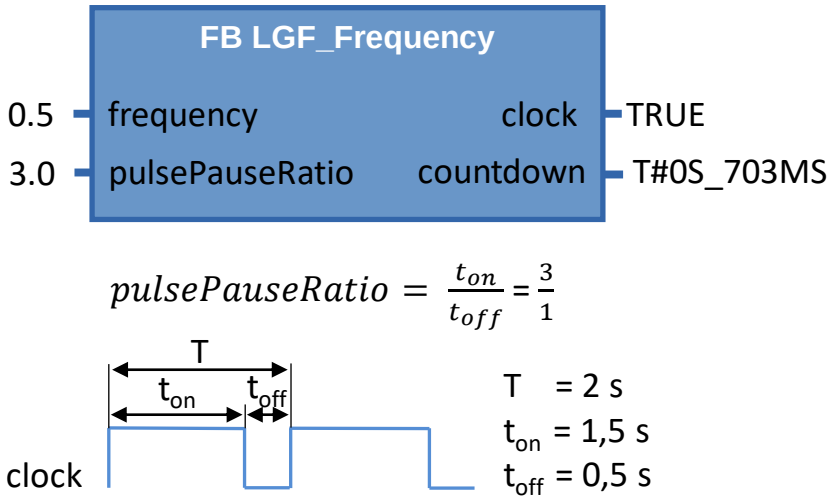
Principle of operation

The “clock” output is a boolean value that toggles at the desired frequency. The “pulsePauseRatio” input is used to set the pulse pause ratio.

The output “countdown” outputs the remaining time of the current state of “clock”.

If the desired frequency or pulse pause ratio is less than or equal to “0.0”, the output “clock” = FALSE and “countdown” = “0 s”.

Example



Note

The “clock” of the FB LGF_Frequency depends on the cycle time of the OB Main. To increase the accuracy, the FB can also be called in a cyclic interrupt OB with a low time interval.

Further information on libraries in TIA Portal:

- Topic page libraries
  https://support.industry.siemens.com/cs/ww/en/view/109738702
- Guideline on Library Handling
  https://support.industry.siemens.com/cs/ww/en/view/109747503
- Programming Guideline for S7-1200/1500 in chapter “Libraries”
  https://support.industry.siemens.com/cs/ww/en/view/81318674
- Programming Styleguide
  https://support.industry.siemens.com/cs/ww/en/view/81318674