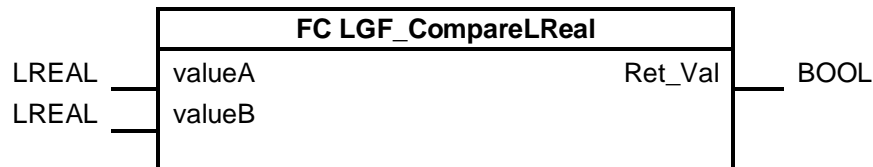


LGF_CompareLReal

Short description

This function checks two LREAL numbers for equality using an approximation formula.

Block



Input parameters

Parameters	Data type	Description
valueA	LREAL	First LREAL number to be compared.
valueB	LREAL	Second LREAL number to be compared.

Output parameters

Parameters	Data type	Description
Ret_Val	BOOL	FALSE: not the same TRUE: same

Principle of operation

The comparison of the LREAL numbers is based on an accuracy of 1.0E-12. The difference between the two input values must be smaller than the “PRECISION” accuracy multiplied by one of the two input values.

Note

If your application requires a different accuracy when comparing the numbers, adapt the “PRECISION” constant in the function to your requirements.

Or you may use the FC LGF_CompareLRealByPrecision.

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>