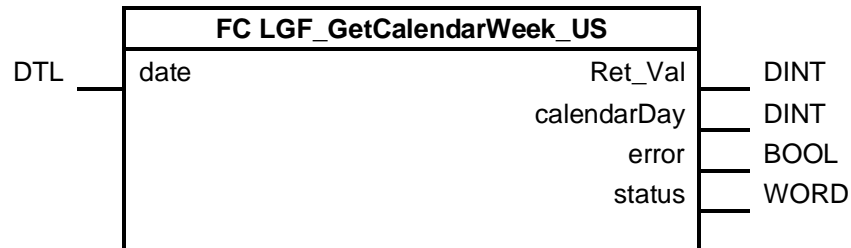# LGF_GetCalendarWeek_US

Short description

This function uses the specified date to calculate the calendar week and the number of days that have passed since the beginning of the year for the USA and many other countries.

Block

```
                    ┌─────────────────────────────────┐
                    │   FC LGF_GetCalendarWeek_US     │
          DTL ──────┤ date                  Ret_Val   ├────── DINT
                    │                    calendarDay   ├────── DINT
                    │                          error   ├────── BOOL
                    │                         status   ├────── WORD
                    │                                 │
                    └─────────────────────────────────┘
```

Input parameters

Parameters	Data type	Description
inDate	DTL	Date used to calculate the calendar week and days since 1 January.

Output parameters

Parameters	Data type	Description
Ret_Val	DINT	Number of the calendar week.
calendarDay	DINT	Days past since January 1st.
error	BOOL	Error display. FALSE: no error. TRUE: Error in block, "status" outputs error code.
status	WORD	"status" outputs the status/error code (see Table below).

Status and error displays

Status	Meaning	Remedy
16#0000	No error.	-
16#8201	Date on input "inDate" below the lower limit. "status" is passed by LGF_GetCalendarDay and is not declared in the function.	Select "inDate" greater than 1971-01-01.

Counting method for the USA and many other countries

- Calendar weeks have 7 days, start on a Sunday and are counted continuously throughout the year
- Calendar week 1 of a year is the week that contains January 1.
- Each year has either 52 or 53 calendar weeks.
- A year has 53 calendar weeks if the following characteristics apply:
  - A common year begins on a Saturday and ends on a Saturday.
  - A leap year begins either on a Saturday and ends on a Sunday or it begins on a Friday and ends on a Saturday.
- The days after the last Saturday in December can belong to the first calendar week of the following year.

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