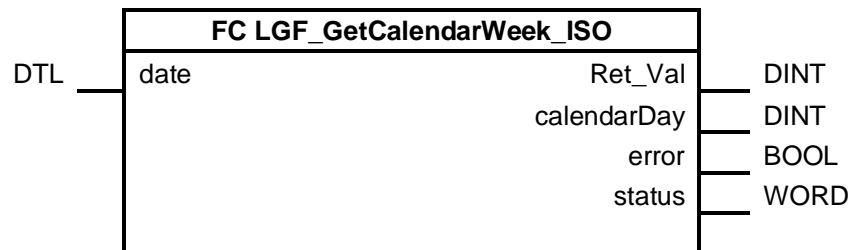## LGF_GetCalendarWeek_ISO

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 ISO 8601 European countries.

Block

```
              ┌──────────────────────────────────────┐
              │      FC LGF_GetCalendarWeek_ISO       │
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 European countries in accordance with ISO 8601

- Calendar weeks have 7 days, start on a Monday, and they are counted continuously throughout the year
- Calendar week 1 of a year is the week that contains the first Thursday.
- 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 Thursday and ends on a Thursday.
  - A leap year begins either on a Wednesday and ends on a Thursday or it begins on a Thursday and ends on a Friday.
- The 29th, 30th and 31st December can belong to the calendar week 1 of the following year.
- The 1st, 2nd, and 3rd January can still belong to the last calendar week of the previous 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