

# Long counter

## OUT LC

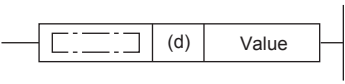
FX5S

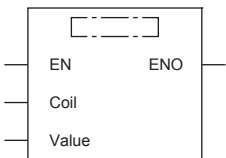
FX5UJ

FX5U

FX5UC

This instruction increments the current value of the long counter specified by (d) by 1 when the operation result up to the OUT instruction changes from OFF to ON, and when the counter reaches the end of its count, NO contact becomes conductive and NC contact becomes non-conductive.

| Ladder diagram  | Structured text                       |
|---|---------------------------------------|
|  <p>Value: Set value</p> | <pre>ENO:=OUT_C(EN,Coil,Value);</pre> |

| FBD/LD   |
|--|
|  <p>("OUT_C" enters □.)</p> |

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## Setting data

### ■Descriptions, ranges, and data types

| Operand                   | Description            | Range           | Data type              | Data type (label)     |
|---------------------------|------------------------|-----------------|------------------------|-----------------------|
| (d) <sup>*1</sup>         | Long counter number    | —               | Long counter           | ANY <sup>*3</sup>     |
| (Set value) <sup>*2</sup> | Long counter set value | 0 to 4294967295 | 32-bit unsigned binary | ANY_INT <sup>*4</sup> |
| EN                        | Execution condition    | —               | Bit                    | BOOL                  |
| ENO                       | Execution result       | —               | Bit                    | BOOL                  |

\*1 In the case of the ST language and the FBD/LD language, d displays as Coil.

\*2 In the case of the ST language and the FBD/LD language, Set value displays as Value.

\*3 Only long counter type label can be used.

\*4 Digit specified bit type label cannot be used.


### ■Applicable devices

| Operand     | Bit                         | Word                      |       |   | Double word |    | Indirect specification | Constant        |   |    | Others |
|-------------|-----------------------------|---------------------------|-------|---|-------------|----|------------------------|-----------------|---|----|--------|
|             | X, Y, M, L, SM, F, B, SB, S | T, ST, C, D, W, SD, SW, R | U□\G□ | Z | LC          | LZ |                        | K, H            | E | \$ |        |
| (d)         | —                           | —                         | —     | — | ○           | —  | —                      | —               | — | —  | —      |
| (Set value) | —                           | ○ <sup>*1</sup>           | ○     | — | —           | —  | —                      | ○ <sup>*2</sup> | — | —  | —      |

\*1 T, ST, and C cannot be used.

\*2 Only decimal constant (K) can be used.

## Processing details

- This instruction increments the current value of the long counter specified by (d) by 1 when the operation result up to the OUT instruction changes from OFF to ON, and when the counter reaches the end of its count (current value  $\geq$  set value), NO contact becomes conductive and NC contact becomes non-conductive.
- The counter does not count while the operation result remains on. (Count input does not need to be converted to pulses.)
- After a count up, the count value and contact status do not change until the RST or ZRST instruction is executed.
- When the set value is 0, the same processing as for set value 1 is performed.
- When signed (-2147483648 to + 2147483647) or high speed counter is assigned to the LC, the UDCNTF instruction is used. For the UDCNTF instruction, refer to  Page 774 UDCNTF.

## Operation error

| Error code<br>(SD0/SD8067) | Description  |
|----------------------------|--|
| 2821H                      | When the high speed counter is assigned to the specification long counter. |