

# Rising edge output

## PLS

FX5S FX5UJ FX5U FX5UC

This instruction turns ON the device specified by (d) for one scan when the PLS command turns from OFF to ON, and turns OFF in other cases.

| Ladder diagram | Structured text |
|----------------|-----------------|
|                | ENO:=PLS(EN,d); |

| FBD/LD |
|--------|
|        |

## Setting data

### ■Descriptions, ranges, and data types

| Operand | Description                     | Range | Data type | Data type (label) |
|---------|---------------------------------|-------|-----------|-------------------|
| (d)     | Device to be converted to pulse | —     | Bit       | ANY_BOOL          |
| EN      | Execution condition             | —     | Bit       | BOOL              |
| ENO     | Execution result                | —     | Bit       | BOOL              |

### ■Applicable devices

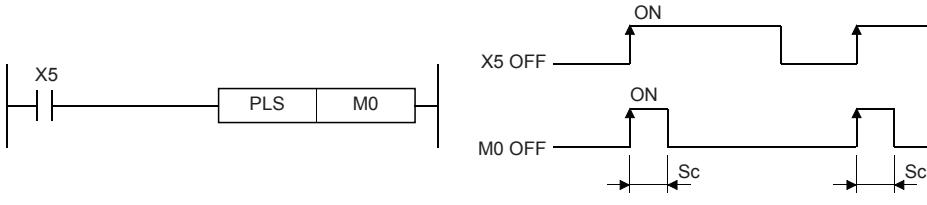
| Operand | Bit | Word                        |                           |       | Double word |    | Indirect specification | Constant |   |    | Others (DY) |
|---------|-----|-----------------------------|---------------------------|-------|-------------|----|------------------------|----------|---|----|-------------|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

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

\*2 Only the FX5 intelligent function module can be used.

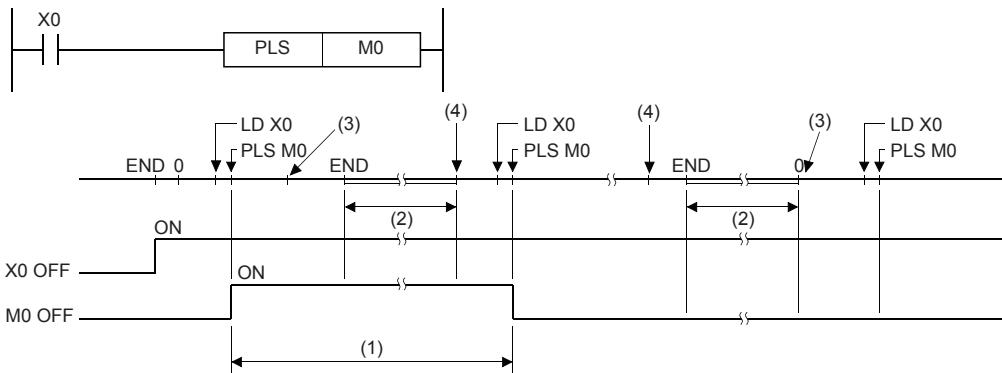
## Processing details

- This instruction turns ON the specified device for one scan when the PLS command turns from OFF to ON, and turns OFF in other cases. When there is one PLS instruction programmed for the device specified by (d) during a scan, the specified device turns ON for one scan.



Sc: 1 scan

- If the RUN/STOP/RESET switch is changed from RUN to STOP after execution of the PLS instruction, the PLS instruction will not be executed even if the switch is set to RUN again.



- (1) 1 scan of PLS M0  
(2) CPU module operation stop time  
(3) Set the RUN/STOP/RESET switch on the CPU module to RUN→STOP.  
(4) Set the RUN/STOP/RESET switch on the CPU module to STOP→RUN.

## Precautions

- When write during RUN is completed for a circuit including a rising edge instruction (LDP/ANDP/ORP instruction), the instruction is not executed regardless of the ON/OFF status of the target device of the rising edge instruction. Also, in the case of a rising edge instruction (PLS instruction), the instruction is not executed regardless of the ON/OFF status of the device that is set as the operation condition. The instruction is executed when the target device and the device in the operation conditions is set from OFF to ON again.
- Note that the device specified by (d) sometimes turns ON for one scan or more when the PLS instruction is made to jump by the CJ instruction or the executed subroutine program was not called by the CALL(P) instruction.

## Program example

Timing chart



In the figure above, M0 is ON during only one operation cycle when X0 changes from OFF to ON.

## Operation error

There is no operation error.