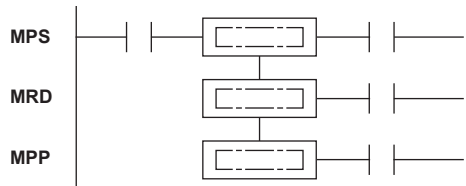# Storing/reading/clearing the operation result
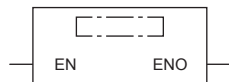
MPS, MRD, MPP

FX5S **FX5UJ** **FX5U** **FX5UC**

- MPS: This instruction stores the preceding operation result (ON/OFF) to memory.
- MRD, MPP: These instructions read the operation result stored by the MPS instruction, and executes operations from the next step using that operation result.

Ladder diagram	Structured text
MPS MRD MPP	ENO:=MPS(EN); ENO:=MRD(EN); ENO:=MPP(EN);

FBD/LD
EN   ENO

Processing details

■MPS
- This instruction stores the preceding operation result (ON/OFF) to memory.
- This instruction can be used up to 16 times consecutively. When MPP instruction is used in between, the number of uses of MPS instruction is decremented by 1.
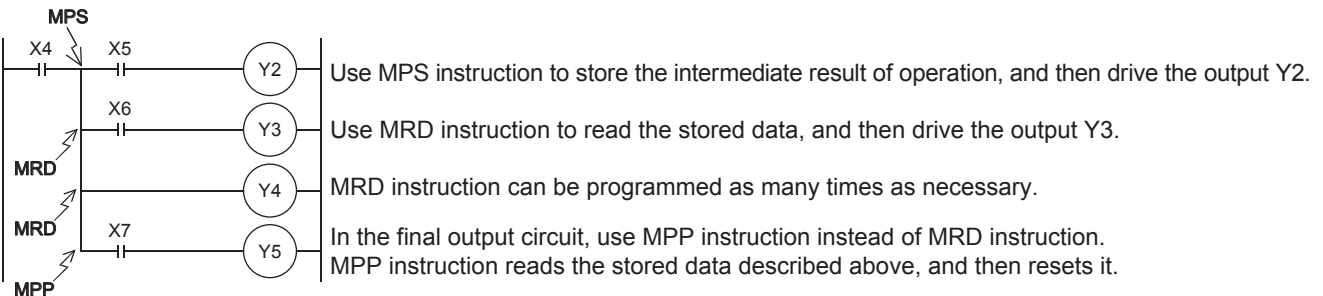
■MRD
- This instruction reads the operation result stored by the MPS instruction to memory, and executes operations from the next step using that operation result.

■MPP
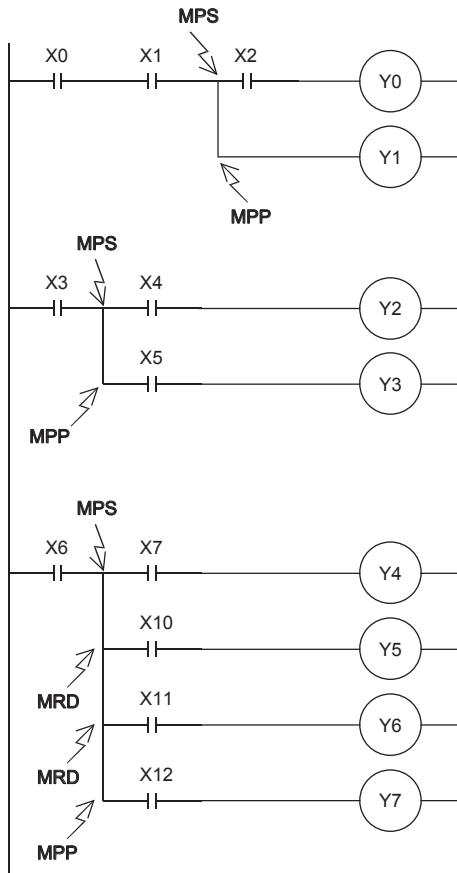- This instruction reads the operation result stored by the MPS instruction to memory, and executes operations from the next step using that operation result.
- This instruction clears the operation result stored by the MPS instruction from memory.
- The number of uses of MPS instruction is decremented by 1.

Ex.

Use MPS instruction to store the intermediate result of operation, and then drive the output Y2.

Use MRD instruction to read the stored data, and then drive the output Y3.

MRD instruction can be programmed as many times as necessary.

In the final output circuit, use MPP instruction instead of MRD instruction.
MPP instruction reads the stored data described above, and then resets it.
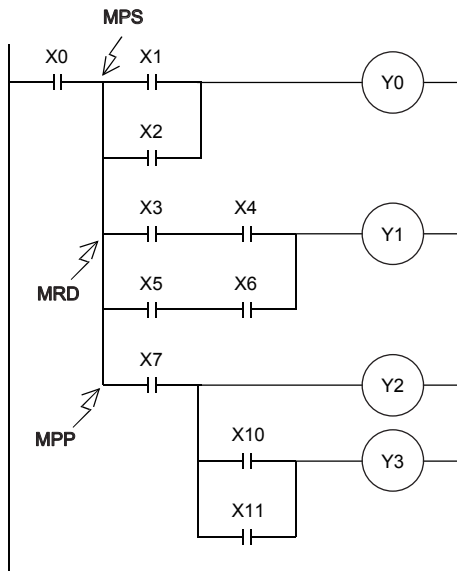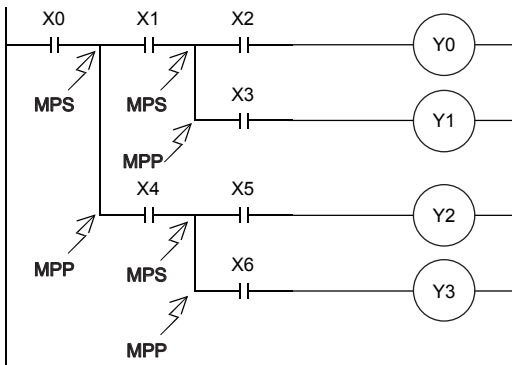
Program example

• Continuous use of MPS instruction - once

Only one stack is used in this example.

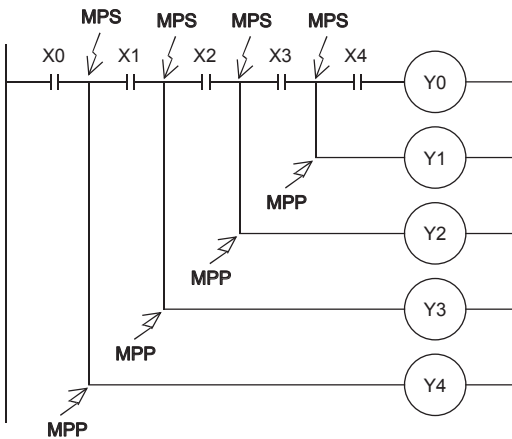• Continuous use of MPS instruction - once (both ANB and ORB used)
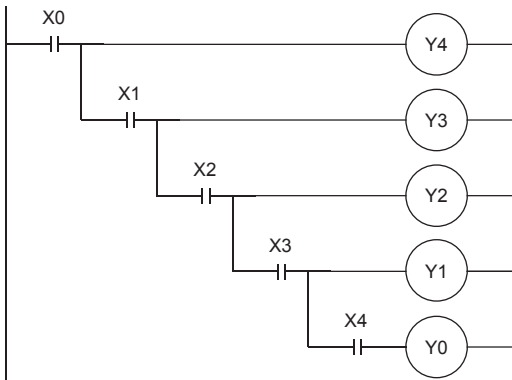
• Continuous use of MPS instruction - twice

• Continuous use of MPS instruction - four times

MPS instruction is used three times in programming.

By changing the circuit as follows, the same contents can be programmed easily without MPS instruction.

Operation error

There is no operation error.