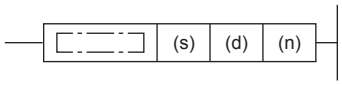
Writing data to the data table

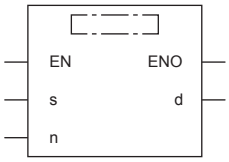
SFWR(P)

FX5S FX5UJ FX5U FX5UC

These instructions write data for first-in first-out (FIFO) and last-in first-out (LIFO) control.

Ladder diagram	Structured text
	ENO:=SFWR(EN,s,n,d); ENO:=SFWRP(EN,s,n,d);

FBD/LD



Setting data

■Descriptions, ranges, and data types

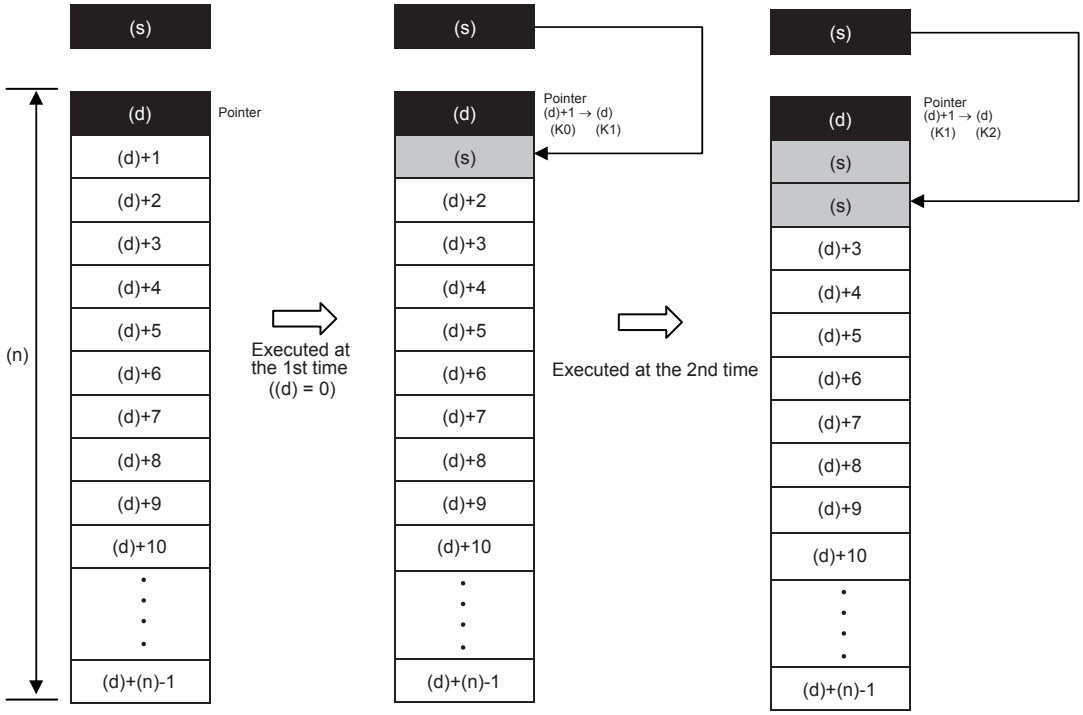
Operand	Description	Range	Data type	Data type (label)
(s)	Word device number storing data to be put in first	—	16-bit signed binary	ANY16
(d)	Start word device number storing and shifting data (The start is a pointer. The data is stored starting from (d)+1.)	—	16-bit signed binary	ANY16
(n)	Number of stored points plus "1".	2 to 32768	16-bit unsigned binary	ANY16_U
EN	Execution condition	—	Bit	BOOL
ENO	Execution result	—	Bit	BOOL

■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	$	
(s)	○	○	○	○	—	—	○	○	—	—	—
(d)	○	○	○	○	—	—	○	—	—	—	—
(n)	○	○	○	○	—	—	○	○	—	—	—

Processing details

- The contents of (s) are written to "(n)-1" devices from (d)+1, and "1" is added to the number of data stored in (d). For example, for (d)=0, the contents are written to (d)+1, and for (d)=1, to (d)+2.



- At the first execution, the contents of (s) are stored in (d)+1.
- When the contents of (s) are changed and then the instruction is executed again, the new contents of (s) are stored to (d)+2. So the contents of +2 become equivalent to (s). (When the continuous operation type SFWR instruction is used, the contents are stored in each operation cycle. Use the pulse operation type SFWRP instruction in programming.) Data is stored from the right end in the same way, and the number of stored data is specified by the contents of the pointer (d).

Precautions

- In the case of the continuous operation type instruction (SFWR), note that data is stored (overwritten) in every scan time (operation cycle).

Program example

For a program example, refer to ☞ Page 468 Reading the oldest data from the data table.

Operation error

Error code (SD0/SD8067)	Description
2820H	The number of device points (n) from (d) exceeds the device range.
3405H	The value set in (n) is other than the following. 2≤(n)≤32768
	In (d), a negative value is specified.