

# Shifting n-bit(s) data to the right by (n) bit(s)

## SFTR(P)

FX5S

FX5UJ

FX5U

FX5UC

These instructions shift (n1) bits of data to the right by (n2) bit(s) from the device specified by (d).

Ladder diagram	Structured text
	<pre>ENO:=SFTR(EN,s,n1,n2,d); ENO:=SFTRP(EN,s,n1,n2,d);</pre>
FBD/LD	

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## Setting data

### ■Descriptions, ranges, and data types

Operand	Description	Range	Data type	Data type (label)
(s)	Head device number stored to the shift data after the shift	—	Bit	ANY_BOOL
(d)	Head device number to be shifted	—	Bit	ANY_BOOL
(n1)*1	Data length of shift data	0 to 65535	16-bit unsigned binary	ANY16_U
(n2)*1	Number of shifts	0 to 65535	16-bit unsigned binary	ANY16_U
EN	Execution condition	—	Bit	BOOL
ENO	Execution result	—	Bit	BOOL

\*1 Set so that  $n2 \leq n1$ .

### ■Applicable devices

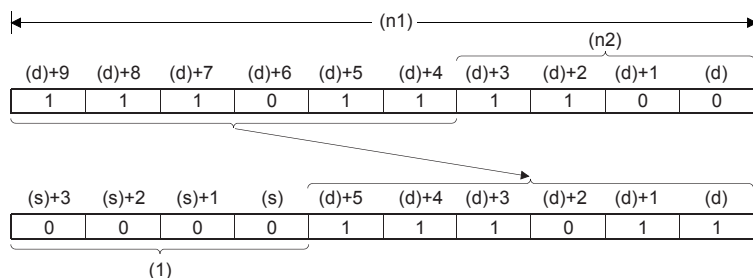
Operand	Bit	Word			Double word		Indirect specification	Constant			Others
	X, Y, M, L, SM, F, B, SB, S	T, ST, C, D, W, SD, SW, R	U□\G□	Z	LC	LZ		K, H	E	\$	
(s)	○	○*1	—	—	—	—	—	○*2	—	—	—
(d)	○	○*1	—	—	—	—	—	—	—	—	—
(n1)	○	○	○	○	—	—	○	○	—	—	—
(n2)	○	○	○	○	—	—	○	○	—	—	—

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

\*2 Only 0 or 1 can be used.

## Processing details

- These instructions shift (n1) bits of data to the right by (n2) bit(s) from the device specified by (d). After the shift, (n2) points from (s) are set into (n2) points from (d)+(n1-n2).
- When K0 is specified for (s), set 0s for (n2) points of bits from (d)+(n1-n2) after the shift.
- When K1 is specified for (s), set 1s for (n2) points of bits from (d)+(n1-n2) after the shift.



(1): When (s)=K0, it is 0.

## Operation error

Error code (SD0/SD8067)	Description
2820H	The (n2) points of data starting from the device specified by (s) exceed in the corresponding device.
	The (n1) points of data starting from the device specified by (d) exceed in the corresponding device.
2821H	The transfer source data (s) overlaps with shift device (d).
3405H	A constant other than K0 or K1 is specified when the constant (s) is specified.
	The values specified in (n1) and (n2) are such that (n1)<(n2).