Transferring Unicode string data

$MOV(P)_WS

FX5S   FX5UJ   FX5U   FX5UC

These instructions transfer Unicode string data to the specified device number and later.

Ladder	ST
(s) (d)	ENO:=STRINGMOV_WS(EN,s,d); ENO:=STRINGMOVP_WS(EN,s,d);

FBD/LD
EN   ENO s   d

(□ is replaced by STRINGMOV_WS or STRINGMOVP_WS.)

Setting data

■Descriptions, ranges, and data types
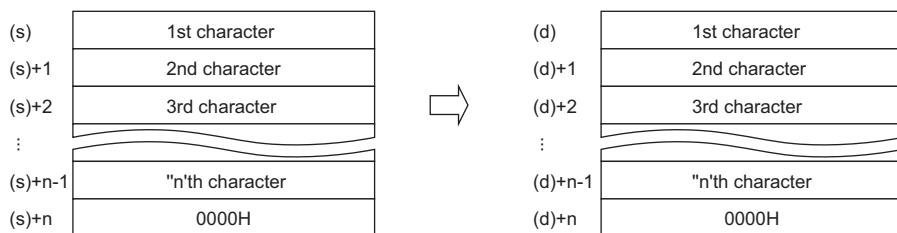
Operand	Description	Range	Data type	Data type (label)
(s)	Unicode character string to be transferred (maximum of 255 characters) or the start device containing the Unicode character string	—	Unicode string	ANYSTRING_DOUBLE
(d)	Start device for storing the transferred Unicode character string	—	Unicode string	ANYSTRING_DOUBLE
EN	Execution condition	—	Bit	BOOL
ENO	Execution result	—	Bit	BOOL

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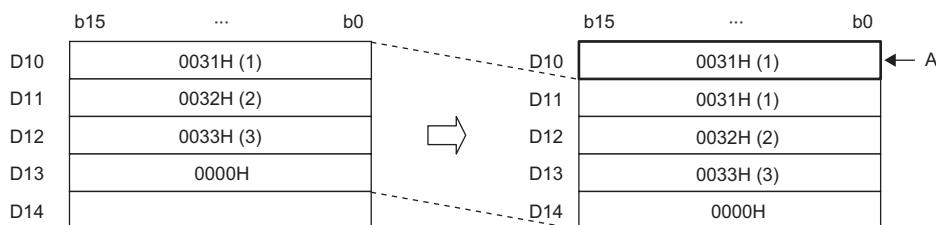
Operand	Bit	Word			Double word		Indirect specification	Constant			Others
	X, Y, M, L, SM, F, B, SB, S	T, ST, C, D, W, SD, SW, R	U□\G□	Z	LC	LZ		K, H	E	$	
(s)	—	○	—	—	○	—	○	—	—	○	—
(d)	—	○	—	—	○	—	○	—	—	—	—

Processing details

- These instructions transfer the Unicode character string data in the device specified by (s) to the device number specified by (d) and later. The Unicode character strings specified by (s) or the Unicode character strings from the device number specified by (s) to the device number containing 0000H are transferred all at once.

(s)	1st character		(d)	1st character
(s)+1	2nd character		(d)+1	2nd character
(s)+2	3rd character	⇨	(d)+2	3rd character
⋮			⋮	
(s)+n-1	"n'th character		(d)+n-1	"n'th character
(s)+n	0000H		(d)+n	0000H

- Even when the device range ((s) to (s)+n)) in which the Unicode character string data to be transferred and the device range ((d) to (d)+n) for storing the transferred data are overlapping, the processing is performed normally. For example, the character strings stored in the devices specified by D10 to D13 are transferred to the devices specified by D11 to D14 as shown below.

	b15 ··· b0			b15 ··· b0	
D10	0031H (1)		D10	0031H (1)	← A
D11	0032H (2)		D11	0031H (1)	
D12	0033H (3)	⇨	D12	0032H (2)	
D13	0000H		D13	0033H (3)	
D14			D14	0000H	

A: Same as before transfer

Precautions

- The character code of the Unicode string data specified in (s) is not judged. Even if a string other than the Unicode string has been specified in (s), the word data to up to 0000H are transferred to (d).
- When the data length of the Unicode string specified in (s) is 0, only the one character (one word) of termination NULL is written to (d)+0.

Operation error

Error code (SD0/SD8067)	Description
2820H	There is no 0000H in the setting area specified by (s) and later in the device/label memory.
3405H	The number of characters in the Unicode string specified by (s) exceeds 512.
3406H	The entire Unicode string cannot be stored in the setting area specified by (d) in the device/label memory. (The number of required points is insufficient.)