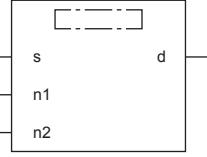
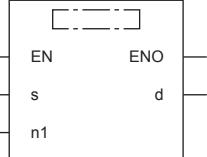


## 27.3 Extract Mid String

### MID(\_E)

**FX5S    FX5UJ    FX5U    FX5UC**

These functions output the specified number of characters from an arbitrary position of an input character string.

Ladder diagram, FBD/LD	Structured text
<p>[Without EN/ENO]</p>  <p>[With EN/ENO]</p> 	<p>[Without EN/ENO] d:=MID(s,n1,n2);</p> <p>[With EN/ENO] d:=MID_E(EN,ENO,s,n1,n2);</p>

#### Setting data

#### ■Descriptions, types, and data types

Argument	Description	Type	Data type
EN	Execution condition (TRUE: Execution, FALSE: Stop)	Input variable	BOOL
s(IN)	Input	Input variable	STRING(255)
n1(L)	Specification of number of characters to be extracted	Input variable	INT
n2(P)	Specification of head character position of a character string to be extracted	Input variable	INT
ENO	Output status (TRUE: Normal, FALSE: Abnormal)	Output variable	BOOL
d(MID_E)	Output	Output variable	STRING(255)

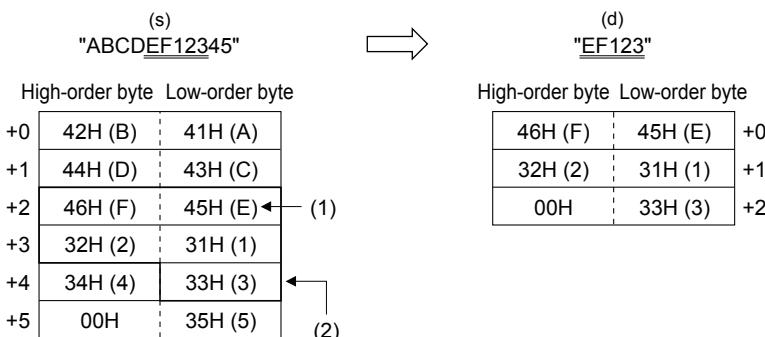
#### Processing details

#### ■Operation processing

- These functions output the data for the specified number of characters from an arbitrary position of a character string input to (s).
- The value input to (n1) specifies the number of characters to be extracted.
- The value input to (n2) specifies the number of the head character position of a character string to be extracted.

#### Ex.

When the value input to (n1) and (n2) is 5



(1): Head character position of a character string to be extracted n2: 5th character  
 (2): Number of characters to be extracted n1: 5

- A value input to (s) is the STRING type data value and within the range from 0 to 255 byte(s).
- A value input to (n1) is the INT type data value and within the range from 0 to 255. (However, the value must be within the number of characters of the character string to be input to (s).)
- A value input to (n2) is the INT type data value and within the range from 1 to 255. (However, the value must be within the number of characters of the character string to be input to (s).)

## ■Operation result

### 1. Function without EN/ENO

The following table lists the operation results.

Operation result	(d)
No operation error occurred	Operation output value
An operation error occurred	Indefinite value

### 2. Function with EN/ENO

The following table lists the execution conditions and operation results.

Execution condition	Operation result	
EN	ENO	(d)
TRUE (Executes operation)	TRUE (Operation error did not occur)	Operation output value
	FALSE (Operation error occurred) <sup>*1</sup>	Indefinite value
FALSE (Stops operation)	FALSE <sup>*1</sup>	Indefinite value

\*1 When FALSE is output from ENO, data output from (d) is undefined. In that case, modify a program so that the data output from (d) is not used.

## Operation error

Error code (SD0/SD8067)	Description
2820H	In the corresponding device range of the device specified by (s) and later, "00H" does not exist.
3405H	<p>The character string specified by (s) has more than 16383 characters.</p> <p>Data outside the allowable range was set to (n1) and (n2).</p> <ul style="list-style-type: none"> <li>• The value stored in a device specified in (n1) and (n2) is 0 or less.</li> <li>• The value stored in a device specified in (n2) is any value other than an effective value (-1, 0, 1, or more).</li> <li>• The value stored in a device specified in (n1) exceeds the number of characters of (s).</li> <li>• The total of the values stored in devices specified in (n1) and (n2) exceeds the number of characters of (s).</li> </ul>