

## Performing an XNOR operation on 16-bit data

### WXNR(P) [using two operands]

FX5S

FX5UJ

FX5U

FX5UC

These instructions exclusive NOR each bit of 16-bit binary data from the device specified by (d) and each bit of 16-bit binary data from device specified by (s), and store the results in the device specified by (d).

Ladder diagram	Structured text
	Not supported Page 302 WXNR(P) [using three operands]
FBD/LD	
Not supported. Page 302 WXNR(P) [using three operands]	

### Setting data

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

Operand	Description	Range	Data type	Data type (label)
(s)	Data for exclusive NOR or head device where data is stored	-32768 to +32767	16-bit signed binary	ANY16
(d)	Head device for storing exclusive NOR results	-32768 to +32767	16-bit signed binary	ANY16

#### ■ 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 exclusive NOR each bit of 16-bit binary data from the device specified by (d) and each bit of 16-bit binary data from device specified by (s), and store the results in the device specified by (d).

	b15	...				b8	b7	...				b0				
(d)	1	0	1	0	1	0	1	0	1	0	1	0	1	0	0	1
XNOR																
	b15	...				b8	b7	...				b0				
(s)	1	1	1	1	0	0	0	0	0	0	0	0	0	1	1	0
↓																
	b15	...				b8	b7	...				b0				
(d)	1	0	1	0	0	1	0	1	0	1	0	1	0	0	0	0

- Bit devices subsequent to number of points by digit specification are calculated as 0.

### Operation error

There is no operation error.

## WXNR(P) [using three operands]

FX5S

FX5UJ

FX5U

FX5UC

These instructions exclusive NOR each bit of 16-bit binary data from the device specified by (s1) and each bit of 16-bit binary data from device specified by (s2), and store the results in the device specified by (d).

Ladder diagram	Structured text
	<pre>ENO:=WXNR(EN,s1,s2,d); ENO:=WXNRP(EN,s1,s2,d);</pre>

FBD/LD

### Setting data

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

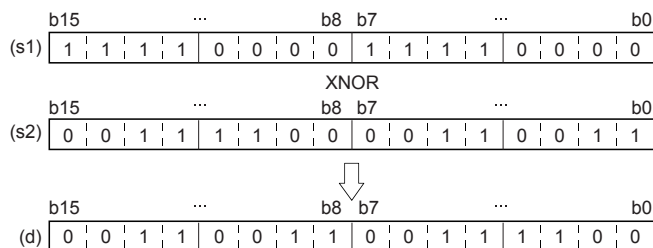
Operand	Description	Range	Data type	Data type (label)
(s1)	Data for exclusive NOR or head device where data is stored	-32768 to +32767	16-bit signed binary	ANY16
(s2)	Data for exclusive NOR or head device where data is stored	-32768 to +32767	16-bit signed binary	ANY16
(d)	Head device for storing exclusive NOR results	—	16-bit signed binary	ANY16
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	\$	
(s1)	○	○	○	○	—	—	○	○	—	—	—
(s2)	○	○	○	○	—	—	○	○	—	—	—
(d)	○	○	○	○	—	—	○	—	—	—	—

### Processing details

- These instructions exclusive NOR each bit of 16-bit binary data from the device specified by (s1) and each bit of 16-bit binary data from device specified by (s2), and store the results in the device specified by (d).



- Bit devices subsequent to number of points by digit specification are calculated as 0.

### Operation error

There is no operation error.