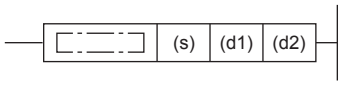
32-bit data variable speed pulse

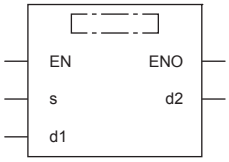
DPLSV [For the FX3 compatible operand specification]

FX5S FX5UJ FX5U FX5UC

This instruction outputs variable speed pulses with an assigned rotation direction output. Only CPU module is supported.

Ladder diagram	Structured text
	ENO:=DPLSV(EN,s,d1,d2);

FBD/LD



Setting data

■Descriptions, ranges, and data types

Operand	Description	Range	Data type	Data type (label)
(s)	Command speed	-2147483648 to +2147483647	32-bit signed binary	ANY32
(d1)	Bit device number (Y) from which pulses are output	■FX5S/FX5UJ CPU module 0 to 2 ■FX5U/FX5UC CPU module 0 to 3	Bit	ANY_ELEMENTARY (BOOL)
(d2)	Bit device number from which the rotation direction is output	—	Bit	ANY_BOOL
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)	○	○	○	○	○	○	○	○	—	—	—
(d1)	○*1	—	—	—	—	—	—	—	—	—	—
(d2)	○*2	○*3	—	—	—	—	—	—	—	—	—

*1 Only Y can be used.

*2 When the output mode is CW/CCW, specify the CCW axis. When the output mode is PULSE/SIGN and using Y, only the SIGN output or general-purpose output of the self-axis can be specified.

*3 T, ST, and C cannot be used.

Processing details

This instruction outputs variable speed pulses with an assigned rotation direction output.

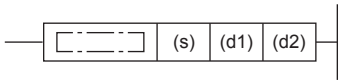
- For (s), specify the command speed to be output. (The speed must be 200 kpps or lower in frequency.)
- For (d1), specify the device from which pulses are output. Only the output devices (Y) having positioning parameters can be specified.
- For (d2), specify the bit device from which the rotation direction signal is output. Only the device specified with the parameter or general-purpose outputs can be specified. When the output devices (Y) is executed by another function (PWM, positioning PULSE axis, or CW/CCW axis etc.), the device does not function and causes an error.

For details on the function, precautions, and error code, refer to MELSEC iQ-F FX5 User's Manual (Application).

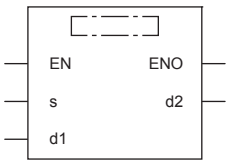
DPLSV [For the FX5 operand specification]

FX5S FX5UJ FX5U FX5UC

This instruction outputs variable speed pulses with an assigned rotation direction output.

Ladder diagram	Structured text
	ENO:=DPLSV(EN,s,d1,d2);

FBD/LD



Setting data

■Descriptions, ranges, and data types

Operand	Description	Range	Data type	Data type (label)
(s)	Command speed	-2147483648 to +2147483647	32-bit signed binary	ANY32
(d1)	Axis number from which pulses are to be output	■FX5S/FX5UJ CPU module K1 to K3, K5 to K12 ■FX5U/FX5UC CPU module K1 to K12	16-bit unsigned binary	ANY_ELEMENTARY (WORD)*1
(d2)	Bit device number of the positioning complete flag or abnormal end flag	—	Bit	ANY_BOOL
EN	Execution condition	—	Bit	BOOL
ENO	Execution result	—	Bit	BOOL

*1 Digit specified bit type label cannot be used.

■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)	○	○	○	○	○	○	○	○	—	—	—
(d1)	—	○	○	○	—	—	○	○	—	—	—
(d2)	○	○*1	—	—	—	—	—	—	—	—	—

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

Processing details

This instruction outputs variable speed pulses with an assigned rotation direction output.

- For (s), specify the command speed to be output. (The speed must be 200 kpps or lower in frequency.)
- For (d1), specify the axis number from which pulses are output.
- For (d2), specify the bit device of the abnormal end flag for the DPLSV instruction. (This device does not have the normal complete status, and only has the abnormal end status ((d2)+1).

For details on the function and error code, refer to MELSEC iQ-F FX5 User's Manual (Application).

Precautions

Two devices are occupied from the device specified in (d2). Make sure that these devices are not used in other controls.

For other precautions, refer to MELSEC iQ-F FX5 User's Manual (Application).