

EX200MP

USER'S GUIDE

◀ This manual only describe for Linear Interpolation and Circular Interpolation. Other instructions are all as same as the manual of EX series PLC.

Linear Interpolation (G01) : Maximum output frequency 60KHz.

Description of Related flag:

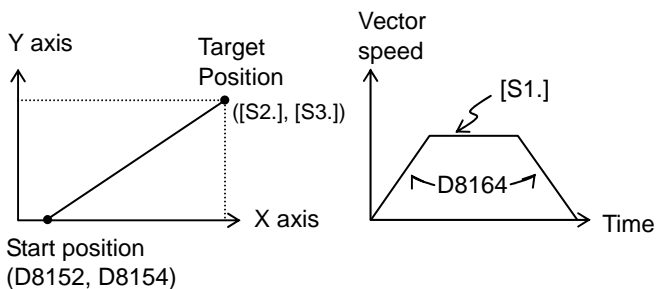
M8142 : Linear Interpolation enable flag

M8143 : Circular Interpolation enable flag

M8186 : Linear Interpolation busy flag

M8188 : Circular Interpolation busy flag

M8134, M8135 : Relative coordinate and Absolute coordinate select flag



```

X10
├── [SET M8142] set Linear Interpolation enable flag
├── [RST M8143] clear Circular Interpolation enable flag
├── [RST M8134] relative coordinate position
├── [RST M8135] relative coordinate position
├── [DMOV K5000 D100] Vector Speed
├── [DMOV K2000 D102] X Axis Target Coordinate
├── [DMOV K400 D104] Y Axis Target Coordinate
├── M8142 [S1.] [S2.] [S3.] [D.]
├── [DPLSR D100 D102 D104 Y00]
├── M8029
├── [RST M8029]
└── [RST M8142]
    
```

[S1.] : Vector Speed

[S2.] : X Axis Target Coordinate

[S3.] : Y Axis Target Coordinate

[D.] : Y0 or Y1

(D8152, D8154) is Start Coordinate

Circular Interpolation (G02, G03) : Maximum output frequency 10KHz.

[S1.] : Vector Speed

[S2.] : X Axis Target Coordinate

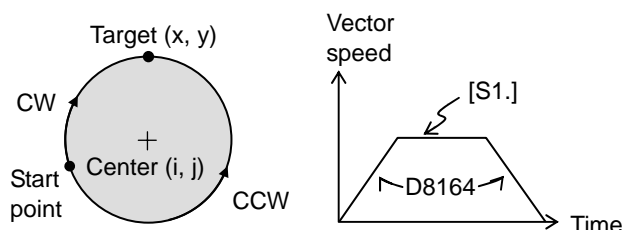
[S3.] : Y Axis Target Coordinate

[D.] : Y00:Circle center input method,Y01: radius input direction

If assign to Circle center input mode, [D.] assign to Y00, then [S2+4] is Circle center coordinate of X axis, [S3+4] is Circle center coordinate of Y axis.

If assign to radius input mode, [D.] assign to Y01, then [S2+4] is radius length, [S3+4] : Don't Care

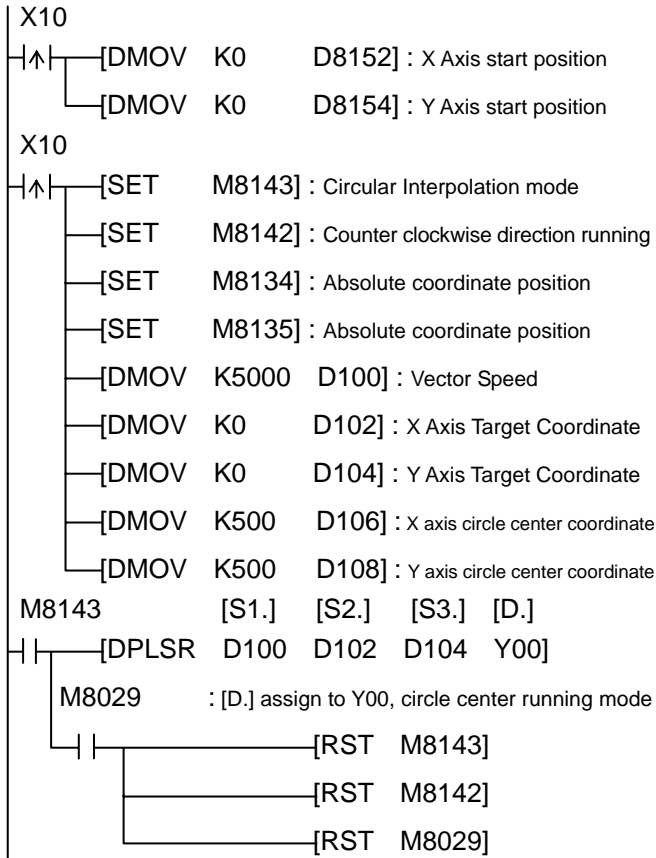
(I) Input Target Absolute Coordinate, Circle Center Coordinate, Clockwise CW direction (G02)



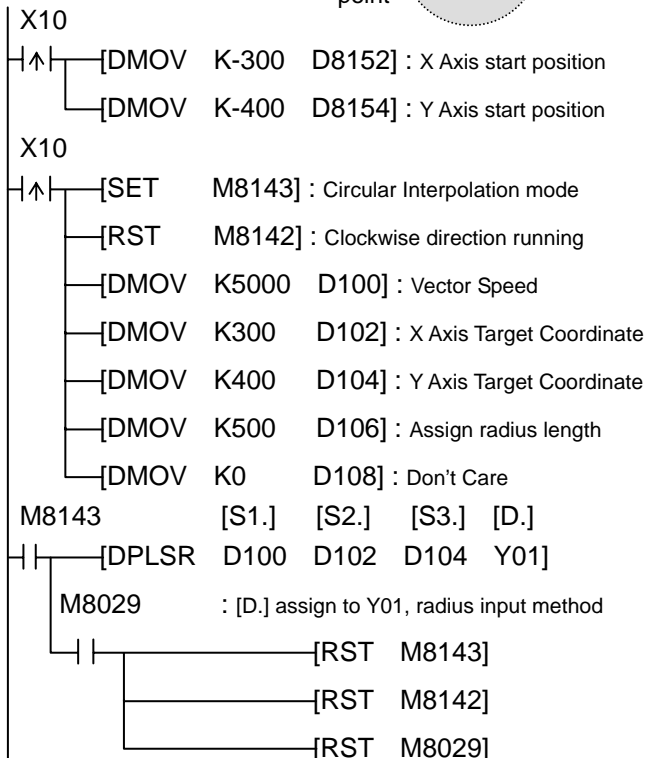
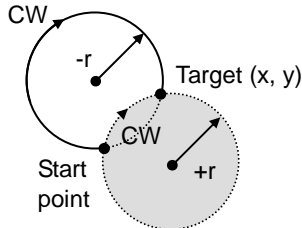
```

X10
├── [DMOV K0 D8152] : X Axis start position
├── [DMOV K0 D8154] : Y Axis start position
├── X10
├── [SET M8143] Circular Interpolation Mode
├── [RST M8142] Clockwise direction running
├── [SET M8134] Absolute coordinate position
├── [SET M8135] Absolute coordinate position
├── [DMOV K5000 D100] : Vector Speed
├── [DMOV K0 D102] : X Axis Target Coordinate
├── [DMOV K0 D104] : Y Axis Target Coordinate
├── [DMOV K500 D106] : X Axis circle center coordinate
├── [DMOV K500 D108] : Y Axis circle center coordinate
├── M8143 [S1.] [S2.] [S3.] [D.]
├── [DPLSR D100 D102 D104 Y00]
├── M8029 : [D.] Assign to Y00, circle center running mode
├── [RST M8143]
├── [RST M8142]
└── [RST M8029]
    
```

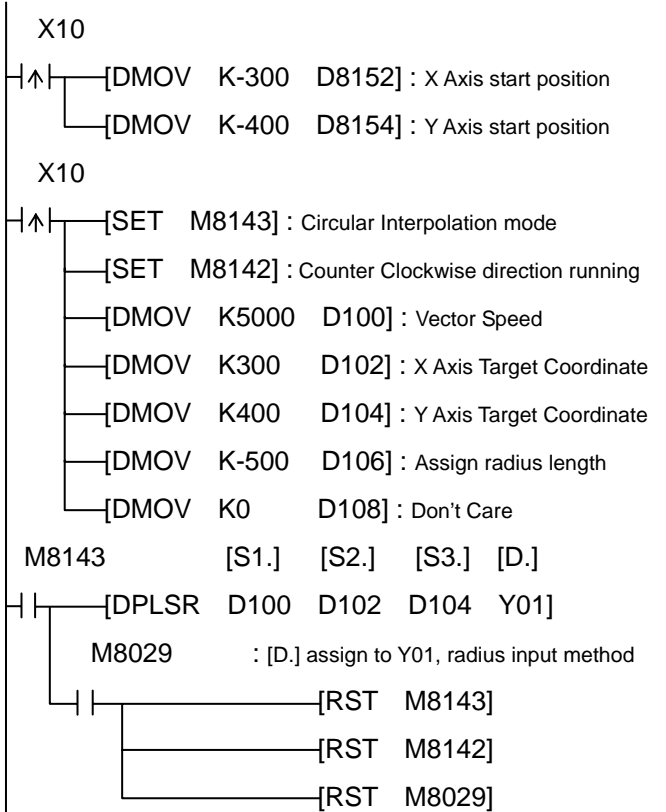
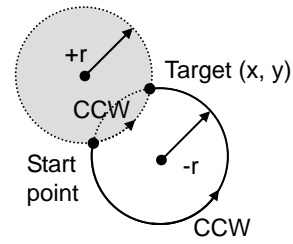
(II) Input Target Absolute Coordinate, Circle Center Coordinate, Counter Clockwise CCW direction (G03)



(III) Input Target Absolute Coordinate, Radius(r) Length, Clockwise direction, if "r" is a positive value, then be big circle route. If "r" is a negative value, then be small circle route.



(IV) Input Target Absolute Coordinate, Radius(r) Length, Counter Clockwise direction, if "r" is a positive value, then be big circle route. If "r" is a negative value, then be small circle route.



M8142	0	1	0	1
M8143	0	0	1	1
function	Running independently	Linear Interpolation	Clockwise Circular Interpolation	Counter-Clockwise Circular Interpolation

Note : If assign to Radius input direction, then Start coordinate and Target coordinate can't be the same.

EX200MP-edoc0401v100

LIYAN ELECTRIC INDUSTRIAL LTD.

TEL: 886-4-25613700 FAX: 886-4-25613408

Website: <http://www.liyanplc.com>

E-mail: twliyan@ms16.hinet.net