Motions during Interpolation

Notes for motions during interpolation motion.

Acceleration and Deceleration

Acceleration and deceleration (linear/S-curve) are available in the linear interpolation motion.
Acceleration and deceleration are not available in the circular interpolation motion.

Error Stop

If any one axis in the interpolation axes stops in error, all interpolation axes stops as well.
Confirm the error stop in "MTR_FINISH_STATUS" of the MtnGetStatus function. (except 0)
For the axis which is the error stop factor, the factor bit is "1" and for the other interpolation axes, bit 15 is "1".
＜Error stop＞
Error stop is the case that an axis stops for the factor in bit 16 through bit3 of MTR_FINISH_STATUS of the MtnGetStatus function.

SD signal input

If the SD input status of any one axis in the interpolation axes becomes on, in error, all interpolation axes decelerate or deceleration stop.

→ Refer to the MtnSetPulseOut function for the SD signal function.

Idling Control

If any one axis in the interpolation axes is in the idling range, acceleration motion is not available.

→ Refer to the MtnSetLimitConfig function for idling.

Correction Function

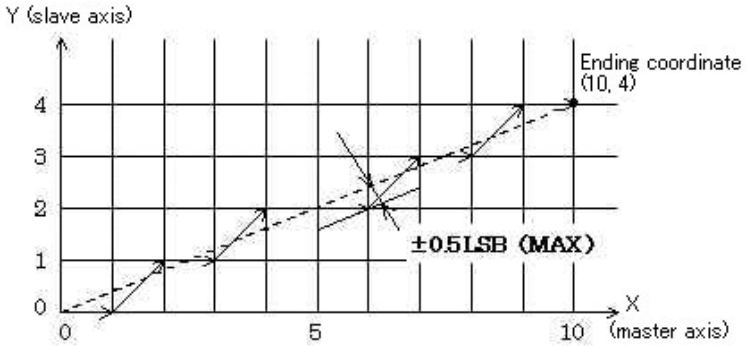
The backlash correction/slip collection control is not available during interpolation.

Continuous Execution of Interpolation Motion

The interpolation motion can be executed consecutively using the pre-registar.
It consecutively operates different configurations of linear interpolation or circular interpolation.
Refer to "Startup by Stopping Another Axis" for the configuration example of continuous execution of interpolation motion using the pre-register.

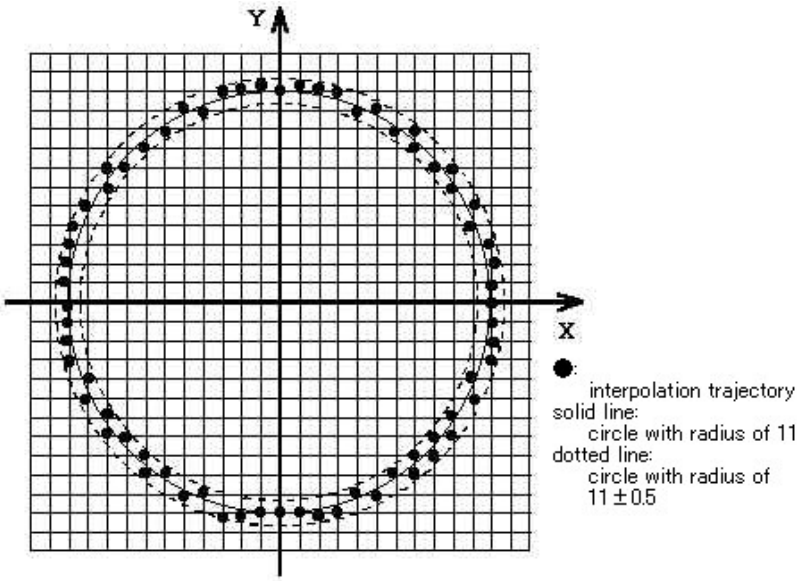
Linear Interpolation Precision

The position error for specified line in the linear interpolation is ±0.5LSB within all interpolation range.



Circular Interpolation Precision

The position error for specified arc curve in the circular interpolation is ±0.5LSB within all interpolation range.
The following figures shows the example of drawing a true circle with radius of 11.



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