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Brief description

The function block MB_CyclicSetPoint cyclically sends the external command value of an axis without direct change at the drive.

Interface description

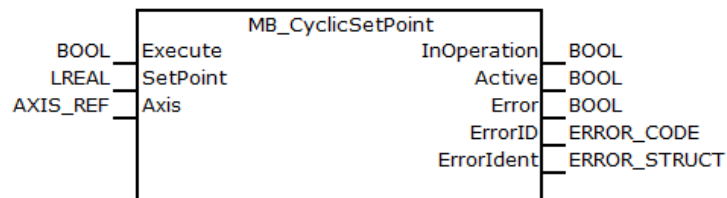


Fig. 342: MB_CyclicSetPoint function block

	Name	Type	Description
Input	Execute	BOOL	Rising edge starts the processing
	SetPoint	LREAL	External command value generated from the motion profile of the user
Output	InOperation	BOOL	Command AxsCyclicSetPoint is active and SetPoint sends cyclically to the drive
	Active	BOOL	Function block is active
	Error	BOOL	An error occurred
	ErrorID	↘ ERROR_CODE	Error classification
	ErrorIdent		

	Name	Type	Description
	ErrorIdent	↘ ERROR_STRUCT	Error diagnostics
Inout Const	Axis	AXIS_REF	Axis to be controlled

Functional description



NOTICE!

Prerequisite

The axis should be in the STANDSTILL state before this function is triggered.

Start SetPoint from the current position of the axis.

Refresh SetPoint after the output "InOperation" is TRUE.

The following applies after the function block has been enabled:

- The axis is always in the DISCRETE_MOTION state (also if the axis velocity is zero)
- The axis reports an error and stops the motion if its dynamic limits (position/velocity/acceleration, deceleration) exceed the configuration values
- The function block can only be aborted with MC_Stop
- MC_SetOverride does not work in this case
- The function blocks MB_AxsInterrupt and MB_AxsContinue does not work in this case



NOTICE!

This function block has to be executed in a PLC task with a specific cyclic time of motion.

Troubleshooting:

The function block uses the error table CXA_TABLE.

The function block can generate the following error codes in Additional1/Additional2:

ErrorID	Additional1	Additional2	Description
DEVICE_ERROR	16#00000000	16#0C238006	Prerequisite of CyclicSetPoint not available

ErrorID	Additional1	Additional2	Description
DEVICE_ERROR	16#00000000	16#0C238007	Enabling the CyclicSetPoint command failed
DEVICE_ERROR	16#00000000	16#0C238008	Error when setting the external command value of the axis
DEVICE_ERROR	16#00000000	16#0C238009	Command AxsCyclicSetPoint is aborted