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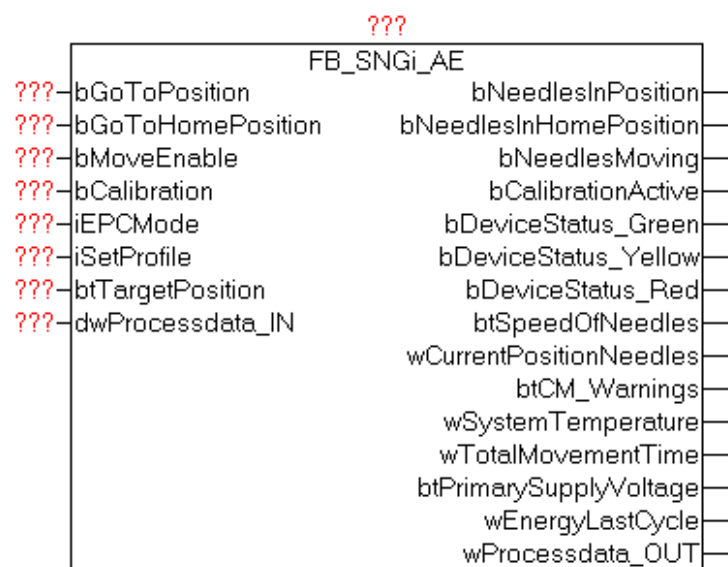
# 1 Function block "FB\_SNGi\_AE"

## 1.1 Brief description

This function block controls the Processdata of Schmalz SNGi AE with IO-Link.

## 1.2 Image of function block

Example of function block:



### 1.3 Parameter - Input

name	data type	description
bGoToPosition	BOOL	Needles move to position "btTargetPosition"
bGoToHomePosition	BOOL	Needles move to base (home position)
bMoveEnable	BOOL	Enabling movement of the needle
bCalibration	BOOL	Perform referencing then move to home position
iEPCMode	INT	Request for EPC data can be controlled as following: 0 = no request 1 = request for values of EPC-Select 0 2 = request for values of EPC-Select 1 3 = request for values of EPC-Select 2 4 = request for values of EPC-Select 3 5 = values are automatically picked up
iSetProfile	INT	Choice of desired vacuum profile (0 – 3)
btTargetPosition	BYTE	Target position (from 1 = 0,1mm to 200 = 20mm)
dwProcessdata_IN	DWORD	Input doubling word of process data

### 1.4 Parameter - Output

name	data type	description
bNeedlesInPosition	BOOL	Needles are in selected position
bNeedlesInHomePosition	BOOL	Needles in base (home Position)
bNeedlesMoving	BOOL	Needles in movement
bCalibrationActive	BOOL	Status of the calibration
bDeviceStatus_Green	BOOL	Device is working optimally
bDeviceStatus_Yellow	BOOL	Device is working but there are warnings
bDeviceStatus_Red	BOOL	Device is not working properly
btSpeedOfNeedles	BYTE	Speed of needles (%)
wCurrentPositionNeedles	WORD	Current position of needles (0,1mm)
btCM_Warnings	BYTE	CM Warnings
wSystemTemperature	WORD	System temperature (°C)
wTotalMovementTime	WORD	Total movement time (s)
btPrimarySupplyVoltage	BYTE	Input voltage (V)
wEnergyLastCycle	WORD	Energy consumption of last handling cycle (Ws)
wProcessdata_OUT	WORD	Output word of process data

## 2 Appendix

### 2.1 List of abbreviations

abbreviation	description
FB	Function block
EPC	Energy- and Processcontrol
CM	Condition Monitoring
EM	Energy Monitoring
PM	Predictive Maintenance

### 2.2 Note

- The byte order of the product is represented as big endian.
- The triggering of the vacuum must be carried out in accordance with the corresponding ejector variant (e.g., NO, NC, IMP).

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