

Function Block-Documentation

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Note

This document were originally written in German and have been translated into English.
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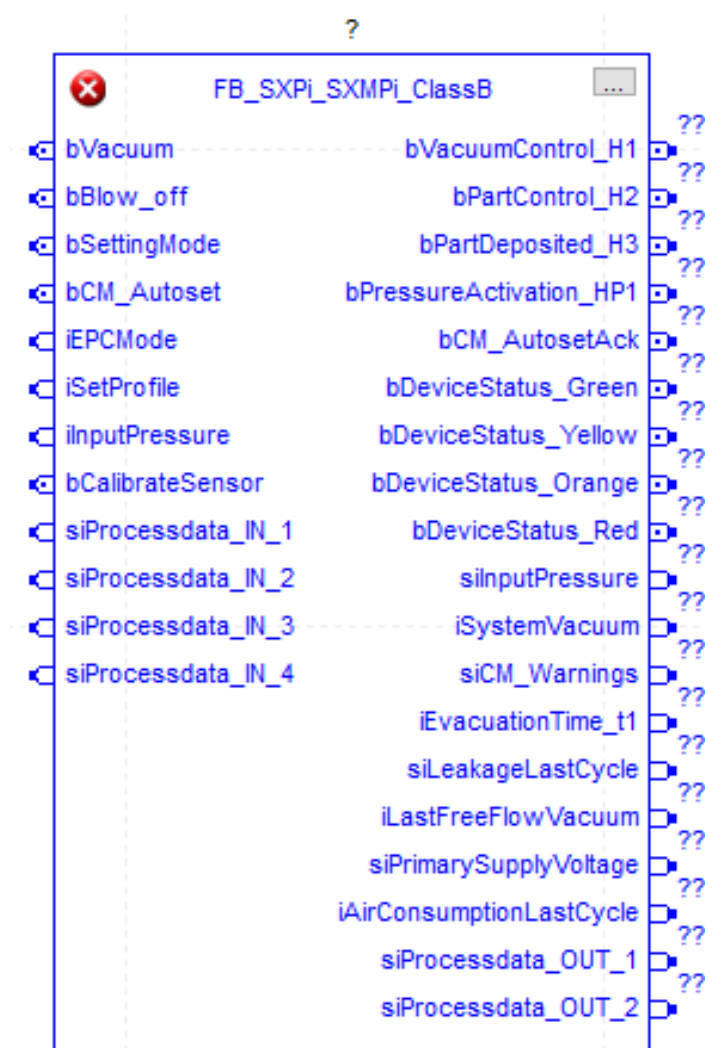
1 Function block "FB_SXPi_SXMPi_ClassB"

1.1 Brief description

This function block controls the Processdata of Schmalz SXPi/SXMPi Class B with IO-Link.

1.2 Image of function block

Example of function block:



1.3 Parameter - Input

name	data type	description
bVacuum	BOOL	Request for suction
bBlow_off	BOOL	Request to blow-off
bSettingMode	BOOL	Vacuum on/off with continuous suction disabled
bCM_Autoset	BOOL	Automatic determination and storage in the active profile of max. leakage rate (-L-) and evacuation time (t-1) of last cycle
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)
iInputPressure	INT	Ejectors without a pressure sensor get the input pressure via process data to be able to create EPC analysis. Input size in mbar
bCalibrateSensor	BOOL	Calibration of vacuum sensor and pressure sensor if existing
siProcessdata_IN1	SINT	Input byte 1 of process data
siProcessdata_IN2	SINT	Input byte 2 of process data
siProcessdata_IN3	SINT	Input byte 3 of process data
siProcessdata_IN4	SINT	Input byte 4 of process data

1.4 Parameter - Output

name	data type	description
bVacuumControl_H1	BOOL	Control value vacuum
bPartControl_H2	BOOL	Switch-on value signal output „Part control“
bPartDeposited_H3	BOOL	Part deposited
bPressureActivation_HP1	BOOL	Pressure Activation
bCM_AutoSetAck	BOOL	Active when CM Autostart completes successfully
bDeviceStatus_Green	BOOL	Device is working optimally
bDeviceStatus_Yellow	BOOL	Device is working but there are warnings
bDeviceStatus_Orange	BOOL	Device is working but there are severe warnings
bDeviceStatus_Red	BOOL	Device is not working properly
siInputPressure	SINT	Input pressure (0,1 bar)
iSystemVacuum	INT	System vacuum (mBar)
siCM_Warnings	SINT	CM Warnings
iEvacuationTime_t1	INT	Evacuation time t1 (ms)
siLeakageLastCycle	SINT	Leakage of last handling cycle (mbar/s)
iLastFreeFlowVacuum	INT	Last free flow vacuum (mbar)
siPrimarySupplyVoltage	SINT	Input voltage (V)
iAirConsumptionLastCycle	INT	Air consumption of last handling cycle (0,1 NL)
siProcessdata_OUT1	SINT	Output byte 1 of process data
siProcessdata_OUT2	SINT	Output byte 2 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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