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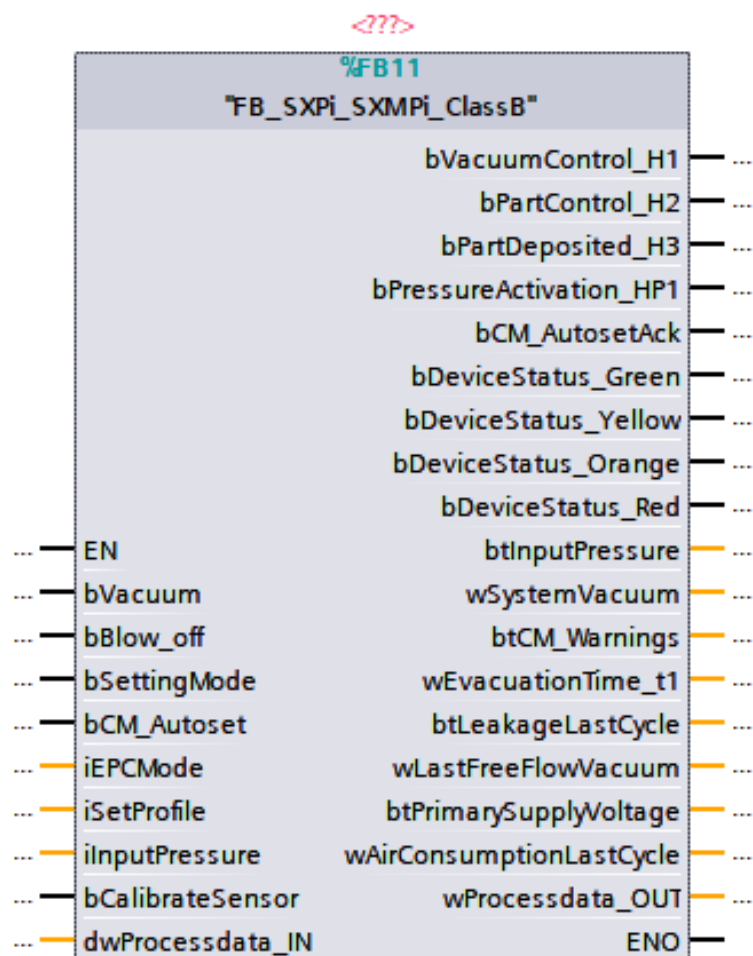
1 Function block "FB_SXPi_SXMPi_ClassB"

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 |
| dwProcessdata_IN | DWORD | Input doubling word 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 |
| btInputPressure | BYTE | Input pressure (0,1 bar) |
| wSystemVacuum | WORD | System vacuum (mBar) |
| btCM_Warnings | BYTE | CM Warnings |
| wEvacuationTime_t1 | WORD | Evacuation time t1 (ms) |
| btLeakageLastCycle | BYTE | Leakage of last handling cycle (mbar/s) |
| wLastFreeFlowVacuum | WORD | Last free flow vacuum (mbar) |
| btPrimarySupplyVoltage | BYTE | Input voltage (V) |
| wAirConsumptionLastCycle | WORD | Air consumption of last handling cycle (0,1 NL) |
| 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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