

WWW.SCHMALZ.COM

Note

This document were originally written in German and have been translated into English.
Store in a safe place for future reference.

Subject to technical changes without notice. No responsibility is taken for printing or other types of errors.

Published by

© J. Schmalz GmbH, 02.2022

This document is protected by copyright. J. Schmalz GmbH retains the rights established thereby. Reproduction of the contents, in full or in part, is only permitted within the limits of the legal provisions of copyright law. Any modifications to or abridgments of the document are prohibited without explicit written agreement from J. Schmalz GmbH.

Contact

J. Schmalz GmbH
Johannes-Schmalz-Str. 1
72293 Glatten, Germany

Tel. +49 (0) 7443 2403-0
Fax +49 (0) 7443 2403-259
schmalz@schmalz.de
www.schmalz.com

Contact information for Schmalz companies and trade partners worldwide can be found at

 www.schmalz.com/salesnetwork

Table of contents

1	Function block “FB_DSM”	4
1.1	Brief description	4
1.2	Image of function block.....	4
1.3	Parameter - Input.....	5
1.4	Parameter - Output.....	6
2	Appendix	7
2.1	List of abbreviations	7
2.2	Note.....	7

1 Function block "FB_DSM"

1.1 Brief description

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

1.2 Image of function block

Example of function block:



1.3 Parameter - Input

name	data type	description
bEnableDrive	BOOL	Enable drive
bMoveToPosition	BOOL	Move to position
bMoveToHomeposition	BOOL	Move to homeposition
bJogForwardSlow	BOOL	Jog forward slow (+)
bJogForwardFast	BOOL	Jog forward fast (++)
bJogReverseSlow	BOOL	Jog reverse slow (-)
bJogReverseFast	BOOL	Jog reverse fast (--)
bAcknowledgeError	BOOL	Acknowledge for errors
bActivateCaptureInput	BOOL	Activate capture input 0 = deactivated 1 = activated
bStartReferencingDrive	BOOL	Start reference drive
bSetRefPosToCurrentPos	BOOL	Set reference position to current position
dwTargetPosition	DWORD	Target position (1/100mm linear) / (Grad rotatory)
wRotationSpeed	WORD	Rotation speed [1/min]
btProcessdata_IN_0	BYTE	Input byte of process data
btProcessdata_IN_1	BYTE	Input byte of process data
btProcessdata_IN_2	BYTE	Input byte of process data
btProcessdata_IN_3	BYTE	Input byte of process data
btProcessdata_IN_4	BYTE	Input byte of process data
btProcessdata_IN_5	BYTE	Input byte of process data

1.4 Parameter - Output

name	data type	description
bPositionReached	BOOL	Position reached
bHomePositionReached	BOOL	Homeposition reached
bDrivesMoving	BOOL	Drive is moving
bDriveInUpperEndPosition	BOOL	Endposition +
bDriveInLowerEndPosition	BOOL	Endposition -
bOperational	BOOL	Operational
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
bSwitchCam1	BOOL	Switch cam 1
bSwitchCam2	BOOL	Switch cam 2
bSwitchCam3	BOOL	Switch cam 3
bSwitchCam4	BOOL	Switch cam 4
bInputExtSensorPin2	BOOL	Input sensor Pin 2
bInputExtSensorPin4	BOOL	Input sensor Pin 4
bStepLossDetected	BOOL	Step loss detected
bDrivesReferenced	BOOL	Drive referenced
dwCurrentPosition	DWORD	Current position (1/100mm linear) / (Grad rotatory)
btProcessdata_OUT_0	BYTE	Output byte of process data
btProcessdata_OUT_1	BYTE	Output byte of process data
btProcessdata_OUT_2	BYTE	Output byte of process data
btProcessdata_OUT_3	BYTE	Output byte of process data
btProcessdata_OUT_4	BYTE	Output byte of process data
btProcessdata_OUT_5	BYTE	Output byte of process data
btProcessdata_OUT_6	BYTE	Output byte of process data
btProcessdata_OUT_7	BYTE	Output byte 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.

At your service worldwide



● **Headquarters**
Hauptsitz

Schmalz Germany – Glatten

● **Sales and production companies**
Vertriebs- und Produktionsgesellschaften

Schmalz China – Shanghai
Schmalz India – Pune
Schmalz Japan – Yokohama
Schmalz USA – Raleigh (NC)

● **Sales companies**
Vertriebsgesellschaften

Schmalz Australia – Melbourne
Schmalz Benelux – Hengelo (NL)
Schmalz Canada – Mississauga
Schmalz Finland – Vantaa
Schmalz France – Champs-sur-Marne
Schmalz Italia – Novara
Schmalz Mexiko – Querétaro

Schmalz Poland – Suchy Las (Poznan)
Schmalz Russia – Moskow
Schmalz South Korea – Anyang
Schmalz Spain – Erandio (Vizcaya)
Schmalz Switzerland – Nürensdorf
Schmalz Turkey – Istanbul

• **Sales partners**
Vertriebspartner

You can find the Schmalz sales partner in your country at:
WWW.SCHMALZ.COM/SALESNETWORK

Den Schmalz Vertriebspartner in Ihrem Land finden Sie auf:
WWW.SCHMALZ.COM/VERTRIEBSNETZ

J. Schmalz GmbH
Johannes-Schmalz-Str. 1
72293 Glatten, Germany
T: +49 7443 2403-0
schmalz@schmalz.de
WWW.SCHMALZ.COM

Version 01 | 02.2022