EN

FXSL005

Fill-Level Sensors with IO-Link

IO-Link

Interface Description

Subject to change without notice
Available as PDF version only
Status: 19.05.2025
www.wenglor.com

FXSL005

Vendor ID

Product	hex	dec	hex (Bytes)	dec (Bytes)
wenglor sensoric GmbH	0x0057	87	00 57	0 87

Device ID

Product	hex	dec	hex (Bytes)	dec (Bytes)
FXSL005	0x000072	114	00 00 72	1 14

IO-Link Version:	V1.1
Data Storage:	Yes
Blockparameter:	Yes
MinCycletime:	6,4 ms
SIO-Mode:	Yes
COM-Mode:	COM2
ISDU	Yes
Process data In (Device to Master)	24 Bit
Process data Out (Master to Device)	-

Process data (Length: 24 Bit)

Subindex	Name	Bit Offset	Length	Range
1	Measurement values	tbd	16 bit	0 – 1000
2	Short circuit wire 2	tbd	1 bit	0 = no short circuit 1 = short ciruit
3	Quality Bit	tbd	1 bit	0 = good output quality 1 = bad output quality
4	Output A2	tbd	1 bit	0 = false/off 1 = true/on
5	Output A1	tbd	1 bit	0 = false/off 1 = true/on

Octet 1

Bit Offset	23	22	21	20	19	18	17	16
Subindex	1							
Element Bit	15	14	13	12	11	10	9	8

Octet 1

Bit Offset	15	14	13	12	11	10	9	8
Subindex	1							
Element Bit	7	6	5	4	3	2	1	0

Octet 2

Bit Offset	7	6	5	4	3	2	1	0
Subindex	-	-	-	-	2	3	4	5

Parameter

Name	Index (hex)	Index (dec)	Sub-index	R/W	Length	Data Storage	Dynamic	Modify others	Default value	Range
Vendor Name	0x0010	16	0	R	String				wenglor sensoric GmbH	
Vendor Text	0x0011	17	0	R	String				the innovative familiy	
Product Name	0x0012	18	0	R	String				FXPL/ FXSL	
Product ID	0x0013	19	0	R	String				FXSL005	
Serial Number	0x0015	21	0	R	String				—	
Hardware Revision	0x0016	22	0	R	String				—	
Firmware Revision	0x0017	23	0	R	String				—	
Application Specific Tag	0x0018	24	0	R/W	String 32 Byte	X			********** **********	
Status / Diagnosis	0x0024	36	1	R	Uint8				—	0 (0x00) = OK 1 (0x01) = Warning Mask 2 (0x02) = Alarm Mask 16 (0x10) = Alarm Signal Quality 32 (0x20) = Alarm short circuit on A1 48 (0x30) = Alarm short circuit on A2 64 (0x40) = Alarm EEprom write error 80 (0x50) = Alarm ASIC write error
Device Settings										
System Command	0x0002	2	0	W	Uint8			X	—	64 (0x40) = Teach press 1 = start Teach press 2 = Measure and store 130 (0x82) = Factory Reset 160 (0xA0) = Teach Air 161 (0xA1) = Teach media channel 1 162 (0xA2) = Teach media-channel 2 163 (0xA3) = Adaptive trigger zeroing 164 (0xA4) = Adaptive trigger filled tank state
Teach Channels - Line Teach Chanel	0x3A	58	1	R/W	Uint8				0	Read / write of teaching bit for channel 1 and channel 2 0 = Teach not active 1 = Teach active on channel 1 2 = Teach active on channel 2 128 = Teach active on channel 1 and 2
A1 Settings										
A1 Switching Point 1	0x3C	60	1	R/W	Uint16	X	X		0	0…100 [%]
A1 Switching Point 2	0x3C	60	2	R/W	Uint16	X	X		75	0…100 [%]
A1 NO/NC	0x3D	61	1	R/W	Uint8	X			0	0 = Normally Open 1 = Normally Closed
A1 Trigger Type	0x3D	61	2	R/W	Uint8	X			2	2 = Window Trigger 128 = Adaptive Trigger
A1 PNP/NPN/Push-Pull	0x4E	78	2	R/W	Uint8	X			2	0 = PNP 1 = NPN 2 = Push-Pull 3 = Off
A1 Switching Hysteresis	0x45	69	1	R/W	Uint16	X	X		3	0…50 [%]
A1 Time Delay for Window Trigger	0x79	121	2	R/W	Uint16	X			100	0...10.000 [ms] Time Delay
A1 Time Delay for Adaptive Trigger	0x79	121	22	R/W	Uint16	X			100	0...10.000 [ms] Time Delay

Name	Index (hex)	Index (dec)	Sub-index	R/W	Length	Data Sto-rage	Dyna-mic	Modify others	Default value	Range
A1 Set Point low for Adaptive Trigger	0x300	768	1	R/W	Uint16	X			0	0…100 [%]
A1 Set Point high for Adaptive Trigger	0x300	768	2	R/W	Uint16	X			100	0…100 [%]
A1 Advanced active for Adaptive Trigger	0x300	768	3	R/W	Uint8	X			0	0 = Disabled 1 = Enabled - Steady detection inactive 3 = Enabled - Steady detection active
A1 Trigger Distance for Adaptive Trigger	0x300	768	4	R/W	Uint16	X			3	0.5…50 [%]
A1 Start Level for Adaptive Trigger	0x300	768	5	R/W	Uint16	X			0	0…100 [%]
A2 (Digital/ Analog Settings)										
A2 Switching Point 1	0x3E	62	1	R/W	Uint16	X	X		75	0…100 [%]
A2 Switching Point 2	0x3E	62	2	R/W	Uint16	X	X		100	0…100 [%]
A2 NO/NC	0x3F	63	1	R/W	Uint8	X			0	0 = Normally Open 1 = Normally Closed
A2 Trigger Type	0x3F	63	2	R/W	Uint8	X			2	2 = Window Trigger 128 = Adaptive Trigger
A2 PNP/NPN/Push-Pull/4…20 mA	0x4E	78	11	R/W	Uint8	X			2	0 = PNP 1 = NPN 2 = Push-Pull 3 = Off 4 = 4…20 mA
A2 Switching Hysteresis	0x45	69	11	R/W	Uint16	X	X		3	0…50 [%]
A2 Time Delay for Window Trigger	0x79	121	12	R/W	Uint16	X			100	0...10.000 [ms] Time Delay
A2 Time Delay for Adaptive Trigger	0x79	121	32	R/W	Uint16	X			100	0...10.000 [ms] Time Delay
A2 Set Point low for Adaptive Trigger	0x300	768	11	R/W	Uint16	X			0	0…100 [%]
A2 Set Point high for Adaptive Trigger	0x300	768	12	R/W	Uint16	X			100	0…100 [%]
A2 Advanced active for Adaptive Trigger	0x300	768	13	R/W	Uint8	X			0	0 = Disabled 1 = Enabled – Steady detection inactive 3 = Enabled – Steady detection active
A2 Trigger Distance for Adaptive Trigger	0x300	768	14	R/W	Uint16	X			3	0.5…50 [%]
A2 Start Level for Adaptive Trigger	0x300	768	15	R/W	Uint16	X			0	0…100 [%]
Switch Analog Output 4-20 mA Zoom from	0x202	202	3	R/W	Uint16	X			0	0…100 [%]
Switch Analog Output 4-20 mA Zoom to	0x202	202	5	R/W	Uint16	X			100	0…100 [%]
Measured Values Settings										
Graph Data	0x5A	90	0	R	Uint8				–	0…124 Graph Data of the Frequency Sweep Part 1 of 2 125 Bytes
Graph Data	0x5B	91	0	R	Uint8				–	125…249 Graph Data of the Frequency Sweep, Part 2 of 2 125 Bytes
3 Point Graph Low Edge	0x5C	92	1	R	Uint16				0	0…100 [%] Low Edge Frequency of the Graph
3 Point Graph High Edge	0x5C	92	2	R	Uint16				0	0…100 [%] High Edge Frequency of the Graph
3 Point Graph Mid Frequency	0x5C	92	3	R	Uint16				0	0…100 [%] Measured Frequency
3 Point Graph Amplitude	0x5C	92	4	R	Uint16				0	0…100 Amplitude of the Graph