COPY OF THE ORIGINAL

INSTRUCTION MANUAL

LINEAR POSITION SENSOR

Type LPS 4.0 14 IO

worldwide • weltweit • worldwide

Date: 2020-02
Version: 4
Language: English

SMW® AUTOBLOK

Content

INSTRUCTION MANUAL
Linear Position Sensor
Type LPS 4.0 14 IO

with analog interface 0..10V and IO-Link Interface
Measuring range 0..14mm

Thank you for purchasing an Original-SMW-AUTOBLOK Linear Position Sensor LPS 4.0.

This **instruction manual** contains the installation, the use and the maintenance instructions of the **„LPS 4.0"**.

SMW-AUTOBLOK reserves the right to make **changes without notice**.

This **instruction manual is a part of the „LPS 4.0"** and must be passed to the new owner in case of sale.

This **instruction manual may not be** -in whole or in part- **copied** without our written agreement.

Please read the instruction manual carefully before installation and use and always follow the regulations.

Please note especially the sections which are marked with the following signs:

- **Danger of injury or danger to life if instructions are not followed.**
- **Danger of damage to the sensor, the machine or the components.**

Declaration of incorporation

for a partly completed machinery to machine directive 2006/42/EC

The manufacturer:

SMW-Autoblok Spannsysteme GmbH
Wiesentalstraße 28
88074 Meckenbeuren
Deutschland / Germany
Tel.: +49 (0) 7542 - 405 0

herby declares, that the following product:

Product description:	Linear Position Sensor
Type:	LPS 4.0 14 IO
Ident-No.:	208106

Due to its concept and design as it is introduced into the market is according to the following general safety and health EU regulations.

Machine directive:	2006/42/EC
EMI directive:	2004/108/EC

Applied harmonized norms:

Emission:	EN 61000-6-3
Immunity:	EN 61000-6-2

Date: 20.06.2018

Signature of responsible person

General safety instructions

1. Intended use

The linear positioning sensor is exclusively intended to be used as a parts of a production machine. The sensor must only be installed and operated by personal authorized and advised by the operation, that is qualified according to the valid national laws and according to the national and international regulations. Any other use is a non authorized use, and can cause hazards to health and life of persons as well as damage to material.

The sensor must only be used in perfect functioning condition. The advises of this manual must always be observed.

For any other use than the intended use or any other use than authorised by the manufacturer the operator is sole and fully responsible. Any changes carried out at the sensor must be authorised by the manufacturer and must be documented properly.

In addition to this manual all laws, norms and regulations must be observed.

2. Safety requirements

In order to protect the unit against fire, electric shock or potential destruction of the electronic components, it must never be exposed to rain or extreme humidity. Direct sun or heat are to be avoided as well.

3. Calibration, recalibration

The linear positioning sensor is adjusted and calibrated at the factory for the measuring path specified.

If the linear positioning sensor is not used as an absolute measuring system, recalibration is not necessary.

If you are in doubt, please contact the manufacturer.

A recalibration can only be carried out in the factory.

4. Warranty and avoiding of harms

This manual is the basis for installation, use and opertation of the linear positioning sensor.

Before using the linear positioning sensor read the manual carefully. This manual must remain stored at the machine where the linear position sensor installed.

All operations described in this manual must only be carried out by capable personal authorized by the operation.

5. Safety

Always follow the regulations concerning safe working, protection clothes and any other protection devices to be used at the corresponding production machine.

6. General safety advises

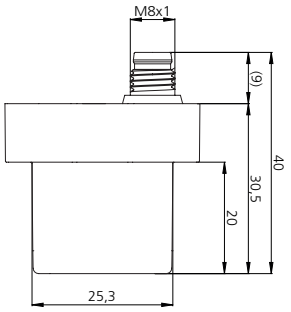
- All safety advises, national and international regulations to avoid accidents as well as company internal working and operation advises have to be observed.
- Any conditions causing hazards have to be avoided.
- Interferences that can cause hazards have to be eliminated immediately.
- Ignoring the safety instructions can cause hazards to persons, environment and / or can cause damage and will make any warranty void.
- During installation, the installation and maintenance of the linear positioning sensor all safety regulations of the machine, into which the sensor is installed, must be observed.
- Prior to any runoff this manual must read, and all safety advises must be followed.
- The manufacturer refuses any claims for problems caused by not following this manual.

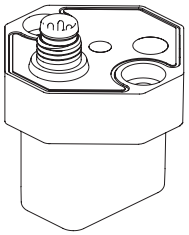
7. Safety advises for operation

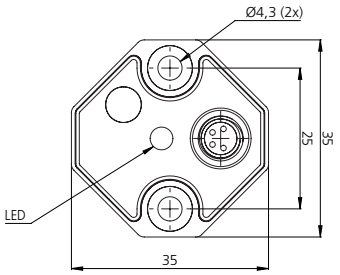
- When using the linear positioning sensor in safety relevant operations, precautions must be taken to avoid danger for personal and machine, in case of failure of the sensor. This can be done by posting safety advises on the machine or by adding safety advises to the manual of the machine. Additionally the machine maker can add suitable (mechanical) protections , to avoid any hazards. We also refer to the trouble shooting.
- The installation and run off must be carried out by qualified personal. All safety regulations for electronic installations must be observed.
- The sensor must not be opened at all!
- Before use all connections must be double checked carefully.
- Never touch the sensing surface (opposed to the plug) with sharp or tipped articles. Use a soft tissue only.

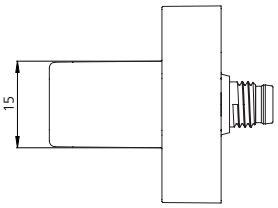
Insufficient or improper maintenance makes any warranty from SMW-AUTOBLOK void.

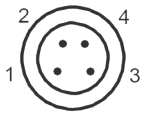
In case of problems or questions please contact SMW-AUTOBLOK directly or one of our authorized offices.











Pin assignment connectors M8 x 1

Pin	Description
1	24V DC
2	Signal output 0-10 V
3	GND
4	C/Q (Data)

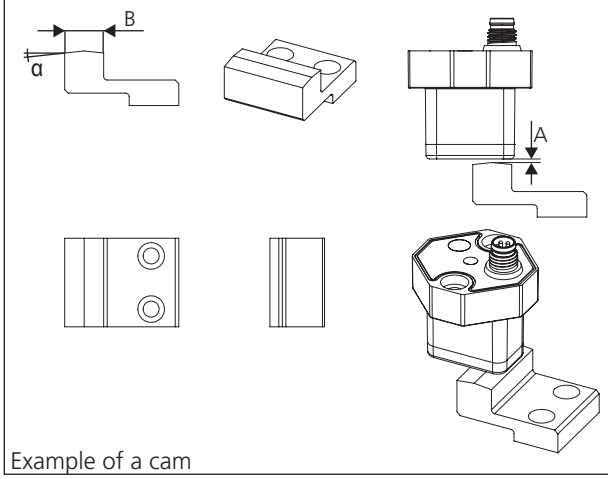
	LPS 4.0 14 IO
Power supply	24VDC ±10%@ 35mA typ. Inverse-polarity and overvoltage protection
Interface	0...10V, short-circuit-proof, oad > 2 kOhm, IO Link 1.0
Function monitoring	on error: output 0V
Resolution	ca. 5 mV
Reproducibility	±0,05 mm
Linearity	±0,2 mm
Temperature drift	±0,25mm through the whole operating, temperature range, temperature engaged
Measuring frequency	33 Hz
EMV Compatiblity	EN61000-6-2 Immunity / EN61000-6-4 Emision
Power-on phase	The first measuring value is available after 3 sec. approximately
Case dimensions	L x W x H; 35 x 35 x 30,5 mm
Case material	Plastic/Metal
Case protection class	IP 67
Mounting	via threaded holes for M4 screws
Operation and storing temperature ranges	0 to 75°C
Connections	4-pin connector M8x1, male

Dimensioning Cam / Shiftring

Recommended dimensions of Cams / Shiftrings:

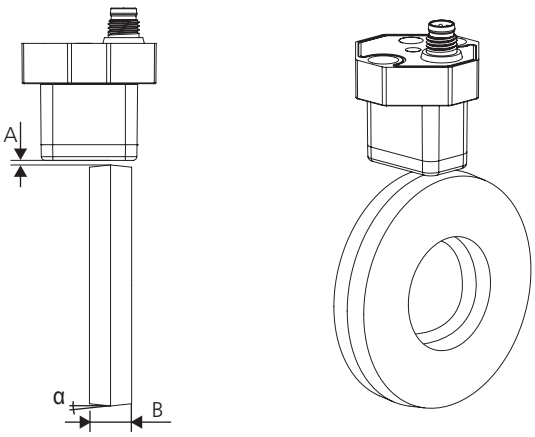
Dimensions	Info
Distance A = 1.0 mm ± 0.25	A = recommended distance (inside and parallel) between the measuring surface and the Shiftring (ring shape)
Width B = 11 mm	B = recommended width of the Cam or Shiftring
Angle α = 6°	α = Angle min. 6°

Cam



Example of a cam

Shift ring



Example for an shift ring

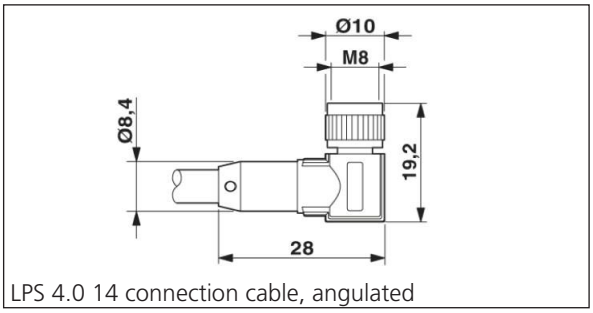
Analog interface

The LPS 4.0 with analog signal outputs provides 0...10V, corresponding to 0...14mm. If there is an upper or lower deviation from the measuring range or in case of an error, 0V or 0mA is output.

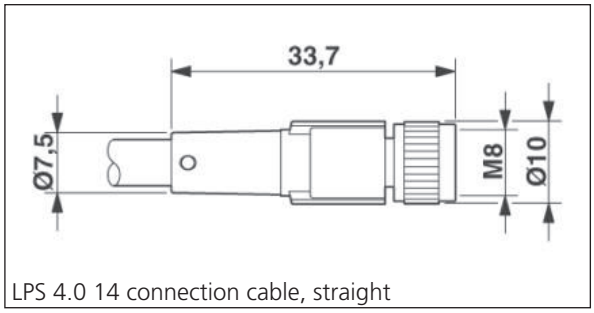
Pin assignment, analog

The following pin assignment applies to the 4-pin cable connectorM8x1

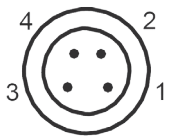
Pin	Description	Comment	4-pin cable
1	24V DC	+/- 10%	brown
2	Signal out	0..10V	white
3	GND		blue
4	CQ (Data)	must not be used	black



LPS 4.0 14 connection cable, angulated



LPS 4.0 14 connection cable, straight



Pin assignment connectors M8x 1

Pin	Description
1	24V DC
2	Signal output 0-10 V
3	GND
4	C/Q (Data)

Use only 4-pin shielded cable

Use only 4-pin shielded cable. GND is used for power supply and signal. Shield connected on one side at the female connector.

The pin assignment is binding

The pin assignment is binding. The lead colours of the cable may vary.

Analog connection

After the module has been assembled, the cable is connected to the PLC control via a shielded connection cable according to the pin assignment. Only 3 of the 4 wires are relevant for the user.
The other two must neither be stripped nor used for any other purposes. The shield should be connected all over and possibly on both sides. Differences in the shield ground(s) are to be avoided; if need be, the shield may be connected only on one side. The securing screw of the M8 flanged connector must be tightened moderately.

Do not lay connection cables in parallel to cables!

Do not lay connection cables in parallel to cables which could cause interferences.

Consider cable crosssection and cable length!

Per ohm copper resistance, about 35mV offset are added to the measuring signal. Cable crosssection and cable length are to be taken into account.

Electric power

When connecting the test sensor to power, all safety advises of the machine or of the external unit (see the corresponding manuals) have to be observed.
The connection must only be carried out by qualified personal.

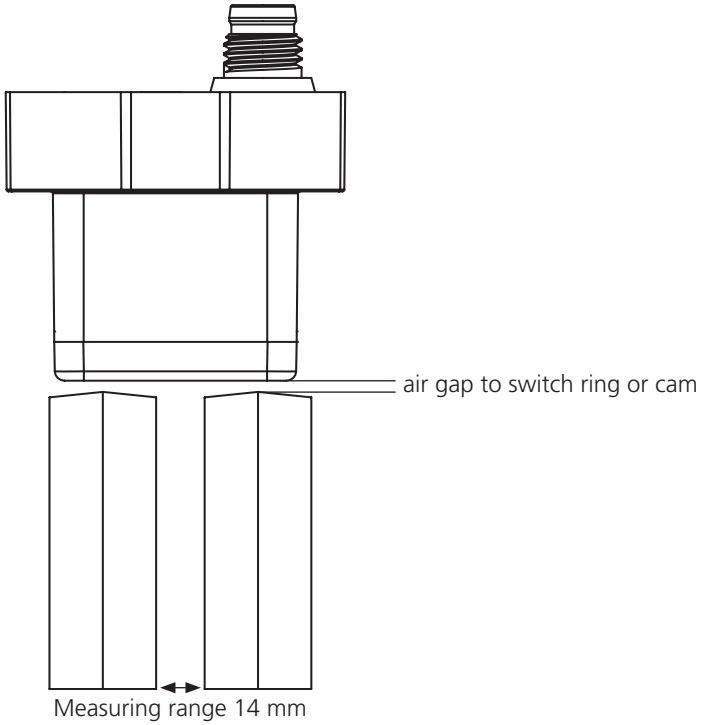
Mounting LPS 4.0

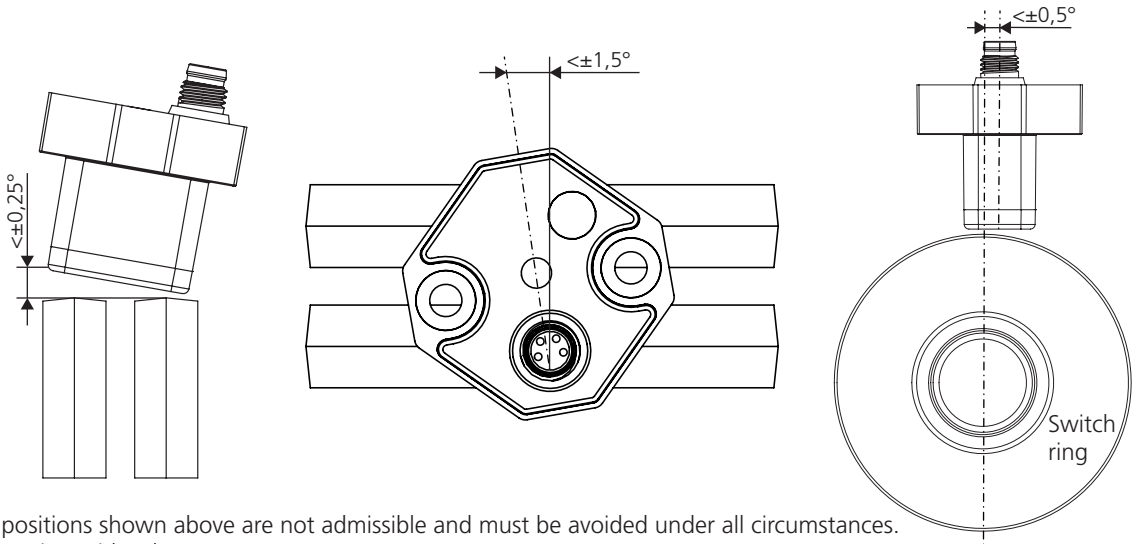
Special care must be taken when mounting

Special care must be taken when mounting the sensor module since correct mounting is decisive for the quality of the measurement signal.

The following procedure is recommended:

- Mount the LPS 4.0 by means of a support (not contained in the
- delivery package).
- Set the exact distance to the switch ring (ring shape) or cam.
- Take care that the sensor module is in an exact parallel position to and is concentric with the cylinder axis.
- No minimum distance to metal surfaces has to be observed on the sides, the front and the side facing the support; a distance of 10mm must be kept towards the measuring surface opposite the support..





The mounting positions shown above are not admissible and must be avoided under all circumstances.
LPS 4.0 scale drawing with tolerances

Notes

IO-Link Process Data Structure and Parameters

Input data structure

15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
Position value												0			
AD9	AD8	AD7	AD6	AD5	AD4	AD3	AD2	AD1	AD0	res	res	res	BD3	BD2	BD1

Function

BD1	Switching signal 1
BD2	Switching signal 2
BD3	Switching signal 3
AD	Position value

Values

BDn	bool	0	Switched off
		1	Switched on
AD		0...448	Valid position value in 1/32 mm
		1021	Outside of the value range (below the value range)
		1022	Outside of the value range (above the value range)
		1023	No target

IO-Link Process Data Structure and Parameters

Configuration

BD1 switchpoint logic	Index 0x3D Subindex 1	
	0 (High-Active)	1 (Low-Active)
BD1 - switching signal 1:		
Target outside of the limits	0	1
Target within the limits	1	0

BD2 switchpoint logic	Index 0x3F Subindex 1	
	0 (High-Active)	1 (Low-Active)
BD2 - switching signal 2:		
Target outside of the limits	0	1
Target within the limits	1	0

BD3 switchpoint logic	Index 0x400	
	0 (High-Active	1 (Low-Active)
BD3 - switching signal 3:		
Target outside of the limits	0	1
Target within the limits	1	0

IO-Link Communication and ID Parameters

Direct Paramter Page 1 - Index 0x00							
Sub	**Address hex**	**Name**	**Type**	**Data type**	**Attribute**	**Value**	**Comment**
	Communication Control						
1	0x00	Master Command	R/W	uint8	volatile		written by master
2	0x01	Master cycle time	R/W	uint8	volatile		written by master
3	0x02	Min. cycle time	R	uint8	constant	0x17	2.3 ms
4	0x03	Frame Capability	R	uint8	constant	0x01	ISDU support
5	0x04	IO-Link Version ID	R	uint8	constant	0x10	IO-Link version 1.0
6	0x05	Process Data in	R	uint8	constant	0x50	16bit Pdin, SIO support
7	0x06	Process Data out	R	uint8	constant	0x00	n/a
	Validation Parameter						
8	0x07	IO-Link Vendor ID1 (MSB)	R	uint8	constant	0x04	SMW Autoblok
9	0x08	IO-Link Vendor ID2 (LSB)	R	uint8	constant	0x46	
10	0x09	Device ID1 (MSB)	R	uint8	constant	0x03	
11	0x0A	Device ID2	R	uint8	constant	0x2C	
12	0x0B	Device ID3 (LSB)	R	uint8	constant	0xEA	
13	0x0C	Function ID1 (MSB)	R/W	uint8	static	0x00	
14	0x0D	Function ID2 (LSB)	R/W	uint8	static	0x00	not used

IO-Link Standard Parameters

System Command (Index 0x02)

Value hex	Value dec	Function
0x40	64	Teach Apply
0x41	65	SP1 Single Value Teach
0x42	66	SP2 Single Value Teach
0x4F	79	Teach Cancel
0x82	130	Restore Factory Settings

Profile ID (Index 0x0D)

Subindex	Value hex	Function
1	0x0001	Smart Sensor Profile supported
2	0x8000	Device Identification
3	0x8001	Binary Data channel
4	0x8002	Process Data Variable
5	0x8004	Teach Channel

PD input descriptor (Index 0x0E)

Subindex	Value hex	Function
1	0x010300	SetFBool3.0
2	0x020A06	UIntegerT10.6

Parameters for Identification

Index hex	Index dec	Name	Type	Data type
0x10	16	Vendor Name	R	char [31]
0x11	17	Vendor Text	R	char [max 32]
0x12	18	Product Name	R	char [max 32]
0x13	19	Product ID	R	char [11]
0x14	20	Product Text	R	char [max 32]
0x15	21	Serial Number	R	char [14]
0x16	22	Hardware Revision	R	char [7]

IO-Link Device Parameter

Note:
The existing indexes for the various sensors differ according to their properties. For example, indexes for parameterizing an analog output are only available for sensors with an analog output.

Index hex	sub	Name	Type	Data type	Value	Default	Unit
Smart Sensor Profile Parameters							
0x3A		Teach-In Channel	R/W	unit8	0...3	0	
0x3B		Teach-In Status	R	unit8			
0x3C		**BD1_SPV - Switching signal 1**	R/W	record			
	1	SP1- set point value 1	R/W	unit16	0...448	112	1/32mm
	2	SP1- set point value 2	R/W	unit16	0...448	144	1/32mm
0x3D		**BD1_SPC - Switching signal 1 configuration**	R/W	record			
	1	switchpoint logic	R/W	unit8	0x00 not inverted 0x01 - inverted 0x02 - 0xFF - not allowed	0x00	
	2	switchpoint mode	R/W	unit8	0x00 - inactive 0x01 - single point mode 0x02 - window mode 0x03 - two point mode 0x04 - 0x7F - reserved 0x80 - centered window mode	0x80	
	3	switchpoint hysteresis	R/W	unit16	0: Normal 1: Medium 3: High	1	
0x3E		**BD2_SPV - Switching signal 1**	R/W	record			
	1	SP1 - set point value 1	R/W	uint16	0...448	224	1/32mm
	2	SP2 - set point value 2	R/W	uint16	0...448	256	1/32mm
0x3F		**BD2_SPC - Switching signal 1 configuration**	R/W	record			
	1	switchpoint logic	R/W	uint8	0x00 - not inverted 0x01 - inverted 0x02 - 0xFF - not allowed		
	2	switchpoint mode	R/W	uint8	0x00 - inactive 0x01 - single point mode 0x02 - window mode 0x03 - two point mode 0x04 - 0x7F - reserved 0x80 - centered window mode		
	3	switchpoint hysteresis	R/W	uint8	0: Normal 1: Medium 2: High		

Index hex	sub	Name	Type	Data type	Value	Default	Unit
0x4000		**BD3_SPV - Switching signal 1**	R/W	record			
	1	SP1 - set point value 1	R/W	unit16	0...448	336	1/32mm
	2	SP1 - set point value 1	R/W	unit16	0...448	368	1/32mm
0x4001		**BD3_SPC - Switching signal 1 configuration**	R/W	record			
	1	switchpoint logic	R/W	uint8	0x00 - not inverted 0x01 - inverted 0x02 - 0xFF - not allowed	0x00	
	2	switchpoint mode	R/W	uint8	0x00 - inactive 0x01 - single point mode 0x02 - window mode 0x03 - two point mode 0x04 - 0x7F - reserved 0x80 - centered window mode	0x80	
	3	switchpoint hysteresis	R/W	uint16	0: Normal 1: Medium 2: High	1	
Device specific operation parameters							
0x40		**Centered Window Width**	R/W	record			
	1	BD channel 1 width	R/W	uint16	0...448	32	1/32mm
	2	BD channel 2 width	R/W	uint16	0...448	32	1/32mm
	3	BD channel 3 width	R/W	uint16	0...448	32	1/32mm
0x42		**AD_SPC - Analog Signal Set Point Value**	R/W	record			
	1	SP1 - set point value 1	R/W	uint16	0...448	0	
	2	SP1 - set point value 2	R/W	uint16	0...448	448	
0x43		**AD_SPC - Analog Signal Configuration**	R/W	record			
	1	Analog Output Mode	R/W	uint8	0x00 - Rising Ramp 0x01 - Falling Ramp	0x00	
	2	Error Value Hysteresis	R/W	uint16	0: Normal 1: Medium 2: High	0	
	3	Error Replacement Value	R/W	uint8	0b0000 0000 - disabled 0bXXXX XXX1 - out-of-range enabled 0bXXXX XX1X - no target enabled	0	

Index hex	8sub9	Name	Type	Data type	Value	Default	Unit
0x5F		Measurement Data Collection	R	record			
	1	Position value	R	uint16	0...448		1/32mm
	2	Signal quality	R	uint8	0x00 - insufficient / no position acquisition possible 0x01 - acceptable 0x02 - good 0x03 - excellent		
	3	BD1 Status	R	uint8	0: inactive 1: active		
	4	BD2 Status	R	uint8	0: inactive 1: active		
	5	BD3 Status	R	uint8	0: inactive 1: active		
Standard operation control							
0x70		**Output Configuration**	R/W	record			
	1	Output Type Q1	R/W	uint8	0x00 - push-pull 0x01 - low-side 0x02 - high-side		
	2	reserved	R/W	uint8	0x00 - reserved 0x01 - reserved 0x02 - reserved 0x03 - reserved		
	3	reserved	R/W	uint8	0x02 - reserved 0x03 - reserved		
	4	Analog Output Type UI	R/W	uint8	0x00 - reserved 0x01 - reserved 0x02 - reserved 0x03 - U: 0...10V 0x04 - U: 1...5V		
	5	reserved	R/W	uint8	0...200	0	
	6	reserved	R/W	uint8	0...200	200	
	7	Voltage Low Value	R/W	uint8	0...100	0	0.1V
	8	Voltage High Value	R/W	uint8	0...100	100	0.1V

Index hex	8sub9	Name	Type	Data type	Value	Default	Unit
0x74		**Event Configuration**	R/W	uint8	0b0000 0000 - application events disabled 0bXXXX XXX1 - no target event enabled	0x00	
	1	**Locator Indication Control**	R/W	uint8	0x00 - normal indication 0x01 - locator indication	0x00	
User information							
0xC0		**UT1 - User Tag 1**	R/W	uint32	0x00000000... 0xFFFFFFFF	0	
0xC1	1	**UT2 - User Tag 2**	R/W	uint16	0x0000... 0xFFFF	0	
Special function							
0xE2		**Operating Temperature**	R	int8			°C
0xE8		**Device characteristics**	R	record			
	1	Position Range	R	uint16	448		
	2	Resolution	R	uint16	16		1/512mm

IO-Link Process Data Structure and Parameters

Index hex	sub	Name	Type	Data type	Value	Default	Unit
Event Configuration (Data Storage = yes)							
0x78	1	No Target (Warning)	R/W	bool	0: Disabled 1: Enabled		
	2	Signalfehler	R/W	bool	0: Disabled 1: Enabled		
Service Function (Data Storage = no)							
0x7F		Indication Setting	R/W	unit8	0: Normal Indication 1: Locator Indication	0	
Device Access Locks (Data Storage = yes)							
0x0C		Data Storage Lock (Bit1)	R/W	bool	0: false (Data Storage activated) 1: true (Data Storage locked)	0	
Device Status Information (Data Storage = no)							
0x24		Device Status	R	unit8	0: Device is OK 2: Out of specification	0	
0x25		Detailed Device Status	R	unit 8 [9]	Active Events, see IOLink 1.1-Specification		
Operation Information (Data Storage = no)							
0xE0		Operating Hours	R	unit32	0: 0x3FFFFFFF Resolution 0,25h		0,25h
User Specific Information (Data Storage = yes)							
0x18		Application Specific Tag	R/W	char [32]	Always a step ahead		
0xC0		User Tag	R/W	char [32]	LPS 4.0 Series		
Device Characteristics (Data Storage = no)							
0xE8	1	Position Range	R	unit16	LPS 4.0 14: 0...960		
	2	Resolution	R	unit16	50 µm		
Process Data (Data Storage = no)							
0x28		Process Data Values	R	unit16	See Process Data Structure		
Observation (Data Storage = no)							
0xEC	1	Measured Value	R	unit16	LPS 4.0 14: 0...960		1/20 mm
	2	Signal Quality	R	unit8	0: Insufficient 1: Acceptable 2: Good 3: Excellent		
	3	Switching Signal 1	R	unit8	0: Inactive 1: Active		
	4	Switching Signal 2	R	unit8	0: Inactive 1: Active		
	5	Switching Signal 3	R	unit8	0: Inactive 1: Active		

Note: At parameter „0xEC“ it is only possible to read the complete parameter. Accessing of subindexes is not possible here.

Error Codes

In case of a fault, the sensor transmits the error codes detailed in the following table. The error code consists of 2 bytes. The higher value byte, here 0x80, represents the IO-Link device as the emitter. The lower value byte represents the actual fault.

Error	Error code	Comment
Index unavailable	0x8011	R/W access to unavailable parameter index.
Unavailable subindex	0x8012	R/W access to unavailable parameter subindex.
Service temporarily unavailable	0x8020	Write/read access to parameter limited by the device status is not possible.
Access denied	0x8023	Write attempt to read-only address.
Invalid value range, parameter	0x8030	For all R/W parameters outside of the valid value range.
Parameter value too large	0x8031	For all R/W parameters above the valid value range.
Parameter value too small	0x8032	For all R/W parameters beneath the valid value range.

Event Data

The sensor is capable of transmitting events that occur:

Event	Instance	Type	Mode	Event Qualifier	Event Code	Description
PDU Buffer overflow	DL	Error	Single shot	0x72	0x5200	Size of the transmitted data package can not be processed by the sensor
PDU Checksum error	DL	Error	Single shot	0x72		
PDU Procedure error PDU Flow control error	DL	Error	Single shot	0x72	0x5600	Asynchrony in the transmission of the PDU data
Restricted PDU service	AL	Error	Single shot	0x73	0x5800	Submitted service request is invalid
No damping element	APP	Warning	Appear/ Disappear	0xE4/0xA4	0x8CA4	No damping element or no position determination possible

Maintenance, service

The LPS 4.0 usually works without maintenance.

Any way the function should be tested in regular intervals when testing the machine tool.

The following tests need to be carried out:

- Check the relative position of the sensor to the cam of the cylinder.
- Check if all mounting bolts are tightened correctly and check the cam of the cylinder.
- Check the switch ring.
- Check that the sensing surface has no physical damage.
- Check that there is no contamination of the sensor.

LPS 4.0 analog

The LPS 4.0 sensor is factory set, so that the full measuring range results in a proportional signal of 0-10V.

In case the sensor detects a non logical position or is out of its measuring range, it will give a 0 Volt or 0 mA output signal.

As the SPS can not identify if the 0-signal is a 0 mm signal or an error, the sensor should be adjusted mechanically so that the position "0" is out of the mechanical measuring/stroke range of the cam /switch ring of the cylinder.

Troubleshooting

Fault	Cause		Remedy
No IO-Link connection to device	**A**	The C/Q communication port on the sensor is not connected to the IO-Link master	Make sure that the C/Q communication port is connected to the IO-Link master.
	B	No power supply	Check whether there is a reason for the absence of the power supply (installation or maintenance work, etc.). switch on the power supply.
Target does not get detected	**A**	Sensor is too far away from the item to be detected	Check the mounting and, if necessary, adjust the sensor to the correct distance.

Connecting Cable

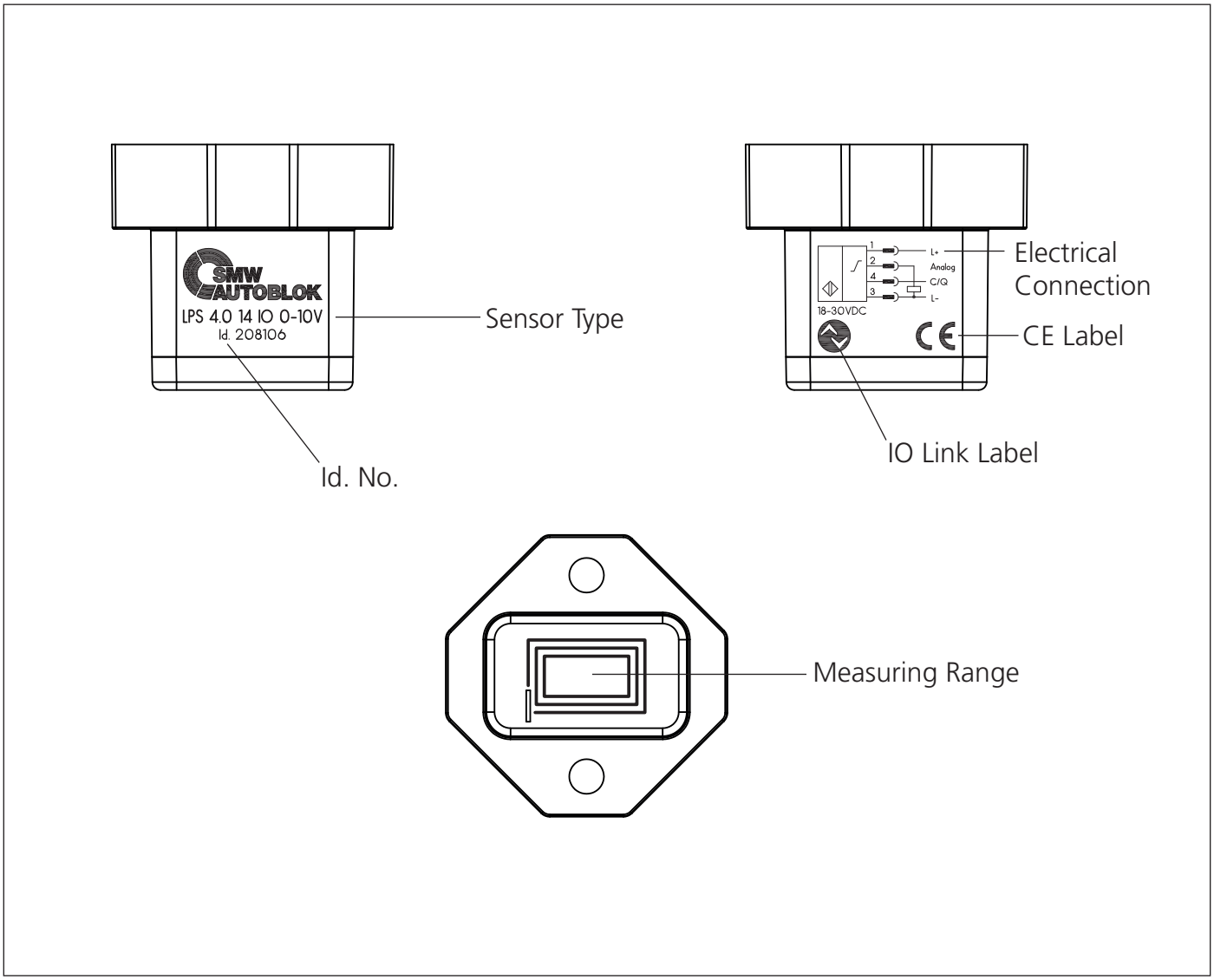
Connection cables and matching connectors are not included in the delivery package.

They can be ordered from (special length up to 20m on request).
The wire cross section min. 0.14 mm².

Description (Connecting Cable for LPS 4.0 14)	SMW-ID-No.
Connecting Cable 5m straight 5m Length, 4-pin M8x1 connector, straight	208244
Connecting Cable 5m angled 5m Length, 4-pin M8x1 connector, angled	208247
Connecting Cable 10m straight 10m Length, 4-pin M8x1 connector, straight	208245
Connecting Cable 10m angled 10m Length, 4-pin M8x1 connector, angled	208248
Connecting Cable 15m straight 15m Length, 4-pin M8x1 connector, straight	208246
Connecting Cable 15m angled 15m Length, 4-pin M8x1 connector, angled	208249

Typeplate/Contact

For questions on the product and place an order, please indicate the type marked on the label of the sensor type specification and part number.



Contact:

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Sales International:
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12 month warranty

Product: Linear Position Sensor

SMW-AUTOBLOK guaranties the proper function of the sensor, if use and storage are in accordance with the technical instructions of this manual.

In case the sensor does not perform properly, a repair or exchange is done, after inspecting the circumstances.

In case of a production error the sensor is repaired free of charge within the warranty period.

The warranty period is 12 month.

In order to claim warranty, the sensor must be returned in the original packaging.

The return shipment must be accompanied by a detailed trouble description.

Otherwise the manufacturer reserves the right to void any warranty claims.

Empfangsbestätigung für die Betriebsanleitung
Confirmation of receipt of the instruction manual

Hiermit bestätigt die vom Betreiber/ Anwender beauftragte Person

This certifies the operator assigned by the operating company

Herr / Frau

Mr. / Mrs.

den Erhalt der Betriebsanleitung sowie deren Inhalte, insbesondere das Kapitel Sicherheit gelesen und verstanden zu haben.

hereby confirms to have received the instruction manual and to have read and understood the content, especially the chapters concerning safety.

Bediener	Datum	Operator	Date
Betreiber / Sachbeauftragter	Datum	Operating Company / Authorised person	Date

Id.Nr. / Id. No. :

Artikelbez. / Item :

Gewicht / Weight :

Seriennr. / Serialno. :

Bitte ausgefüllt zurückschicken an:

Please send the filled in form back to:

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Mail: sales@smw-autoblok.de

Id. No.	:	
Item	:	
Weight	:	
Serialno.	:	

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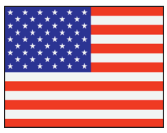

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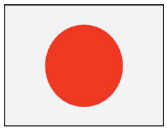

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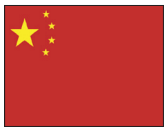

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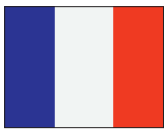

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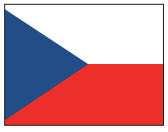

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