

## Technical data sheet

### Line profile sensor

Part no.: 50137351

LPS 36HI/EN.10

#### Contents

- Technical data
- Electrical connection
- Operation and display
- Notes
- Accessories



Figure can vary



## Technical data

### Basic data

Series	36
Contains	LxSsoft configuration software
Application	Contour measurement Object measurement

### Optical data

Light source	Laser, Red
Laser class	2M

### Measurement data

X-axis measurement range	46 ... 140 mm
Measurement range z-axis	200 ... 600 mm
Resolution of x-axis	0.2 ... 0.6 mm
Resolution of z-axis	0.1 ... 0.9 mm
Repeatability of Z-axis, relative to measurement distance	≤ 0.25 %
Repeatability of Z-axis, relative to measurement distance, note	Reflectivity 90%, identical object, identical environment conditions, measurement object ≤ 50x50 mm <sup>2</sup>
Measurement time	10ms
Linearity of Z-axis, relative to measurement distance	± 0,5% %
Black/white behavior	0.5 %, 6 ... 90% diffuse reflectance

### Electrical data

<b>Performance data</b>	
Supply voltage U <sub>B</sub>	18 ... 30 V, DC
<b>Inputs</b>	
Number of activation inputs	1 Piece(s)
<b>Outputs</b>	
Number of digital switching outputs	2 Piece(s)
<b>Switching outputs</b>	
<b>Switching output 1</b>	
Switching element	Transistor, Push-pull
<b>Switching output 2</b>	
Switching element	Transistor, Push-pull

### Interface

Type	Ethernet
------	----------

### Connection

Number of connections	3 Piece(s)
<b>Connection 1</b>	
Function	Signal IN Signal OUT Voltage supply
Type of connection	Connector
Thread size	M12
Type	Male
Material	Metal
No. of pins	8 -pin
Encoding	A-coded

### Connection 2

Function	Configuration interface Data interface
Type of connection	Connector
Thread size	M12
Type	Female
Material	Metal
No. of pins	4 -pin
Encoding	D-coded

### Connection 3

Function	Encoder
Type of connection	Connector
Thread size	M12
Type	Female
Material	Metal
No. of pins	8 -pin
Encoding	A-coded

### Mechanical data

Dimension (W x H x L)	56 mm x 160 mm x 74 mm
Housing material	Metal Plastic
Metal housing	Aluminum
Lens cover material	Plastic
Net weight	620 g

### Environmental data

Ambient temperature, operation	-30 ... 50 °C
--------------------------------	---------------

### Certifications

Degree of protection	IP 67
Protection class	III, VDE
Certifications	c UL US
Standards applied	IEC 60947-5-2

### Classification

Customs tariff number	90318020
ECLASS 5.1.4	27280190
ECLASS 8.0	27280190
ECLASS 9.0	27280190
ECLASS 10.0	27280190
ECLASS 11.0	27280190
ECLASS 12.0	27280190
ECLASS 13.0	27280190
ETIM 5.0	EC001825
ETIM 6.0	EC001825
ETIM 7.0	EC001825
ETIM 8.0	EC001825

## Electrical connection

### Connection 1

### PWR

Function	Signal IN
	Signal OUT
	Voltage supply
Type of connection	Connector
Thread size	M12
Type	Male
Material	Metal
No. of pins	8 -pin
Encoding	A-coded

### Pin Pin assignment

1	V+
2	IN ACTIVATE
3	GND
4	OUT 1 / Operational readiness
5	Trigger IN
6	OUT 2
7	n.c.
8	n.c.

### Connection 2

### ETH

Function	Configuration interface
	Data interface
Type of connection	Connector
Thread size	M12
Type	Female
Material	Metal
No. of pins	4 -pin
Encoding	D-coded

### Pin Pin assignment

1	Tx+
2	Rx+
3	Tx-
4	Rx-

### Connection 3

Function	Encoder
Type of connection	Connector
Thread size	M12
Type	Female
Material	Metal
No. of pins	8 -pin
Encoding	A-coded

## Electrical connection

Pin	Pin assignment
1	V+
2	
3	
4	
5	
6	
7	
8	

## Operation and display

LED	Display	Meaning
1	Green, continuous light	Operational readiness
	Off	No supply voltage
2	Yellow, continuous light	Ethernet connection is established
	Yellow, flashing	Data transmission active
	Off	No data transmission

## Notes



### Observe intended use!



- ⚠ This product is not a safety sensor and is not intended as personnel protection.
- ⚠ The product may only be put into operation by competent persons.
- ⚠ Only use the product in accordance with its intended use.



### NOTE



- ⓘ For UL applications, use is only permitted in Class 2 circuits in accordance with the NEC (National Electric Code).

## Accessories


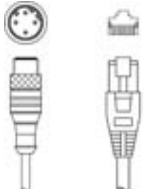
### Connection technology - Connection cables

	Part no.	Designation	Article	Description
	50135128	KD S-M12-8A-P1-050	Connection cable	Connection 1: Connector, M12, Axial, Female, A-coded, 8 -pin Connector, LED: No Connection 2: Open end Shielded: Yes Cable length: 5.000 mm Sheathing material: PUR
	50135139	KS S-M12-8A-P1-050	Connection cable	Connection 1: Connector, M12, Axial, Male, A-coded, 8 -pin Connector, LED: No Connection 2: Open end Shielded: Yes Cable length: 5.000 mm Sheathing material: PUR


## Accessories

Part no.	Designation	Article	Description
----------	-------------	---------	-------------

### Connection technology - Interconnection cables

Part no.	Designation	Article	Description
	50125541 K-DS M12A-8P-0,75m-LxS36-CP	Configuration cable	Parameter memory: Yes Connection 1: Connector, M12, Axial, Female, A-coded, 8 -pin Connection 2: Connector, M12, Axial, Male, A-coded, 8 -pin Shielded: Yes Cable length: 750 mm Sheathing material: PUR
	50135081 KSS ET-M12-4A-RJ45-A-P7-050	Interconnection cable	Suitable for interface: Ethernet Connection 1: Connector, M12, Axial, Male, D-coded, 4 -pin Connection 2: RJ45 Shielded: Yes Cable length: 5,000 mm Sheathing material: PUR

### Mounting technology - Rod mounts

Part no.	Designation	Article	Description
	50121435 BT 56 - 1	Mounting device	Functions: Static applications Design of mounting device: Mounting system Fastening, at system: For 12 mm rod, For 14 mm rod, For 16 mm rod Mounting bracket, at device: Clampable Material: Metal Tightening torque of the clamping jaws: 8 N·m

### Services

Part no.	Designation	Article	Description
	S981001 CS10-S-110	Start-up support	Details: Performed at location of customer's choosing, duration: max. 10 hours. Conditions: Devices and connection cables are already mounted, price not including travel costs and, if applicable, accommodation expenses. Restrictions: No mechanical (mounting) and electrical (wiring) work performed, no changes (attachments, wiring, programming) to third-party components in the nearby environment.
	S981005 CS10-T-110	Product training	Details: Location and content to be agreed upon, duration: max. 10 hours. Conditions: Price not including travel costs and, if applicable, accommodation expenses. Restrictions: Travel costs and accommodation expenses charged separately and according to expenditure.

#### Note



A list with all available accessories can be found on the Leuze website in the Download tab of the article detailed page.