Technical data sheet

Line profile sensor

Part no.: 50137351

LPS 36HI/EN.10

Figure can vary

Contents

Technical data

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Basic data

Series	36
Contains	LxSsoft configuration software
Application	Contour measurement
	Object measurement

Special version

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 mm²
Measurement time	10ms
Linearity of Z-axis, relative to measurement distance	± 0,5% %
Black/white behavior	0.5 %, 6 … 90% diffuse reflectance

Electrical data

Performance data

Supply voltage U_B	18 ... 30 V, DC

Inputs

Number of activation inputs	1 Piece(s)

Outputs

Number of digital switching outputs	2 Piece(s)

Switching outputs

Switching output 1

Switching element	Transistor, Push-pull

Switching output 2

Switching element	Transistor, Push-pull

Interface

Type	Ethernet

Connection

Number of connections	3 Piece(s)

Connection 1

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
eCl@ss 5.1.4	27280190
eCl@ss 8.0	27280190
eCl@ss 9.0	27280190
eCl@ss 10.0	27280190
eCl@ss 11.0	27280190
ETIM 5.0	EC001825
ETIM 6.0	EC001825
ETIM 7.0	EC001825

Electrical connection

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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

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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.

> ℹ️ **NOTE**
>
> ↳ For UL applications, use is only permitted in Class 2 circuits in accordance with the NEC (National Electric Code).

Accessories

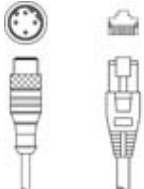## Connection technology - Connection cables

	Part no.	Designation	Article	Description
	50135128	KD S-M12-8A-P1-050	Connection cable	Connection 1: Connector, M12, Axial, Female, A-coded, 8 -pin 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 Connection 2: Open end Shielded: Yes Cable length: 5,000 mm Sheathing material: PUR

Accessories

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	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.