



Figure can vary

Part no.: 50111331
LES 36HI/PB
Line profile sensor



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Part no.: 50111331 – LES 36HI/PB – Line profile sensor

Technical data

Basic data	
Series	36
Contains	LxSsoft configuration software
Application	3D object detection Object measurement
Special design	
Special design	Synchronization input
Optical data	
Light source	Laser , Red
Laser class	2M
Measurement data	
X-axis measurement range	50 ... 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 ²
Measurement time	10ms
Linearity of Z-axis, relative to measurement distance	± 0,5% %
Minimum object size, x-axis	0.6 ... 2 mm
Minimum object size, z-axis	0.4 ... 3 mm
Black/white behavior	0.5 %
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 ,
Switching output 2	
Switching element	Transistor ,
Interface	
Type	PROFIBUS DP , Ethernet
Connection	
Number of connections	3 Piece(s)

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Connection 1

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

Connection 2

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

Connection 4

Type of connection	Connector
Function	PROFIBUS IN PROFIBUS OUT
Thread size	M12
Type	Female
Material	Metal
No. of pins	5 -pin
Encoding	B-coded

Mechanical data

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

Environmental data

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

Degree of protection	IP 67
Protection class	III
Certifications	c UL US
Standards applied	IEC/EN 60947-5-2
US patents	US 8,928,894 B

Classification

Customs tariff number	90318020
eCl@ss 8.0	27280190
eCl@ss 9.0	27280190
ETIM 5.0	EC001825

Electrical connection

Connection 1	PWR
Type of connection	Connector
Function	Signal IN Signal OUT Voltage supply
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
Type of connection	Connector
Function	Configuration interface Data interface
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 4	
Type of connection	Connector
Function	PROFIBUS IN PROFIBUS OUT
Thread size	M12
Type	Female

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Connection 4	
Material	Metal
No. of pins	5 -pin
Encoding	B-coded

Pin	Pin assignment
1	VP
2	A (N)
3	GND
4	B (P)
5	FE

Operation and display

LEDs

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.

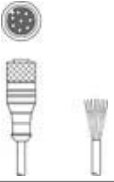
NOTE

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


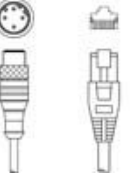
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Accessories


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


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

Connection technology - Adapters



	Part no.	Designation	Article	Description
	50109834	KDS BUS OUT M12-T-5P	Adapter	Suitable for: MultiNet Plus, PROFIBUS DP Number of connections: 3 Piece(s) Connection 1: Connector, M12, Axial, Male, B-coded, 5 -pin Connection 2: Connector, M12, Axial, Female, B-coded, 5 -pin Connection 3: Connector, M12, Axial, Male, B-coded, 5 -pin

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

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Services

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

Note

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