Model Number

ODT-LR300-40-60

Linerunner 300 laser light sensor for measuring height and width information

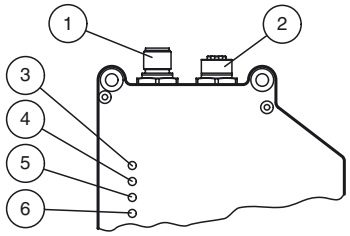
Features

- Master/Slave operation
- Intelligent exposure time control
- Laser protection class 1
- Measuring range z = 65 mm ... 125 mm

Function

The LineRunner is a high performance laser light sensor in the Pepperl+Fuchs family of sensors for industrial applications. In the laser light process, a laser line projected onto an object is detected by a camera at a specific angle. Height and width information are determined using the triangulation principle.
With its high performance hardware and software platform, the LineRunner provides innovative and modular solutions for performance, communication, and maintenance.
It reliably measures a wide variety of surfaces thanks to innovative laser technology and intelligent exposure control. It is laser protection class 1, which eliminates additional-protective measures.

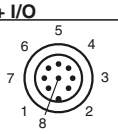
Indicating / Operating means



1	24 V DC + I/O	
2	LAN	
3	LED POWER	green
4	LED LAN	yellow
5	LED LASER	green
6	LED STATUS	green

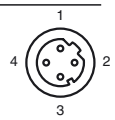
Electrical connection

24 V DC + I/O



Pin	Signal
1	IN/OUT 1
2	+UB
3	IN/OUT 2
4	IN/OUT 3
5	IN Trigger
6	IN/OUT 4
7	GND
8	IN/OUT 5

LAN



Pin	Signal
1	TX+ Ethernet
2	RX+ Ethernet
3	TX- Ethernet
4	RX- Ethernet

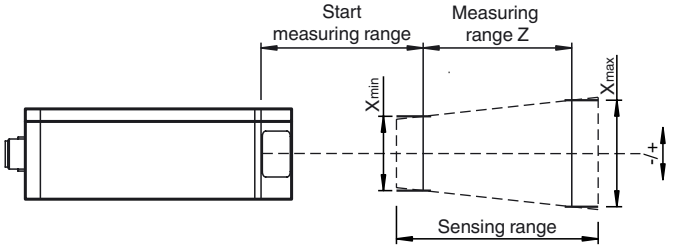
Release date: 2012-10-17 16:18 Date of issue: 2012-10-17 217005_eng.xml

Technical data

General specifications		
Measurement range		Xmin = ±15 mm Xmax = ±21.5 mm Z = 65 mm ... 125 mm
Light source		laser diode
Light type		Red laser for measuring location indication, 650 nm Infrared light laser as measuring laser, 785 nm Both laser lines are congruent and are operated in parallel
Laser nominal ratings		
Note		VISIBLE AND INVISIBLE LASER RADIATION , DO NOT STARE INTO BEAM DO NOT VIEW DIRECTLY WITH OPTICAL INSTRUMENTS
Laser class		1
Wave length		Alignment laser: 650 nm Measurement laser: 785 nm
Pulse length		Measurement laser: 20 ms
Maximum optical power output		Alignment laser: 1.4 mW Measurement laser: 6 mW
Laser monitoring		The safety system switches off the laser when the laser current is too high
Scan rate		90 s^{-1}
Indicators/operating means		
Operating display		LED green
Function display		LAN, laser, status
Electrical specifications		
Operating voltage	U_B	24 V DC ± 10 %, SELV/PELV
Power consumption	P_0	max. 5 W , Outputs without load
Interface		
Interface type		Ethernet via TCP/IP , 100 Mbit/s
Input		
Input voltage		24 V
Number/Type		3 digital inputs and external trigger
Output		
Number/Type		2 digital outputs
Switching type		PNP
Switching voltage		24 V
Ambient conditions		
Ambient temperature		0 ... 40 °C (32 ... 104 °F)
Storage temperature		-20 ... 70 °C (-4 ... 158 °F)
Mechanical specifications		
Protection degree		IP65
Connection		8-pin, M12 x 1 connector (supply voltage + I/O) connector M12 x 1, 4-pin (Ethernet)
Material		
Housing		anodized aluminium
Optical face		glass pane
Mass		approx. 500 g
Compliance with standards and directives		
Standard conformity		
Noise immunity		EN 60947-5-2
Emitted interference		EN 60947-5-2
Protection degree		EN 60529
Laser class		IEC 60825-1:2007

Notes

Measuring range LineRunner



Accessories

V19-G-5M-PUR-ABG
Cable socket, M12, 8-pin, shielded, PUR cable

V1SD-G-2M-PUR-ABG-V45-G
Connection cable, M12 to RJ-45, PUR cable 4-pin, CAT5e

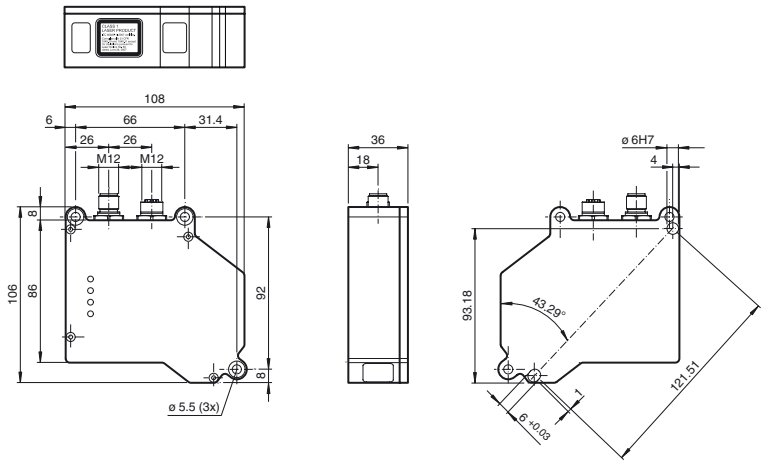
V1SD-G-2M-PUR-ABG-V45X-G
Connection cable, M12 to RJ-45, PUR cable 4-pin, CAT5e

Laserlabel

Other suitable accessories can be found at www.pepperl-fuchs.com

Release date: 2012-10-17 16:18 Date of issue: 2012-10-17 217005_eng.xml

Dimensions



Laser notice laser class 1

- The irradiation can lead to irritation especially in a dark environment. Do not point at people!
- Maintenance and repairs should only be carried out by authorized service personnel!
- Attach the device so that the warning is clearly visible and readable.
- The warning accompanies the device and should be attached in immediate proximity to the device.
- Caution – Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

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