



High Speed Laser Beam Micrometer

Series LBM 34

- Measuring range 34 mm
- Measuring frequency 2300 Hz
- 1µm resolution, ≤ 3 µm reproduceability
- Gap, edge, position and diameter detection

Highest resolution and accuracy

Principal features:

- Distance: Emitter – Receiver **300 mm (150-700mm)**
- Resolution **1 µm***
- Linearity **+/- 10 µm****
- Measuring rate **2300 Hz**
- Wear-free (no rotating mirror)
- Analogue output **0-10V**
- Digital output RS232 or RS422
- 5 Switching outputs
- Laser Class 2
- Protection IP 64 (Emitter/Receiver)
- 4 Measuring programs
- CE

* Notification on controller display

** Valid for distance of the target to receiver 20 +/- 5mm

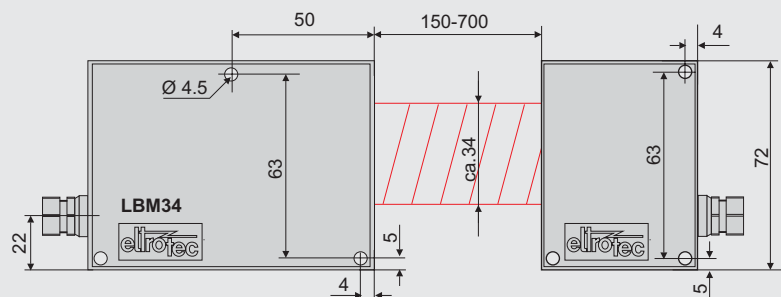
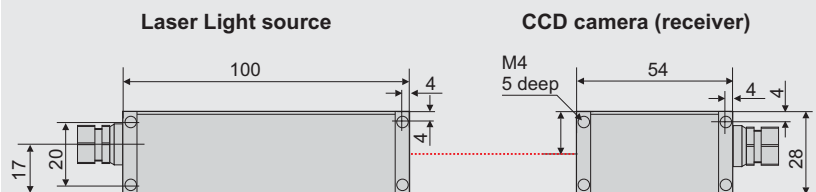
Typical applications:

- Non contact and high dynamical measurements on running conveyor
- Extrusion lines, drawing process
- Diameter and gap measuring
- Position and edge measuring
- Edge control
- Measuring on glas and transparent plastics

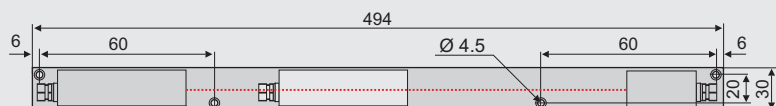
Advantages:

- High resolution and accuracy
- High linearity
- High dynamic
- Operation and evaluation via intelligent controller with graphic display
- Active temperature compensation

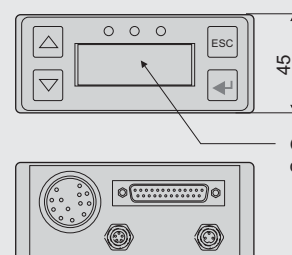
Dimensions



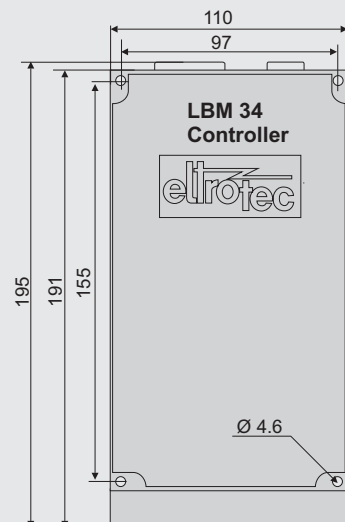
Mounting bar (distance 150 and 300 mm prepared)



Controller



Graphic display



All dimensions in mm

Technical data

Electrical data	Supply voltage	24 VDC +/-15%
	Current consumption	typ.
	Measuring rate	2300 Hz
Specific data	Measuring range	34 mm
	Distance emitter - receiver	300 mm (150-700mm) adjustable with mounting bar
	Linearity*	+/- 10 µm
	Resolution**	1 µm
	Reproduceability	≤ 3 µm
	Smallest measuring object Ø	0.5 mm (smallest gap: 0.3 mm)
Outputs	Analogue	0-10 V, -10 to +10V selectable
	Digital	RS232 or RS422
		1x Error, 2x limit, 2x warning limit SYNC-OUT
Inputs	Digital	SYNC-IN, ZERO, Laser ON/OFF
Light source	Laser	typ. 670 nm
	Laser Class	2 (EN 60825-1:11/01)
Data on ambient conditions	Operating temperature	0 to +50 °C
	Storage temperature	-20 to + 70 °C
	Protection	Emitter / receiver: IP 64 Controller: IP 40
Measurement	Measuring programs	Diameter, Gap, Position/Edge, Segment

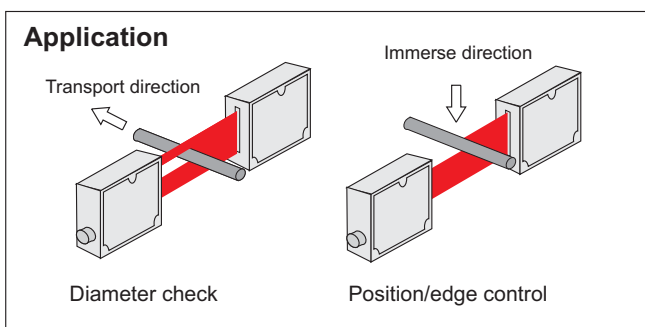
* At distance object-receiver 20 +/- 5 mm

**Notification on controller display

Ordering information

Sensor	Part No.
Laser Beam Micrometer LBM 34 Sensor set (emitter and receiver) on mounting bar, controller, supply plug	10662936 (entire sett)
Accessories	
Sensor extension cable f. emitter CA 34-3000S	11232937
Sensor extension cable f. receiver CA 34-3000E	11232938
Interface card RS422 for 1-4 sensors LBM 34	11232939
Supply cable PC34-3 meter / PC34-10 meter	11232940 / 11232941
Signal output cable for analogue and switching outputs SCA 2500-3	11232942

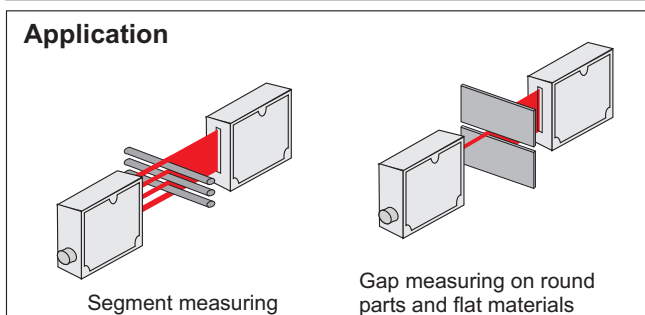
ELT.LB.ML.BM3441



LASER CLASS 2
DIN EN 60825-1: 11.01

Laser radiation
Avoid exposure to beam

Sensors of CLASS 2 don't need environment with special protection



Presented by: