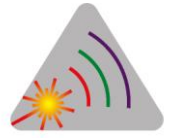


Data sheet LaserMicrometer LM70

The LM70 is a laser measurement system in which the transmitter (laser) and receiver (detector) are separated. Using the laser and the associated optics, a line of parallel light of the desired length is generated and imaged on the receiver. If a measurement object between the transmitter and receiver interrupts the line, part of the receiver is shadowed. The light / dark transition is determined very precisely on the photo detector (shadow measurement principle).

The LM70 systems enable simple and accurate measurement or detection of:

- diameters
- Widths
- Edges
- Roundness and vertical runout
- vibrations



Data sheet laser micrometer LM70

Operating voltage: 10V 26V
Current consumption @ 12V: < 170 mA
Interface: RS232, TXD, RXD (RS422 Simplex TX+, TX-)
Laser: 655nm Laserklasse 1M
Housing: Aluminium, red - black anodized, potential free
Housing dimensions (L x W x H): 395 mm x 140 mm x 50 mm (see Appendix `C´)
Weight: 2700 g
Mounting: 4 x M5 (see Appendix `C´)
Temperature range in operation: 0°C 50°C
Temperature range in stock: -25° 75°C

Measurement data: (optics POG)

Measuring range: 0.4 mm 70 mm
Resolution: 2 µm
Repeat accuracy Edge mode: +/- 20 µm
Repeat accuracy Dia mode: +/- 40 µm
Non-linearity Edge mode +/- 35 µm
Non-linearity Dia mode: +/- 50 µm
Reaction time: < 1.5 ms
Measuring rate: 750 Mess./s (1500 Mess./s on request possible)
Mess - Modi: Edge-Mode, Dia-Mode (see Appendix `B´)
Serielle Schnittstelle:

- Connector: 6-pol. circular socket FISCHER
- Signals: RXD, TXD, GND
- Baud rate: 4800, 9600, 19200, 38400, 57600, 115200
selectable via coding switch