

Laser Scan Micrometer Measuring Unit



Specifications

Linearity at 20°C *1	Entire range : ±1,0 µm Narrow range : ±(0,6+0,1ΔD) µm
Repeatability (±2 σ)	±0,11 µm
Positional error *2	±1,5 µm
Measuring region	10 x 30 mm
Laser wavelength	650 nm, Visible
Scanning rate	3200 scans/s
Scanning speed	226 m/s
Applicable laser standards	IEC, FDA

Optional accessories

No.	Description
02AGD130	Calibration gauge set (ø1-30 mm)
02AGD490	Adjustable workstage
02AGD440	Centre support
02AGD450	Adjustable V-block
02AGD240	Air shield
957608	Air cleaner for air shield
02AGC150A	Extension relay cable 1 m
02AGC150B	Extension relay cable 3 m
02AGC150C	Extension relay cable 5 m
02AGN780A	Extension signal cable 5 m
02AGN780B	Extension signal cable 10 m
02AGN780C	Extension signal cable 15 m
02AGN780D	Extension signal cable 20 m

02AGD440 and 02AGD450 : use with an adjustable workstage

Series 544

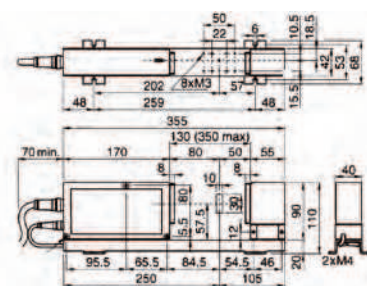
LSM-503S

High Accuracy Non-contact measuring system

- General-purpose type with a measuring range of 0,3 mm to 30 mm.
- Provides high accuracy with a linearity of ±1,0 µm over the entire measuring range and ±(0,6+0,1ΔD) µm in the narrow range.
- Excellent repeatability of ±0,1 µm.
- High scanning rate of 3200 scans/s.



LSM-503S



Inch/Metric

No.	Range	Resolution (selectable)
544-536	0,3-30 mm / 0.012-1.18"	0,00002-0,1 mm / 0.000001-0.005"

Specifications

Linearity at 20°C *1	Entire Range : ±3 µm Narrow range : ±(1,5+0,5ΔD) µm
Repeatability (±2 σ)	±0,36 µm
Positional error *2	±4 µm
Measuring region	20 x 60 mm
Laser wavelength	650 nm, Visible
Scanning rate	3200 scans/s
Scanning speed	452 m/s
Applicable laser standards	IEC, FDA

Optional accessories

No.	Description
02AGD140	Calibration gauge set (ø1-60 mm)
02AGD520	Adjustable workstage
02AGD580	Centre support
02AGD590	Adjustable V-block
02AGD250	Air shield
957608	Air cleaner for air shield
02AGC150A	Extension relay cable 1 m
02AGC150B	Extension relay cable 3 m
02AGC150C	Extension relay cable 5 m
02AGN780A	Extension signal cable 5 m
02AGN780B	Extension signal cable 10 m
02AGN780C	Extension signal cable 15 m
02AGN780D	Extension signal cable 20 m

02AGD580 and 02AGD590 : use with an adjustable workstage

Series 544

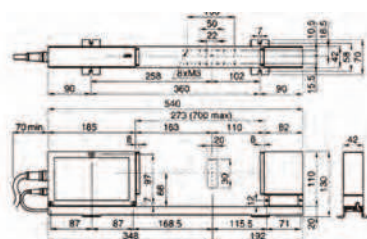
LSM-506S

High Accuracy Non-contact Measuring System

- General-purpose type with a measuring range of 1 mm to 60 mm.
- Provides high accuracy with a linearity of ±3 µm over the entire measuring range and ±(1,5+0,5ΔD) µm in the narrow range.
- Excellent repeatability of ±0,36 µm.
- High scanning rate of 3200 scans/s.



LSM-506S



Inch/Metric

No.	Range	Resolution (selectable)
544-538	1-60 mm / 0.04-2.36"	0,00005-0,1 mm / 0.000002-0.005"

*1 At the centre of the measuring region

*2 Potential measurement error due to variation in workpiece position within the measuring region

ΔD = Difference in diameter between the mastergauge and workpiece



LSM brochure on request