

Laser Scan Micrometer Measuring Unit

Series 544

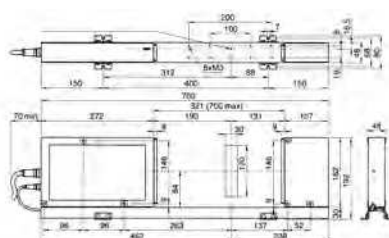
LSM-512S

High Accuracy Non-contact measuring system

- General-purpose type with a wide measuring range of 1 mm to 120 mm.
- Provides high accuracy with a linearity of $\pm 6 \mu\text{m}$ over the entire measuring range and $\pm(4,0+0,5\Delta D) \mu\text{m}$ in the narrow range.
- Excellent repeatability of $\pm 0,8 \mu\text{m}$.
- High scanning rate of 3200 scans/s



LSM-512S



Inch/Metric

No.	Range	Resolution (selectable)
544-540	1-120 mm / 0.04-4.72"	0,0001-0,1 mm / 0.000005-0.005"

Series 544

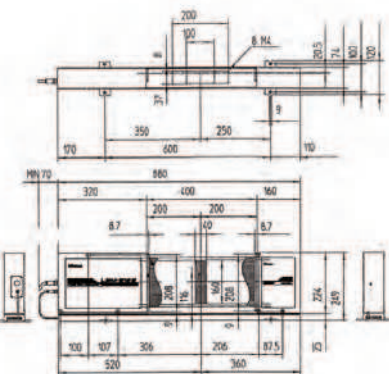
LSM-516S

High Accuracy Non-contact measuring system

- General-purpose type with a wide measuring range of 1 mm to 160 mm.
- Provides high accuracy with a linearity of $\pm 7 \mu\text{m}$ over the entire measuring range and $\pm(4,0+2\Delta D) \mu\text{m}$ in the narrow range.
- Excellent repeatability of $\pm 1,4 \mu\text{m}$.
- High scanning rate of 3200 scans/s



LSM-516S



Inch/Metric

No.	Range	Resolution (selectable)
544-542	1-160 mm / 0.04-6.3"	0,0001-0,1 mm / 0.000005-0.005"



Specifications

Linearity at 20°C *1	Entire range : $\pm 6 \mu\text{m}$ Narrow range : $\pm(4,0+0,5\Delta D) \mu\text{m}$
Repeatability ($\pm 2 \sigma$)	$\pm 0,8 \mu\text{m}$
Positional error *2	$\pm 8 \mu\text{m}$
Measuring region	30 x 120 mm
Laser wavelength	650 nm, Visible
Scanning rate	3200 scans/s
Scanning speed	904 m/s
Applicable laser standards	IEC, FDA

Optional accessories

No.	Description
02AGD150	Calibration gauge set ($\phi 20$ -120 mm)
02AGD260	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



Specifications

Linearity at 20°C *1	Entire range : $\pm 7 \mu\text{m}$ Narrow range : $\pm(4,0+2\Delta D) \mu\text{m}$
Repeatability ($\pm 2 \sigma$)	$\pm 1,4 \mu\text{m}$
Positional error *2	$\pm 8 \mu\text{m}$
Measuring region	40 x 160 mm
Laser wavelength	650 nm, Visible
Scanning rate	3200 scans/s
Scanning speed	1206 m/s
Applicable laser standards	IEC, FDA

Optional accessories

No.	Description
02AGM300	Calibration gauge set ($\phi 20$ -160 mm)
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

*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