

Laser Scan Micrometer Measuring Unit and Display Unit Package

Series 544

LSM-902/6900

Ultra-high Accuracy Non-contact Measuring System

- Suitable for pin and plug gauge measurements.
- Wide measuring range of $\varnothing 0,1$ mm to $\varnothing 25$ mm.
- Provides ultra-high accuracy with a linearity of $\pm 0,5 \mu\text{m}$ over the entire measuring range and $\pm(0,3+0,1\Delta D) \mu\text{m}$ in the narrow range.
- Ultra-high repeatability of $\pm 0,05 \mu\text{m}$.



LSM-6900 display unit



LSM-902 measuring unit

Metric

No.	Range	Resolution (selectable)
544-495D	0,1-25 mm	0,01-10 μm / 0.0000001-0.0005"

Inch/Metric

No.	Range	Resolution (selectable)	Remarks
544-496D*	0,1-25 mm / 0.004-1"	0,01-10 μm / 0.0000001-0.0005"	
544-496E	0,1-25 mm / 0.004-1"	0,01-10 μm / 0.0000001-0.0005"	UK only

Functions	Series 544
GO/ \pm NG judgement	●
Multi-limit judgement	●
Sample Measurement	●
Statistical calculation	●
ZERO/SET	●
PRESET	●
Group judgement	●
Workpiece position display	●
Dual-gauge calibration	●
Transparent object measurement	●
Automatic measurement	●
Dual-unit measurement (optional)	●
Abnormal data elimination	●
Data Output	●
OFFSET	●

Specifications

Linearity at 20°C *1	Entire range : $\pm 0,5 \mu\text{m}$ Narrow range : $\pm(0,3+0,1\Delta D) \mu\text{m}$
Repeatability ($\pm 2 \sigma$)	$\pm 0,05 \mu\text{m}$ / 2.0 μinch
Positional error *2	$\pm 0,5 \mu\text{m}$
Measuring region	3 x 25 mm / 0.12 x 0.98"
Laser wavelength	650 nm, Visible
Scanning rate	800 scans/s
Scanning speed	56m/s
Applicable laser standards	IEC
Main display	16-digit fluorescent tube
Interface units	RS-232C, Analog I/O, Footswitch equipped
Power supply	100 - 240VAC, 40 VA, 50/60Hz

Optional accessories

No.	Description
02AGD180	Calibration gauge set ($\varnothing 1-25$ mm)
02AGD270	Workstage
02AGD280	Adjustable workstage

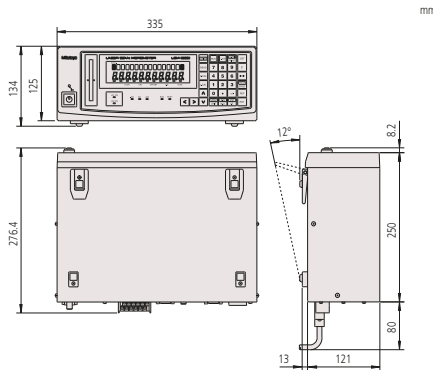
*1 At the centre of the measuring region

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

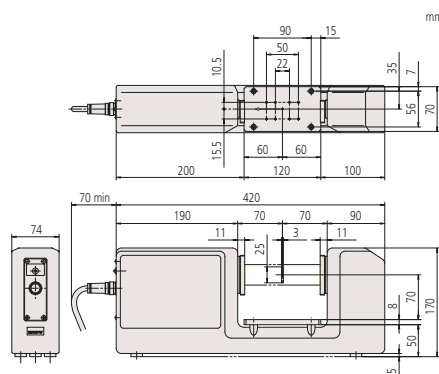
ΔD = Difference in diameter between the mastergauge and workpiece



LSM brochure on request



LSM-6900 display unit



LSM-902 measuring unit