

# Laser Hologage LGH/LGB-S

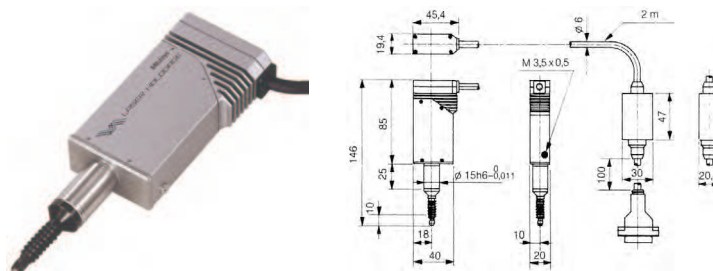


542-401  
542-421

## Series 542

### 0,0001 mm resolution types

- The Mitutoyo Laser Hologage is a highly precise measuring instrument that uses the phenomena of optical interference of laser light to produce a very high resolution holographic scale from a diffraction grating.
- The Laser Hologage can be used both for precise measurement and as a transducer in ultra-precise positioning and control systems.



542-711-1

Series 542	
542-074D	
<b>Functions</b>	
PRESET	●
Tolerance limit input on/off	●
Calculation of sum	●
Sum/determination of two probes	●
ABS/INC	●
ZERO/ABS	●
Error display	●
Diameter display	●
MAX/MIN difference measurement	●
Key lock	●
Counting direction switching mm/inch	●
External control	●
RS Link	●
RS-232C Output	●
Digimatic Output	●
USB MITUTOYO SENSORPAK Output	●
I/O Output	●
Tolerance judgement (3 or 5 step)	●

### Specifications

Scale type	Laser-hologram measurement sensor
Max. response speed	250 mm/s
Contact point	R 1,5 mm carbide
Bearing type	High precision linear ball bearing
Output signal	90° phase difference, differential square wave (RS-422A equivalent)
Signal pitch	0,25 μm

### Standard accessories

No.	Description
538610	Wrench for contact point (for 10 mm range models)

### Optional accessories

No.	Description
971750	Comparator for Laser Hologage LGH
971753	Cable release
542-075D	EF-Counter with single display
542-071D	EH-Counter with double display
971751	Stem fixture for fixing to top surface
971752	Stem fixture for fixing to bottom surface

### For 542-401/542-421

02ADE230	Pneumatic drive CAP 10 mm
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### Consumable spares

No.	Description
901312	Standard contact point



Refer to the Linear Gage brochure

No.	Range	Accuracy (20°C)	Measuring force *1	Stem diameter	Resolution μm	Mass g	Remarks
542-711-1	0-10 mm/0-0.4"	0,2 μm	0.55 N/0.45 N/0.35 N	15 mm	0,1 μm	410	
542-712-1*	0-10 mm/0-0.4"	0,2 μm	0.1 N/-	15 mm	0,1 μm	410	
542-074D*						900	
542-074E*						900	UK only

\*1 Spindle DOWN/Horizontal/Spindle UP



542-074



542-074