



CARMAR ACCURACY CO., LTD.

## Linear Gauge

- Suitable for a variety of industrial automation ;  
High-accuracy dimension, displacement,  
thickness measurement
- Exchangeable probe-head ;  
Operable in harsh environments

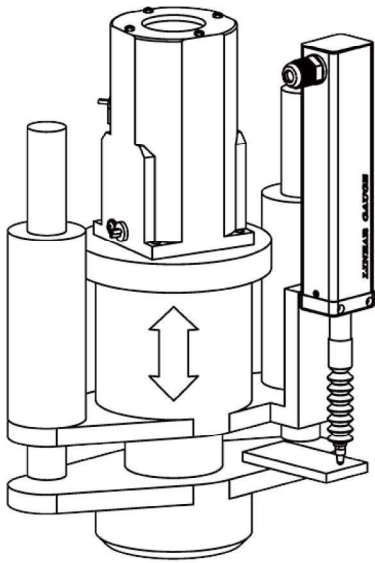


MADE IN  
TAIWAN

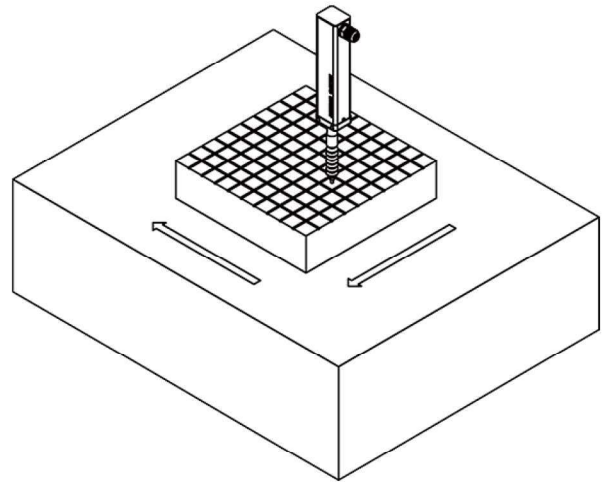
## ■ AREA OF APPLICATIONS

1. Free surface
2. Warpage
3. Thickness
4. Shaft slants
5. Mold critical dimensions
6. Spindle travel distance
7. Camshaft profiling
8. Sheet-metal probing in auto-industry
9. Structure displacement monitoring
10. Process quality control

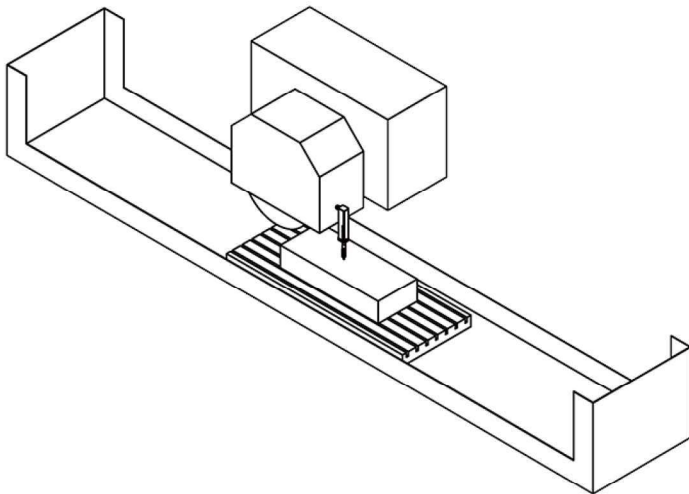
## ■ SAMPLE APPLICATIONS



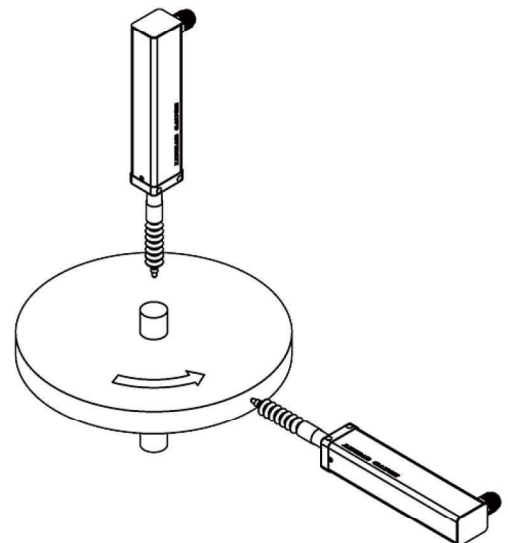
Travel calibration & compensation for PCB drilling machine spindles



Free surface checkup





Feed control for grinding wheel



Cam waviness and runout

## ■ SPECIFICATIONS

Model	Digital: DLG 25 / DLG 30	Analog: ALG 25 / ALG 30
Resolution *	0.1 μm / 0.2μm / 0.5 μm / 1 μm / 5 μm	—
Signal period	4-fold the resolution	Grating period 20 μm
Travl	25 mm / 30 mm	
Accuracy (@ 20°C)	± 3 μm / ± 5 μm	
Meas. Force	< 5 N	
Guaranteed travels	> 10 million times	
IP grade	IP 54 / IP 67	
Stem diameter	φ 5.0 mm	
Probe-head thread	M2.5 × 0.45p	
Input voltage	5.0 Vdc ± 5%	
Operation current	Digital : ≤ 70 mA (@ 5 Vdc) Analog : ≤ 55 mA (@ 5 Vdc)	
Operation temperature	0 ~ +50 °C	
Storage temperature	-10 ~ +55 °C	
Output signal	Digital : A / B phase differential  (RS422) Analog : A / B phase differential  (1 Vpp)	
Cable length	≈ 2 m, or customized (≤ 10 m)	
Mass (with cable)	25 mm : ≈ 320 g / 30 mm : ≈ 340 g	

- ◆ A four-fold increase of the signal period. Refer to output signals on the next page.
- ◆ Models and specs may change without notice. Accuracy good for downward measurement.