



B.N.C.TOOLING Co.,Ltd.

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69/90 Hatairat Rd., Minburi ,Minburi Bangkok (Thailand) 10510



Vision Measuring Machine

Precision Linear scales

SG0.5-100/150/200/250/300/400/500

Model	SG0.5-100/150/200/250/300/400/500
Code#	SG0.5-100/150/200/250/300/400/500
Accuracy	$\pm 3\mu\text{m}$
Certificate	CE



1. Application of Linear Scales

ISG series of Linear Scales are widely used with Sinowon profile projectors, toolmaker microscopes, video measuring machines etc. SG Linear scale has good dynamic performance, great moving speed, and perfect reliability, not only can they meet the requirements of normal shaft dynamic performance, but also the requirements of direct drive equipment of highly dynamic performance.

2. Features of Linear Scales

- It adopts the advanced coating replication technology of glass grating, which ensures the accuracy of glass pitch, the benchmarks of main and auxiliary grating.
- It adopts the imported electronic components and uses the latest STM chip mounting technology that ensures the durability of electronic components for each linear encoder.
- Scan read system adopts the reliable and durable five-bearing design, it ensures the movement of optical induction system smoothly and durably.
- It adopts the double anti-oil, high elasticity and anti-aging plastic as dust-seal, it ensures optimum sealing performance and minimal friction force.
- It adopts the positioning spring as position controller for the scan read, it ensures the movement of bearing pulley durably and smoothly even in the condition of high-speed.
- It is strictly inspected by testing instrument for each glass, electronic components, dust-seal and snake skin tube, it ensures that each linear encoder can pass the calibration of the laser intrferometer smoothly.



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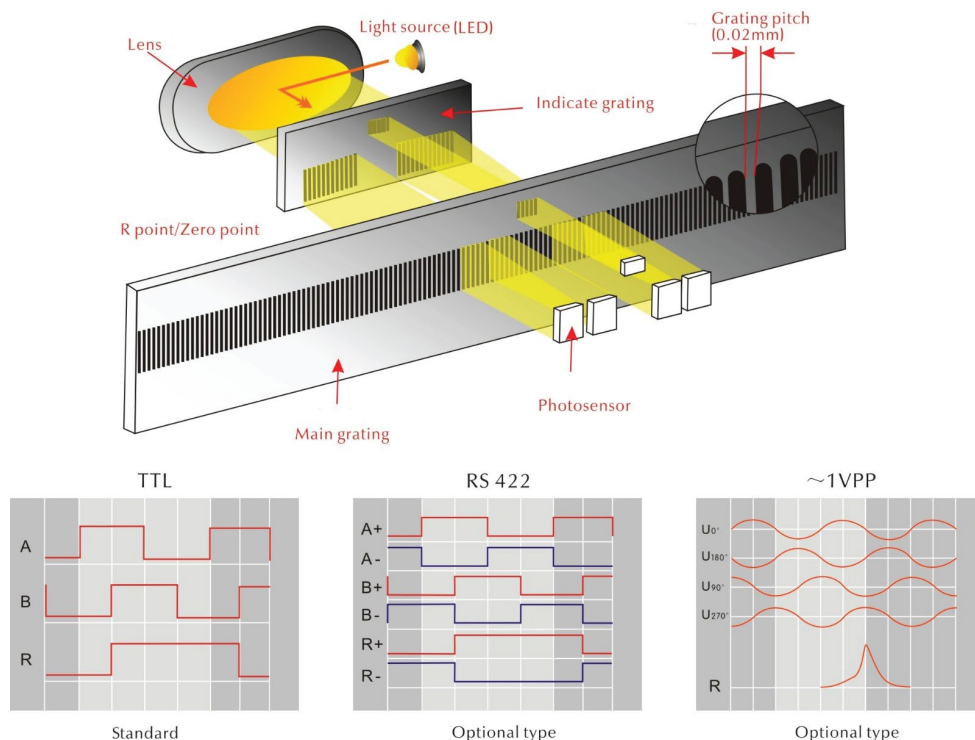
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3.Output Signal Schematic Diagram3



4.Technical Specification:

Product Name	Linear Scale SG Series		
Model	SG1	SG0.5	SG0.1
Resolution	1μm	0.5μm	0.1μm
Max. Working Speed	60m/min	60m/min	10m/min
Grating Pitch	20μm	20μm	10μm
Output Signal	TTL,RS422	TTL,RS422	TTL,RS422
Grating Measuring System	Transmission infrared optical measurement system, infrared wavelength:880(um)		
Measuring Length	25~600mm		
Scan Unit Rolling System	90° five ball bearing rolling system		
Working Voltage	5V±5%DC		
Working Environment	Temperature : -10~45°C; Humidity : ≤90%		
Accuracy	50≤ML≤500mm : Accuacy: ±3μm		
	510≤ML≤600mm : Accuracy: ±5μm		