

Linear Scale SH52

Analog output scale for feedback applications

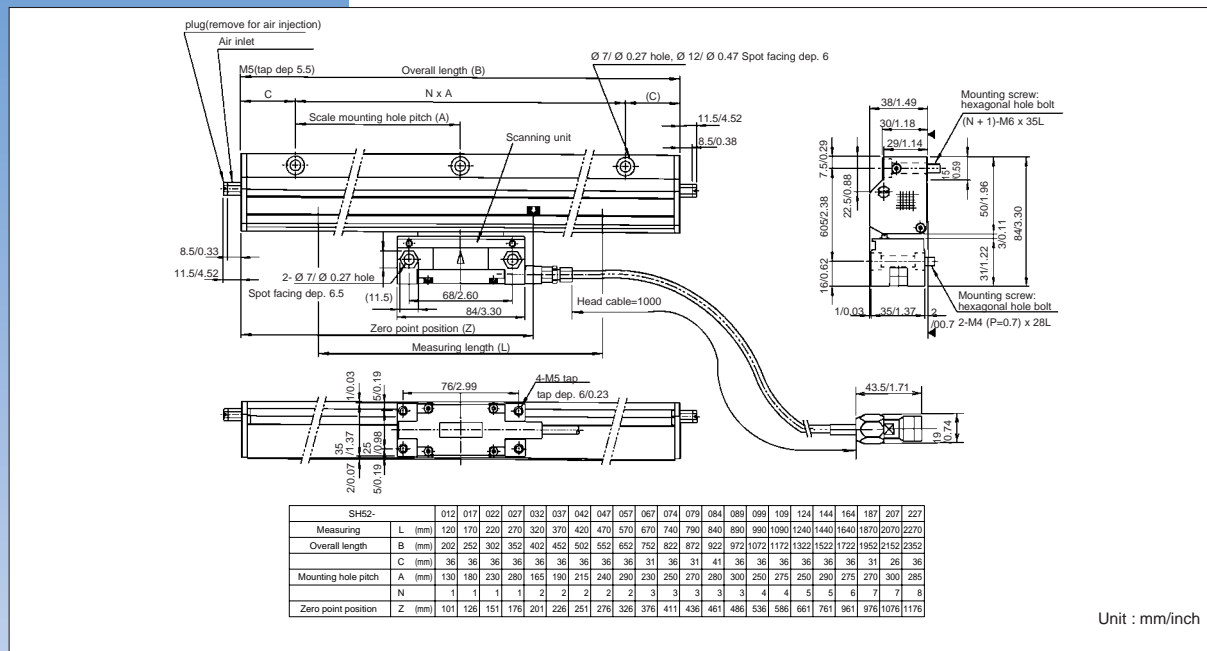
- A/B phase sinusoidal analog output signals with a signal level of 1V p-p.
- Recommended measuring pitch: 0.1 and 1 μm
- Measuring length: 120 to 2270 mm / 4.7" to 89.4" (22 models)
- Perfect for positioning high accuracy NC machine tools or measuring equipment.

Specifications

Model	SH52-	
	A3	A5
Measuring length L mm (inch)	120/170/220/270/320/370/420/470/570/670/740/790/840/890/990/1090/1240/1440/1640/1870/2070/2270 (4.7,6.6,8.6,10.6,12.5,14.5,16.5,18.5,22.4,26.3,29.1,31.1,33,35,38.9,42.9,48.8,56.6,64.5,73.6,81.4,89.4)	
Accuracy (at 20 °C / 68 °F)	$\pm 3 \mu\text{m}$	$\pm 5 \mu\text{m}$
Max. response speed	120 m/min	
Recommended measuring pitch	0.1 to 1 μm	
Output signal	1V p-p	
Engraving pitch	20 μm	
Zero point	1 point with in the measuring length. (standard: 1 point at the center)	
Expansion coefficient	$(8.8 \pm 1) \times 10^{-6} / ^\circ\text{C}$	
Operating temperature	0 °C to 45 °C / 14 °F to 140 °F	
Storage temperature	-10 °C to 60 °C / 32 °F to 113 °F	
Humidity range	Relative humidity 30 to 90 % (no condensation)	
Protective design grade	(1) Equivalent to IP53* (2) Improvement of the protective design grade (see the instruction manual)	
Atmosphere	Corrosive gas should not be contained in the atmosphere.	
Vibration resistance	49 m/s ² (according to our vibration test data, 30 to 1000 Hz for 30 min)	
Shock resistance	98 m/s ² (according to our vibration test, 11 ms, in each of the X, Y, Z directions)	
Sliding resistance of detector head	3.9 N (average)	
Power supply	5V DC $\pm 5\%$	
Power consumption	Approx. 150 mA	

*Air purge may be used to increase resistance to dust, humidity and condensation.

Dimensions



Unit : mm/inch

