

**newall**

# PRODUCT FEATURE ANALYSIS

Digital Readout Systems • Linear Encoders

	NEWALL A50	NEWALL C70	NEWALL C80	NEWALL E70-M	NEWALL E70-L
Application	General Machining	Standard	Milling or Turning	Milling	Turning
Number of Axis Available	1	2 or 3	2 or 3	2 or 3	2 or 3
Absolute/Incremental Operation	•	•	•	•	•
Inch/Metric Conversion	•	•	•	•	•
Zero Reset/Data Preset	•	•	•	•	•
Data Recall		•	•	•	•
Data Hold		•	•	•	•
Radius/Diameter Readings	•	•	•	•	•
Center Find	•	•	•	•	•
Home Reference	•	•	•	•	•
Bolt Hole Circle			•	•	
Grid Hole Array*			•		
Arc Contouring			•	•	
Zero Approach Warning		•	•	•	•
Linear Error Compensation	•	•	•	•	•
Segmented Error Compensation	99 segments	99 segments	99 segments	99 segments	99 segments
Memory Back-up		•	•	•	•
Programmable Memory			99 points	99 points	99 points
Edit Capabilities			•	•	•
Self Diagnostics	•	•	•	•	•
Polar Coordinates			•	•	
Line Hole Calculator			•	•	
Tool Offsets			•		99
Taper Calculations			•		•
Axis Vectoring/Summing			•		•
Feed Rate Display			•		
Software Upgradeable (via Internet)		•	•		
Keypad	Membrane	Membrane		Membrane	
Audible Keystroke Entry		•		•	
Chassis	Metal	Die Cast		Die Cast	
Encoder Input	Spherosyn® Microsyn®	Spherosyn® Microsyn®		Spherosyn® Microsyn®	
Dimensions	2.8" x 5.6" x 2.8" (71mm x 142mm x 71mm)	10.4" x 7" x 2" (264mm x 178mm x 51mm)		6.7" x 11.6" x 1.2" (170mm x 295mm x 30mm)	
Weight	1.2 lbs. (.55Kg)	6.3 lbs. (2.9Kg)		4.5 lbs. (2.1Kg)	
Voltage	115-230V	115-230V		115/230V (switchable)	
Operating Temperature	32° - 113° F (0° - 45° C)				
Storage Temperature	-4° - 140° F (-20° - 60° C)				

	SPHEROSYN®	MICROSYN® 10	MICROSYN® 5
Environmental	IP67	IP67	IP67
Accuracy	+/- 0.0004" + 0.0002"/meter (+/- 10µm + 5µm/meter)	+/- 0.0004" (+/- 10µm)	+/- 0.0002" (+/- 5µm)
Repeatability	Within one resolution count	Within one resolution count	Within one resolution count
Resolution	0.0005"/0.0002" (0.01mm/0.005mm)	0.0005"/0.0002" (0.01mm/0.005mm)	0.0005"/0.0002"/0.0001"/0.00005" (0.01mm/0.005mm/0.002mm/0.001mm)
Scale Travels	4" (102mm) to 462" (11.7M)	2" (51mm) to 40" (1M)	
Reader Head Dimensions	2.04" x 5.16" x 1.10" (52mm x 131mm x 28mm)	1.38" x 2.95" x 0.70" (35mm x 75mm x 18mm)	
Scale Dia./Material	0.601" (15.25mm)/Stainless Steel	0.257" (6.5mm)/Carbon Fiber	
Overall Scale Length	Scale Travel Length + 10" (254mm)	Scale Travel Length + 7" (178mm)	
Output Cable Length	11.5' (3.5M) stainless steel armored (extended lengths available)	11.5' (3.5M) stainless steel armored (extended lengths available)	

\* Feature available for download online at [www.newallusa.com/download/features\\_c80.htm](http://www.newallusa.com/download/features_c80.htm). Specifications subject to change without notice.

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