

Compare Each Encoder Model To Select the Best One for Your New Design

Mercury Encoder Models						
	M3500	M3000	M2000	M1500	M1200	M1000
Encoder Resolution Range*						
5.0 Nanometers	↑ ↓	↑ ↓	↑ ↓	↑ ↓	↑ ↓	↑ ↓
20.0 Nanometers						
0.1 Microns						
0.5 Microns						
5.0 Microns						
INTERPOLATION ELECTRONICS						
Interpolation Level	x4 - x4096 Integer Steps	x4 - x1024 Integer Steps	x4 - x256 Integer Steps	x4, x8, x20, x40 Factory Select	x4 - x256 Recommended	x4 - x256 Recommended
Interpolation Circuits	In SmartPrecision Connector	In SmartPrecision Connector	In SmartPrecision Connector	Digital in Sensor Head	Customer Supplied	Customer Supplied
SIGNAL OUTPUT						
A-Quad-B	•	•	•	•		
High Speed Serial Word	•	•				
Analog					•	•
Index Reference Mark	1LSB	1LSB	1LSB	20µm	20µm	20µm
CONNECTOR STYLE						
High Density (HD) or Standard (Std.)	15 Pin HD D-Sub	15 Pin HD D-Sub	15 Pin HD D-Sub	15 Pin Std. D-Sub, Micro Connector or PCB Mount	PCB Mount	15 Pin Std. D-Sub
SMARTPRECISION						
Alignment Indicators	Standard	Standard	Standard	Accessory	PCB Mount	Accessory
Software	Setup Alignment Configuration Monitoring Diagnostics	Setup Alignment Configuration Monitoring Diagnostics	Setup Alignment Configuration Monitoring Diagnostics	Setup Alignment		Setup Alignment
Programmable Interpolation Level	•	•	•			
ACCURACY						
	SmartPrecision Accuracy Enhancement	SmartPrecision Accuracy Enhancement	SmartPrecision Accuracy Enhancement			Auto Calibration
MINIATURE SENSOR						
Sensor Height & Weight	8.4mm 5.0g	8.4mm 5.0g	8.4mm 5.0g	8.4mm/5.6mm 5.0g/2.6g	5.6mm 2.6g	8.4mm 5.0g
Broad Alignment Tolerance	± 2.0° Z theta	± 2.0° Z theta	± 2.0° Z theta	± 2.0° Z theta	± 2.0° Z theta	± 2.0° Z theta
Broad Standoff Clearance	2.4mm ± 0.15	2.4mm ± 0.15	2.4mm ± 0.15	2.4mm ± 0.15	2.4mm ± 0.15	2.4mm ± 0.15
ENCODER STYLE						
Linear or Rotary	•	•	•	•	•	•
Vacuum Compatible	•	•	•	•	•	•

* See data sheets for rotary resolutions

Get all the details to support your design: www.microsys.com