

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

Mercury Encoder Models							
	M3500	M3000	M2000	M1800	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	X200, X400 Factory Select	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	Digital in Sensor Head	Customer Supplied	Customer Supplied
SIGNAL OUTPUT							
A-QUAD-B	•	•	•	•	•		
High Speed Serial Word	•	•					
Analog						•	•
Index Reference Mark	1LSB	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	26 Pin HD D-Sub or Micro Connector	15 Pin Std. D-Sub or Micro Connector	PCB Mount	15 Pin Std. D-Sub
SMARTPRECISION							
Alignment Indicators	Standard	Standard	Standard	Accessory	Accessory	PCB Mount	Accessory
Software	Setup Alignment Configuration Monitoring Diagnostics	Setup Alignment Configuration Monitoring Diagnostics	Setup Alignment Configuration Monitoring Diagnostics	Setup Alignment	Setup Alignment		Setup Alignment
Programmable Output Freq. & Interpolation Depth	•	•	•				
ACCURACY							
	SmartPrecision Accuracy Enhancement	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	8.9mm 10.8g	8.4mm 5.0g	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	± 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	2.4mm ± 0.15
ENCODER STYLE							
Linear or Rotary	•	•	•	•	•	•	•
Vacuum Compatible	•	•	•		•		•

* See data sheets for rotary resolutions