

Roland MDX-40A

MDX-40A Specifications

Acceptable material	Plastics (ABS, Delrin/Acetal, Nylon, Acrylic), tooling board, wood, and modeling wax (metal not supported)	
X, Y, and Z strokes	12.0 (X) x 12.0 (Y) x 4.1 (Z) in. (305 (X) x 305 (Y) x 105 (Z) mm)	
Distance from spindle tip to table	Maximum 4.8 in. (123 mm)	
Table size	12.0 (W) x 12.0 (D) in. (305 (W) x 305 (D) mm)	
Loadable workpiece weight	8.8 lb (4 kg)	
XYZ-axis motor	Stepping motor	
Feed rate	XY-axis: 0.0039 to 1.9 in./s (0.1 to 50 mm/sec.), Z-axis: 0.0039 to 1.1 in./s (0.1 to 30 mm/sec.)	
Software resolution	NC-code: 0.000039 in./step (0.001mm/step), RML-1: 0.01 mm/step (0.00039 in./step)(RML-1)	
Mechanical resolution	0.00008 in./step (0.002 mm/step) Micro-step	
Spindle motor	Brushless DC motor, Maximum 100 W	
Spindle rotation	4500 to 15000 rpm	
Tool chuck	Collet	
Interface	USB 1.1	
Power supply	Voltage and frequency	AC100 to 240 +/-10%, 50/60 Hz
	Required power capacity	2.1 A
Power consumption	Approx. 210 W	
Acoustic noise level	No-load operation: 56 dB (A) or less, Standby: 42 dB (A) or less	
Dimensions	26.3 (W) x 29.9 (D) x 21.8 (H) in. (669 (W) x 760 (D) x 554 (H) mm)	
Weight	143.3 lb (65 kg)	
Operation temperature	41 to 104°F (5 to 40°C)	
Operation humidity	35 to 80% (no condensation)	
Included items	Power cord, power plug adapter, USB cable, collet, Z0 sensor, hexagonal wrench, hexagonal screw drivers, spanners, Roland Software Package CD-ROM, SRP Player CD-ROM, user's manual, SRP Player installation and setup guide	

ZCL-40A Specifications

Maximum angle of rotation	+/-18 x 10 ⁵⁰ (+/-5000 rotations)
Maximum loadable workpiece size*	4.7 in. (120 mm) diameter by 10.6 in. (270 mm) long
Maximum thickness holdable by workpiece clamp	0.4 to 1.7 in. (10 to 45 mm)
Loadable workpiece weight	2.2 lb (1kg) (including clamps)
Feed rate	0.23-11.79 rpm
Mechanical resolution	0.005625 deg./step (Micro-step)
Dimensions	18.5 (W) x 11.3 (D) x 4.5 (H) in. (470 (W) x 286 (D) x 115 (H) mm)
Weight	16.5 lb (7.5 kg)
Included items	Y-origin sensor, Y-origin detection pin, center drill, live center, hexagonal wrench, cap screws (for securing Z-origin sensor), and user's manual

Software Requirements for Included Software

OS	Windows Vista®(32bit edition) or Windows® XP (32bit edition) and Internet Explorer 6.0 or later
CPU	Pentium® 4, 2.4GHz or faster recommended
RAM	1GB or more recommended
Free hard-disk space	20MB or more recommended
Video card and monitor	A resolution of 1024 x 768 or more recommended, video card compatible with OpenGL recommended, and at least 16-bit highcolor