



Pocket NC V2-50 Specifications

Max Travel

X: 4.55 in (115.5mm)
Y: 5.05 in (128.3 mm)
Z: 3.55 in (90.1mm)
A: -25° to 135°
B: Continuous Rotation
(-9999° to 9999°)

Tested on G5 titanium,
6061 aluminum, 303
stainless, machinable
wax, acetal

Accepts standard
G Code. Test G Code
at sim.pocketnc.com



www.pocketnc.com
info@pocketnc.com
Phone: +1.406.451.3799



pocket_nc

Axis	Maximum Travel	Speed
X	4.55 in (115.5 mm)	60 in/min (1524 mm/min)
Y	5.05 in (128.3 mm)	60 in/min (1524 mm/min)
Z	3.55 in (90.1 mm)	60 in/min (1524 mm/min)
A	-25° to 135°	40°/second
B	Continuous rotation (-9999° to 9999°)	40°/second

Axis	Backlash
X & Y	0.0005 in (12.7 µm) at tool base
Z	Backlash at 18 pound (8.16 kg) load: 0.0005 in (12.7 µm)
A & B	0.01°

Axis	Resolution and Repeatability
XYZ	Resolution: 0.00024 in (6.10µm) Homing Repeatability: ±0.0005 in (12.7µm) Repeatability: ±0.002 in (50.8µm) at 0% load
A & B	Resolution: 0.01° Homing Repeatability: ±0.05° Repeatability: ±0.05° at 0% load Runout: < 0.002 in (50.8 µm)

Spindle	
Spindle Speed	1,000-50,000 RPM*
Power	200 W
Spindle Motor	BLDC 3 Phase with Hall Feedback
Spindle Runout	0.0001 in (2.5 µm)
Tool Change	Lever Type CHB Collet

Software
1-year subscription Autodesk Fusion360 Ultimate (TM), post processor included

Machine Control
Texas Instruments Arm Cortex A8 running Machinekit/Rockhopper

Accepts Standard Gcode	
Features	Spindle Override Feed Override Stop, Start, Pause Jog while pause 5 axis simultaneous movement

Connectivity	Ethernet, USB, and mini USB
--------------	-----------------------------

Power Source	90-264 VAC, 127-370 VDC, 47-63Hz
--------------	----------------------------------

Components

6061 Aluminum Frame, ±0.002 in (50.8 µm) squareness in all axes

Machine Footprint: 17.5 in (444.5 mm) x 12.5 in (279.3 mm)

5 NEMA 17 Motors	3 linear lead screws with preloaded nuts 2 Rotary Worm Drives
------------------	--

Linear Bearings	9 and 42mm, 10% preload
-----------------	-------------------------

Integrated angular contact rotary bearings

Purchase includes:
<ul style="list-style-type: none"> • 1/8 inch CHB collet • 1/8 inch end mill, single flute • 1-year subscription of Autodesk Fusion360 Ultimate™ • Pocket NC vise and hardware • Limited Pocket NC Warranty
*Sold Separately: Air Compressor (required)

www.pocketnc.com
info@pocketnc.com
Phone: +1.406.451.3799

