

5C 4th Axis rotary table for Fadal VMC's



The Calmotion 5C rotary table for Fadal CNC's is a simple, yet effective way to increase the productivity of your Fadal VMC. This compact tool is an ideal choice for holding small parts and eliminating costly part set-up operations. This industry compatible rotary table uses standard 5C collets, step chucks and manual jaw chucks for wide variety of tool holding options.

The 5C rotary comes standard with a manual collet closer. An air collet closer, featuring an impressive 3,000 lbs of thrust @ 100 PSI, is available as an option. The air collet closer increases part holding force compared to a manual version. Operator fatigue is reduced as well by converting the manual collet open and close operation to a simple flip of a switch. This unique air collet closer design retains its holding force even with air pressure variations or a complete loss of air pressure.

The Calmotion 5C head is built from top-quality components and has been engineered to provide robust operation without sacrificing accuracy. Its heat treated steel gear set uses throated helix gears for greater contact area to reduce gear wear and absorb shock loads. A dual adjustment design provides optimal gear mesh to further enhance the performance and accuracy of the gear set. AC brushless motors used in the 5C eliminates any maintenance associated with brush replacement.

The 5C rotary arrives complete with Fadal style bayonet connectors for a quick installation of the 5C for machines pre-wired for an AC rotary. Wiring kits with amplifiers are available for AC machines without pre-wire as well as a conversion kit for DC machines.

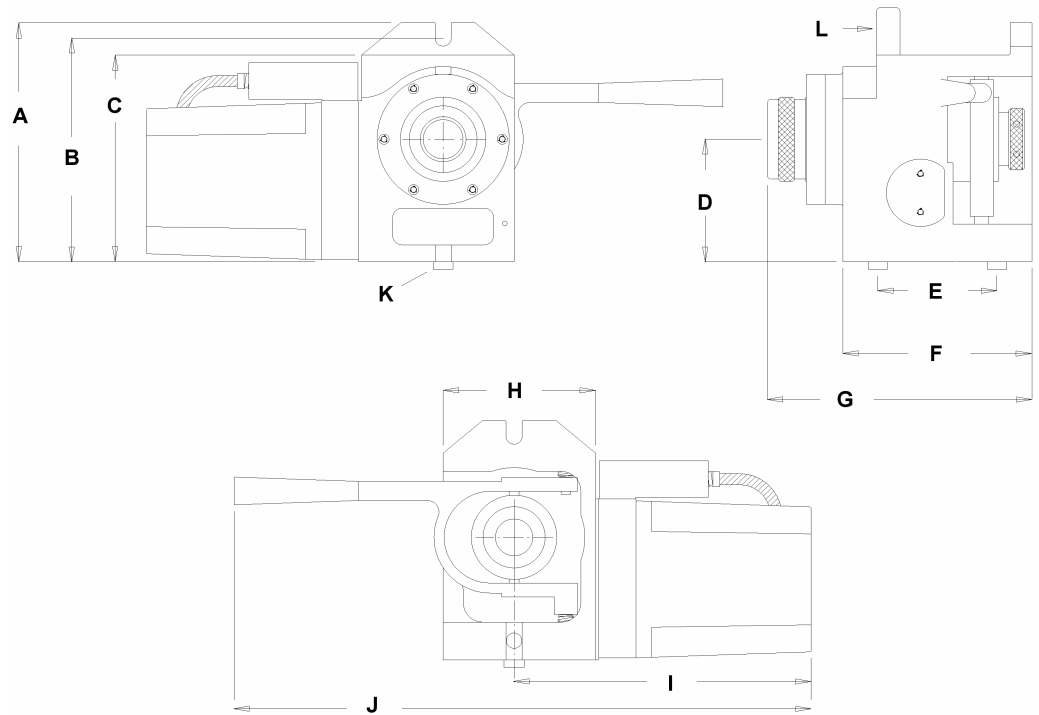
Features

- Compact casting design with removable handle for maximum spindle clearance.
- Motor and encoder wires are epoxy sealed on the motor end to protect against contamination
- All spindle bearing journals and collet taper are precision ground to a maximum .0002 (TIR).
- Gear sets are made of heat treated steel with a throated gear design for increased gear contact area. This reduces wear and helps to maximize gear life while helping to ensure that accuracy is maintained over a longer period of time.
- Both front and rear bearings incorporate tapered rollers to handle more axial and radial loads.
- Precision gear mesh is accomplished using a double adjustment.
- Threaded nose accepts standard 5C tooling.
- O-ring seals ensure maximum protection against leaks.
- Rotary table comes ready with bayonet connectors for easy connection to Fadal VMC's with factory 4th axis AC motor wiring.
- AC servo motor eliminates brush wear maintenance.

5C-FAD

5C 4th Axis rotary table

	Inches	mm
A	7.8	198
B	7.3	185.5
C	6.75	171.5
D	4.0	101.6
E	3.83	97.3
F	6.08	154.5
G	8.5	216
H	4.9	125
I	9.5	242
J	18.5	470
K	.500 - .625	12.7 – 15.875
L	Removable	Removable



Spindle	
Collet size	Standard 5C 1/64 – 1 1/16"
Center height	4.000 +/- .001"
Gear ratio	60:1
Backlash	40 arc-sec
Max run-out	0.0004"
Nose thread	2 3/16 – 10"
Speed range	.001 to 330 degrees/sec <i>May be limited by control</i>
Max torque	60 ft-lbs
Max rating	.75 HP
Indexing	
Accuracy	+/- 30arc-sec
Resolution	.001 degrees
Repeatability	10 arc-sec
General	
Weight	49 lbs
Duty cycle w/o tailstock	75% @ full speed
Max operating temperature	100 degrees F (ambient)

Servo options:

5C-FAD-AC

This kit is intended for Fadal AC machines. The kit includes an AC amplifier for the rotary table and complete cable assembly. A 4th axis controller card is not included.

5C-FAD-DC

This kit is intended for Fadal DC machines. The kit includes a separate power chassis and AC amplifier for the rotary as well as a complete cable assembly. A 4th axis controller card is not included.

5C-ENC

This board allows a DC 4th axis controller card to be compatible with the Calmotion 5C-FAD rotary. This is not required if an AC 4th axis controller card is used.

Note: Control software must support 60:1 ratio rotary tables

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