

**... SERVO INDEXING AT
MECHANICAL INDEXER PRICES ...**



... Servo indexing at mechanical indexer prices ...

The EZ INDEXER servo indexers are high precision indexing machines designed to be low cost without sacrificing flexibility. They are ideally suited for higher inertia applications that require superior accuracy and high torque.

Unlike traditional servo indexing systems, the EZ INDEXER has been designed as an “off-the-shelf” indexing solution. It offers the most popular features of servo indexing at a price that competes head-on with mechanical indexers. The ability to set: number of stations, direction of rotation, move time, precisely set home position, electronic torque limiting, and other features provide servo indexing flexibility previously not available at this price and level of simplicity.

The EZ INDEXER is a complete indexing package that includes the rotary chassis with all position mounting, servomotor with digital AC servo controller, absolute position feedback, 5M power and encoder cables, and *i-series* control software that runs on your laptop in a simple to use Excel spreadsheet. The spreadsheet is comprised of radio buttons and drop down boxes providing quick configuration of the indexer. There is no programming experience necessary, and unlike traditional servo applications **THERE IS NO TUNING REQUIRED.**

If you can “point and click” you can set up the EZ INDEXER. It’s that easy to use.

THE EZ INDEXER INCLUDES

- Rotary Chassis
- Servo Motor with Digital AC Servo Controller
 - Absolute Position Feedback
 - 5M Power and Encoder Cables
 - *i-series* Control Software

Series	Number of Models	Output Torque Range (In-lb)	Load Capacity (lb)	Thru-Bore Range
EZ2000	8	1,000 - 78,000	325 - 5,500	0”
EZ2500	24	1,000 - 78,000	34,000 - 42,000	0”
EZ4000	6	1,700 - 55,500	1,250 - 6,500	0.98”-4.70”
EZ4500	18	28,000 - 44,600	34,000 - 42,000	Up to 23”



EZ INDEXER™
GENERAL SPECIFICATIONS¹

DESCRIPTION	VALUE	EZ2000A	EZ2000C
MOTIONS			
Reciprocating Motion	Degrees	0.1 thru 359.9	0.1 thru 359.9
Continuous Motion	rpm range	0.1 thru 58	0.1 thru 28
Indexing Motion	No. of Stops Equidistant	1 thru 63	1 thru 63
Random Positioning	No. of stops Equidistant	Discrete I/O	Discrete I/O
LOADS			
Rated axial load	Lb.	325	1,000
Rated moment load	In-lb.	1,700	7,600
Rated load inertia	Lb-In ²	32,000	1,000,000
Output Torque	In-lb	1,000	9,000
REPEATABILITY			
	+/- arc sec	< 30	< 30
ELECTRONIC TORQUE LIMITING			
	Percent	1 – 100	1 – 100
FOOTPRINT			
	OAH" x MAJOR Ø"	8.20" x 5.94"	10.90" x 9.06"
CONTROL			
	Cycle on demand	Discreet I/O 24VDC in – 24VDC out	Discreet I/O 24VDC in – 24VDC out
CONFIGURABILITY			
	Spreadsheet	Microsoft Excel®	Microsoft Excel®
VOLTAGE			
		100VAC, single phase	200VAC, single phase
		200VAC, single phase	200VAC, three phase
		200VAC, three phase	400VAC, three phase
		Other voltages available	Other voltages available



¹ Indexer sizing must be verified by Centricity Engineering Department



SAMPLE SPREADSHEET INDEXING MOTION

The screenshot shows a Microsoft Excel spreadsheet titled "Microsoft Excel - NT Test Software". The spreadsheet is used for configuring indexing motion settings. The interface includes a menu bar (File, Edit, View, Insert, Format, Tools, Data, Window, ACT!, Help), a toolbar, and a status bar at the bottom.

The spreadsheet content is as follows:

Row	Column A	Column B	Column C	Column D	Column E	Column F	Column G	Column H	Column I	Column J	Column K	Column L	Column M
1	STEP 3 <<< INDEXING SCREEN >>>												
2													EZ INDEXER
3	INDEXING SETTINGS												
4													
5													
6													
7													
8													
9	NUMBER OF STOPS		<input type="text" value="4"/>										
10	MOVE TIME (SECONDS)		<input type="text" value="2"/>										
11													
12													
13	SAVE SETTINGS												
14													
15													
16	FAULT RESET												
17													
18													
19													
20	COPYRIGHT © 2011, ALL RIGHTS RESERVED, CENTRICITY CORPORATION												
21													
22													
23													
24													
25													
26													
27													

The status bar at the bottom shows the following navigation options: **STEP 1 SETUP / STEP 2 JOG AND/OR SET HOME / STEP 3 INDEXING / STEP 3 CONTINUOUS ROTATION / STEP 4 ADJUST HOME POSITION / GLOSSARY OF TERMS**. The status bar also displays "Ready" and "CAPS NUM".



SAMPLE SPREADSHEET RECIPROCATING MOTION

The screenshot shows a Microsoft Excel spreadsheet titled "EZ INDEXER" with the following content:

STEP 3 ◀◀ RECIPROCATE & ADJ. STOPS SCREEN ▶▶ **CENTRICITY™** automation products **EZ INDEXER**

RECIPROCATING SETTINGS

FIRST STOP (DEGREES)	89.9999
SECOND STOP (DEGREES)	179.9999
MOVE TIME (SECONDS)	2

SAVE SETTINGS **FAULT RESET**

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Navigation: **STEP 1 SETUP** / **STEP 2 JOG & SET STOPS** / **STEP 3 RECIPROCATE & ADJ. STOPS** / **GLOSSARY OF TERMS**

Ready CAPS NUM



SAMPLE SPREADSHEET CONTINUOUS MOTION

STEP 3 ◀◀◀ **CONTINUOUS ROTATION SCREEN** ▶▶▶

CENTRICITY™
automation products

EZ INDEXER

CONTINUOUS ROTATION SETTINGS

RUN SPEED (RPM)	5
ACCELERATION TIME (SECONDS)	0.2

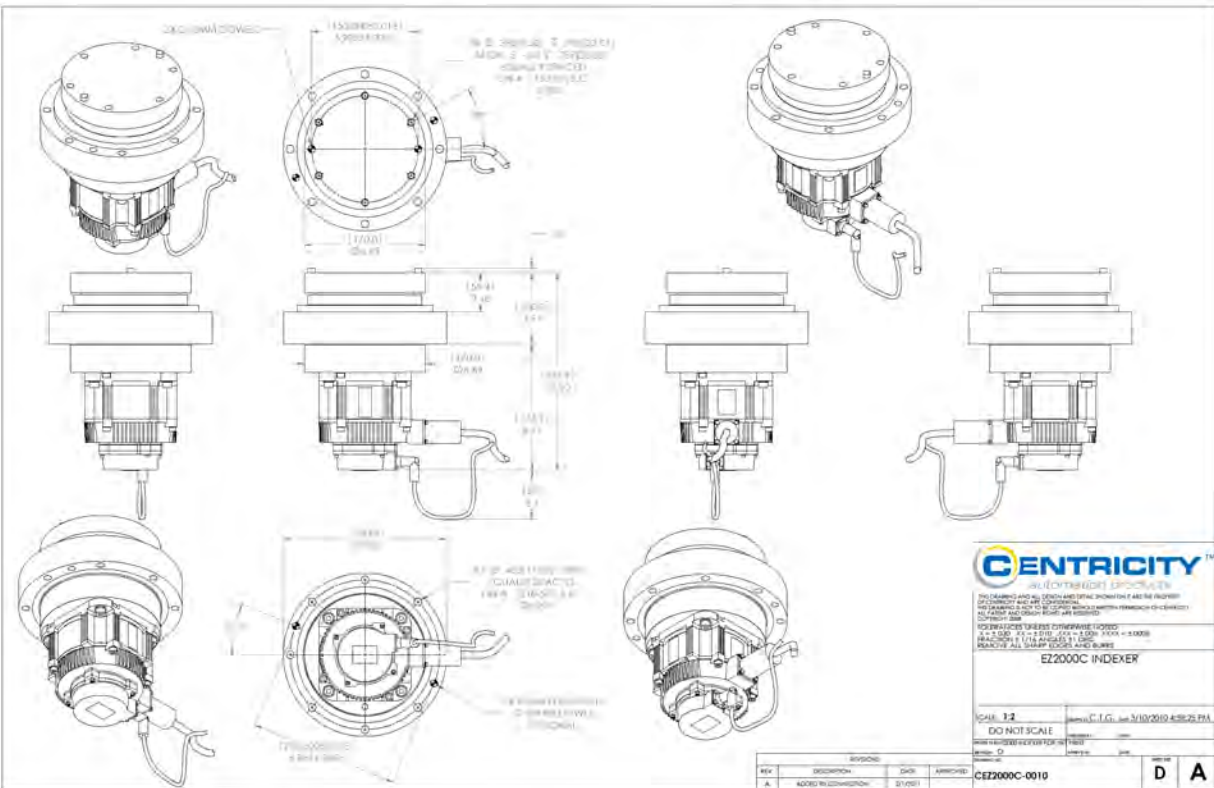
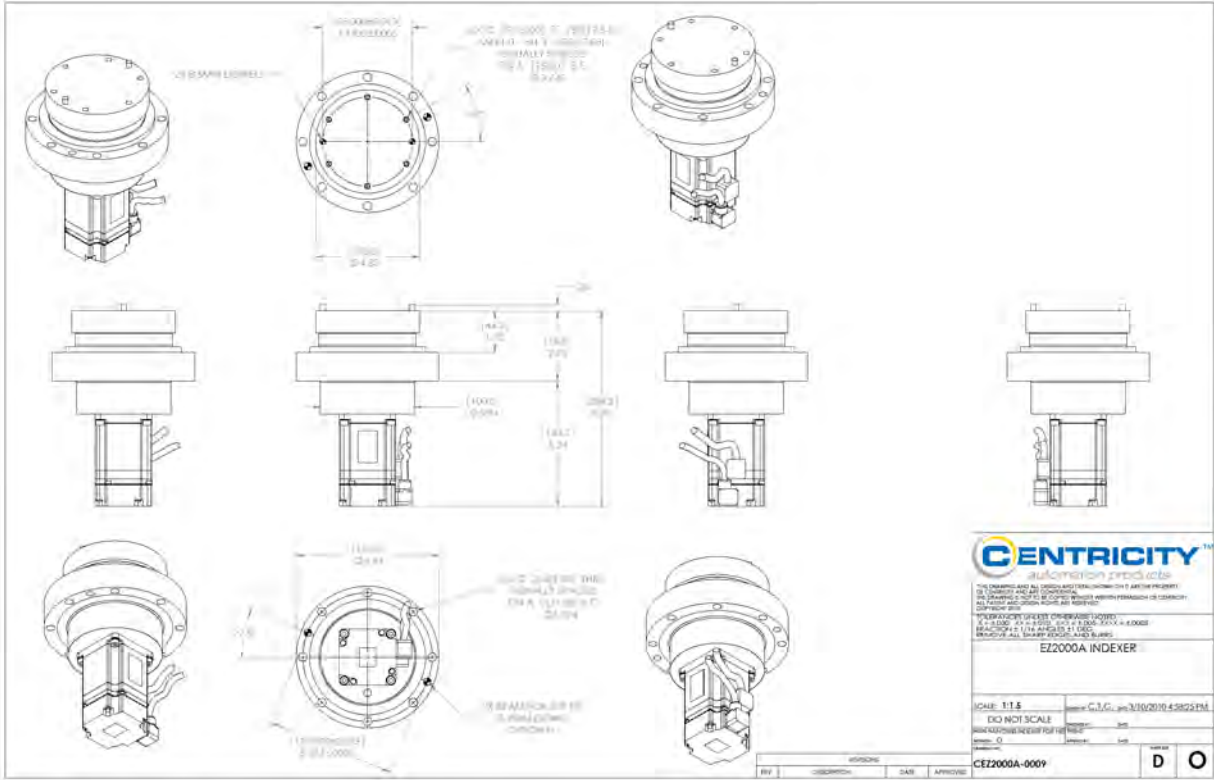
SAVE SETTINGS

FAULT RESET

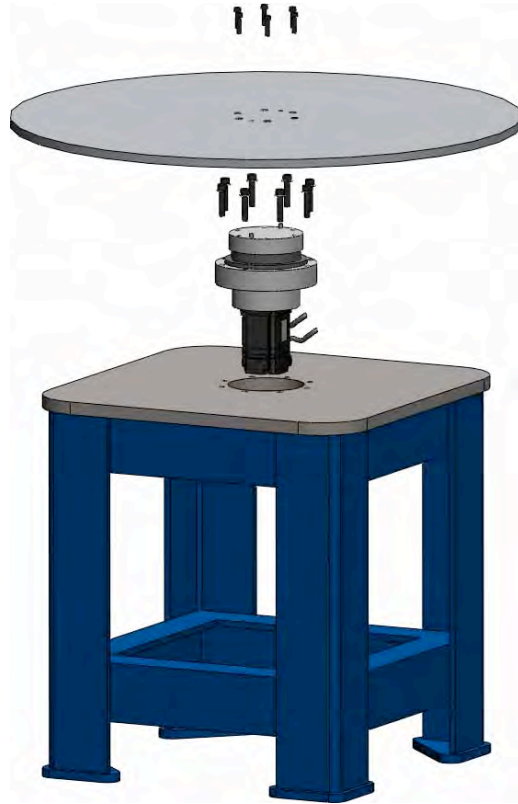
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STEP 1 SETUP / STEP 2 JOG AND OR SET HOME / STEP 3 INDEXING / **STEP 3 CONTINUOUS ROTATION** / STEP 4 ADJUST HOME POSITION / GLOSSARY OF TERMS

Ready CAPS NUM

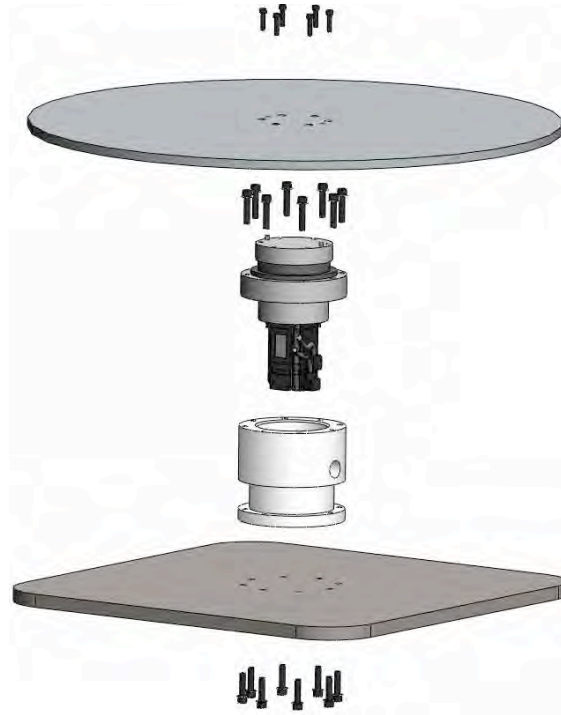


**DIAL AND INDEXER
INSTALLATION PROCEDURE
SAMPLE “Flange Mount Type 3”**



STEP	DESCRIPTION	VALUE	EZ2000A	EZ2000C
1	Insert indexer through base	Thru-hole diameter	4-1/2"	7"
3	Fasten indexer to base	Socket head cap screw – grade 8*	M8 8-pcs	M10 8-pcs
3	Torque fasteners	Ft-lb (Use 75% for aluminum)	29	58
4	Mount dial on hub dowel pins	Dowel pin diameter	M6	M10
5	Fasten dial to hub	Socket head cap screw – grade 8*	M6 6-pcs	M10 6-pcs
5	Torque fasteners	Ft-lb (Use 75% for aluminum)	12	58
		*All fasteners installed with appropriate thread locker		

DIAL AND INDEXER INSTALLATION PROCEDURE SAMPLE “Pedestal Mount Type 6”



STEP	DESCRIPTION	VALUE	EZ2000A	EZ2000C
2	Fasten pedestal to base	Socket head cap screw – grade 8*	M8 8-pcs	M10 8-pcs
2	Torque fasteners	Ft-lb (Use 75% for aluminum)	29	
4	Fasten indexer to pedestal	Socket head cap screw – grade 8*	M8 8-pcs	M10 8-pcs
4	Torque fasteners	Ft-lb (Use 75% for aluminum)	29	58
5	Mount dial on hub dowel pins	Dowel pin diameter	M6	M10
6	Fasten dial to hub	Socket head cap screw – grade 8*	M6 6-pcs	M10 6-pcs
6	Torque fasteners	Ft-lb (Use 75% for aluminum)	12	58
		*All fasteners installed with appropriate thread locker		

**EZ INDEXER
Mounting Examples**

Ceiling Mount Type 1



Ceiling Mount Type 2



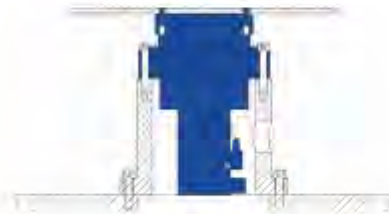
Flange Mount Type 3



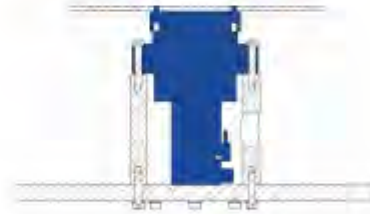
Flange Mount Type 4



Pedestal Mount Type 5



Pedestal Mount Type 6



Wall Mount Type 7

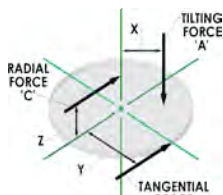


Wall Mount Type 8



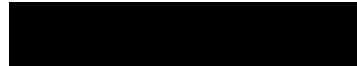
DESCRIPTION	NOTES	VALUE	UNITS
Dial Plate Outside Diameter			inches
Dial Plate Inside Diameter			inches
Dial Plate Material			
Dial Plate Thickness			inches
Number of Stations			
Total Weight of Single Station Including Fixture and Part			pounds
Total Weight on Indexer including Dial Plate			pounds
Radius to Center of Station			inches
Rotational Repeatability @ Center of Station		+/-	inches
IMPACT FORCE			
➤ Weight of object being dropped			pounds
➤ Distance above dial of the object being dropped			inches
➤ Radius to the point of impact of the object being dropped			inches
Maximum torque if specified by customer			in-lb
Voltage required			volts
Additional Forces			
	Tilting Force – unbalanced weight or additional force on dial.	pounds	
		Radius in inches to the center of the tilting force. "X" dimension on figure 1.	
	Radial Force – load acting through the center of rotation	pounds	
		Vertical distance in inches above the surface of the dial. "Z" dimension on figure 1	
	Tangential Force – load acting perpendicular to the center of rotation	pounds	
		Radius in inches to load acting perpendicular to the center of rotation. "Y" dimension on figure 1	
Other loads present – describe		pounds	
Move Time		seconds	
Dwell Time		seconds	
Elevation from Floor to top of Dial Plate		inches	

FIG 1





... Other quality automation products from Centricity ...



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