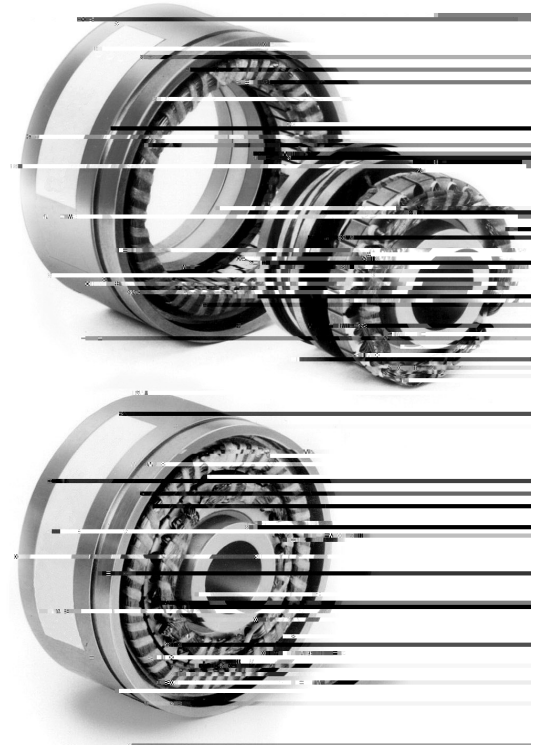


# Low Cost Brushless Pancake Resolver

## TYPICAL APPLICATIONS

- Brushless DC servo commutation, position, and velocity feedback
- Robotics and factory automation
- Machine tools
- Material handling equipment
- Packaging equipment
- Commercial aircraft
- Oil and gas market
- COTS military - aerospace/radar
- Gimbals
- Guidance systems

Sizes 11, 14, 15, 21 and 22



For commutation, position, and velocity feedback

Rugged, reliable - ideal for demanding environments. Brushless resolvers provide accurate position and velocity feedback as well as commutation in precision equipment, without the structural or temperature restrictions imposed by other electronic feedback devices. They are resistant to the shock and vibration levels often encountered in industrial and instrument applications.

These low cost brushless resolvers are available in sizes 11, 14, 15, 21 and 22. For more information, contact your Moog distributor or the Moog Engineering Department at 1-800-541-5555. A consultation is available for your application.

Note: This catalog contains basic marketing information and general part descriptions of Moog product lines. With respect to the U.S. export regulations, the products described herein are controlled by the U.S. Commerce Department or the U.S. State Department. Contact Moog for additional detail on the export controls that are applicable to your part.

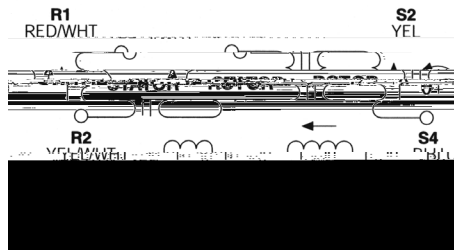


PARAMETER	JSSB-14-A-01A	JSSB-14-C-01D
Primary	Rotor	Rotor
Speed	One	One
Input Voltage	7 Vrms 10 KHz	4 Vrms 3.4 KHz
Input Current	0.042 mA Max.	18.8 mA Max.
Input Power	0.126 watt	0.046 watt
Transformation Ratio (±10%)	0.5	0.5
Phase Shift	-2.3° ± 2°	12.5° ± 3°
Impedance	Zro Zso Zrs	129 + j169 283 + j399 123 + j146
DC Resistance		
Stator	48 ohms	67 ohms
Rotor	77 ohms	159 ohms
Null Voltage	15 mV	15 mV
Electrical Error †	±10 minutes	±20 minutes
Output Voltage	3.5 Vrms	2 Vrms

PARAMETER	JSSB-15-J-05K	JSSB-15-D-01H	DSSB-15-AB-01AM	JSMB-15-J-05A	JSMB-15-K-06P
Primary	Rotor	Rotor	Rotor	Rotor	Rotor
Speed	One	One	One	Three	Three
Input Voltage	7 Vrms 10 KHz	4 Vrms 3.4 KHz	4 Vrms 3.4 KHz	7 Vrms 10 KHz	5 Vrms 6 KHz
Input Current	0.050 A Max.	0.075 A Max.	0.075 A Max.	0.0457 A Max.	0.025 A Max.
Input Power	0.20 watt	0.13 watt	0.13 watt	0.176 watt	0.050 watt
Transformation Ratio ( $\pm 10\%$ )	0.5	0.5	0.5	0.286	0.4
Phase Shift-14.5°	4°	5° $\pm$ 3°	5° $\pm$ 3°	10°	20° $\pm$ 3°
Impedance	Zro 103.6 + j158.4 Zso 144.7 + j126.5 Zrs 88.9 + j136.9	38 + j60 23 + j34 25 + j34	28 + j60 23 + j34 25 + j34	103.6 + j158.4 144.7 + j126.5	129 + j221 148 + j232

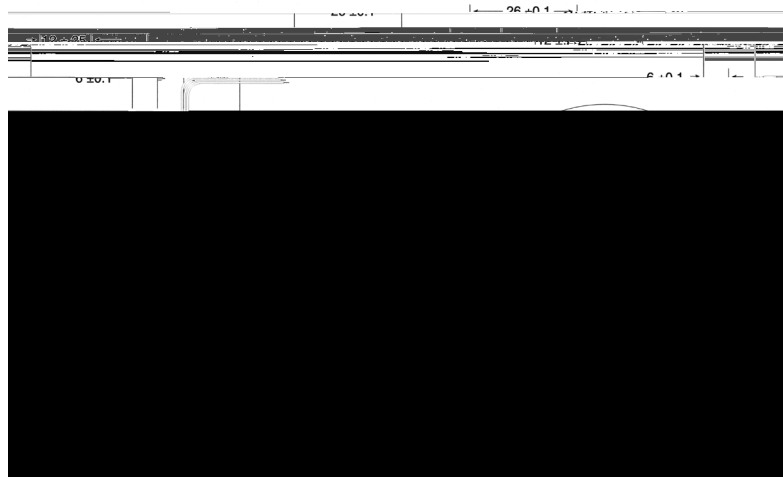
### Typical Schematic

CCW is positive when viewed from side opposite mounting end.



Alternate phasing available on request.

### Typical Outline Drawing



### Pancake Brushless Resolvers

These units provide accurate position and velocity feedback as well as commutation in precision equipment, without the structural or temperature restrictions imposed by other electronic feedback devices. They are highly resistant to the shock and vibration levels often encountered in industrial environments, and do not require protection from the dirt, oil or other contaminants that normally occur in factory conditions.

Pancake brushless resolvers are supplied as separate rotor and stator assemblies, which are then mounted directly in the user's system.