

# PRODUCT INTRODUCTION

## Micro-precision motors

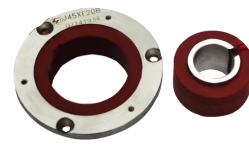
66 series, over 3,000 models



Torque Motors



Servo Motors



Resolvers



Fans



Coreless Motors



Starter-Generators

## Integrated Drive Units



Fuel Delivery Units



Rotary Table Units



Starter Units

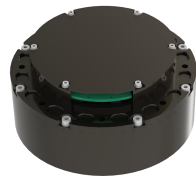


Servos



Inertial Nav Products

## Robotics



Robot Joint Modules



Frameless Torque Motors

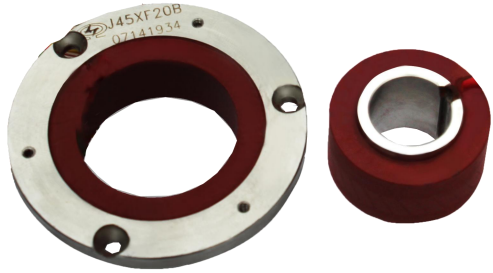


Coreless Motors



Industrial Servo Motors

# Product Advantages — Resolvers



## Product Features

Simple structure, high reliability, high accuracy, and strong resistance to harsh environments.

## Product Advantages

- • Single-pole resolver accuracy up to 3' (arc-minutes)
- • Multi-pole resolver accuracy up to 5" (arc-seconds)
- • Fully epoxy-potted for excellent environmental adaptability

## Key Specification

- Diameter range: 20mm~1000mm
- Excitation voltage: 5V、7V、12V、26V、36V
- Excitation frequency: 400Hz、1000Hz、5000Hz、10000Hz
- Open-circuit output impedance: > 50Ω
- Electrical error: arc-minute level for single-pole; arc-second level for multi-pole

Project Model	Magnetic Excitation Square	Magnetic Excitation Voltage V	Magnetic Excitation Frequency Hz	Ratio ( $\pm 10\%$ tolerance of the ratio value)	Open-circuit Input Impedance $\Omega$ ( $\geq$ )	Electrical Error (')	Dimensions mm	Weight g ( $\leq$ )
45ZF20F	Rotor	6	2000	1	120	$\pm 4$	$\varphi 45 \times \varphi 2.5 \times 85$	200
45ZF0105	Rotor	6.8	2000	0.5	80	$\pm 4$	$\varphi 45 \times \varphi 13.5 \times 13$	
60ZF20	Rotor	6.8	2000	1	130	$\pm 3$ 、 $\pm 8$	$\varphi 60 \times \varphi 30 \times 14$	300
80ZF02	Rotor	5	2000	0.454	300	$\pm 4$	$\varphi 80 \times \varphi 28 \times 12$	500
45ZF20B	Rotor	6.8	2000	1	136	$\pm 4$	$\varphi 45 \times \varphi 15.8 \times 18$	200
25ZFW2015A	Rotor	6	2000	0.5	60	$\pm 12$ (average value)	$\Phi 25 \times \varphi 3.5 \times 20$	75
25ZFW9015	Rotor	7	10000	0.5	160	$\pm 10$	$\Phi 25 \times \varphi 3.5 \times 20$	70
36ZFW5015A	Rotor	5	5000	0.5	80	$\pm 8$	$\Phi 36 \times \varphi 10 \times 25$	150
52ZFW7014	Stator	4.25	7500	0.47	77.3	$\pm 8$	$\varphi 52 \times \varphi 22 \times 34.2$	1200
52ZFW9015	Stator	7	10000	0.5	100	$\pm 8$	$\varphi 52 \times \varphi 22 \times 30$	380

Dual Channel Resolvers												
Project Model	Excitation Voltage V	Excitation Frequency Hz	Number of Pole Pairs		Maximum Output Voltage V ( $\pm 10\%$ tolerance of maximum output voltage)	Open-Circuit Input Impedance $\Omega$		Zero-Point Deviation (')	Electrical Error		Weight kg	Dimensions
			Coarse Machine	Fine Machine		Coarse Machine	Fine Machine		Coarse Machine	Fine Machine		
50ZFS1622	26	2000	1	16	11.8	Coarse and Fine Machines in Parallel $\geq 100$		$\pm 30$	$\pm 30'$	$\pm 30''$	$\leq 0.15$	$\Phi 50 \times \Phi 25 \times 15$
52ZFSW1611	6	2000	1	16	3	Coarse and Fine Machines in Parallel $\geq 40$		$\pm 30$	$\pm 30'$	$\pm 30''$	$\leq 0.55$	$\Phi 52 \times \Phi 8 \times 35$
72ZFSW3241	5	4000	1	32	2.2	Coarse and Fine Machines in Parallel $\geq 100$		$\pm 30$	$\pm 30'$	$\pm 25''$	$\leq 1.3$	$\Phi 73 \times \Phi 30 \times 52$
150ZFS3244	28	400	1	32	11.8	$\geq 1000$	$\geq 120$	$\pm 30$	$\pm 30'$	$\pm 20''$	$\leq 1.5$	$\Phi 150 \times \Phi 100 \times 20$
J166ZFSW3222	26	2000	1	32	11.8	$\geq 100$		$\pm 30$	$\pm 30'$	$\pm 35''$	$\leq 4$	$\Phi 166 \times \Phi 90 \times 50$
204ZFS3243	36	400	1	32	11.8	$\geq 150$		$\pm 30$	$\pm 30'$	$\pm 30''$		$\Phi 204 \times \Phi 96 \times 30$
260ZFSW6411	12	1000	1	64	4	$\geq 60$		$\pm 30$	$\pm 30'$	$\pm 20''$	$\leq 14.5$	$\Phi 260 \times \Phi 170 \times 68$
410ZFS6443	36	400	1	64	11.8	$\geq 1000$	$\geq 100$	$\pm 30$	$\pm 30'$	$\pm 20''$	$\leq 18$	$\Phi 410 \times \Phi 300 \times 50$
650ZFS6443	36	400	1	64	11.8	$\geq 1000$	$\geq 100$	$\pm 30$	$\pm 30'$	$\pm 20''$	$\leq 110$	$\Phi 650 \times \Phi 460 \times 90$