

**NEW PRODUCTS**

High Performance AC Servo Motor

# SANMOTION R

## AC SERVO SYSTEMS

**R1 Servo Motor** 100, 200 V models



40 mm sq. Motor **Rated output** 50, 100 W

60 mm sq. Motor **Rated output** 200, 400 W

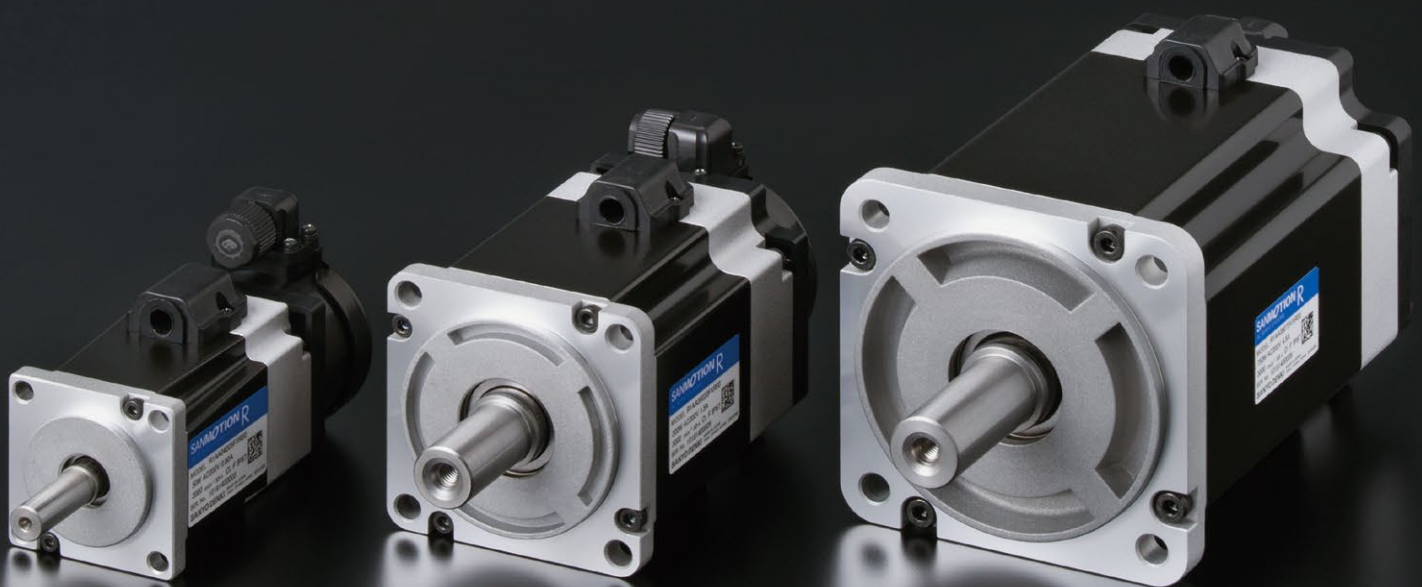
80 mm sq. Motor **Rated output** 750 W

Applications: Semiconductor manufacturing equipment, spring forming machines

**High Torque**

**High Speed**

**High Acceleration**



**SANYO DENKI**

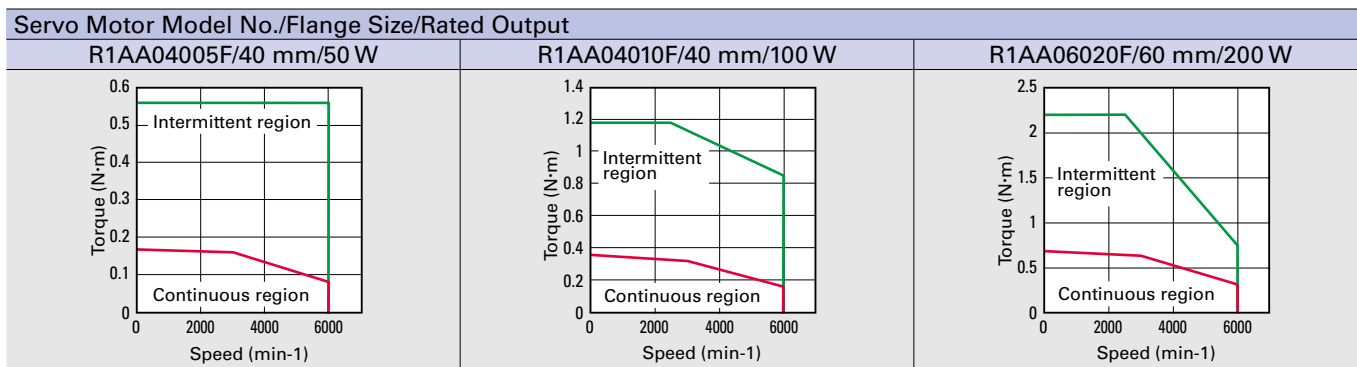
# Specifications

## R1 Servo Motors High Power Rate (Low Inertia) RoHS

Input voltage **200 VAC**

Compatible servo amplifier model numbers	R 3E Model	RS3A01□□ <10 A>		RS3A02□□ <20 A>
Servo motor model number	Inside ( ) indicates motor flange size.	R1AA04005F □ 40 mm	R1AA04010F □ 40 mm	R1AA06020F □ 60 mm
	Unit			
Rated Output	W	50	100	200
Rated Speed	min <sup>-1</sup>	3000	3000	3000
Maximum Speed	min <sup>-1</sup>	6000	6000	6000
Rated Torque	N·m	0.159	0.318	0.637
Peak Torque	N·m	0.56	1.18	2.2
Rotor Inertia	× 10 <sup>-4</sup> kg · m <sup>2</sup>	0.0146	0.0242	0.122
Mass w/out brake (with brake)	kg	0.46 (0.7)	0.61 (0.85)	1.1 (1.5)

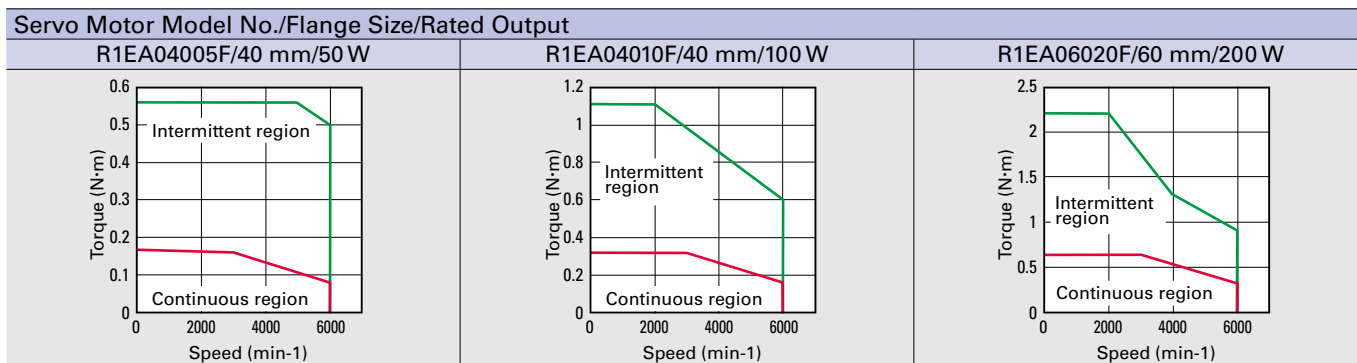
### Speed-Torque Characteristics



Input voltage **100 VAC**

Compatible servo amplifier model numbers	R 3E Model	RS3E02□□ <20 A>		RS3E03□□ <30 A>
Servo motor model number	Inside ( ) indicates motor flange size.	R1EA04005F □ 40 mm	R1EA04010F □ 40 mm	R1EA06020F □ 60 mm
	Unit			
Rated Output	W	50	100	200
Rated Speed	min <sup>-1</sup>	3000	3000	3000
Maximum Speed	min <sup>-1</sup>	6000	6000	6000
Rated Torque	N·m	0.159	0.318	0.637
Peak Torque	N·m	0.56	1.11	2.2
Rotor Inertia	× 10 <sup>-4</sup> kg · m <sup>2</sup>	0.0146	0.0242	0.122
Mass w/out brake (with brake)	kg	0.46 (0.70)	0.61 (0.85)	1.1 (1.5)

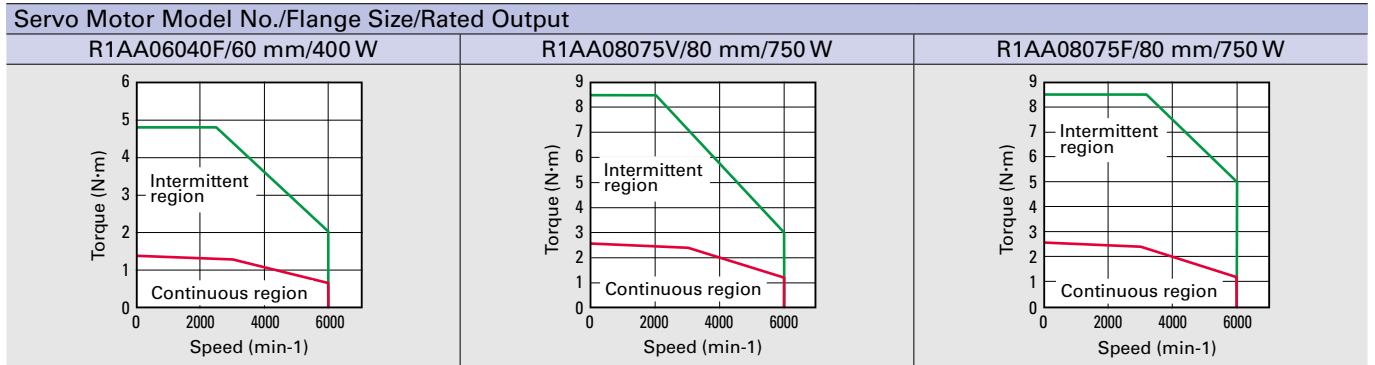
### Speed-Torque Characteristics



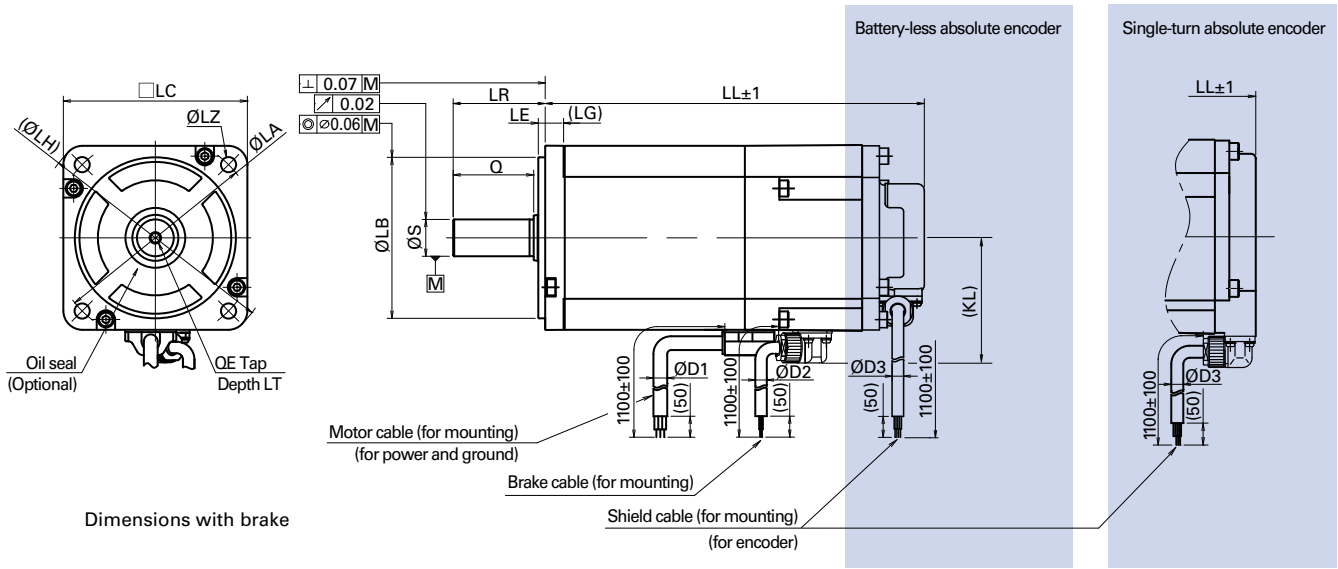


RS3A02□□ <20 A>	RS3A03□□ <30 A>	RS3A05□□ <50 A>	Compatible servo amplifier model numbers	
R1AA06040F 《□ 60 mm》	R1AA08075V 《□ 80 mm》	R1AA08075F 《□ 80 mm》	Servo motor model number Inside ( ) indicates motor flange size.	
			Unit	
400	750	750	W	Rated Output
3000	3000	3000	min <sup>-1</sup>	Rated Speed
6000	6000	6000	min <sup>-1</sup>	Maximum Speed
1.27	2.39	2.39	N·m	Rated Torque
4.8	8.5	8.5	N·m	Peak Torque
0.203	0.719	0.719	× 10 <sup>-4</sup> kg · m <sup>2</sup>	Rotor Inertia
1.5 (2.0)	3.1 (4.1)	3.1 (4.1)	kg	Mass w/out brake (with brake)

### ■ Speed-Torque Characteristics



# Dimensions [Unit: mm] □ 40 to □ 80 mm



Dimensions with brake

Model no.	Battery-less absolute encoder				Single-turn absolute encoder			
	W/out oil seal		With oil seal		W/out oil seal		With oil seal	
	W/out brake	With brake	W/out brake	With brake	W/out brake	With brake	W/out brake	With brake
R1□A04005	84	115	89	120	73	104	78	109
R1□A04010	103	134	108	139	92	123	97	128
R1□A06020	96.5	126.5	103.5	133.5	86.5	116.5	93.5	123.5
R1AA06040	121	151	128	158	111	141	118	148
R1AA08075	133	165	140	172	123	155	130	162

Model no.	LG	KL	LA	LB	LE	LH	LC	LZ	LR	S	Q	QE	LT	D1	D2	D3
R1□A04005	5	35.3	46	0	2.5	56	40	4- φ 4.5	25	0	20	-	-	6	5	5
R1□A04010				30-0.021						8 -0.009						
R1□A06020	6	44.4	70	0	3	82	60	4- φ 5.5	30	0	25	M5	12	6	5	5
R1AA06040				50-0.025						14 -0.011						
R1AA08075	8	54.4	90	0		108	80	4- φ 6.6	40	0	35					
				70-0.030						16 -0.011						

## Safety Precautions

- Read the accompanying Instruction Manual carefully prior to using the product.
- Do not use this product in an environment where vibration is present, such as in moving vehicles or shipping vessels.
- Do not perform any retrofitting, re-engineering, or modification to the equipment.

Please contact us beforehand if you intend to use this product in the following applications.

- Medical equipment that may have an effect on human life
- Systems or equipment that may have a major impact on society or on the public
- Special applications related to aviation and space, nuclear power, electric power, submarine repeaters, etc.

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