

NEW PRODUCTS

SANMOTION K

DC SERVO SYSTEMS

DC Servo Motors



42 mm sq. Motor **Rated output** 23 W, 40 W, 60 W

54 mm sq. Motor **Rated output** 60 W, 80 W, 110 W

76 mm sq. Motor **Rated output** 200 W, 300 W

88 mm sq. Motor **Rated output** 400 W, 500 W

Applications: Precision measuring instruments, medical equipment

Low Cogging Torque

Low Loss

For 42 and 54 mm motors, low-voltage (24 V) models are also available.



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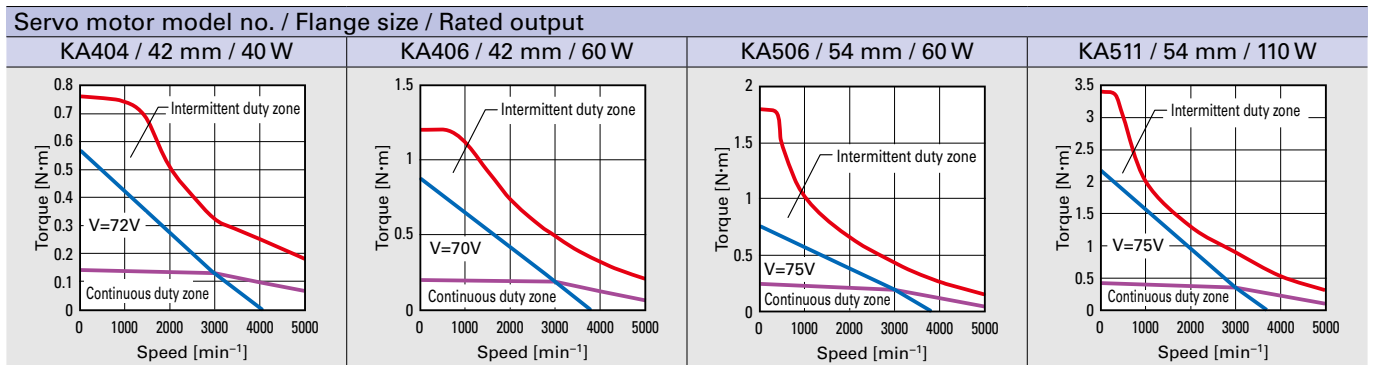
Specifications

75 VDC class

Rated armature voltage		72 VDC	70 VDC	75 VDC	75 VDC
Servo motor model no. Inside < > indicates motor flange size		KA404 < 42 mm >	KA406 < 42 mm >	KA506 < 54 mm >	KA511 < 54 mm >
	Unit				
Rated output	W	40	60	60	110
Rated speed	min ⁻¹	3000	3000	3000	3000
Maximum speed	min ⁻¹	5000	5000	5000	5000
Rated torque	N·m	0.13	0.19	0.19	0.35
Peak torque	N·m	0.76	1.2	1.8	3.4
Rotor inertia*	×10 ⁻⁴ kg·m ²	0.084	0.108	0.22	0.37
Mass	kg	0.55	0.65	0.8	1.1

* Inertia of the motor alone

Speed-Torque Characteristics

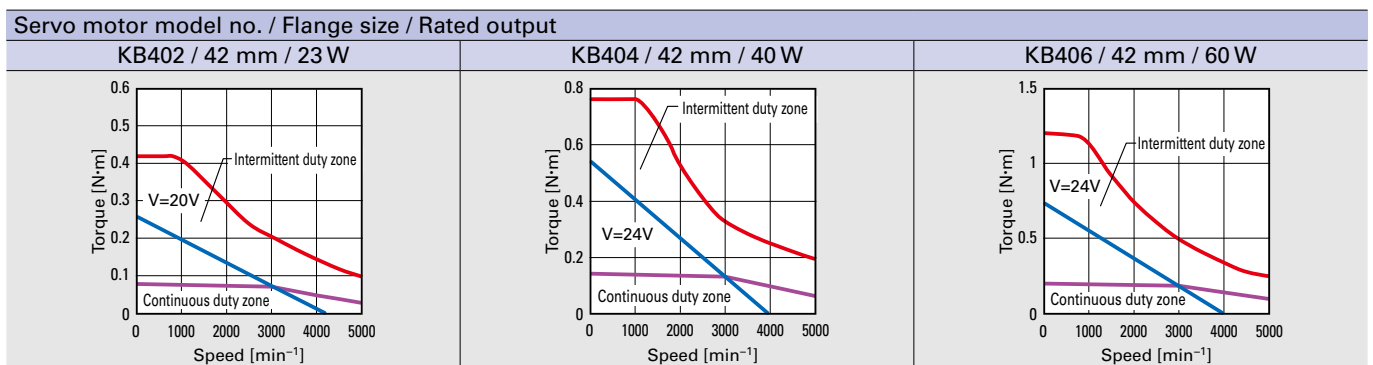


24 VDC class

Rated armature voltage		20 VDC	24 VDC	
Servo motor model no. Inside < > indicates motor flange size		KB402 < 42 mm >	KB404 < 42 mm >	KB406 < 42 mm >
	Unit			
Rated output	W	23	40	60
Rated speed	min ⁻¹	3000	3000	3000
Maximum speed	min ⁻¹	5000	5000	5000
Rated torque	N·m	0.073	0.13	0.19
Peak torque	N·m	0.42	0.76	1.2
Rotor inertia*	×10 ⁻⁴ kg·m ²	0.047	0.084	0.108
Mass	kg	0.4	0.55	0.65

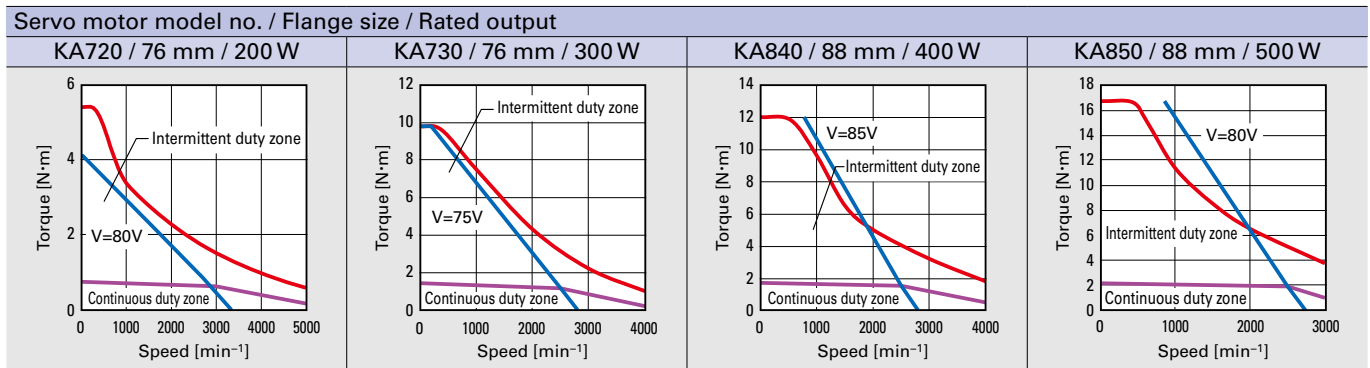
* Inertia of the motor alone

Speed-Torque Characteristics



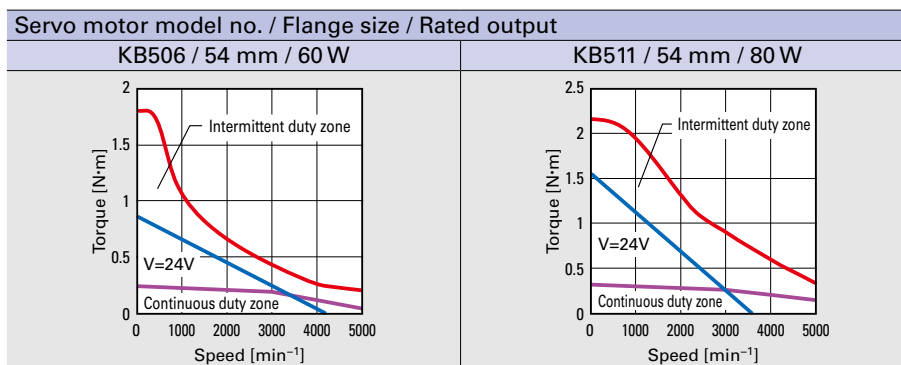
80 VDC	75 VDC	85 VDC	80 VDC	Rated armature voltage	
KA720 《 76 mm 》	KA730 《 76 mm 》	KA840 《 88 mm 》	KA850 《 88 mm 》	Servo motor model no. Inside 《 》 indicates motor flange size	
				Unit	
200	300	400	500	W	Rated output
3000	2500	2500	2500	min ⁻¹	Rated speed
5000	4000	4000	3000	min ⁻¹	Maximum speed
0.64	1.15	1.53	1.91	N·m	Rated torque
5.4	9.8	12	16.7	N·m	Peak torque
1.47	2.7	5	6	×10 ⁻⁴ kg·m ²	Rotor inertia*
2.1	3.1	3.65	4.25	kg	Mass

Speed-Torque Characteristics



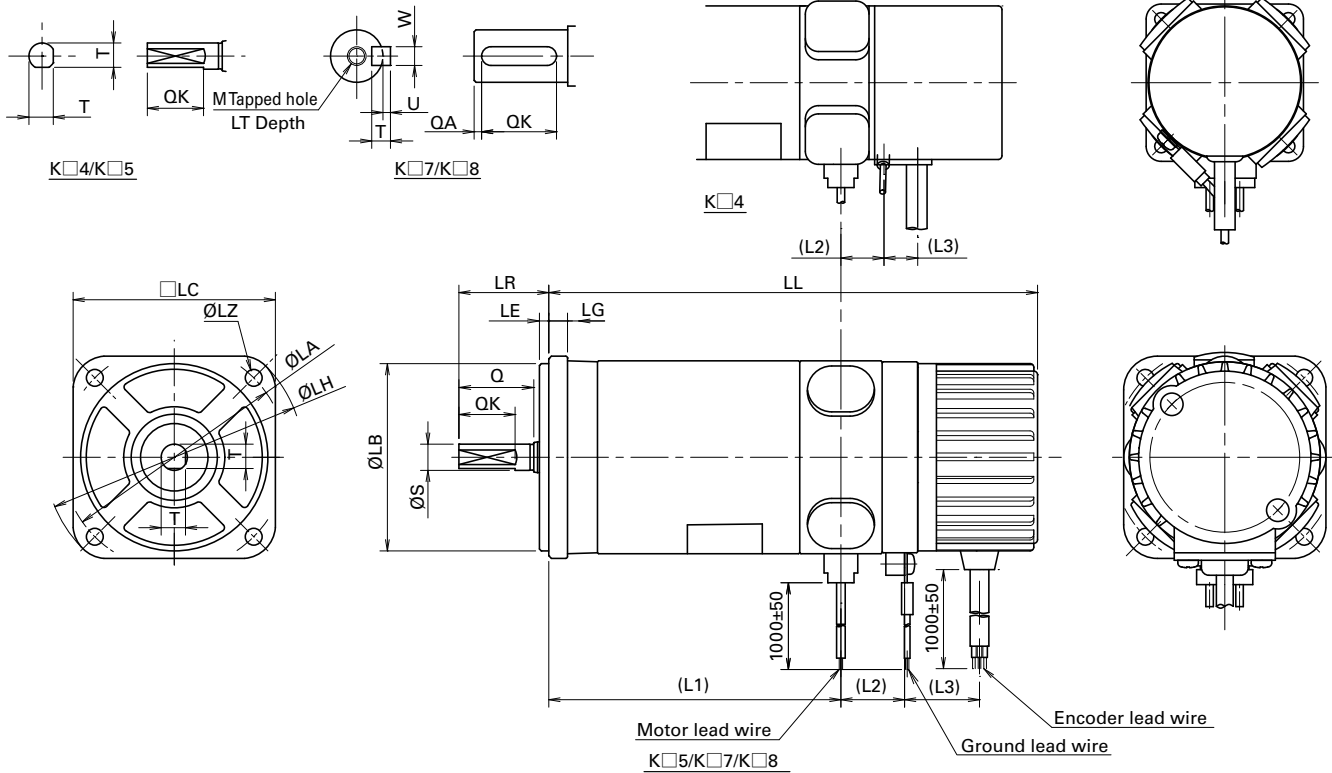
24 VDC		Rated armature voltage	
KB506 《 54 mm 》	KB511 《 54 mm 》	Servo motor model no. Inside 《 》 indicates motor flange size	
		Unit	
60	80	W	Rated output
3000	3000	min ⁻¹	Rated speed
5000	5000	min ⁻¹	Maximum speed
0.19	0.26	N·m	Rated torque
1.8	2.16	N·m	Peak torque
0.22	0.37	×10 ⁻⁴ kg·m ²	Rotor inertia*
0.8	1.1	kg	Mass

Speed-Torque Characteristics



Dimensions [Unit: mm]

□42 to □88 mm



This drawing is for motors equipped with a wire-saving incremental encoder.

Model no.	LL	LG	L1	L2	L3	LA	LB	LE	LH	LC	LZ	LR	S
K □ 402	83±1	5±0.5	40.5	11.5	9	48±0.2	0 34-0.025	2±0.3	56	42±0.5	4-ø3.5	24±0.5	0 7 -0.009
K □ 404	96±1		53.5										
K □ 406	109±2		66.5										
K □ 506	110.5±2		58										
K □ 511	130.5±2	8±0.5	78	17	20	60±0.3	0 50-0.025	2.5±0.3	69	54±0.5	4-ø4.5	30±0.8	0 14 -0.011
K □ 720	134.5±2		74.5										
K □ 730	158.5±2		98.5										
K □ 840	166±2		103.5										
K □ 850	181±2		118.5	22	25	100±0.3	0 80-0.030	3±0.4	112	88±0.8	4-ø6.6	35±0.8	0 16 -0.011

Model no.	Q	QA	QK	W	T	U	M	LT
K □ 402	20±0.5	-	15±1.5	Two slots 6.5±0.2			-	-
K □ 404								
K □ 406								
K □ 506								
K □ 511								
K □ 720	25±0.5	2	20±0.7	+0.024 5+0.012	5	0 2-0.2	M5	8
K □ 730								
K □ 840	30±0.5		25±0.7				M6	10
K □ 850								

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.

SANYO DENKI CO., LTD. 3-33-1 Minami-Otsuka, Toshima-ku, Tokyo, 170-8451, Japan TEL: +81 3 5927 1020 <http://www.sanyodenki.com>

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