

Ratings and Specifications

Time Rating: Continuous
 Vibration Class: V15
 Insulation Resistance: 500 VDC, 10 M Ω min.
 Ambient Temperature: 0 to 40°C
 Excitation: Permanent magnet
 Mounting: Flange-mounted
 Thermal Class: B

Withstand Voltage: 1500 VAC for one minute
 Enclosure: Totally enclosed, self-cooled, IP65
 (except for shaft opening)
 Ambient Humidity: 20% to 80% (no condensation)
 Drive Method: Direct drive
 Rotation Direction: Counterclockwise (CCW) with forward run
 reference when viewed from the load side

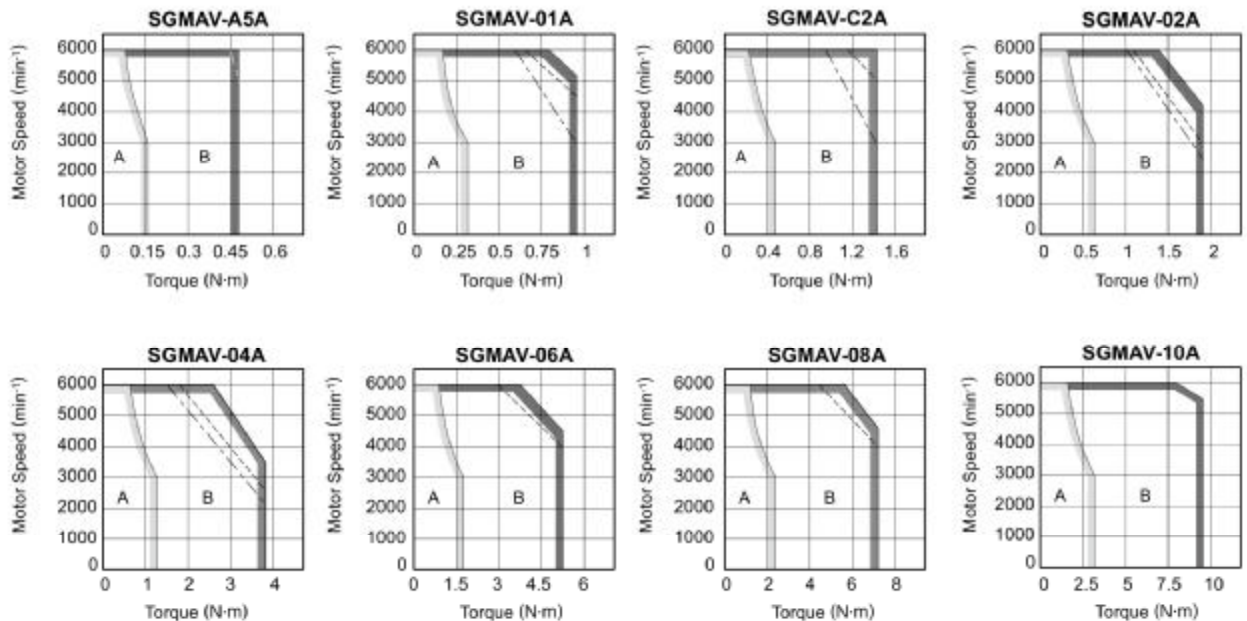
Voltage		200 V							
Servomotor Model: SGMV-□□□□		A5A	01A	C2A	02A	04A	06A	08A	10A
Rated Output ¹	W	50	100	150	200	400	550	750	1000
Rated Torque ^{1, 2}	N·m	0.159	0.318	0.477	0.637	1.27	1.75	2.39	3.18
Instantaneous Peak Torque ¹	N·m	0.477	0.955	1.43	1.91	3.82	5.25	7.16	9.55
Rated Current ¹	A _{rms}	0.66	0.91	1.3	1.5	2.6	3.8	5.3	7.4
Instantaneous Max. Current ¹	A _{rms}	2.1	2.8	4.2	5.3	8.5	12.2	16.6	23.9
Rated Speed ¹	min ⁻¹	3000							
Max. Speed ¹	min ⁻¹	6000							
Torque Constant	N·m/A _{rms}	0.265	0.375	0.381	0.450	0.539	0.496	0.487	0.467
Rotor Moment of Inertia	×10 ⁻⁴ kg·m ²	0.0242 (0.0389)	0.0380 (0.0527)	0.0531 (0.0678)	0.116 (0.180)	0.190 (0.254)	0.326 (0.403)	0.769 (0.940)	1.20 (1.41)
Rated Power Rate ¹	kW/s	10.4	26.6	42.8	35.0	84.9	93.9	74.1	84.3
Rated Angular Acceleration ¹	rad/s ²	65800	83800	89900	54900	67000	53700	31000	26500
Applicable SERVOPACK	SGDV-□□□□	R70□	R90□	1R6A,2R1F		2R8□	5R5A	5R5A	120A

*1: These items and torque-motor speed characteristics quoted in combination with an SGDV SERVOPACK are at an armature winding temperature of 100°C. Other values quoted are at 20°C.

*2: Rated torques are continuous allowable torque values at 40°C with an aluminum heat sink of the following dimensions attached.
 SGMV-A5A, -01A: 200 mm×200 mm×6 mm
 SGMV-C2A, -02A, -04A, -06A, -08A: 250 mm×250 mm×6 mm
 SGMV-10A: 300 mm×300 mm×12 mm

Note: The values in parentheses are for servomotors with holding brakes.

● Torque-Motor Speed Characteristics A: Continuous Duty Zone B: Intermittent Duty Zone^(See Note 3)



Notes: 1 The solid, dotted, and dashed-dotted lines of the intermittent duty zone indicate the characteristics when a servomotor runs with the following combinations:
 · The solid line: With a three-phase 200 V or a single-phase 230 V SERVOPACK
 · The dotted line: With a single-phase 200 V SERVOPACK
 · The dashed-dotted line: With a single-phase 100 V SERVOPACK

2 An SGMV-A5A servomotor has the same characteristics in combination with three-phase 200 V and single-phase 230 V SERVOPACKS.
 3 The characteristics of the intermittent duty zone differ depending on the supply voltage.

4 When the effective torque during intermittent duty is within the rated torque, the servomotor can be used within the intermittent duty zone.

5 When the main circuit cable length exceeds 20 m, note that the intermittent duty zone or the torque-motor speed characteristics will shrink as the line-to-line voltage drops.