

Ratings and Specifications

Junma Servo Motors

Voltage		100/200 VAC			
Servo motor Model	SJME-□□A	01	02	04	08
Applicable Servo Amplifier	SJDE-□□A	01	02	04	08
Rated output *1	W	100	200	400	750
Rated torque *1, *2	Nm	0.318	0.637	1.27	2.39
Instantaneous peak torque *1	Nm	0.955	1.91	3.82	7.16
Rated current *1	A_{rms}	0.84	1.1	2.0	3.7
Instantaneous max. current *1	A_{rms}	2.5	3.3	6.0	11.1
Rated speed *1	RPM	3000 (for 200V models) ³			
Max. speed *1	RPM	4500 (for 200V models) ³			
Torque constant	Nm/A_{rms}	0.413	0.645	0.682	0.699
Rotor moment of inertia	$kg \cdot m^2$	0.0634×10^{-4}	0.330×10^{-4}	0.603×10^{-4}	1.50×10^{-4}
Rated power rate *1	kW/s	16.0	12.3	26.7	38.1
Rated angular acceleration *1	rad/s^2	50200	19300	21100	15900
Time rating	Continuous				
Thermal class	B				
Vibration class	15 μ m or below				
Withstand voltage	1500 VAC for one minute				
Insulation resistance	500 VDC, 10 M Ω min.				
Enclosure	Totally enclosed, self-cooled, IP55 (excluding shaft opening and connectors)				
Impact resistance	Impact acceleration: 490 m/s^2 in three directions - vertical, side to side, and front to back. Impact occurrences: 2				
Vibration resistance	Vibration acceleration: 49 m/s^2 in three directions - vertical, side to side, and front to back.				

*1 These items and speed/torque characteristics quoted in combination with a SJDE servo amplifier are at an armature winding temperature of 100 °C. Other values are at 20 °C.

*2 The rated torques listed here are the values for the continuous allowable torque at 40 °C with an aluminium heatsink (250 mm x 250 mm x 6 mm) attached.

*3 Refer to the Speed/Torque Characteristics for rated speed and maximum speed for 100V models.

Holding Brake Specifications

Servo motor Model	SJME-□□A	01	02	04	08
Rated voltage		24VDC \pm 10%			
Holding brake moment of inertia*	$kg \cdot m^2 \times 10^{-4}$	0.0075		0.064	0.171
Capacity	W	6		6.9	7.7
Minimum holding torque (Static friction torque)	Nm	0.318		1.27	2.39
Coil resistance	Ω (at 20 °C)	96		83	75
Rated current	A (at 20 °C)	0.25		0.29	0.32
Brake release time	ms	80 max.			
Rise time for holding torque	ms	100 max.			

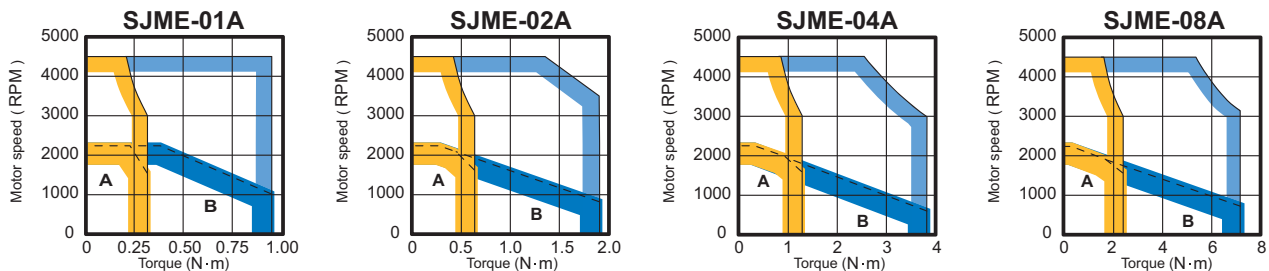
* To obtain the motor moment of inertia with a brake, add the holding brake moment of inertia to the rotor moment of inertia. The rated power rate and angular acceleration of the motor will change according to the motor moment of inertia.

Notes:

1 The holding brake is only used to hold the load and cannot be used to stop the servo motor.

2 Do not use the holding brake when the servo is on. Failure to observe this caution may result in an overload of the servo amplifier or a decrease of brake life.

Speed/Torque Characteristics



A: Continuous Duty Zone B: Intermittent Duty Zone

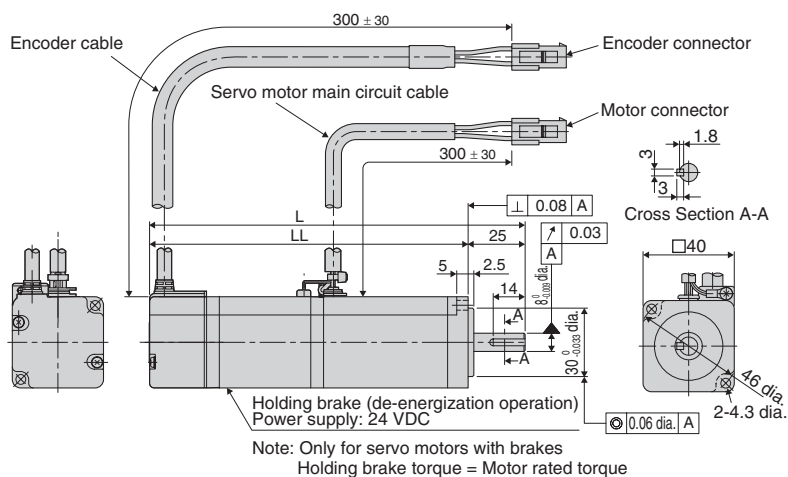
Note: Solid lines show the torque/speed characteristics of the servo motor at 200V and the broken lines show them at 100V.



Dimensions

Units: mm

100 W



Motor Connector Specifications

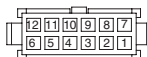


Pin	No brake		With brake	
	Description	Color	Description	Color
1	Phase U	Red	Phase U	Red
2	Phase V	White	Phase V	White
3	Phase W	Blue	Phase W	Blue
4	FG	Green/ Yellow	FG	Green/ Yellow
5	-	-	Brake	Red
6	-	-	Brake	Black

Plug: 5559-06P-210
Terminal (No.1 to 3, 5, 6): 5558T (reel) or 5558TL (bagged)
Grounding Pin (No.4): 30490-2002 (reel) or 30490-2012 (bagged)
(Manufactured by: Molex Japan Co., Ltd)

Type SJME-	L	LL	Approx. mass (kg)
01AMB41	119	94	0.5
01AMB4C	164	139	0.8

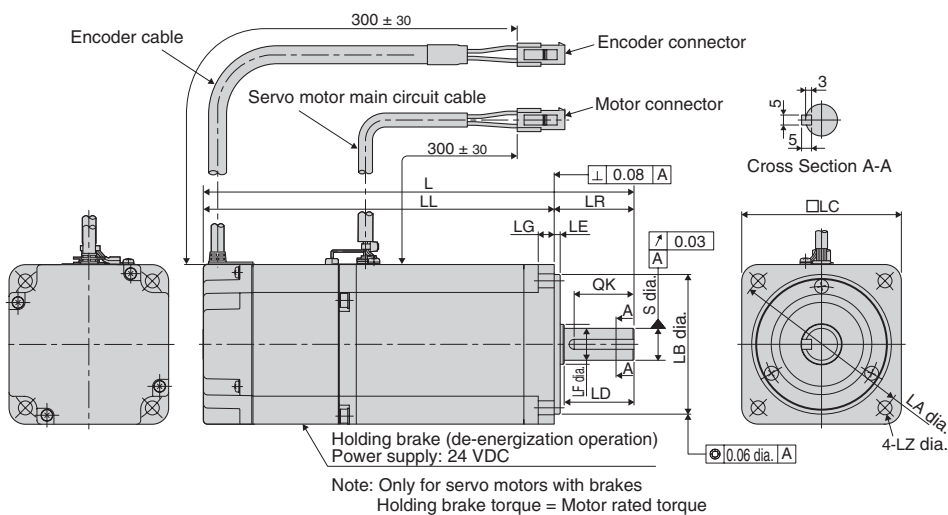
Encoder Connector Specifications



Pin	Description	Color
1	PG 5V	Red
2	PG 0V (GND)	Black
3	Phase A+	Blue
4	Phase A-	Blue/White
5	Phase B+	Yellow
6	Phase B-	Yellow/White
7	Phase /Z	Purple
8	Phase U	Gray
9	Phase V	Green
10	Phase W	Orange
11	-	-
12	FG	Shield

Plug: 5559-12P-210
Terminal: 5558T2 (reel) or 5558T2L (bagged)
(Manufactured by: Molex Japan Co., Ltd)

200 W to 750 W



Type SJME-	L	LL	LR	LG	LE	S	LB	LC	LD	LF	LA	LZ	QK	Approx. mass (kg)
02AMB41	125.5	95.5	30	6	3	14° -0.011	50° -0.039	60	-	-	70	5.5	20	0.9
02AMB4C	165.5	135.5												1.5
04AMB41	148.5	118.5												1.3
04AMB4C	188.5	158.5	40	8	3	16° -0.011	70° -0.046	80	35	20	90	7	30	1.9
08AMB41	173	133												2.6
08AMB4C	216	176												3.5