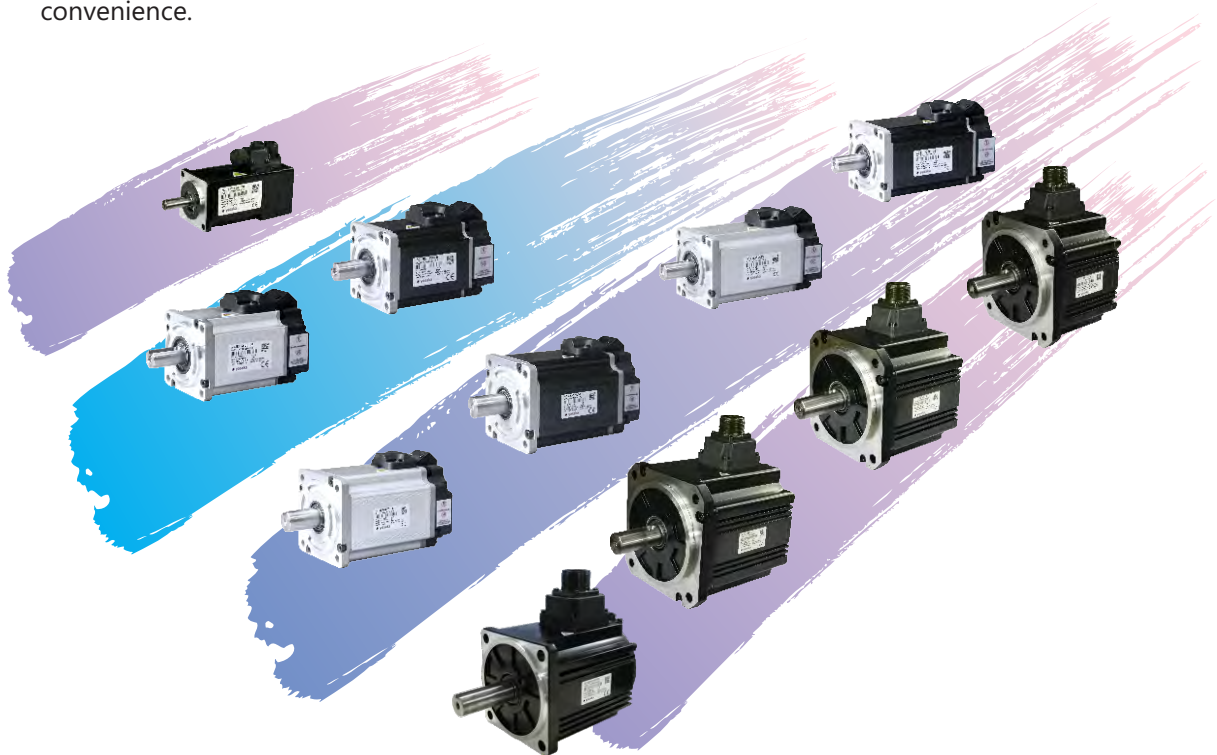


HCSV-X1 series Servo motor

HCSV-X3 series Servo motor

SV series servo has provided the best solution for all the fields of manufacturing, which requires automation, high-speed, high-precision and convenience.



Model name identification

S V - X3 MA 075A - B 2 L N - * *

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① Product series

Specifications
X1 series
X3 series

② Inertia specifications

Symbol	Specifications
MA	Low inertia
MM	Middle inertia
MH	High inertia
MG	Low-speed and high-torque
MQ	Straight type

③ Power specifications

Symbol	Specifications
005A	50W
010A	100W
020A	200W
040A	400W
075A	750W
100A	1KW
150A	1.5KW
200A	2KW
300A	3KW
400A	4KW
500A	5KW
750A	7.5KW
115B	11.5KW
150B	15KW
220B	22KW

④ Brake specifications

Symbol	Specifications
N	No brake
B	With brake

⑤ Power voltage specifications

Symbol	Specifications
1	110V
2	220V
4	400V
6	48V

⑥ Shaft-end specifications

Symbol	Specifications
K	Keyway shaft/no oil seal
L	Keyway shaft/with oil seal

⑧ Customized version

Specifications
**

⑦ Encoder specifications

Symbol	Specifications
N	Single-turn absolute 17-bit
A	Multi-turn absolute 17-bit
B	Multi-turn absolute 20-bit
C	Multi-turn absolute 22-bit
D	Multi-turn absolute 24-bit
T	Tama-gawa 17-bit
M	Tama-gawa 23-bit
K	Nikon single-turn absolute 20-bit
L	Nikon multi-turn absolute 20-bit

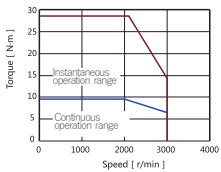
Notes: For special models, please refer to Model Selection.

MM200A Outline



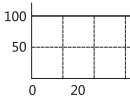
NT characteristics

NT characteristics

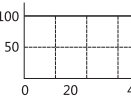


Continuous torque-Ambient temperature

No oil seal
Rated torque ratio(%)



With oil seal
Rated torque ratio(%)



Specifications

Model Name	M□□□□□2□□**	Units
Fitting flange size		mm
Approximate mass (No brake)		Kg
Approximate mass (With brake)		Kg
Rated voltage		V
Rated output		W
Rated torque		N·m
Instantaneous max. torque		N·m
Rated current		Arms
Instantaneous max. current		Arms
Rated speed		r/min
Max. speed		r/min
Torque constant		N·m/A
Induced voltage constant per phase		MV(r/min)
Rated power rate (No brake)		KW/S
Rated power rate (With brake)		KW/S
Mechanical time constant (No brake)		ms
Mechanical time constant (With brake)		ms
Electrical time constant		ms
Moment of inertia (No brake)		×10 ⁻⁴ Kg·m ²
Moment of inertia (With brake)		×10 ⁻⁴ Kg·m ²
Usage		—
Rated voltage		V
Rated current		A
Static friction torque		Nm
Suction time		ms
Release time		ms
Release voltage		V

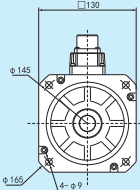
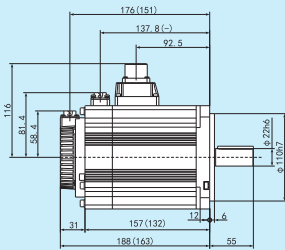
Brake specification

2KW Middle inertia MM200A

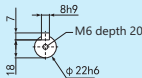
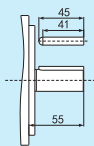
	□130
	8.4
	9.8
	AC200
	2000
	9.55
	28.6
	12.2
	34.6
	2000
	3000
	0.85
	29.6
	104.9
	87.9
	0.58
	0.69
	12.2
	8.70
	10.38
	Holding
	DC24V±10%
	1
	9.55 or more
	120 at 100% voltage
	30 at 100% voltage
	DC1V or more

External dimensions

MM200A



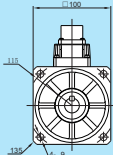
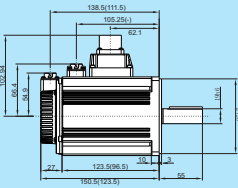
Shaft-end dimension



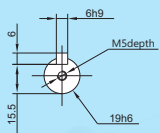
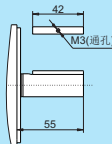
※Dimension with parentheses () show dimensions with no brake.

External Dimension

MA100A

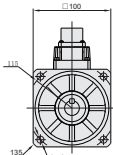
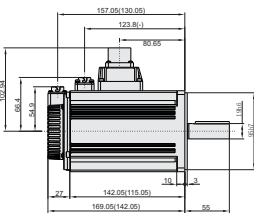


Shaft-end dimension

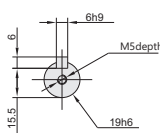
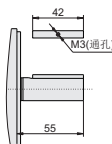


※Dimension with parentheses() show dimensions with no brake.

MA150A

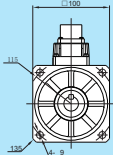
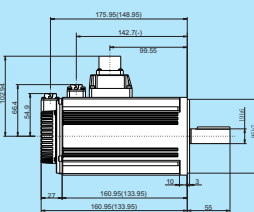


Shaft-end dimension

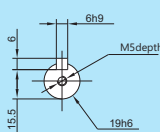
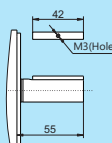


※Dimension with parentheses() show dimensions with no brake.

MA200A

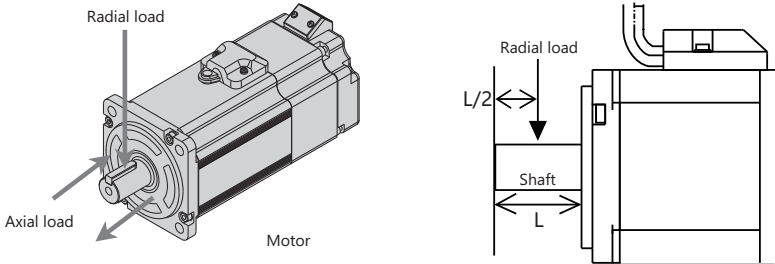


Shaft-end dimension



※Dimension with parentheses() show dimensions with no brake.

Output shaft permissible load for X3/X1 series servo motor



Permissible load	Units	50W	100W	200W	400W	750W	1kW	1.5kW	2kW	850W	1.3KW	1.8KW
Radial load	N	68	68	245	245	392	490	490	490	490	686	980
Axial load	N	58	58	98	98	147	196	196	196	98	343	392