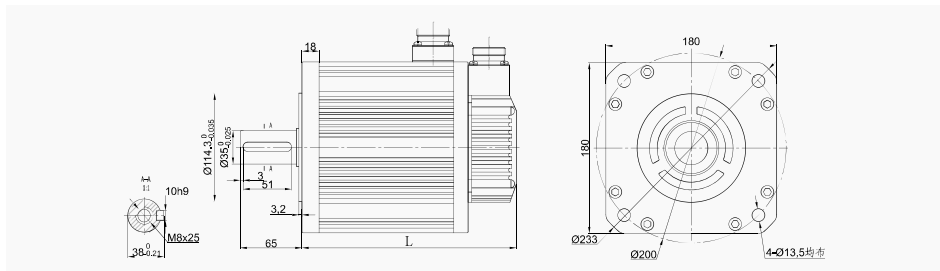


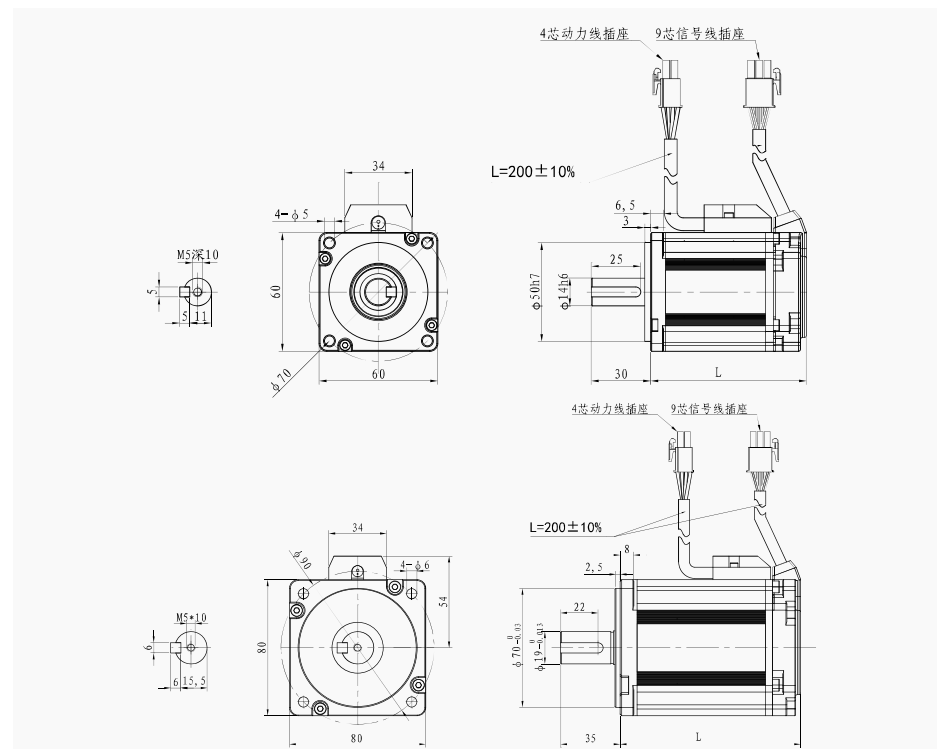
## M4 Series 180 Flange Servo Motors



Modes	180M4D-A27215□	180M4D-B27215□	180M4D-A30215□	180M4D-B30215□	180M4D-A45220□	180M4D-B45220□
Rated power (kW)	2.70	2.70	3.00	3.00	4.50	4.50
Pole pairs	4	4	4	4	4	4
Rate torque (N.m)	17.2	17.2	19	19	21.5	21.5
Max torque (N.m)	43	43	47	47	53	53
Rated speed (rpm)	1500	1500	1500	1500	2000	2000
Rated current (A)	10.5	6.5	12	7.5	16	9.5
Max. current (A)	31.5	19.5	36	22.5	48	28.5
Torque constant (N.m/A)	1.64	2.65	1.58	2.5	1.34	2.26
Voltage constant (V/krpm)	112	167	97	170	84	140
Rotor inertia (kg.m <sup>2</sup> ) no brake	6.5 × 10 <sup>-3</sup>	6.5 × 10 <sup>-3</sup>	7.0 × 10 <sup>-3</sup>	7.0 × 10 <sup>-3</sup>	7.96 × 10 <sup>-3</sup>	7.96 × 10 <sup>-3</sup>
Rotor inertia (kg.m <sup>2</sup> ) brake	6.57 × 10 <sup>-3</sup>	6.57 × 10 <sup>-3</sup>	7.07 × 10 <sup>-3</sup>	7.07 × 10 <sup>-3</sup>	8.03 × 10 <sup>-3</sup>	8.03 × 10 <sup>-3</sup>
Line resistance (Ω)	0.7	1.47	0.4	1.23	0.24	0.71
Line inductance (mH)	3.5	7.8	2.42	7.3	1.45	4
L no brake (mm)	226	226	232	232	243	243
L with brake (mm)	298	298	304	304	315	315

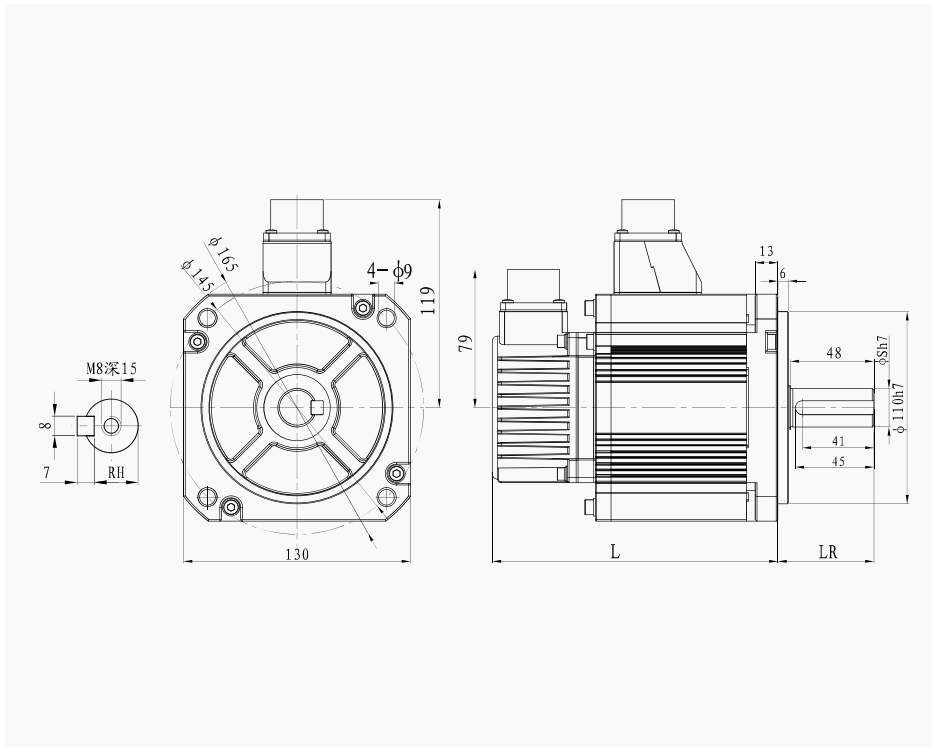
Modes	180M4D-A43215□	180M4D-B43215□	180M4D-A55215□	180M4D-B55215□	180M4D-A75215□	180M4D-B75215□
Rated power (kW)	4.30	4.30	5.50	5.50	7.50	7.50
Pole pairs	4	4	4	4	4	4
Rate torque (N.m)	27	27	35	35	48	48
Max torque (N.m)	67	67	70	70	96	96
Rated speed (rpm)	1500	1500	1500	1500	1500	1500
Rated current (A)	16	10	24	12	32	20
Max. current (A)	48	30	72	36	96	60
Torque constant (N.m/A)	1.69	2.7	1.45	2.9	1.5	2.4
Voltage constant (V/krpm)	103	172	90	181	94	156
Rotor inertia (kg.m <sup>2</sup> ) no brake	9.64 × 10 <sup>-3</sup>	9.64 × 10 <sup>-3</sup>	12.25 × 10 <sup>-3</sup>	12.25 × 10 <sup>-3</sup>	16.72 × 10 <sup>-3</sup>	16.72 × 10 <sup>-3</sup>
Rotor inertia (kg.m <sup>2</sup> ) brake	9.71 × 10 <sup>-3</sup>	9.71 × 10 <sup>-3</sup>	12.32 × 10 <sup>-3</sup>	12.32 × 10 <sup>-3</sup>	16.79 × 10 <sup>-3</sup>	16.79 × 10 <sup>-3</sup>
Line resistance (Ω)	0.28	0.8	0.14	0.62	0.104	0.273
Line inductance (mH)	1.74	4.83	1	4	0.77	2.14
L no brake (mm)	262	262	292	292	346	346
L with brake (mm)	334	334	364	364	418	418

## S Series 60/80 Flange Servo Motors



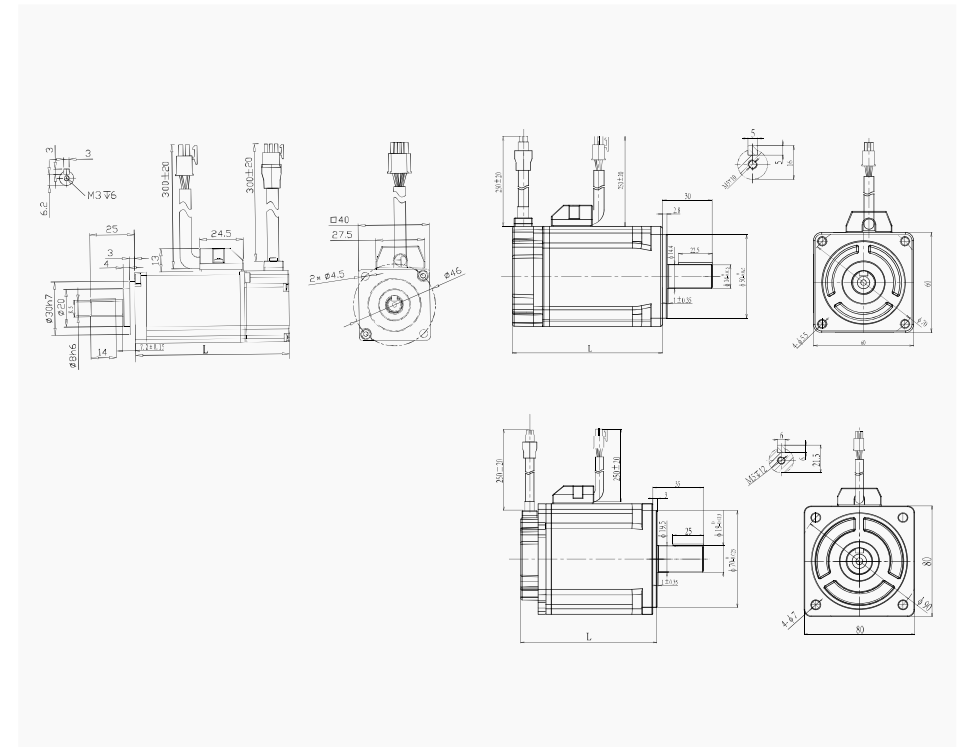
Modes	60SES-A2013060□	60SES-A4013060□	80SES-A7513060□	60SS-A2013050□	60SS-A4013050□	80SS-A7513050□
Rated power (kW)	0.2	0.4	0.75	0.2	0.4	0.75
Pole pairs	5	5	5	5	5	5
Rate torque (N.m)	0.64	1.27	2.39	0.64	1.27	2.39
Max torque (N.m)	1.92	3.8	7.2	1.92	3.8	7.2
Rated speed (rpm)	3000	3000	3000	3000	3000	3000
Max. speed (rpm)	6000	6000	6000	5000	5000	5000
Rated current (A)	2.1	3.2	4.8	1.9	2.8	4
Max. current (A)	6.3	9.6	13.4	5.7	8.4	12
Torque constant (N.m/A)	0.304	0.396	0.498	0.336	0.453	0.597
Voltage constant (V/krpm)	22.0	27.0	35.0	22.9	29.3	39.8
Rotor inertia (kg.m <sup>2</sup> ) no brake	0.15 × 10 <sup>-4</sup>	0.27 × 10 <sup>-4</sup>	0.9 × 10 <sup>-4</sup>	0.16 × 10 <sup>-4</sup>	0.28 × 10 <sup>-4</sup>	1.0 × 10 <sup>-4</sup>
Rotor inertia (kg.m <sup>2</sup> ) brake	0.16 × 10 <sup>-4</sup>	0.28 × 10 <sup>-4</sup>	1.0 × 10 <sup>-4</sup>	0.18 × 10 <sup>-4</sup>	0.3 × 10 <sup>-4</sup>	1.1 × 10 <sup>-4</sup>
Line resistance (Ω)	4.03	2.36	0.93	4.5	3.3	1.4
Line inductance (mH)	9.35	5.80	4.2	12.5	9.61	7.25
L no brake (mm)	78.7	98.7	106.2	108	133	144.5
L with brake (mm)	116.7	136.7	147.2	146	171	185.5

## S Series 130 Flange Servo Motors



Modes	130SD-A1022030□	130SD-A1522030□	130SD-A2022030□	130SD-A3022030□
Rated power (kW)	1.0	1.5	2.0	3.0
Pole pairs	5	5	5	5
Rated torque (N·m)	4.77	7.16	9.55	14.3
Max. torque (N·m)	14.3	21.5	28.65	42.9
Rated speed (rpm)	2000	2000	2000	2000
Max. speed (rpm)	3000	3000	3000	3000
Rate current (A)	6	8.2	10	13.8
Max. current (A)	18	24.6	31.5	41.4
Torque constant (N·m/A)	0.795	0.873	0.905	1.04
Voltage constant (V/krpm)	51.2	55	61	65
Rotor inertia (kgm <sup>2</sup> ) no brake	4.6×10 <sup>-4</sup>	6.7×10 <sup>-4</sup>	8.7×10 <sup>-4</sup>	15.1×10 <sup>-4</sup>
Rotor inertia (kgm <sup>2</sup> ) brake	6.6×10 <sup>-4</sup>	8.7×10 <sup>-4</sup>	10.7×10 <sup>-4</sup>	17.1×10 <sup>-4</sup>
Line resistance (Ω)	0.955	0.7	0.54	0.3
Line inductance (mH)	7.96	6.1	5.91	3.43
L without brake (mm)	163.5	181	198.5	251.5
L with brake (mm)	197.5	215	232.5	285.5

## S5 Series 40/60/80 Flange Servo Motors



Modes	40S5S-A1013060□	60S5S-A2013065□	60S5D-A4013050□	60S5D-A4013065□	80S5D-A7513065□
Rated power (kW)	0.1	0.2	0.4	0.4	0.75
Pole pairs	5	5	5	5	5
Rated torque (N·m)	0.32	0.64	1.27	1.27	2.39
Max. torque (N·m)	0.96	2.23	4.46	4.46	8.36
Rated speed (rpm)	3000	3000	3000	3000	3000
Max. speed (rpm)	6000	6500	5000	6500	6500
Rate current (A)	1.1	1.9	2.1	3.2	5.1
Max. current (A)	3.3	6.6	7.5	11.2	17.8
Torque constant (N·m/A)	0.306	0.33	0.635	0.4	0.465
Voltage constant (V/krpm)	14.8	21.8	38.4	22.6	28.8
Rotor inertia (kgm <sup>2</sup> ) no brake	0.048×10 <sup>-4</sup>	0.29×10 <sup>-4</sup>	0.56×10 <sup>-4</sup>	0.56×10 <sup>-4</sup>	1.56×10 <sup>-4</sup>
Rotor inertia (kgm <sup>2</sup> ) brake	0.051×10 <sup>-4</sup>	0.31×10 <sup>-4</sup>	0.58×10 <sup>-4</sup>	0.58×10 <sup>-4</sup>	1.66×10 <sup>-4</sup>
Line resistance (Ω)	12.4	6.3	6.1	2.64	1
Line inductance (mH)	12.25	12.2	13.8	7.9	5.8
L without brake (mm)	80.7	73.1	89.7	89.7	95.7
L with brake (mm)	114.8	103.6	120.2	120.2	130.7