Technical Specifications of **SMG** Servo Motor (1)

Motor Series	SMG Series Motor						
	Medium inertia flange size 130mm						
Model	SMG130D-0100-10A□K-4LKG	SMG130D-0100-20A□K-4LKG	SMG130D-0150-20A□K-4LKG	SMG130D-0150-20A□K-4HKG	SMG130D-0200-20A□K-4LKG	SMG130D-0200-20A□K-4HKG	SMG130D-0300-20A□K-4HKG
Driver matching	FD422S-LF-000 FD422S-CF-000 FD422S-EF-000 CD422S-AF-000 JD430-AA-000		CD432S-AA-000 FD432S-LA-000 FD432S-CA-000 FD432S-EA-000 JD430-AA-000	FD612S-LA-000 FD612S-CA-000 FD612S-EA-000 CD612S-AA-000 JD620-AA-000	CD432S-AA-000 FD432S-LA-000 FD432S-CA-000 FD432S-EA-000 JD430-AA-000	FD612S-LA-000 FD612S-CA-000 FD612S-EA-000 CD612S-AA-000 JD620-AA-000	FD622S-LA-000 FD622S-CA-000 FD622S-EA-000 CD622S-AA-000 JD620-AA-000
Rated Power (kW)	1	1	1.5	1.5	2	2	3
Rated voltage (V)	220	220	220	380	220	380	380
Rated current (A)	4.5	5	7.5	4.7	10	5.9	7.4
Rated speed (RPM)	1000	2000	2000	2000	2000	2000	2000
Rated torque (Nm)	10	5	7.7	7.7	10	10	15
Peak torque (Nm)	20	12.5	19.25	19.25	25	25	30
Peak current (A)	9	12.5	18.75	11.75	25	14.75	18.5
Reverse voltage	140	68	68	111	70	115	125
constant K_e (V/1000r/min) Torque constant k_t (Nm/A)	2.2	1	1.03	1.64	1	1.69	2.03
Rotor moment of inertia J_m (Kg•m^2)	1.94×10^{-3}	1.06×10^{-3}	1.53×10^{-3}	1.53×10^{-3}	1.94×10^{-3}	1.94×10^{-3}	2.77×10^{-3}
	1.95×10^{-3} (with brake)	1.07×10^{-3} (with brake)	1.54×10^{-3} (with brake)	1.54×10^{-3} (with brake)	1.95×10^{-3} (with brake)	1.95×10^{-3} (with brake)	2.78×10^{-3} (with brake)
Resistance Line-Line R_L (Ω)	2.7	1.84	1.01	2.49	0.73	1.986	1.41
Inductance Line-Line L_L (mH)	8.8	4.9	2.94	7.08	2.45	6.2	5.5
Electrical time constant τe(ms)	3.26	2.66	2.91	2.84	3.36	3.12	3.9
Length of motor L (mm)	213±1	171±1	192±1	192±1	209±1	209±1	231±1
	294±1 (with brake)	228±1 (with brake)	249±1 (with brake)	249±1 (with brake)	290±1 (with brake)	290±1 (with brake)	312±1 (with brake)
Weight (Kg)	10.2±0.7	6.6±0.7	8.3±0.7	8.3±0.7	9.8±0.7	9.8±0.7	11.7±0.7
	12.5±0.7 (with brake)	8.9±0.7 (with brake)	10.6±0.7 (with brake)	10.6±0.7 (with brake)	12.1±0.7 (with brake)	12.1±0.7 (with brake)	14±0.7 (with brake)
Maxsimum radial force F_r (N)	900	900	900	900	900	900	900
Maxsimum axial force F_a (N)	300	300	300	300	300	300	300
Pole pair number	4						
Encoder	2500 P/R Incremental encoder						
Insulation class	F						
Protection level	IP65						
Environment conditions for operation	Temperature: - 20～40℃（non-freezing）;Humidity：Below 90 % RH (no condensation)						

Note: □=A ——without brake
□=B ——with brake

Technical Specifications of **SMG** Servo Motor(2)

Motor Series	SMG Series Motor		
	Medium inertia flange size 180mm		
Model	SMG180D-0440-15A□K-4HKG	SMG180D-0550-15A□K-4HKG	SMG180D-0750-15A□K-4HKG
Driver matching	JD640-LA-000 JD640-AA-000		JD650-AA-000
Rated Power (kW)	4.4	5.5	7.5
Rated voltage (V)	380	380	380
Rated current (A)	10	12	20
Rated speed (RPM)	1500	1500	1500
Rated torque (Nm)	27	35	48
Peak torque (Nm)	67	70	96
Peak current (A)	24.81	30	50
Reverse voltage constant K_e (V/1000r/min)	172	181	156
Torque constant kt (Nm/A)	2.7	2.9	2.4
Rotor moment of inertia J_m (Kg•m^2)	9.64×10^{-3}	12.25×10^{-3}	16.72×10^{-3}
	9.66×10^{-3} (with brake)	12.28×10^{-3} (with brake)	16.75×10^{-3} (with brake)
Resistance Line - Line R_L (Ω)	0.796	0.62	0.273
Inductance Line - Line L_L (mH)	4.83	4	2.14
Electrical time constant τe (ms)	6	6.45	7.8
Length of motor L （mm）	262±1.4	292±1.4	346±1.4
	334±1.4 (with brake)	365±1.4 (with brake)	418±1.4 (with brake)
Weight (Kg)	25.5±0.7	30.5±0.7	40±0.7
	30.7±0.7 (with brake)	37.5±0.7 (with brake)	47±0.7 (with brake)
Maxsimum radial force F_r F(N)	1500	1500	1500
Maxsimum axial force F (N)	600	600	600
Pole pair number	4		
Encoder	2500 P/R Incremental encoder		
Insulation class	F		
Protection level	IP65		
Environment conditions for operation	Temperature: - 20～40℃（non-freezing）;Humidity：Below 90 % RH (no condensation)		

Note: □=A ——without brake
□=B ——with brake