

SD500-Series Spindle Servo System



Precise speed and position control within ± 1 pulse



ARM+CPLD structure for higher performance



Encoder disconnection detection to ensure reliable system running



Auto load inertia detection to self-adjust parameters



Closed-loop vector control with standard dual encoder interfaces



Multistage orientation to ensure rigid tapping error within $\pm 2\%$



Book-like narrow structure to save installation space



Separated air ducts and power devices for higher life service

Models for Selection

Model	Input power	Rated current (A)	Applicable motor (kW)	Brake unit	Applicable resistance (Ω/kW)
SD500-004D-	Three-phase 380V 50/60Hz	10	4	Built-in	50/1.0
SD500-5R5D-		13	5.5		50/1.0
SD500-7R5D-		17	7.5		45/1.5
SD500-011D-		25	11		35/2.0
SD500-015D-		32	15		30/3.0
SD500-018D-		38	18		30/3.0
SD500-022D-		45	22		25/4.0
SD500-030D-		60	30		18/6.0
SD500-037D-		75	37		18/7.0

Spindle Servo Motor Name Rules

CM 2S - 1560 D 004 - U2 28 N 3 Y

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬

① **Product series**
CM: spindle motor series product

② **Base type**
A:130; 0:165;
1:180; 2:200;
4:265; 6:360;

③ **Body length**
S、M、L、H、E、F

④ **Reference speed**
15:1500rpm

⑤ **Maximum speed**
60:6000rpm

⑥ **Reference voltage**
D: 380V

⑦ **Rated power**
004:4kW; 5R5:5.5kW;
7R5:7.5kW; 011:11kW ;
015:15kW; 018:18.5kW;
22:22kW; 030:30kW;
037:37kW

⑧ **Encoder type**
U0:no encoder
U1: increment 1024 encoder
U2: increment 2500 encoder
Z1: sine and cosine 1024 encoder

⑨ **Motor axis diameter**
28:28mm; 38:38mm;
42:42mm; 55:55mm

⑩ **Bond extension structure**
K: motor axis with flat key
N: motor axis without flat key

⑪ **Installation method**
3: horizontal
5: vertical
7: horizontal/ vertical

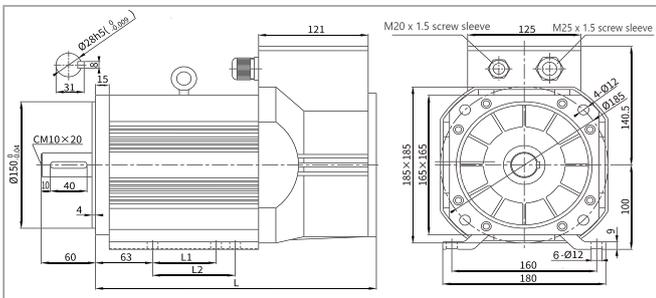
⑫ **Temperature sensor**
Empty: no temperature sensor
Y: KTY; C:PTC

⑬ **Heat dissipation**
Empty: fan cooling (three-phase 415V fan)
F2: fan cooling (single-phase 220V fan)

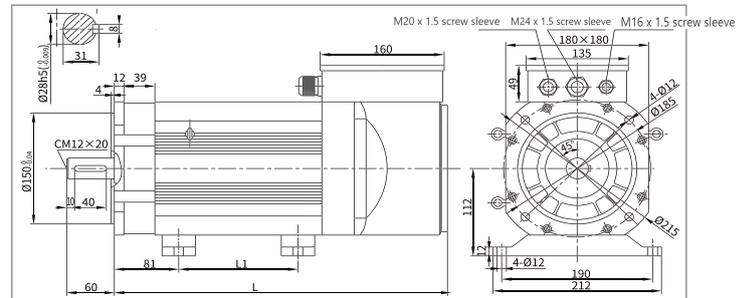
Spindle Servo Motor Specifications and Installation Dimensions

Model	Rated power (kW)	Speed r/min Reference speed/ Max. mechanical speed	Voltage V Reference voltage	Current A Continuous rating	Torque Nm Continuous rating	Inertia kgm ²	Frame No.	L (mm)	L1 (mm)	L2 (mm)	D (mm)	F (mm)	G (mm)
	Continuous rating												
CM0M-1560D2R2-	2.2	1500/6000	380	5.1	14	0.0077	165	335	95	112	28	-	-
CM0L-1560D004-	4	1500/6000	380	8.8	25.5	0.0116		385	140	159	28	-	-
CM0H-1560D5R5-	5.5	1500/6000	380	12.2	35	0.0162		445	200	219	28	-	-
CM1S-1560D2R2-	2.2	1500/6000	380	5	14	0.0071	180	334	65	-	28	-	-
CM1M-1560D004-	4	1500/6000	380	7.7	25.5	0.0101		369	100	-	28	-	-
CM1L-1560D5R5-	5.5	1500/6000	380	11.9	35	0.0151		419	150	-	28	-	-
CM2S-1560D004-	4	1500/6000	380	8.2	25.5	0.0128	200	375	109	-	38	-	-
CM2M-1560D5R5-	5.5	1500/6000	380	11.7	35	0.0169		405	139	-	38	-	-
CM2L-1560D7R5-	7.5	1500/6000	380	15.4	48	0.0236		455	189	-	38	-	-
CM2H-1560D011-	11	1500/6000	380	22.7	70	0.0303	265	505	239	-	38	-	-
CM4S-1560D011-	11	1500/6000	380	21.6	70	0.0605		482	133	-	42	12	45
CM4M-1560D015-	15	1500/6000	380	29.1	96	0.0791		510	173	-	42	12	45
CM4L-1560D018-	18.5	1500/6000	380	35.7	118	0.0954	265	545	208	-	55	16	59
CM4H-1560D022-	22	1500/6000	380	42	140	0.1117		580	243	-	55	16	59
CM4F-1560D030-	30	1500/6000	380	56.5	191	0.1676		700	363	174	55	16	59

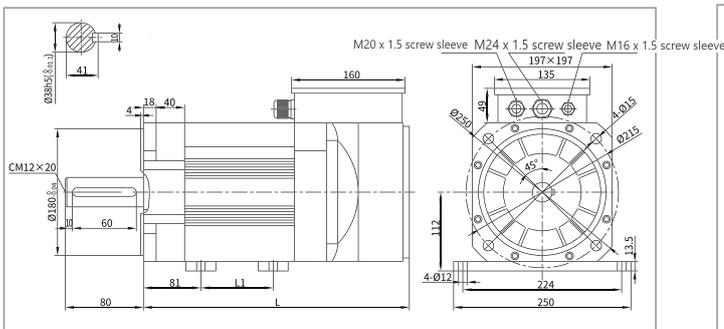
CM0M,0L,0H Series Specifications and Installation Dimensions



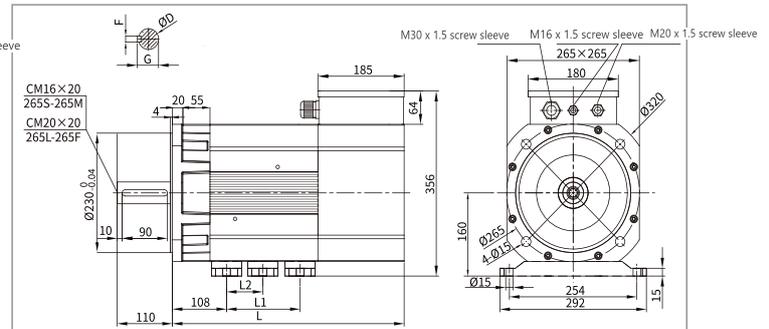
CM1S,1M,1L Series Specifications and Installation Dimensions



CM2S,2M,2L,2H Series Specifications and Installation Dimensions



CM4S,4M,4L,4H,4F Series Specifications and Installation Dimensions



Standard Pulse Wiring Diagram

