



SOLPOWER MACHINE
ELECTRONIC CORP.

SPM

SOL-POWER-SYNCHRONOUS-SERVO MOTOR
SOL-POWER-SPINDLE MOTOR(IP54)





經營理念

品質

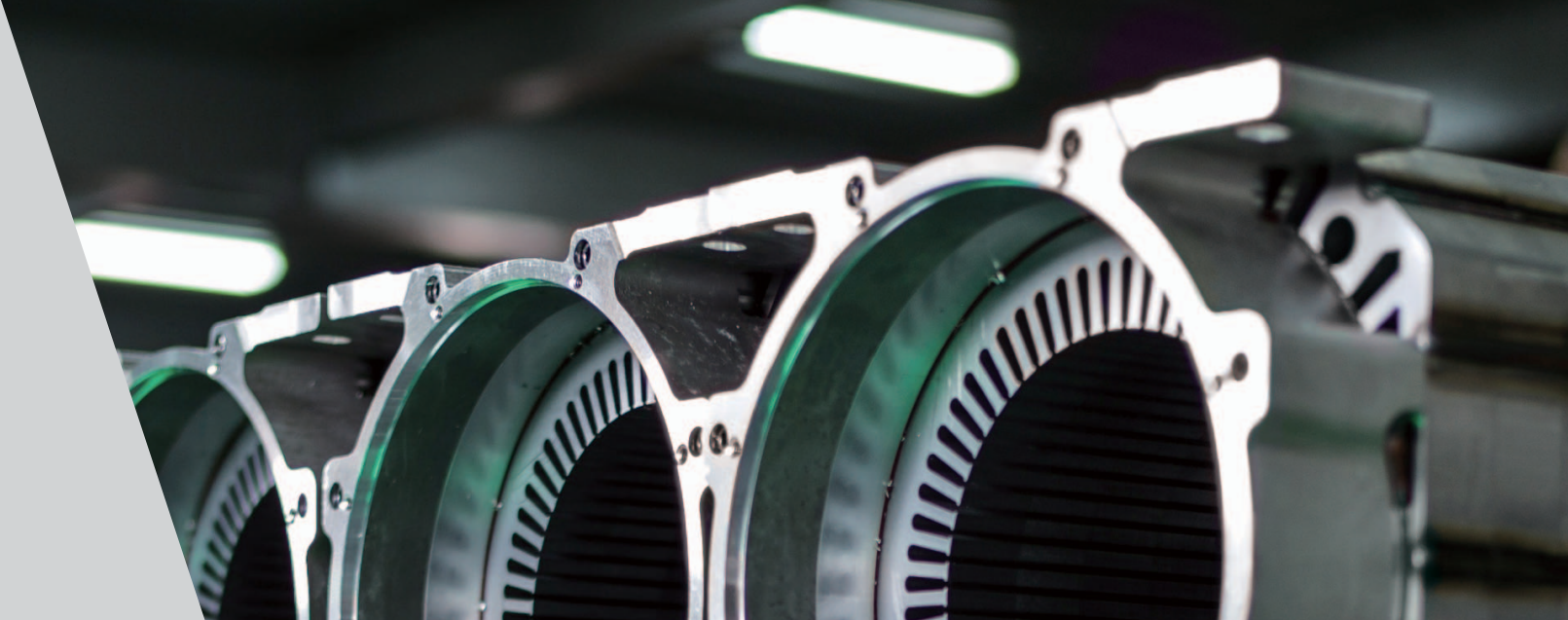
提供優良的高階伺服馬達、高精密檢測設備及嚴謹的 SOP 控管生產流程，致力高效率、高品質及低售服率為訴求，是晟昌機電不斷進步的動力

服務

提供完善的服務網路及滿足客戶的標準化及客制化馬達需求，以誠信作為服務基礎，積極開拓國際版圖

創新

以札實的技术核心，垂直整合研發及技術製程，因應市場的變動，提供卓越的产品提升產業附加價值，與客戶共創雙贏



MANAGEMENT PHILOSOPHY

Quality

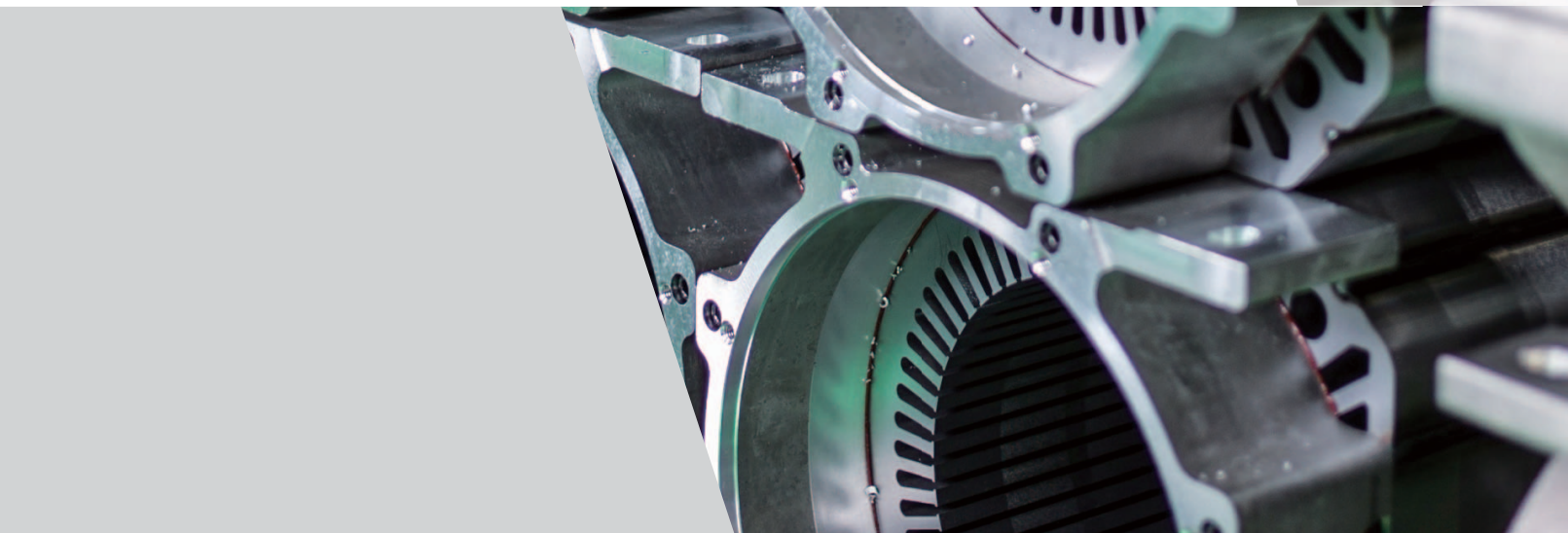
For providing excellent high-class servo motors, high precise detecting instrument and strict SOP to control product process, we strive for offering high efficiency, quality and low after-care service rate so that we have motivation for continuous improvement.

Service

Based on the concept of credibility, we provide complete service network and satisfy standard and customized necessities from customers to expand international market.

Innovation

In order to create mutual beneficial solution between customers and us, we have steady technical core, vertical integrate research, development and technical process for providing outstanding products to upgrade industrial additional value.



SOLP

公司簡介

晟昌機電股份有限公司成立於 1995 年，成立初鑑於台灣工具機出口值在世界排名第四、第五，卻沒有自己的主軸馬達控制器。關鍵性零性需仰賴進口，整體而言相當可惜，當初即整合國內外優質的控制器與驅動器，研發各式產業機械專用馬達，涵蓋感應伺服馬達、同步伺服馬達、線性馬達、DD 馬達及內藏式定轉子，由於產品特性與品質媲美，歐、美、日本主軸馬達，在國內外廣為工具機及控制器大廠所使用，並外銷世界三十餘國家(中、德、日、義、美、瑞士、韓國、波蘭、印度等)受到國內、外客戶的讚賞。

晟昌機電創業至今，不斷提升產品精度與穩定性，滿足各種市場及客戶需求，積極研發符合趨勢的新產品，開拓國際市場，多年來始終堅持著“品質、服務、創新”的經營理念，以創新技術與穩定的產品品質，在此基礎上，展望未來，持續投入研發，與合作夥伴共同努力、共同成本為傳動業創造出更璀璨的未來。





COMPANY PROFILE

was founded in 1995. In consideration of world ranking of Taiwan tool machine export, the Forth and Fifth place, it was a pity that Taiwan tool machinery companies have no their own spindle motor controllers and the key components need to be imported. CHENG CHANG initially integrated high quality controllers and drivers and developed spindle motors including induction servo motors, synchronous servo motors, linear motors, DD motors and build-in stator and rotor specifically for general industrial machine. Owing to the outstanding product characteristics and quality, which is compared favorably with spindle motors made in Europe, America, and Japan to gain very good feedback from customers, our motors export to thirty nations including China, Germany, Japan, Italy, U.S.A., Switzerland, Korea, Poland, India in the world.

Since establishment, Cheng Chang Machine Electronic Corp. continually promote precision and stability of products to research and develop new products in the trend to expand international market for meeting a variety of markets and customers' necessary. We have insisted on the business management ideas, "quality, service, and innovation", for many years to improve technology and steady quality of products. In the future, we will keep putting in more efforts in research and development to create a resplendent future for transmission industry and to achieve the mission of Energy Efficiency and Carbon Reduction.



SPM

伺服主軸馬達特性

GENERAL SPECIFICATION:

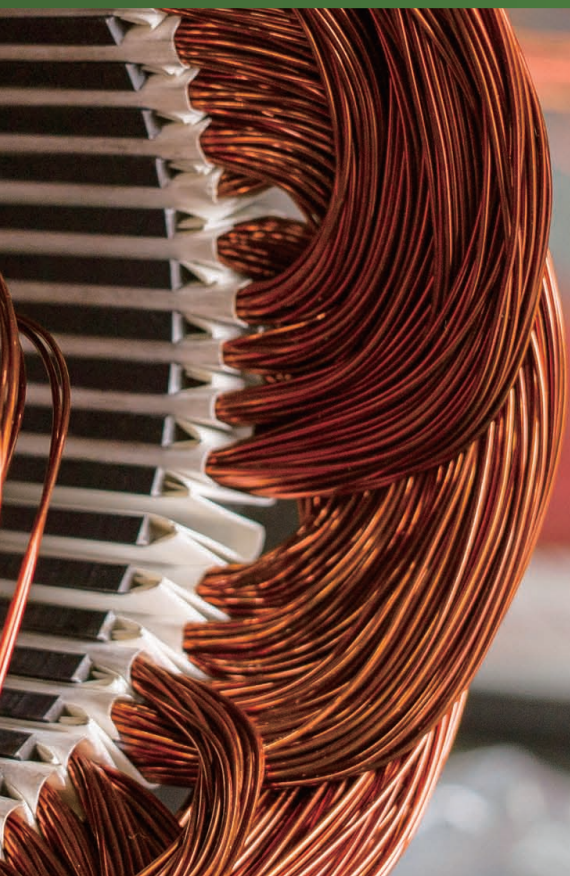
- INSULATION CLASS OF STATOR WINDING : F
- INSULATION VOLTAGE : 1500Vrms/MIN
- INSULATION RESISTANCE : ABOVE 500VDC 10M Ω
- PROTECTION LEVEL : IP55
- OPERATING AMBIENT ENVIRONMENT : 0~40°C , 90%RH
NON-CONDENSING
- STORAGE AMBIENT ENVIRONMENT : -20~60°C , 90%RH
NON-CONDENSING
- VIBRATION CLASS : BLOW 1.8mm / S
- MOUNTING : PM7: B5 , PM10: B35 , PM13: B35
- FEEDBACK SYSTEM : ENCODER +5V . LINE DRIVER ,
/ RESOLVER , 2500PPR WITH U,V,W COMMUTATION
SIGNALS
- TERMINAL BOX & CONNECTOR : POWER : TERMINAL BOX
FEEDBACK DEVICE : CONNECTOR
- OVER TEMPERATURE PROTECTION : THERMO-SWITCH
- COOLING : IC416

APPLICATIONS:

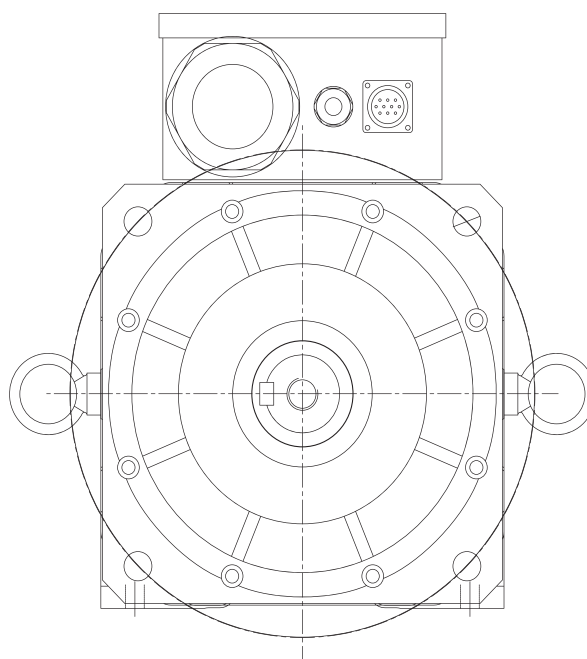
- INJECTION MOLDING MACHINE
- BLOW MOLDING MACHINE
- PRESS PUNCHING MACHINE
- PRESS FEEDER
- ROTARY CUTTER
- TEXTILE
- PRINTING MACHINE
- MACHINE TOOL
- ROBOTIC
- HANDLING SYSTEM
- CUT TO LENGTH
- PACKAGING MACHINE
- FLY SHEAR

經典的工藝 · 精銳的演出
Classical process National elite performances

SOL-POWER-SYNCHRONOUS-SERVO MOTOR
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馬達特性：
A. 高精度、低慣量設計
B. 反應靈敏、速度控制



synchronous

SPM07 SERIES

Servo motors with 8 poles
Rated torque output 12~30 Nm

1~4

synchronous

SPM10 SERIES

Servo motors with 8 poles
Rated torque output 45~142 Nm

5~8

synchronous

SPM13 SERIES

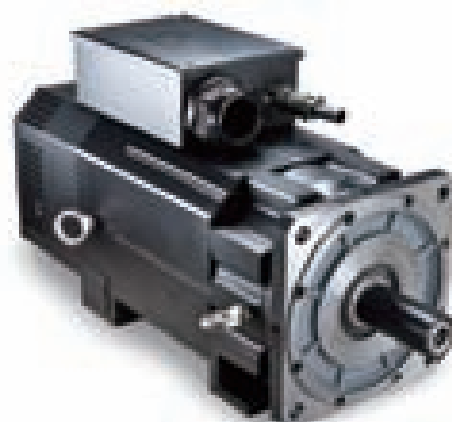
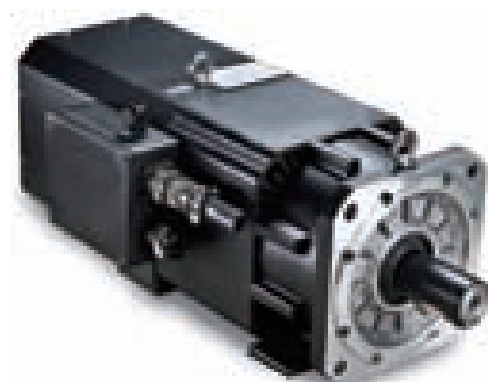
Servo motors with 8 poles
Rated torque output 118~388 ni-m

9~12



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SPM



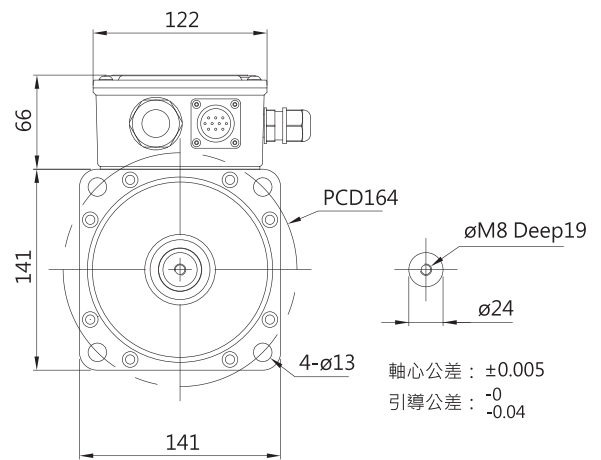
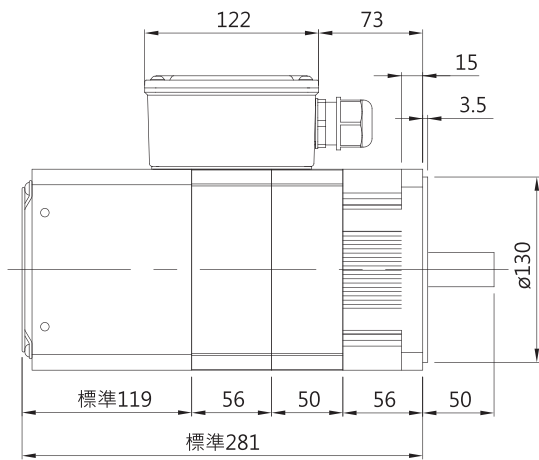
Motor Type	Rated Power Kw	Rated Speed Rpm	Rated Torque Nm	Rated Frequency Hz	Rated Current A	Max Speed Rpm
SPM-072-10	1.2	1000	12	66.7	2.2	7000
SPM-072-15	1.9	1500	12	100.0	3.5	7000
SPM-072-20	2.5	2000	12	133.3	4.6	7000
SPM-072-30	3.7	3000	12	200.0	6.8	7000
SPM-074-10	1.8	1000	17	66.7	3.3	7000
SPM-074-15	2.8	1500	17	100.0	5.2	7000
SPM-074-20	3.7	2000	17	133.3	6.8	7000
SPM-074-30	5.5	3000	17	200.0	10.1	7000
SPM-076-10	2.5	1000	24	66.7	4.6	7000
SPM-076-15	3.8	1500	24	100.0	7	7000
SPM-076-20	5.0	2000	24	133.3	9.2	7000
SPM-076-30	7.5	3000	24	200.0	13.8	7000
SPM-078-10	3.2	1000	30	66.7	5.9	7000
SPM-078-15	4.8	1500	30	100.0	8.9	7000
SPM-078-20	6.3	2000	30	133.3	11.6	7000
SPM-078-30	9.5	3000	30	200.0	17.5	7000

※ 註：本公司保留針對規格設計的修改權利，如有變更恕不另通知。

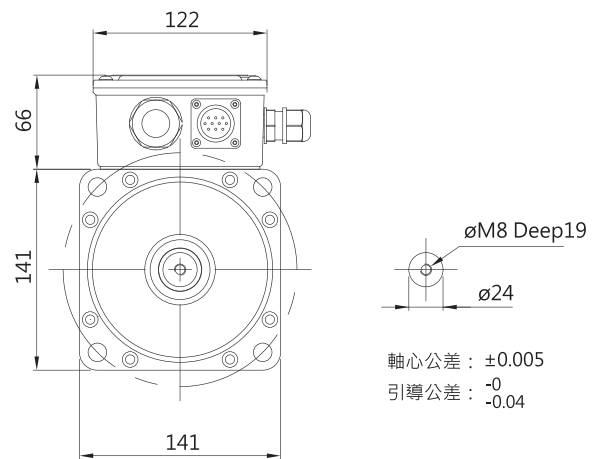
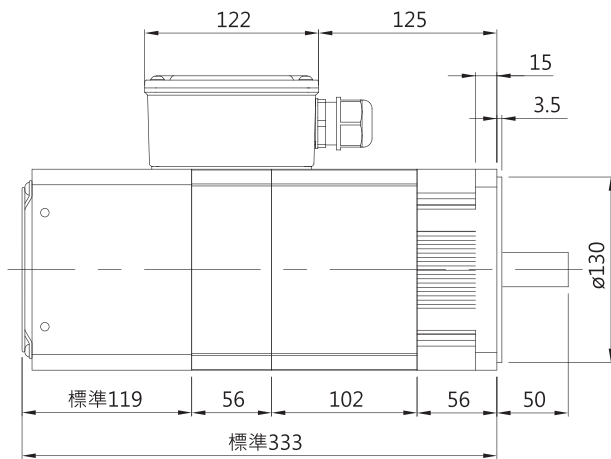
The company reserves the right to modify the specifications/design, subject to change without further notice.

Peak Torque Nm	Ke (E.M.F.) vRMS /1000rpm	Kt Nm /Arms	Inertia Kg-cm ²	Weight Kg
30	300	5	7	23.5
30	200	3.3	7	
30	150	2.5	7	
30	100	1.7	7	
43	300	5	13	26.8
43	200	3.3	13	
43	150	2.5	13	
43	100	1.7	13	
60	300	5	18	30.2
60	200	3.3	18	
60	150	2.5	18	
60	100	1.7	18	
75	300	5	24	33.6
75	200	3.3	24	
75	150	2.5	24	
75	100	1.7	24	

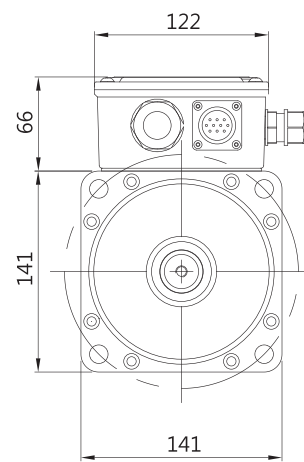
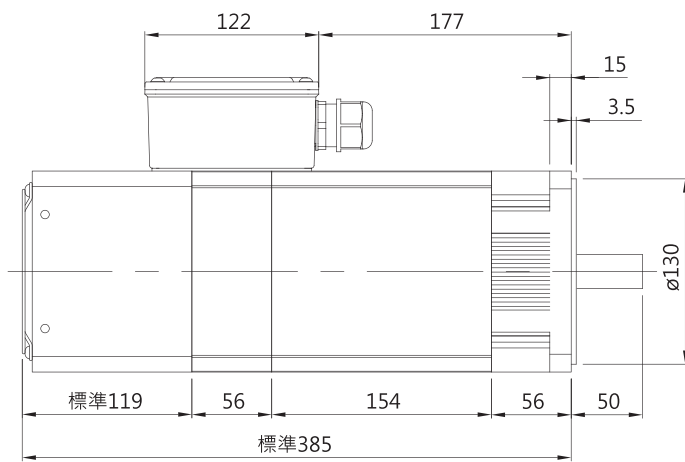
SPM-072




SPM-074

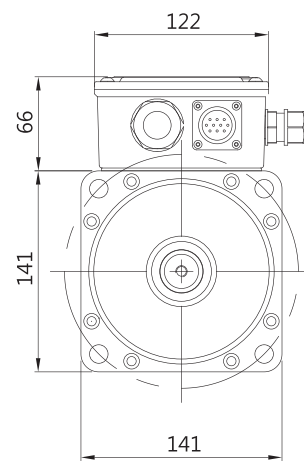
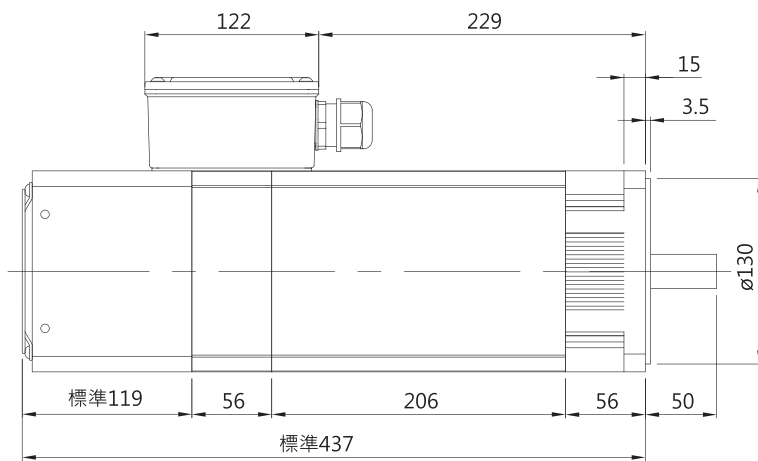



SPM-076




 軸心公差：±0.005
 引導公差： $\begin{matrix} -0 \\ -0.04 \end{matrix}$

SPM-078




 軸心公差：±0.005
 引導公差： $\begin{matrix} -0 \\ -0.04 \end{matrix}$

SPM



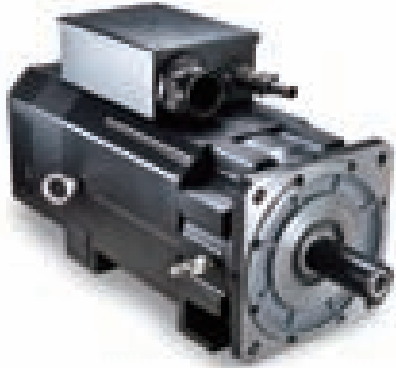
Motor Type	Rated Power Kw	Rated Speed Rpm	Rated Torque Nm	Rated Frequency Hz	Rated Current A
SPM-102-10	4.75	1000	45	66.7	8.8
SPM-102-15	7.1	1500	45	100.0	13.5
SPM-102-20	9.5	2000	45	133.3	17.5
SPM-102-30	14.25	3000	45	200.0	26.3
SPM-103-10	5.5	1000	52	66.7	10.1
SPM-103-15	8.3	1500	52	100.0	15.3
SPM-103-20	11	2000	52	133.3	20.3
SPM-103-30	16.5	3000	52	200.0	30.5
SPM-104-10	7.5	1000	71	66.7	14.0
SPM-104-15	11.3	1500	71	100.0	20.8
SPM-104-20	15	2000	71	133.3	28.0
SPM-104-30	22.5	3000	71	200.0	42.0
SPM-105-10	9.25	1000	88	66.7	17.1
SPM-105-15	13.9	1500	88	100.0	26.0
SPM-105-20	18.5	2000	88	133.3	34.1
SPM-105-30	27.75	3000	88	200.0	51.2
SPM-106-10	11	1000	104	66.7	20.3
SPM-106-15	16.5	1500	104	100.0	30.4
SPM-106-20	22	2000	104	133.3	41.0
SPM-106-30	33	3000	104	200.0	61.0
SPM-108-10	13	1000	124	66.7	24.0
SPM-108-15	19.5	1500	124	100.0	36.0
SPM-108-20	26	2000	124	133.3	48.0
SPM-108-30	39	3000	124	200.0	72.0
SPM-109-10	15	1000	142	66.7	27.7
SPM-109-15	22.5	1500	142	100.0	41.5
SPM-109-20	30	2000	142	133.3	55.3
SPM-109-30	45	3000	142	200.0	83.0

※ 註：本公司保留針對規格設計的修改權利，如有變更恕不另通知。

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Max Speed Rpm	Peak Torque Nm	Ke (E.M.F.) vRMS /1000rpm	Kt Nm /Arms	Inertia Kg-cm2	Weight Kg
4000	113	300	5	60	41
4000	113	200	3.3	60	
4000	113	150	2.5	60	
4000	113	100	1.7	60	
4000	130	300	5	75	49.2
4000	130	200	3.3	75	
4000	130	150	2.5	75	
4000	130	100	1.7	75	
4000	178	300	5	89	58.2
4000	178	200	3.3	89	
4000	178	150	2.5	89	
4000	178	100	1.7	89	
4000	220	300	5	105	66.7
4000	220	200	3.3	105	
4000	220	150	2.5	105	
4000	220	100	1.7	105	
4000	260	300	5	120	75.3
4000	260	200	3.3	120	
4000	260	150	2.5	120	
4000	260	100	1.7	120	
4000	310	300	5	150	92.6
4000	310	200	3.3	150	
4000	310	150	2.5	150	
4000	310	100	1.7	150	
4000	355	300	5	165	101.2
4000	355	200	3.3	165	
4000	355	150	2.5	165	
4000	355	100	1.7	165	

SPM



Motor Type	Rated Power Kw	Rated Speed Rpm	Rated Torque Nm	Rated Frequency Hz	Rated Current A
SPM-132-10	12.5	1000	118	66.7	23
SPM-132-15	18.8	1500	118	100.0	35
SPM-132-20	25	2000	118	133.3	46
SPM-132-30	37.5	3000	118	200.0	70
SPM-133-10	18.75	1000	179	66.7	35
SPM-133-15	28.1	1500	179	100.0	52
SPM-133-20	37.5	2000	179	133.3	70
SPM-133-30	56.24	3000	179	200.0	104
SPM-134-10	22.5	1000	215	66.7	41.5
SPM-134-15	33.8	1500	215	100.0	62.3
SPM-134-20	45	2000	215	133.3	83
SPM-134-30	67.5	3000	215	200.0	125
SPM-135-10	27.5	1000	263	66.7	51
SPM-135-15	41.3	1500	263	100.0	76.2
SPM-135-20	55	2000	263	133.3	101.5
SPM-135-30	82.5	3000	263	200.0	152.2
SPM-136-10	32	1000	303	66.7	59
SPM-136-15	48.0	1500	303	100.0	88.6
SPM-136-20	64	2000	303	133.3	118
SPM-136-30	96	3000	303	200.0	177.1
SPM-137-10	37.5	1000	355	66.7	69.2
SPM-137-15	56.3	1500	355	100.0	104
SPM-137-20	75	2000	355	133.3	138.4
SPM-137-30	112.5	3000	355	200.0	208
SPM-138-10	41	1000	388	66.7	75.7
SPM-138-15	61.5	1500	388	100.0	114
SPM-138-20	82	2000	388	133.3	151
SPM-138-30	123	3000	388	200.0	227

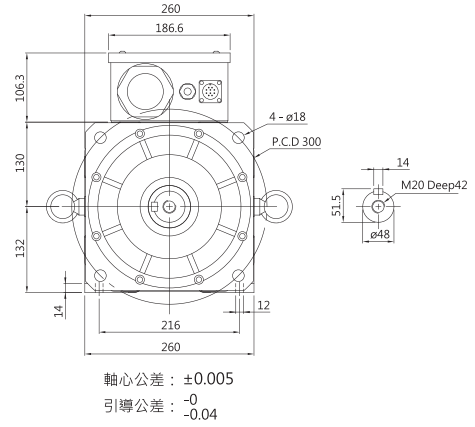
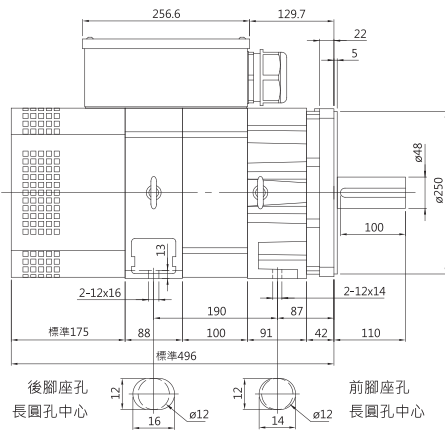
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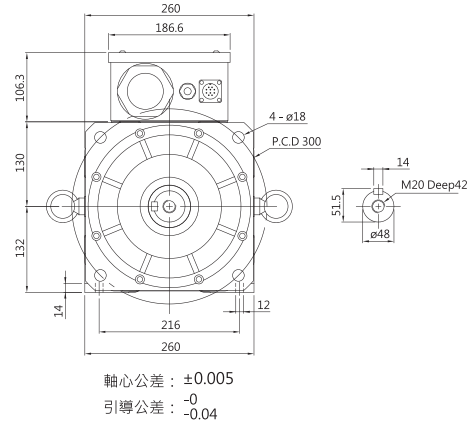
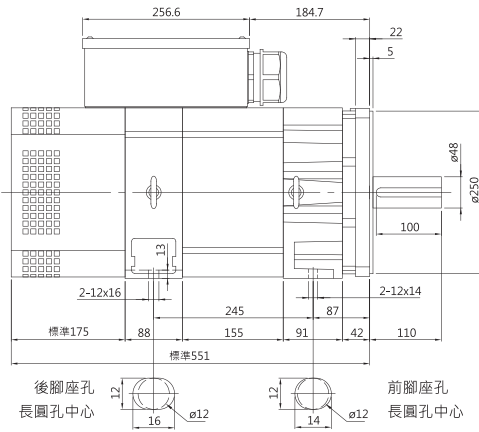
Max Speed Rpm	Peak Torque Nm	Ke (E.M.F.) vRMS /1000rpm	Kt Nm /Arms	Inertia Kg-cm2	Weight Kg
4000	295	300	5	220	123.2
4000	295	200	3.3	220	
4000	295	150	2.5	220	
4000	295	100	1.7	220	
4000	448	300	5	290	145.6
4000	448	200	3.3	290	
4000	448	150	2.5	290	
4000	448	100	1.7	290	
4000	538	300	5	360	168
4000	538	200	3.3	360	
4000	538	150	2.5	360	
4000	538	100	1.7	360	
4000	658	300	5	430	189.2
4000	658	200	3.3	430	
4000	658	150	2.5	430	
4000	658	100	1.7	430	
4000	758	300	5	500	211.6
4000	758	200	3.3	500	
4000	758	150	2.5	500	
4000	758	100	1.7	500	
4000	888	300	5	570	231.8
4000	888	200	3.3	570	
4000	888	150	2.5	570	
4000	888	100	1.7	570	
4000	970	300	5	630	255.36
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4000	970	150	2.5	630	
4000	970	100	1.7	630	

SPM

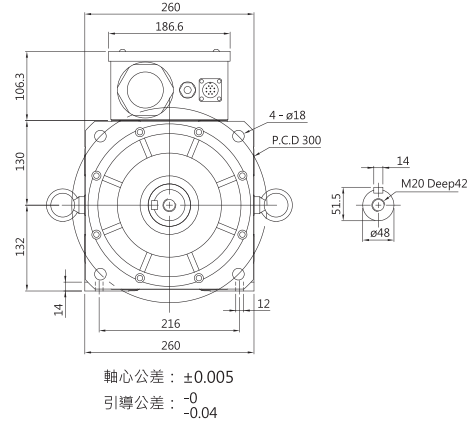
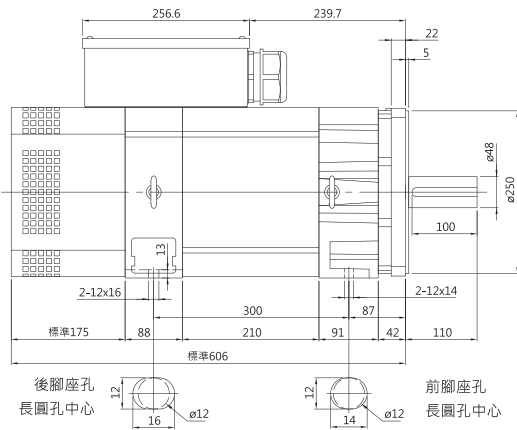
SPM-132



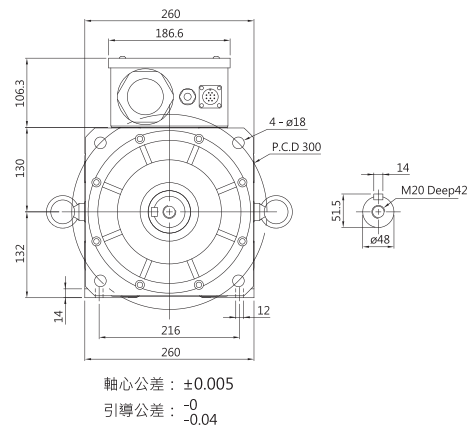
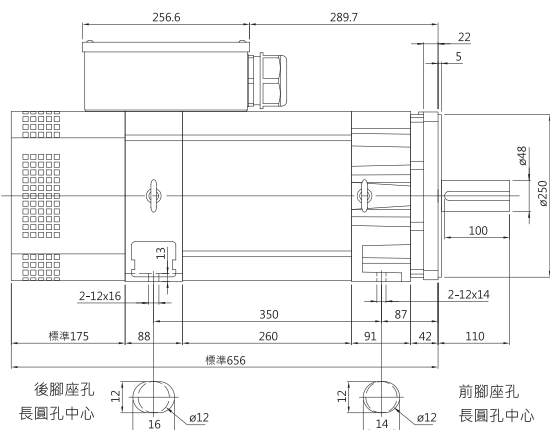
SPM-133

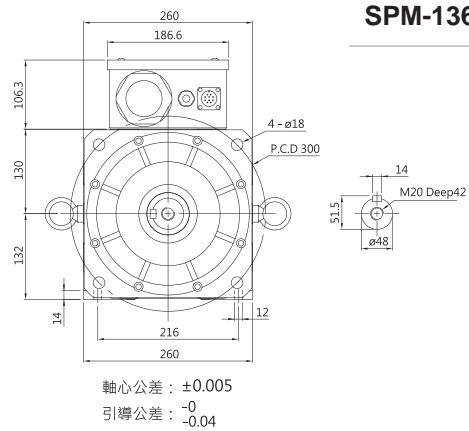
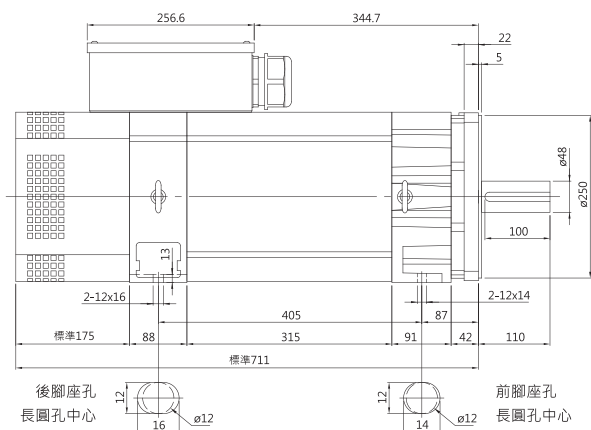


SPM-134

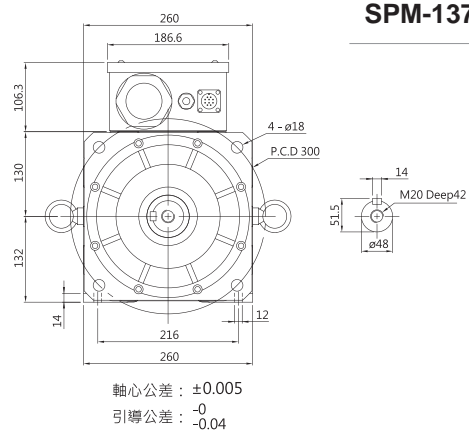
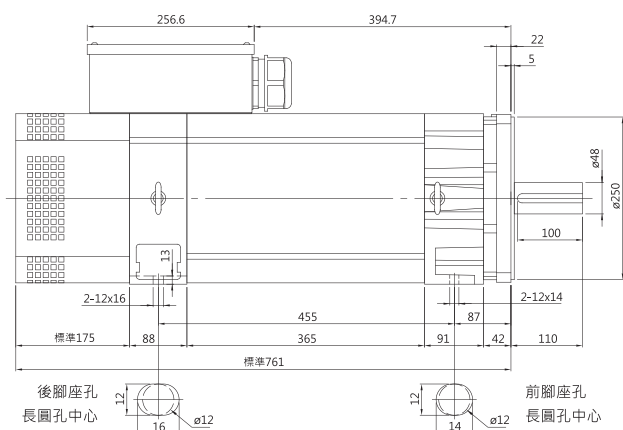


SPM-135

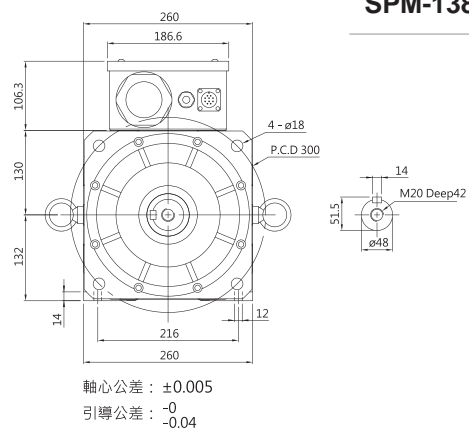
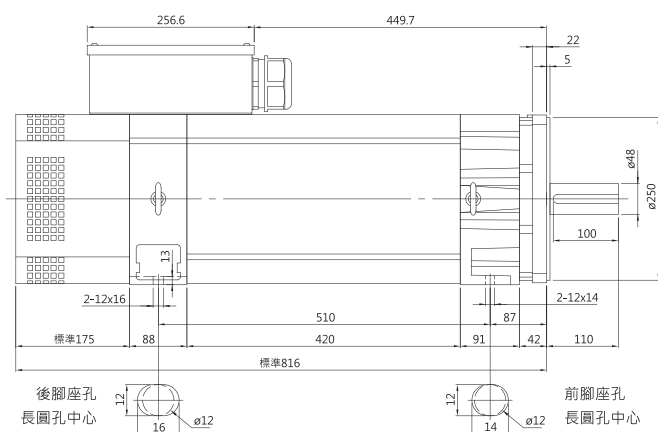




SPM-136

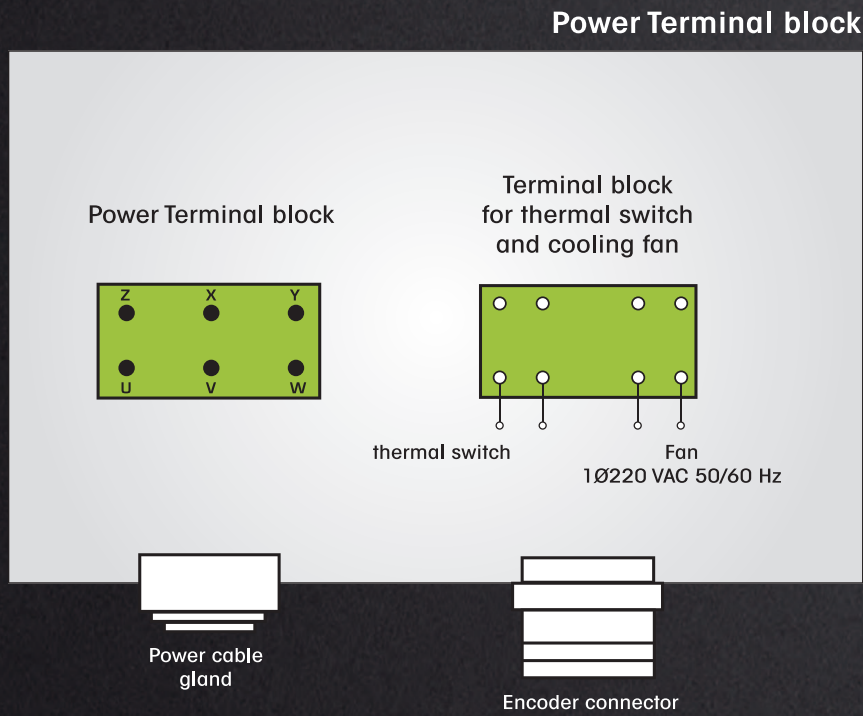


SPM-137

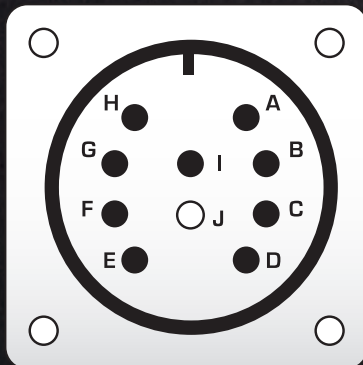


SPM-138

Terminal box

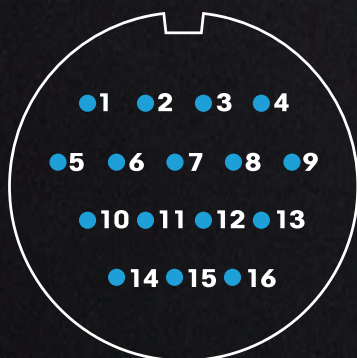


Resolver

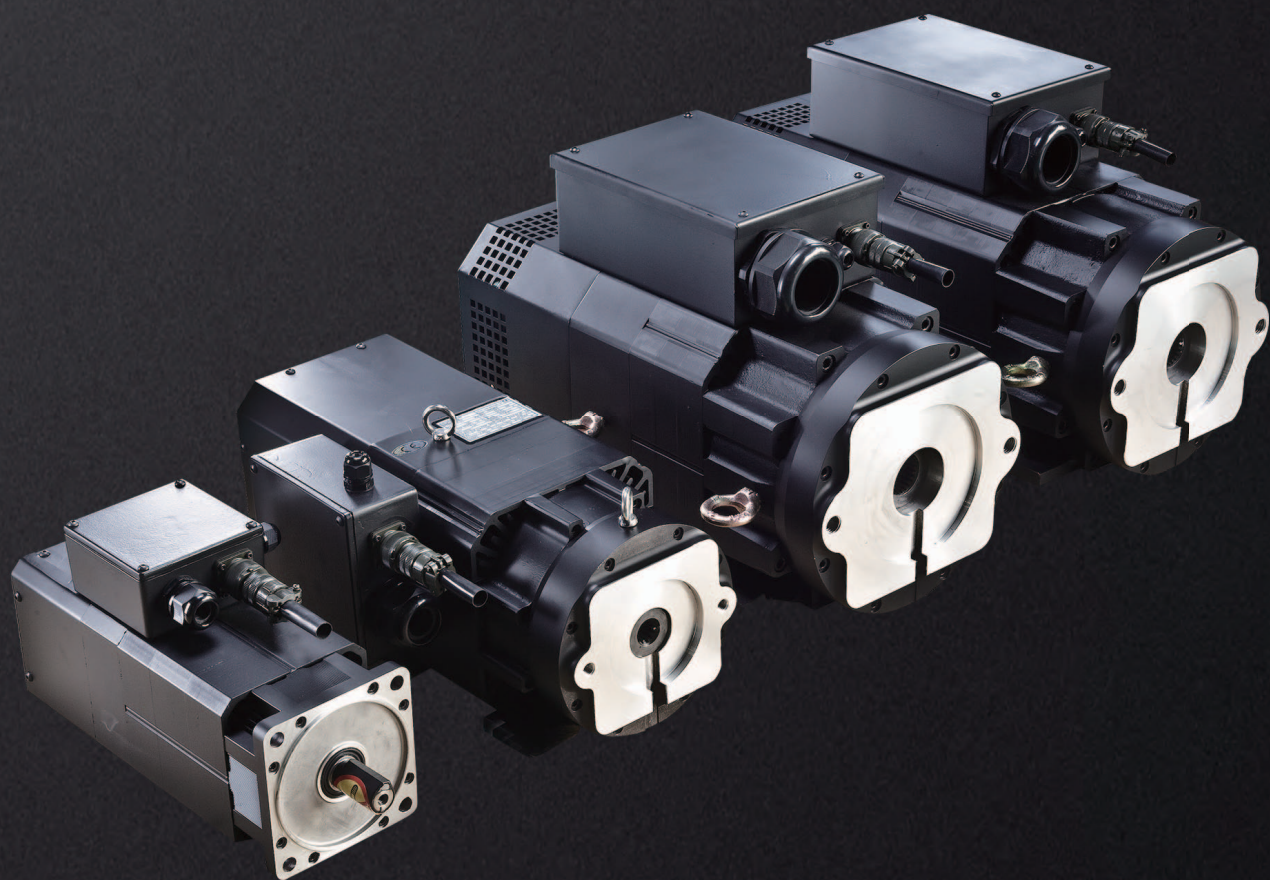


SECONDARY			
A	S1	RED	
B	S2	YEL	
C	S3	BLK	
D	S4	BLU	
PRIMARY			
H	R1	RED / WHT	AC
I	R2	YEL / WHT	7V

Encoder Connection



1 → A	6 → \bar{Z}
2 → \bar{A}	7 → U
3 → B	8 → \bar{U}
4 → \bar{B}	9 → V
5 → Z	10 → \bar{V}
	11 → W
	12 → \bar{W}
	13 → +VCC
	14 → 0V
	15 → Shield





SOLPOWER MACHINE ELECTRONIC CORP.

晟昌機電股份有限公司

No.89, Ln.1005, Sec 1, Hemu Rd., Qingshui Dist.,
Taichung City 43641, Taiwan(R.O.C)

43641 台中市清水區和睦路一段1005巷89號

TEL: +886-4-2620-2888

FAX: +886-4-2620-2777

www.solpowermotor.com

E-mail: sol.power@solpower.com.tw

