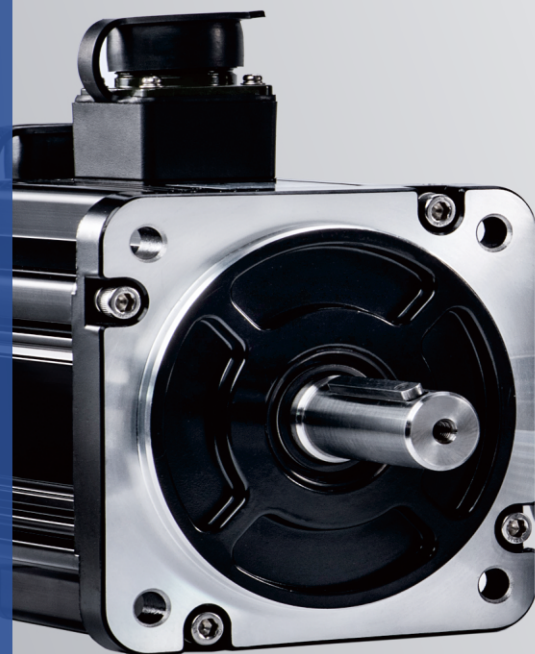


V4.1.1

低压伺服
电机产品手册
LOW VOLTAGE
SERVO MOTOR
PRODUCT MANUAL



COMPANY PROFILE

企业简介

杭州米格电机有限公司是一家面向全球市场的企业，不仅是集电机研发、电机制造、电机销售、自动优化方案提供、技术服务为一体的国家高新技术企业；还是国家高效节能电机推广企业、电机行业骨干企业，负责制定GB 30253-2013国家标准《稀土永磁电动机能效限定值和能效等级》等10余项电机系列标准。公司坐落于杭州仁和先进制造基地内，位于浙江省杭州市余杭区仁和镇境内，建筑面积43000平方米（占地35亩），现有员工400多名（其中研发技术团队60多人）。

公司拥有符合精密制造、先进制造、高效制造的厂房和设备，以此打造永续经营的创新型企业，为客户及战略伙伴提供最完善、最具效益、最可靠的产品和服务。公司核心产品包括通用伺服电机、大功率永磁电机、主轴伺服电机、步进电机以及驱动器等5大类15个应用系列1600多种型号规格产品，年产70万台。产品广泛应用于绣花机、横织机、数控机床、工业机器人、包装机械、雕刻机、注塑机、空压机等自动化控制领域以及新能源电动汽车领域。公司服务遍布全球，在印度苏拉特、北京、深圳、山东、福建等地设有办事处。公司自2005年成立以来，秉承可持续发展的战略和与客户共同提升的理念，努力实现成为世界一流的控制电机供应商之目标！

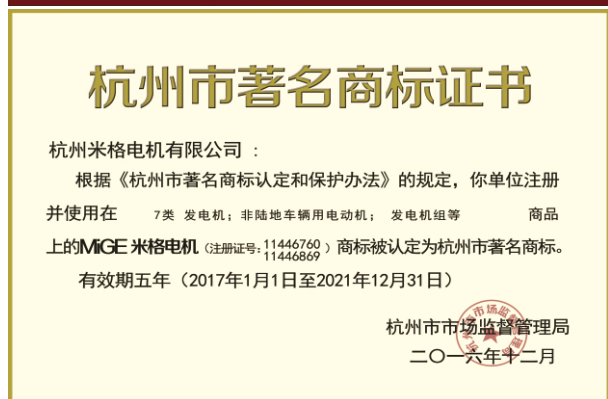
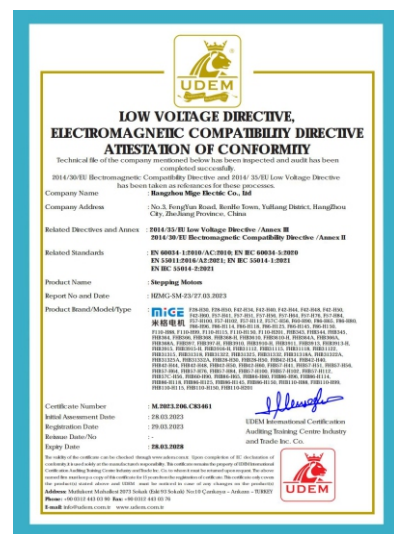
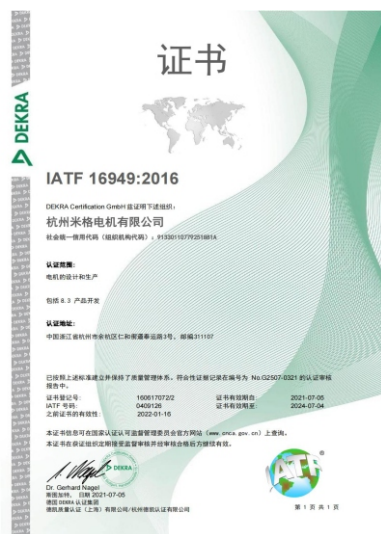
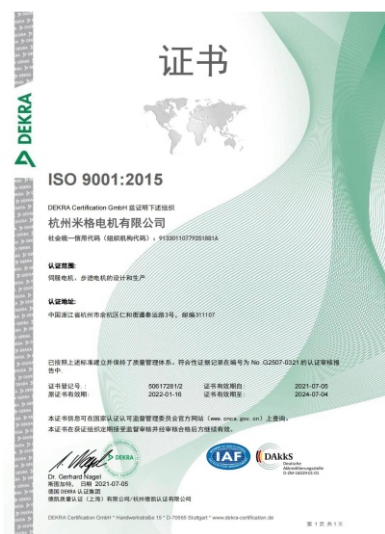
热忱欢迎国内外客户来公司参观指导，真诚期待与您的全方位合作！

Hangzhou Mige Electric Co., Ltd. is a market-oriented enterprises. It is not only one of the national high-tech enterprises for motor development, production and sale, as well as the project self-improvement and the technical service, but also one of the national Energy-efficient promote enterprises and key enterprises in electrical industry. It is responsible for making out more than 10 motor series standards. For example, the national standards GB 30253-2013 "rare earth permanent magnet motor energy efficiency limit value and energy efficiency rating". It is located in Renhe Town, Yuhang District, Hangzhou City, Zhejiang Province, which takes 43000 square meter(covering 35 acres). The number of the employees are more than 400, in which the R&D takes more than 60.

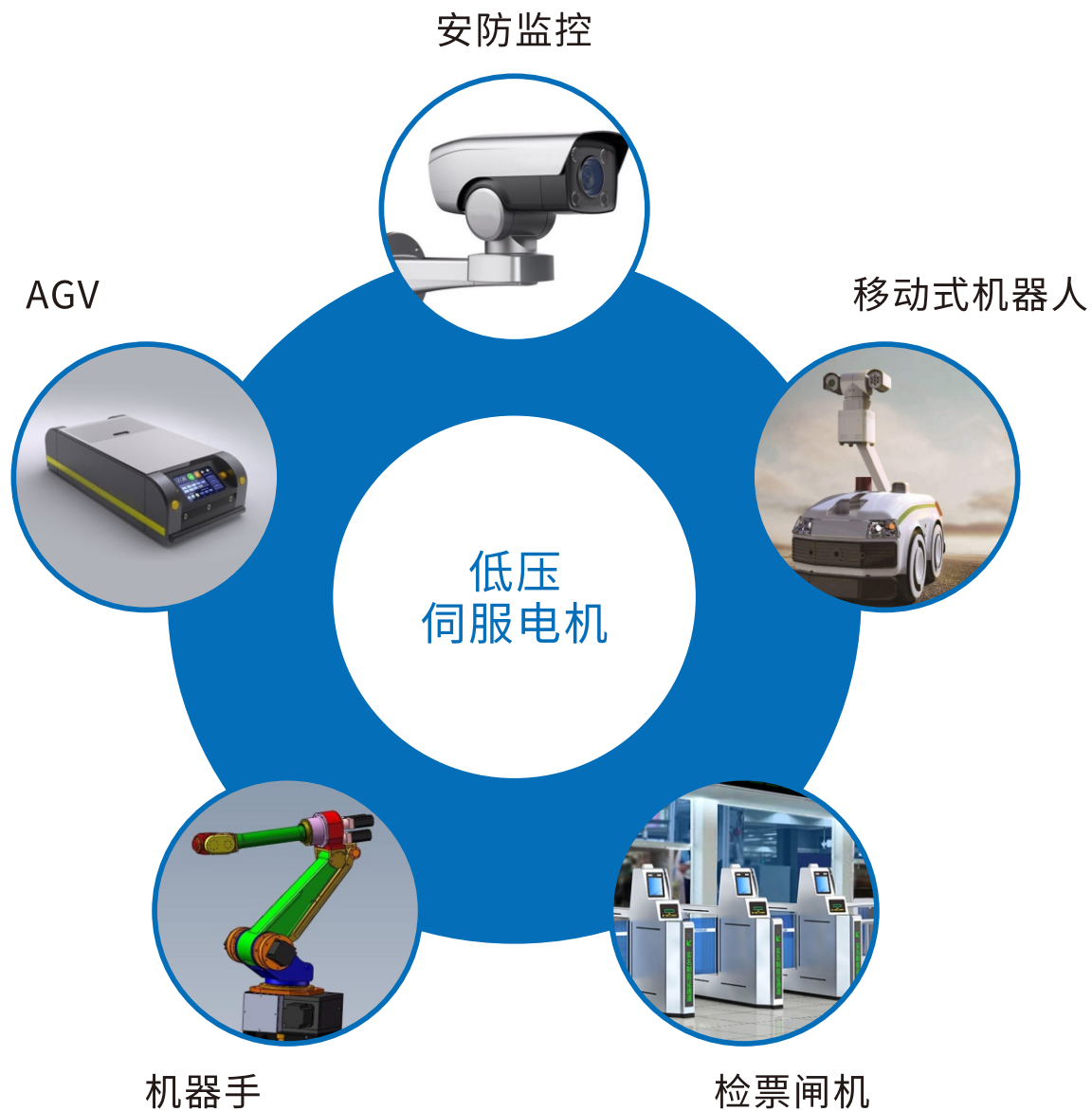
It has owned the workshops and equipments that are conform to the sophisticated manufacture, advanced manufacture, and Highefficiency manufacture. It makes itself as a innovation-type Enterprise, providing its clients and partners with high quality products and service. The core products are include the universal servo motor, high-power permanent magnet motor, the spindle servo motor, stepper motor and drive. There are more than 1,600 different product types in 15 application systems. The annual output of our Enterprise is 700000 pieces, which are widely used in Automatic control and new energy electric automobile areas, such as Embroidery machine, Transverse weaving machine, CNC machine, Industrial robot, Packing machine, Engraving machine, Injection molding machine, air compressor, and so on.. Established in 2005, It has its clients both at home and abroad. Offices are set in Surat of Indian, Beijing, Shenzhen, Shandong, Fujian.In order to complete the target of becoming the word-top supplier , It adheres to sustainable development and win-win belief.

Welcome all the friends both at home and abroad coming to our factory. Sincerely wanting to establish the all-around cooperation with you!





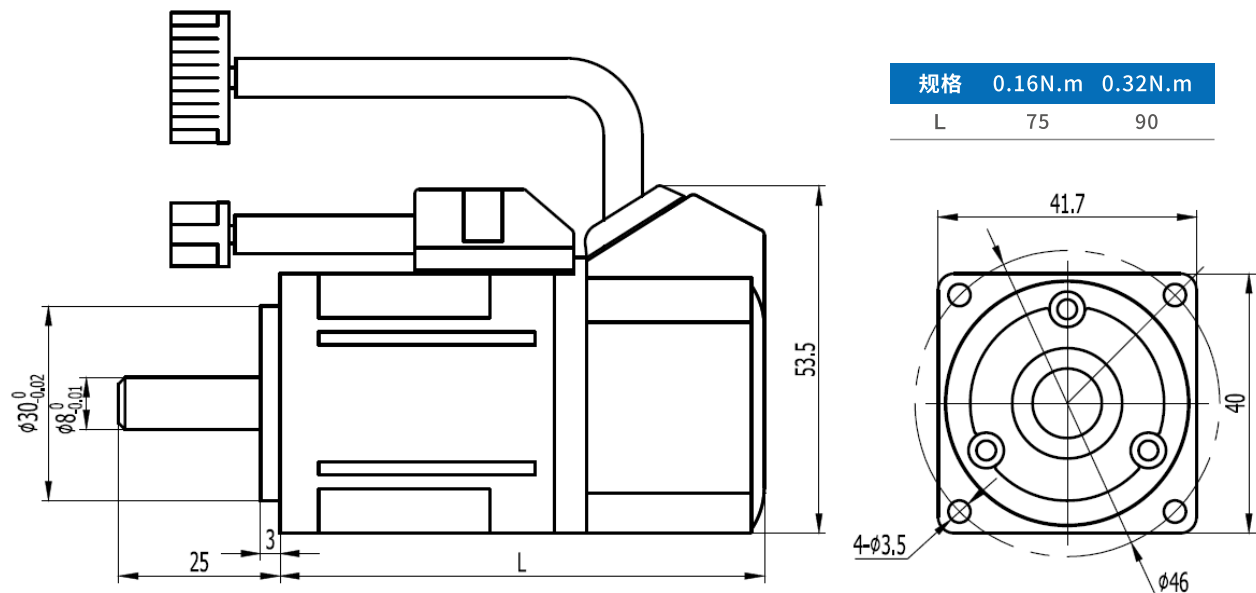
低压伺服电机应用领域



40A系列DC24V伺服电机

40A SERIES DC24V SERVO MOTORS

◎ 外形图 / DIMENSION:UNIT=mm



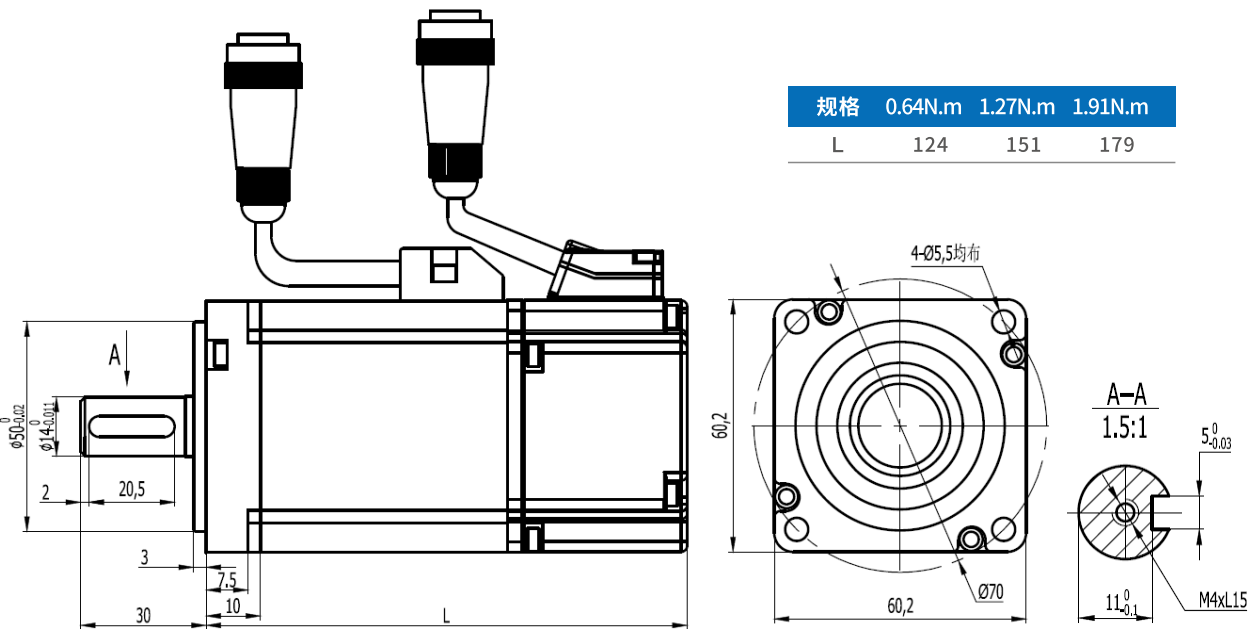
◎ 技术参数 / SPECIFICATIONS

电机型号 MOTOR MODEL	40AST-M00130	40AST-M00330
额定功率 RATED POWER(W)	50	100
额定线电压 RATED VOLTAGE(V)	24	24
额定线电流 RATED CURRENT(A)	2.6	5.2
额定转速 RATED SPEED(RPM)	3000	3000
额定力矩 RATED TORQUE(N.m)	0.16	0.32
反电势 VOLTAGE CONSTANT(V/1000r/min)	4	4
力矩系数 TORQUE COEFFICIENT(N.m/A)	0.067	0.061
转子惯量 ROTOR INERTIA(KG.M ²)	0.025x10 ⁻⁴	0.051x10 ⁻⁴
绕组（线间）电阻 LINE-LINE RESISTANCE (Ω)	1.39	0.49
绕组（线间）电感 LINE-LINE INDUCTANCE (mH)	1.52	0.71
电气时间常数 ELECTRICAL TIME-CONSTANT (ms)	1.09	1.45
编码器线数 ENCODER LINE NUMBER(PPR)	2500	
电机绝缘等级 INSULATION CLASS	ClassB (130℃)	
防护等级 SAFETY CLASS	IP64	
使用环境 ENVIRONMENT	环境温度：-20℃ ~ +50℃ 环境湿度：相对湿度<90%（不结霜条件） TEMPERATURE:-20℃~+50℃ HUMIDITY BELOW 90%RH NO DEWING	

60A系列DC24V伺服电机

60A SERIES DC24V SERVO MOTORS

⊙ 外形图 / DIMENSION:UNIT=mm



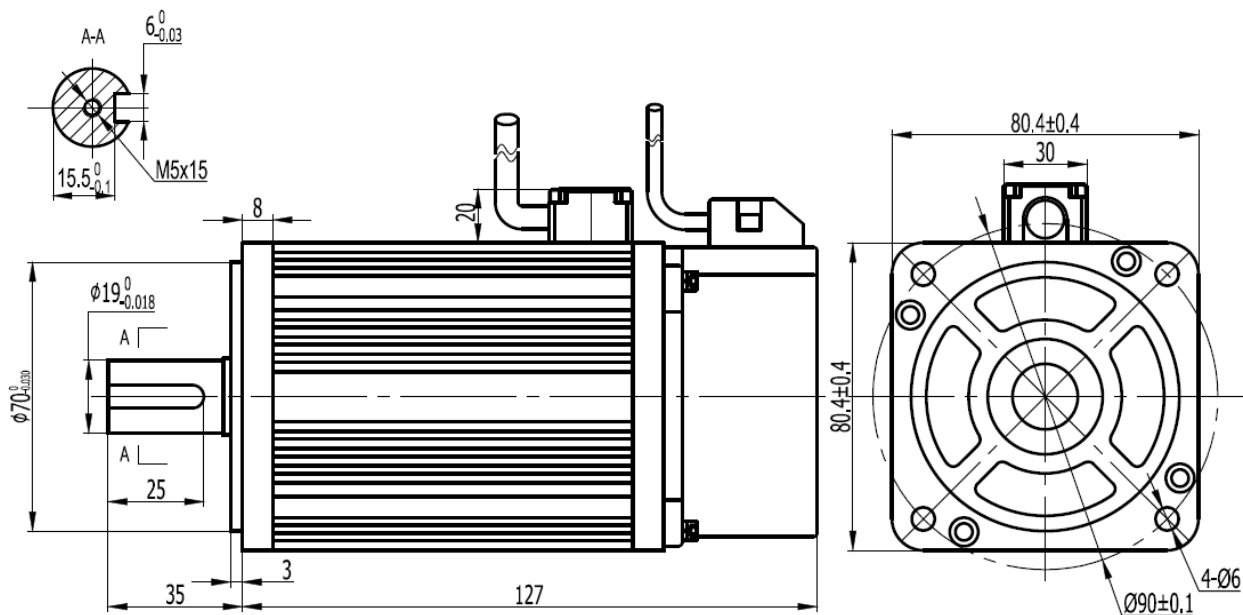
⊙ 技术参数 / SPECIFICATIONS

电机型号 MOTOR MODEL	60AST-M00630
额定功率 RATED POWER(W)	200
额定线电压 RATED VOLTAGE(V)	24
额定线电流 RATED CURRENT(A)	12
额定转速 RATED SPEED(RPM)	3000
额定力矩 RATED TORQUE(N.m)	0.637
反电势 VOLTAGE CONSTANT(V/1000r/min)	4
力矩系数 TORQUE COEFFICIENT(N.m/A)	0.053
转子惯量 ROTOR INERTIA(KG.M²)	0.175x10 ⁻⁴
绕组（线间）电阻 LINE-LINE RESISTANCE (Ω)	0.11
绕组（线间）电感 LINE-LINE INDUCTANCE (mH)	0.42
电气时间常数 ELECTRICAL TIME-CONSTANT (ms)	3.81
编码器线数 ENCODER LINE NUMBER(PPR)	2500
电机绝缘等级 INSULATION CLASS	ClassF
防护等级 SAFETY CLASS	IP65
使用环境 ENVIRONMENT	环境温度：-20℃ ~ +50℃ 环境湿度：相对湿度<90%（不结霜条件） TEMPERATURE:-20℃~+50℃ HUMIDITY BELOW 90%RH NO DEWING

80N系列DC24V伺服电机

80N SERIES DC24V SERVO MOTORS

外形图 / DIMENSION:UNIT=mm



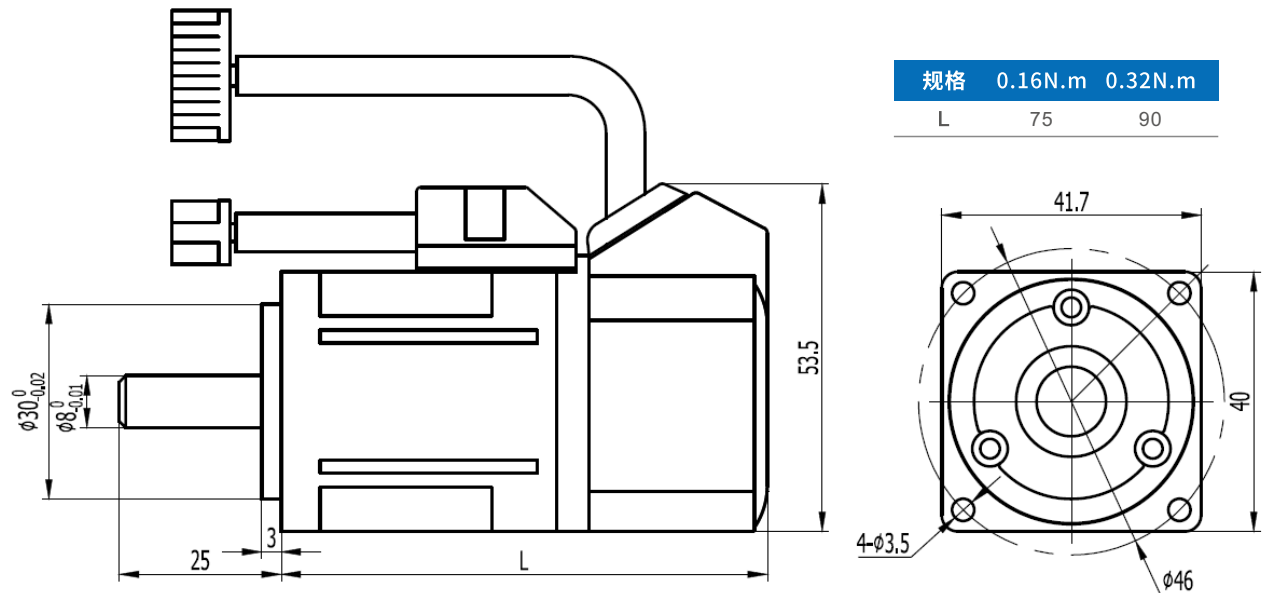
技术参数 / SPECIFICATIONS

电机型号 MOTOR MODEL	80ST-M01330
额定功率 RATED POWER(W)	400
额定线电压 RATED VOLTAGE(V)	24
额定线电流 RATED CURRENT(A)	20
额定转速 RATED SPEED(RPM)	3000
额定力矩 RATED TORQUE(N.m)	1.27
反电势 VOLTAGE CONSTANT(V/1000r/min)	4.5
力矩系数 TORQUE COEFFICIENT(N.m/A)	0.063
转子惯量 ROTOR INERTIA(KG.M ²)	1.05×10^{-4}
绕组（线间）电阻 LINE-LINE RESISTANCE (Ω)	0.06
绕组（线间）电感 LINE-LINE INDUCTANCE (mH)	0.093
电气时间常数 ELECTRICAL TIME-CONSTANT (ms)	1.55
编码器线数 ENCODER LINE NUMBER(PPR)	2500
电机绝缘等级 INSULATION CLASS	ClassF
防护等级 SAFETY CLASS	IP65
使用环境 ENVIRONMENT	环境温度：-20℃ ~ +50℃ 环境湿度：相对湿度<90%（不结霜条件） TEMPERATURE:-20℃~+50℃ HUMIDITY BELOW 90%RH NO DEWING

40A系列DC48V伺服电机

40A SERIES DC48V SERVO MOTORS

⊙ 外形图 / DIMENSION:UNIT=mm



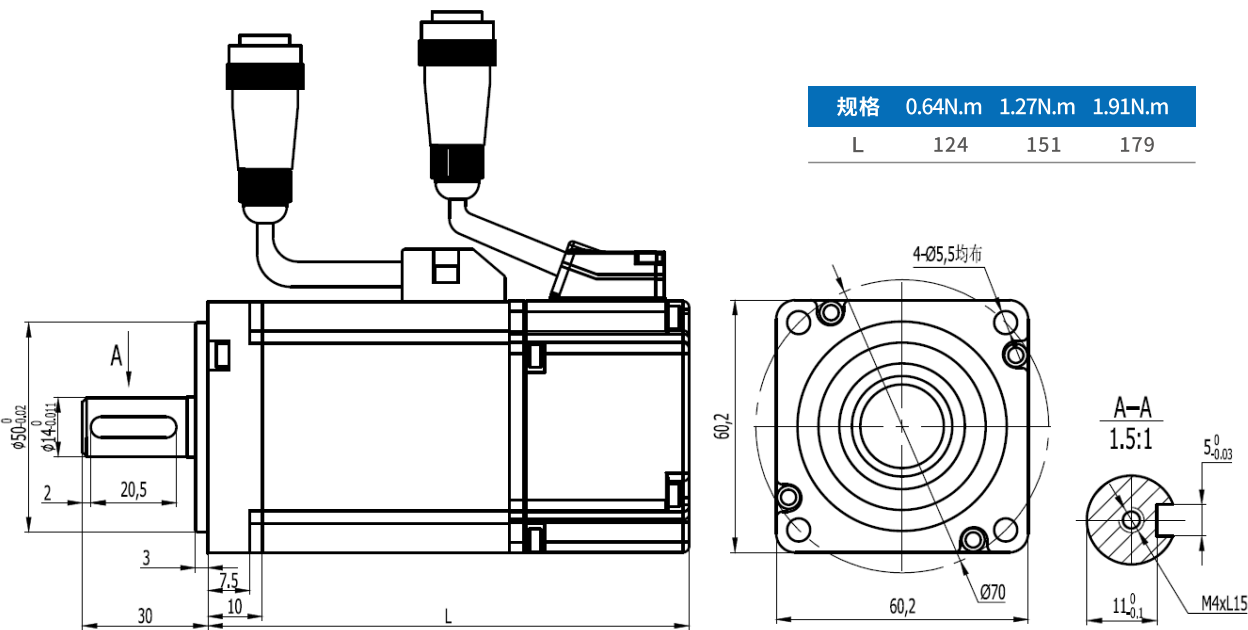
⊙ 技术参数 / SPECIFICATIONS

电机型号 MOTOR MODEL	40AST-M00130	40AST-M00330
额定功率 RATED POWER(W)	50	100
额定线电压 RATED VOLTAGE(V)	48	48
额定线电流 RATED CURRENT(A)	1.1	2.5
额定转速 RATED SPEED(RPM)	3000	3000
额定力矩 RATED TORQUE(N.m)	0.16	0.32
反电势 VOLTAGE CONSTANT(V/1000r/min)	9.2	8.2
力矩系数 TORQUE COEFFICIENT(N.m/A)	0.145	0.128
转子惯量 ROTOR INERTIA(KG.M ²)	0.025x10 ⁻⁴	0.051x10 ⁻⁴
绕组（线间）电阻 LINE-LINE RESISTANCE (Ω)	6.75	2.2
绕组（线间）电感 LINE-LINE INDUCTANCE (mH)	7.5	3
电气时间常数 ELECTRICAL TIME-CONSTANT (ms)	1.11	1.36
编码器线数 ENCODER LINE NUMBER(PPR)	2500	
电机绝缘等级 INSULATION CLASS	ClassB (130℃)	
防护等级 SAFETY CLASS	IP64	
使用环境 ENVIRONMENT	环境温度：-20℃ ~ +50℃ 环境湿度：相对湿度<90%（不结霜条件） TEMPERATURE:-20℃~+50℃ HUMIDITY BELOW 90%RH NO DEWING	

60A系列DC48V伺服电机

60A SERIES DC48V SERVO MOTORS

⊙ 外形图 / DIMENSION:UNIT=mm



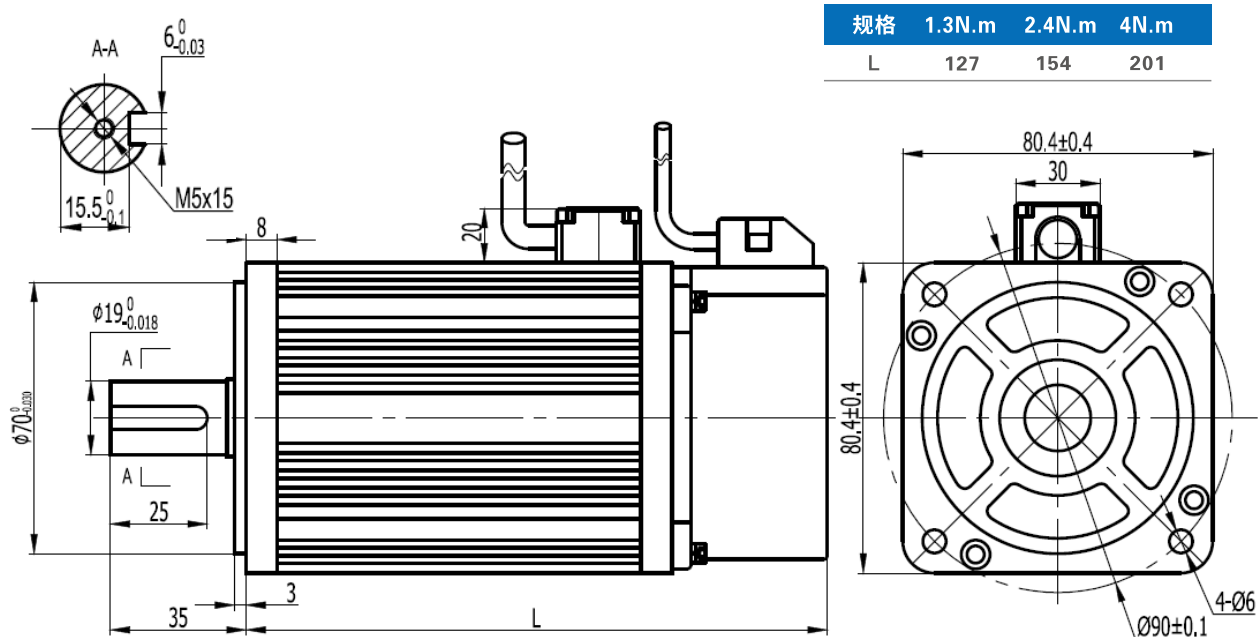
⊙ 技术参数 / SPECIFICATIONS

电机型号 MOTOR MODEL	60AST-M00630	60AST-M01330	60AST-M01930
额定功率 RATED POWER(W)	200	400	600
额定线电压 RATED VOLTAGE(V)	48	48	48
额定线电流 RATED CURRENT(A)	5.7	11	14.5
额定转速 RATED SPEED(RPM)	3000	3000	3000
额定力矩 RATED TORQUE(N.m)	0.64	1.27	1.91
反电势 VOLTAGE CONSTANT(V/1000r/min)	8	8	8.5
力矩系数 TORQUE COEFFICIENT(N.m/A)	0.112	0.115	0.132
转子惯量 ROTOR INERTIA(KG.M²)	0.175x10 ⁻⁴	0.29x10 ⁻⁴	0.39x10 ⁻⁴
绕组（线间）电阻 LINE-LINE RESISTANCE (Ω)	0.3	0.15	0.138
绕组（线间）电感 LINE-LINE INDUCTANCE (mH)	1.378	0.708	0.64
电气时间常数 ELECTRICAL TIME-CONSTANT (ms)	4.59	4.72	4.64
编码器线数 ENCODER LINE NUMBER(PPR)		2500	
电机绝缘等级 INSULATION CLASS		ClassB (130°C)	
防护等级 SAFETY CLASS		IP64	
使用环境 ENVIRONMENT	环境温度：-20℃ ~ +50℃ 环境湿度：相对湿度<90%（不结霜条件） TEMPERATURE:-20℃~+50℃ HUMIDITY BELOW 90%RH NO DEWING		

80N系列DC48V伺服电机

80N SERIES DC48V SERVO MOTORS

◎ 外形图 / DIMENSION:UNIT=mm



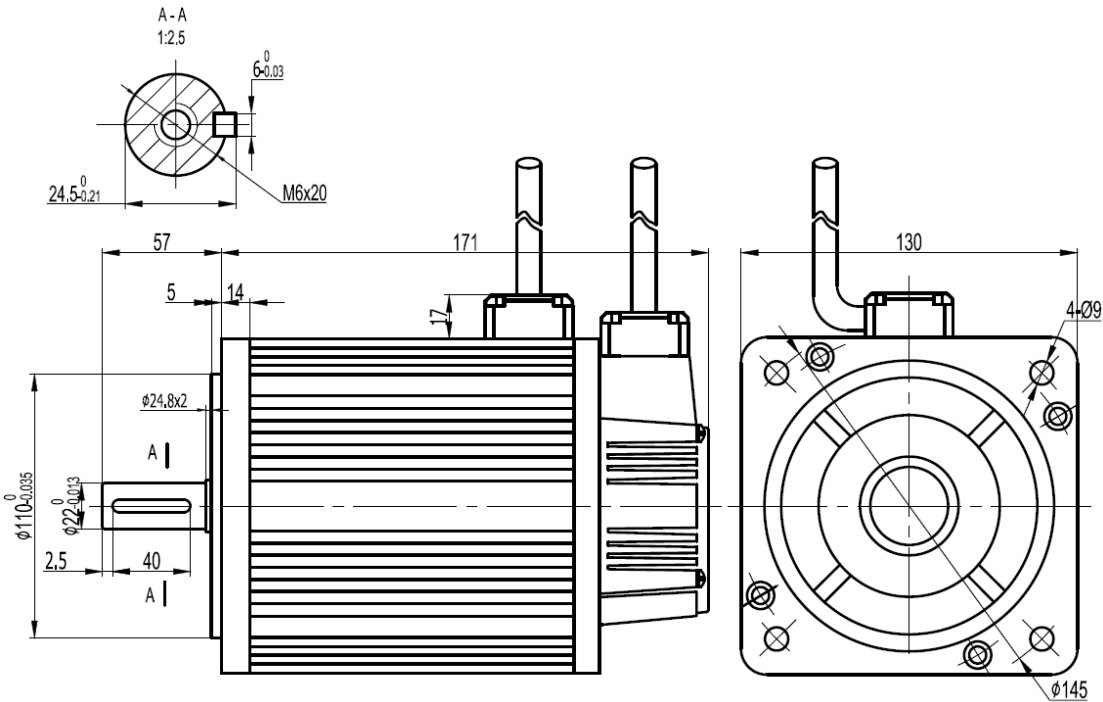
◎ 技术参数 / SPECIFICATIONS

电机型号 MOTOR MODEL	80ST-M01330	80ST-M02430	80ST-M04025
额定功率 RATED POWER(W)	400	750	1000
额定线电压 RATED VOLTAGE(V)	48	48	48
额定线电流 RATED CURRENT(A)	10.9	19.5	27
额定转速 RATED SPEED(RPM)	3000	3000	2500
额定力矩 RATED TORQUE(N.m)	1.27	2.39	4
反电势 VOLTAGE CONSTANT(V/1000r/min)	7.2	7.4	9.2
力矩系数 TORQUE COEFFICIENT(N.m/A)	0.115	0.123	0.148
转子惯量 ROTOR INERTIA(KG.M ²)	1.05×10 ⁻⁴	1.82×10 ⁻⁴	2.97×10 ⁻⁴
绕组（线间）电阻 LINE-LINE RESISTANCE (Ω)	0.15	0.066	0.053
绕组（线间）电感 LINE-LINE INDUCTANCE (mH)	0.27	0.151	0.131
电气时间常数 ELECTRICAL TIME-CONSTANT (ms)	1.8	2.29	2.47
编码器线数 ENCODER LINE NUMBER(PPR)		2500	
电机绝缘等级 INSULATION CLASS		ClassB (130℃)	
防护等级 SAFETY CLASS		IP64	
使用环境 ENVIRONMENT	环境温度：-20℃ ~ +50℃ 环境湿度：相对湿度<90%（不结霜条件） TEMPERATURE:-20℃~+50℃ HUMIDITY BELOW 90%RH NO DEWING		

130N系列DC48V伺服电机

130N SERIES DC48V SERVO MOTORS

⊙ 外形图 / DIMENSION:UNIT=mm



⊙ 技术参数 / SPECIFICATIONS

电机型号 MOTOR MODEL	130ST-M05030
额定功率 RATED POWER(W)	1500
额定线电压 RATED VOLTAGE(V)	48
额定线电流 RATED CURRENT(A)	35
额定转速 RATED SPEED(RPM)	3000
额定力矩 RATED TORQUE(N.m)	5
反电势 VOLTAGE CONSTANT(V/1000r/min)	9.8
力矩系数 TORQUE COEFFICIENT(N.m/A)	0.143
转子惯量 ROTOR INERTIA(KG.M ²)	1.06x10 ⁻³
绕组（线间）电阻 LINE-LINE RESISTANCE (Ω)	0.03
绕组（线间）电感 LINE-LINE INDUCTANCE (mH)	0.087
电气时间常数 ELECTRICAL TIME-CONSTANT (ms)	2.9
编码器线数 ENCODER LINE NUMBER(PPR)	2500
电机绝缘等级 INSULATION CLASS	ClassB (130℃)
防护等级 SAFETY CLASS	IP64
使用环境 ENVIRONMENT	环境温度：-20℃ ~ +50℃ 环境湿度：相对湿度<90%（不结霜条件） TEMPERATURE:-20℃~+50℃ HUMIDITY BELOW 90%RH NO DEWING



微信公众号：米格电机

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