



STOCK CODE  
股票代码  
601609



金田铜业官网

**科技 / 创新 / 卓越**  
TECHNOLOGY / INNOVATION / EXCELLENCE



**宁波金田新材料有限公司**  
Ningbo Jintian New Material Co.,Ltd.

地址：浙江慈溪经济开发区（杭州湾新区）滨海四路636号  
邮编：315336  
电话：0574-87597860 83005049  
传真：0574-87597866-3274 87574479  
邮箱：yanhh@jtgroup.com.cn

ADD: NO.636 Binhai Silu. Cixi Economic Development Zone  
(Hangzhou Bay New Zone), Ningbo, China.  
Postal Code: 315336  
Tel: +86-574-87574052  
Fax: +86-574-87597573  
E-mail: yanhh@jtgroup.com.cn

新材料样本册-2020-12-30-版本1.0

+

**NINGBO JINTIAN  
NEW MATERIAL**

宁波金田新材料有限公司



## 集团简介

### COMPANY PROFILE

宁波金田铜业（集团）股份有限公司（股票简称：金田铜业，股票代码：601609）始建于1986年，专注铜加工三十余年，是全球领先的铜及铜合金材料供应商，致力于为5G通讯、新能源汽车、轨道交通、电力物联网、智慧城市等战略性新兴产业发展提供铜材综合解决方案。

公司坚持科技创新，持续推进转型升级，为实现“创造客户价值、打造百年公司、成为行业标杆、为中国工业强国做贡献”的使命愿景而努力奋斗。

Ningbo Jintian Copper (Group) Co.,Ltd. (abbreviation: Jintian Copper, SSE stock code: 601609) was founded in 1986 and has focused on copper processing for more than 30 years. We are the world's leading supplier of copper and copper alloy materials. We are committed to providing comprehensive copper product solutions for the development of strategic emerging industries such as 5G telecommunications, new energy vehicles, rail transit, Internet of Things, and smart cities.

The company insists on technological innovation and continues to promote transformation and upgrading. Now and in the future, Jintian Copper strives to achieve our mission: "1. Create customer value, 2. Build a 100-year-old company, 3. Become the industry benchmark, and 4. Contribute to China's industrial development!".

- Top 500 Chinese Enterprises
- Top 100 Private Owned Enterprises in China
- Leading Copper Processing Group in China
- National Level High-tech Enterprises
- National Level Engineering Technology Center
- National Level Laboratory

- 中国企业500强
- 中国民营企业100强
- 中国铜加工领军企业
- 国家重点高新技术企业
- 国家级工程技术中心
- 国家级实验室





## 公司简介 COMPANY INTRODUCTION

宁波金田新材料有限公司成立于1995年，致力于漆包铜线产品的研发与生产，投资10亿建立杭州湾新区12万吨耐高温漆包线项目，在重庆、广东投建8万吨生产基地，拥有行业内顶尖的MAG、高速连拉连包生产线，以生产高精尖电磁线系列产品为核心，已成长为中国漆包线行业的领军型企业，是行业标准起草单位、浙江省电线电缆协会副理事长单位。

公司采用国内外先进的有色金属加工装备和生产工艺，严格按照ISO9001质量体系标准及ISO14001环境管理体系要求组织生产，在国内行业率先通过IATF 16949汽车行业质量管理体系认证及ISO 45001职业健康安全管理体系认证。产品广泛应用于汽车行业、电机、变压器、压缩机等行业，产品符合欧盟ROHS指令要求，已经通过UL安全认证，在国内拥有较高的知名度和市场占有率。先后获得“中国漆包线十佳名优品牌”、“浙江省质量信得过产品”、“省电线电缆行业工业产值超10亿突出贡献奖”、浙江省工商企业信用AA级‘守合同重信用单位’、“宁波市名牌产品”、“宁波市信息化与工业化融合标杆企业”等荣誉。

Ningbo Jintian New Material Co.,Ltd founded in 1995, is committed to the research and production of enameled copper wire products, investing 1 billion yuan in establishing the 120,000-ton project for high temperature resistant enameled copper wire in Hangzhou Bay New Zone, and 80,000-ton production base in Chongqing and Guangdong. Till now the factory is assembled with advanced MAG machines, high-speed drawing-enameled production lines in this industry. With its orientation in series of excellent quality magnet wire products, it has grown into a leading enterprise in China's enameled wire industry, an industry standard drafting unit, and the vice-chairman unit of Zhejiang Association of Wire and Cable.

The company adopts the global advanced non-ferrous metals processing equipment and production technique, organizes production in strict accordance with the requirements of ISO9001 quality system standard and ISO14001 environmental management system standard, and takes the lead in passing the IATF 16949 automotive quality management system certification and occupational health and safety management system certification in the domestic industry. Its products are widely used in the automobile industry, motors, transformers and compressors industry etc., complied with EU ROHS directive and certified by American UL(File No. E227047), enjoying a high prestige and broad market share at home with successively being honored "Top Ten Famous Brands of China's Enameled Wire", "Zhejiang Quality Trustworthy Product", "Provincial Wire and Cable Industry Industrial Output Value Over 1 Billion Outstanding Contribution Award", "Zhejiang Industrial and Commercial Enterprise Credit AA Grade 'Contract-honoring and Credit-keeping' Unit", "Ningbo Famous Brand Product", "A Benchmark Enterprise in the Integration of Informatization and Industrialization in Ningbo", etc.



Since 1995, with development and dedication, we are proud in the following achievements:

### Production Capacity:

Annual Output: 200,000 metric tons  
Product Size Range: 0.04mm-4.0mm(AWG7-AWG46)  
Product Types: Class 130°C-Class 240°C  
Executive Standards: IEC, JIS, DIN and NEMA

### Management Systems:

IATF 16949: 2016  
ISO 9001: 2015  
ISO 14001: 2015  
ISO 45001: 2018

### QC Certificate:

RoHS Directive UL Approved

After the new plants finished and new machines imported, our annual output reaches up to 200,000 metric tons. Meanwhile, we have been one of the most important manufacturers and exporters in Enameled Copper Wires industry in China and across the world.

### Main Oversea Markets:

USA, Italy, Middle east Asia, South America, Africa, South east Asia.





## 生产车间 WORKSHOP

公司引进MAG高速连拉连包设备，生产汽车用及高端耐热漆包线产品。设备配备有先进的粒子和高压针孔在线监测，实现对产品的百分之百全检。二维码和数据采集系统实现产品质量的全过程可追溯。

The company introduced MAG high-speed drawing and enameling equipment to produce high-end enameled copper wires for automobile industry. It equipped with the most advanced particle and high voltage pinhole on-line detection instrument to achieve 100% inspection of products. QR code and data collection system can trace the whole process of product quality.



美国连铸连轧生产线  
American Southwire Continuous Casting and Rolling Production Line



高速连拉连包  
High Speed Drawing and Enameling Machine



模具涂漆  
Mold Coating

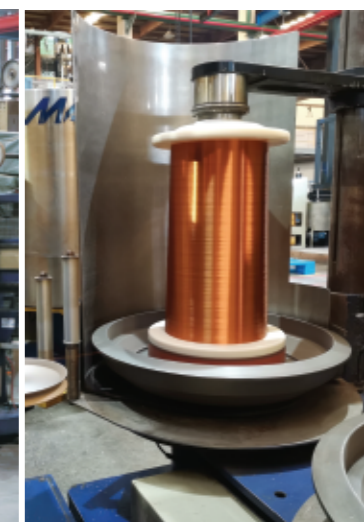


自动包装线  
Automatic Packaging Line

## 先进装备，优良品质 ADVANCED EQUIPMENT, EXCELLENT QUALITY



MAG生产车间  
MAG Plant



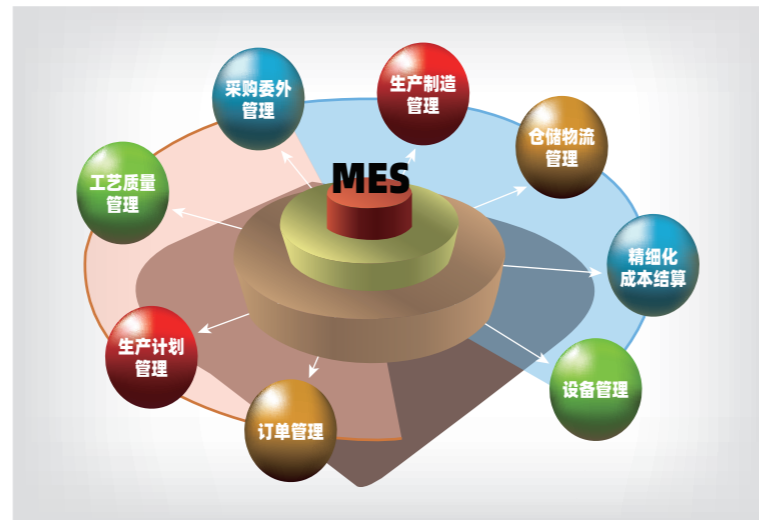
MAG生产车间  
MAG Plant



## 生产制造执行系统

### MANUFACTURING EXECUTION SYSTEM

- 实现生产计划智能化  
Realize intelligent management of production plan
- 实现物流智能化管理  
Realize intelligent management of logistics
- 实现工艺标准数字化  
Realize digital management of process standard
- 实现质量管理数字化  
Realize digital management of quality control



## 技术创新 & 科技兴业

### INNOVATION SCIENCE AND TECHNOLOGY PROSPER THE INDUSTRY

金田铜业坚持科技兴企理念，拥有各类科技人员近千人。公司通过ISO9001质量体系认证，各种产品均为省市名牌产品；先后投入科研资金10多亿元，不断通过更新改造及设备引进，使公司的科技实力达到了国内领先水平；建立了国家级企业技术中心和博士后工作站，不断将先进技术转化成自己的创新成果，其中完全自主研发的新型大吨位潜液电炉，具有能源消耗低、生产周期短、排放污染少的显著特点，荣获了国家有色技术工业科技进步一等奖，并被列入国家火炬计划项目，还被行业专家誉为具有世界领先水平的“金田法”。

Jintian Copper persists in the concept of prospering herself by Sci-Tech, possesses nearly 1,000 Sci-Tech person, has been ISO 9001 quality system certified. Each product item is listed among the provincial and municipal prestigious brands. Before and later we have invested over 1 billion yuan as scientific research Fund. By constantly modifying the old equipment and introducing new machineries, the Sci-Tech strength has been up to the leading level at home. Building a national-level enterprise technical center and a national post-doctoral work station. continuously transforms the advanced technology into innovative results of ourselves, among which there is a new type large tonnage under-liquid electric oven, completely self-researched and self-developed. It features low energy consumption, short construction period less pollution discharge, etc, has won "the First Class State Prize for the Sci-Tech Progress in the Non-Ferrous Metal Industry" and is included in the projects of the State Torch Plan, also is praised as the "Jintian Method" by the world level specialists in this industry.





## 精密检测 PRECISION TESTING

公司严格按照质量管理体系要求管理运行，并拥有全球知名的SGS公司审核后颁发的ISO9001:2015、ISO14001:2015体系认证证书。因为我们对高品质不懈的追求，大部分产品获得UL认证。同时，我司还是行业内为数不多通过IATF16949认证的公司，表明我司产品完全符合对安全要求极为严格的汽车行业设计要求。

公司测试体系完备，所有生产标准规定的测试项目，全部按测试标准作检验测试。

Jintian New Material is operating strictly under Quality Management Systems such as ISO 9001:2015, ISO 14001:2015 issued by the world-renowned SGS company after the audit. Thanks to our unremitting pursuit of quality improvement over the years, our wires have got UL approval (File No. E227047). Moreover, the company is one of the few companies which get the IATF 16949 certification, enabling us to satisfy the strict quality requirements of the automotive industry.

The company have advanced testing equipment to do all the necessary tests before every shipment to ensure the all technical parameters of our wires meet our customers' requirements.



抗张强度测定仪  
Tensile strength tester

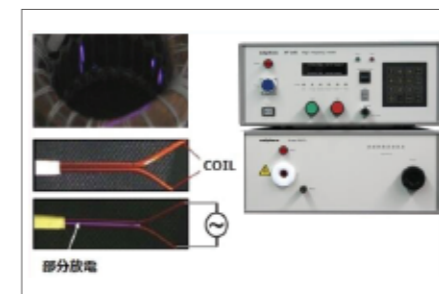
## 科学管理，品质稳定 ERP SYSTEM, QUALITY CONTROL



介质损耗测试仪  
Dielectric loss tester



高精度切面分析仪器  
High resolution section analyzer



高频正弦波环境测试PDIV值（日本制）  
High frequency sine wave environment test PDIV value



模拟EV车高频电晕老化试验仪器  
Simulation EV vehicle high frequency corona aging test equipment

### QA(UEW)

#### 直焊性聚氨酯漆包铜圆线 Self-Solderable Polyurethane Series



**产品主要特点及用途:**  
Products main features and application

- 能直焊, 易染色
- 高频下介质损耗低, 盐水针孔性能好
- 适用于继电器、微电机、变压器、仪器仪表, 和各类电子元器件及绕组用线圈
- Can be Soldered without removal of coating, and easy to be dyed
- Small dielectric loss under high frequency apparatus and good pinhole test performance
- Apply to relays, micro-motors, transformers, instrumentation and various kinds of electronic components and with for coils

热级 Thermal level		规格范围 Specifications range		适用标准 Standard			
代号code	等级level	mm	AWG	IEC	GB / T	NEMA	JIS
B	130	0.04-1.8	13#-46#*	60317-4	6109.4	MW75-C	C3202
F	155			60317-20	6109.10	MW79-C	
H	180			60317-51	6109.23	MW82-C	

注: “\*” 为近似美国线规 Note: “\*” for approximate American wire gage

### QA/N(UEW/N)

#### 尼龙复合涂层系列 Nylon Overcoating Series



**产品主要特点及用途:**  
Products main features and application

- 尼龙复合漆包线除了保留单涂层漆包线原有特点外, 还具有表面摩擦系数小, 耐磨性佳, 弯折性能好等特点
- The polyamide overcoated wires demonstrate the same properties as the above wires without polyamide coating. What's more, because of the polyamide coating, these wires' mechanic properties are improved greatly in friction modulus, abrasive resistance, bending properties ect.

热级 Thermal level		规格范围 Specifications range		适用标准 Standard			
代号code	等级level	mm	AWG	IEC	GB / T	NEMA	JIS
B	130	0.04-1.8	13#-46#*	60317-19	6109.9	MW28-C	C3202
F	155			60317-21	6109.11	MW80-C	
H	180			60317-51	6109.23	MW83-C	

注: “\*” 为近似美国线规 Note: “\*” for approximate American wire gage

## QZ(PEW)

### 聚酯漆包铜圆线 Polyester Series



**产品主要特点及用途:**  
Products main features and application

- 耐刮性、耐溶剂性能优良
- 适用于B级电机、普通电器、仪器仪表, 和各类电子元器件及绕组用线圈
- Good resistance to abrasion and solvent
- Apply to B Class motors, appliances, instrumentations, various types of electronic components and winding for coils

热级 Thermal level		规格范围 Specifications range		适用标准 Standard			
代号code	等级level	mm	AWG	IEC	GB / T	NEMA	JIS
B	130	0.06-4.0	7#-42#*	60317-34	6109.7		C3202
F	155			60317-3	6109.2	MW5-C	

注: “\*” 为近似美国线规 Note: “\*” for approximate American wire gage

## Q(ZY/XY) (EI/AIW)

### 聚酯亚胺/聚酰胺酰亚胺复合漆包铜圆线 Polyester-imide Over coated with Polyamide-imide



**产品主要特点及用途:**  
Products main features and application

- 耐高、低温、耐冷冻剂, 耐辐射, 耐热冲击, 化学性能优良
- 适用于各类工作环境恶劣的C级电机、变压器、及制冷剂为 R22、R410c/R600a/R134a的冰箱、空调用压缩机电机绕组
- Capable of working under extreme situations where strong resistibility against very high and low temperature, powerful cryogen, hard radiation and powerful heat shock are needed.
- Applied in C Class motors, transformers, electric refrigerator powered by Refrigerant R22/R410c/R600a/R134a and windings in air-conditioner compressor.

热级 Thermal level		规格范围 Specifications range		适用标准 Standard			
代号 code	等级 level	mm	AWG	IEC	GB / T	NEMA	JIS
C	200	0.08-4.0	7#-40#*	60317-13	6109.20	MW35-C	
C	220(复合)					MW73-C	
						MW37-C	

注: “\*” 为近似美国线规 Note: “\*” for approximate American wire gage

## QZY(EIW)

### 聚酯亚胺漆包铜圆线 Polyester-imide Series



**产品主要特点及用途:**  
Products main features and application

- 优良的热稳定性, 耐刮、耐溶剂性能好
- 适用于大、中、小型H级电机、高温变压器、仪器仪表, 和各类电子元器件及绕组用线圈
- Good Thermostability under 150°C working environment, good resistance to abrasion and solvent
- Applied in all sizes of H Class motors, transformers, instrumentations, various types of electronic components and winding for coils

热级 Thermal level		规格范围 Specifications range		适用标准 Standard			
代号code	等级level	mm	AWG	IEC	GB / T	NEMA	JIS
H	180	0.06-4.0	7#-42#*	60317-8	6109.5	MW30-C	C3202

注: “\*” 为近似美国线规 Note: “\*” for approximate American wire gage

## Q(ZY/XY)/200-BP

### 变频电机用抗电晕漆包铜圆线 Corona-resistant Enameled Wires Used for Inverter-fed Motors



**产品主要特点及用途:**  
Products main features and application

- 该产品可在200°C环境下连续工作, 除了具备优良耐高温、耐辐射、高强度耐磨特性外, 还具备宝贵的耐电晕性能, 此性能用于改善局部放电性能, 延长变频电机的使用寿命。
- 因此广泛适用于各种变频调速电机、起重电机、电梯电机等。
- Could work continuously at 200 degrees environment. Except with good heat-resistant, irradiation resistance and high strength wear resistance, also with good corona resistant performance.
- Application: Apply to mining and metallurgy machinery motors, elevator motors, hybrid and electric cars motor, wind power and other frequency conversion electrical motor windings.

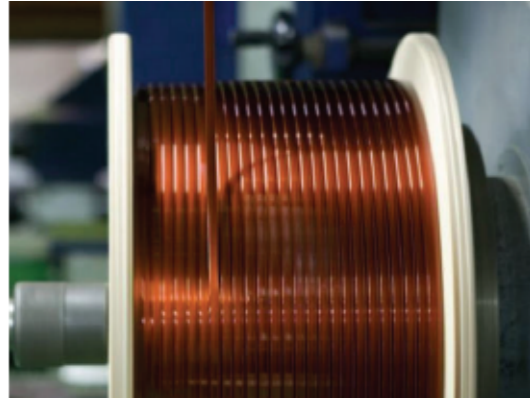
热级 Thermal level		规格范围 Specifications range		适用标准 Standard			
代号code	等级level	mm	AWG	JB/T	GB	NEMA	JIS
C	200	0.3-2.0	12#-28#*	10930-2010	14711-2013		

注: “\*” 为近似美国线规 Note: “\*” for approximate American wire gage



## Q(ZY/XY) (EI/AIWB/200)

### 漆包铜扁线 Enameled Rectangular Copper Wire



#### 产品主要特点及用途: Products main features and application

- 优良的导电性、热稳定性、耐刮性、耐溶剂性，绕成线组具有散热性能好，磁场效率高的优势
- 适用于新能源汽车驱动电机、变压器、电动机、发电机及各种电气装置的绕组线圈
- Electrical conductivity, excellent thermal stability, scratch resistance, solvent resistance, With good heat dissipation and high field efficiency after winding performance and the advantages of high efficiency magnetic field
- Winding coils for EV-motor, transformers, motors, generators, and various electrical devices



- 良好的电化性能、热性能、机械性能和化学性能，专业应用于新能源汽车行业。  
Professionally applied in New Energy automotive industry, with good electrical properties, thermal properties, mechanical properties and chemical properties

热级 Thermal level		型号 Model		规格范围 Specifications range	适用标准 Standard			
代号code	等级level	名称name	型号model	mm <sup>2</sup>	IEC	GB/T	NEMA	JIS
B	130	130级聚酯漆包铜扁线	QZ B-x/130	1.5mm <sup>2</sup> -60mm <sup>2</sup> 1.2:1≤宽窄比≤8:1	60317	7095.7		*
F	155	155级聚酯漆包铜扁线	QZ B-x/155	1.5mm <sup>2</sup> -60mm <sup>2</sup> 1.2:1≤宽窄比≤8:1	60317-16	7095.3		*
H	180	180级聚酯亚胺漆包铜扁线	QZ B-x/180	1.5mm <sup>2</sup> -60mm <sup>2</sup> 1.2:1≤宽窄比≤8:1	60317-28	7095.4		*
C	200/220	200级聚酯亚胺/聚酰胺酰亚胺复合漆包铜扁线 220级聚酰胺酰亚胺漆包铜扁线	Q(ZY/XY) B-x/200QXYB-X/220	1.5mm <sup>2</sup> -45mm <sup>2</sup> 1.2:1≤宽窄比≤12:1	60317-29	7095.6	MW36-C	*
C	240	240级聚酰胺酰亚胺漆包铜扁线	QYB-x/240	1.5mm <sup>2</sup> -45mm <sup>2</sup> 1.2:1≤宽窄比≤8:1	60317-47	7095.5	MW20-C	*

注：“\*”为近似美国线规 Note: “\*” for approximate American wire gage

### 常规生产控制参数表 Reference to Parameters for Normal Production

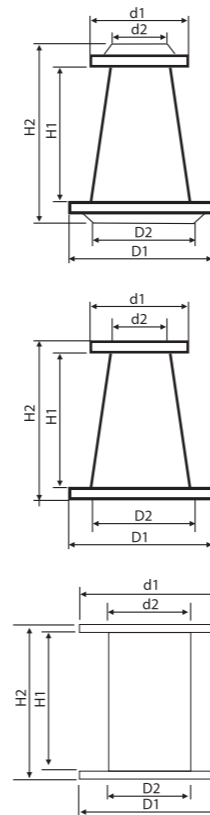
体标称直径 Diameter	公差 Tolerance	最大外径 Max Diameter(mm)			最小漆膜厚度 Min Film Thickness(mm)			最小击穿电压(20°C) Min Breakdown Voltage(20°C)			导体电阻 ohm/m(20°C) Conductor Resistance(20°C)	
		1级	2级	3级	1级	2级	3级	1级	2级	3级	Min	Max
0.036	-	0.044	0.049	-	-	-	-	225	425	-	15.16	18.42
0.040	-	0.049	0.054	-	-	-	-	250	475	-	12.28	14.92
0.045	-	0.055	0.061	-	-	-	-	275	550	-	9.705	11.79
0.050	-	0.06	0.066	-	-	-	-	300	600	-	7.922	9.489
0.056	-	0.067	0.074	-	-	-	-	325	650	-	6.316	7.565
0.063	0.002	0.076	0.083	-	0.007	0.012	0.018	375	700	-	5.045	5.922
0.071	0.003	0.084	0.091	0.097	0.007	0.012	0.018	425	700	-	3.941	4.747
0.080	0.003	0.094	0.101	0.108	0.007	0.014	0.020	425	850	1200	3.133	3.703
0.090	0.003	0.105	0.113	0.12	0.008	0.015	0.022	500	900	1300	2.495	2.900
0.100	0.003	0.117	0.125	0.132	0.008	0.016	0.023	500	950	1400	2.034	2.333
0.112	0.003	0.13	0.139	0.147	0.009	0.017	0.026	1300	2700	3900	1.632	1.848
0.125	0.003	0.144	0.154	0.163	0.010	0.019	0.028	1500	2800	4100	1.317	1.475
0.140	0.003	0.16	0.171	0.181	0.011	0.021	0.030	1600	3000	4200	1.055	1.17
0.160	0.003	0.182	0.194	0.205	0.012	0.023	0.033	1700	3200	4400	0.8122	0.8906
0.180	0.003	0.204	0.217	0.229	0.013	0.025	0.036	1700	3300	4700	0.6444	0.7007
0.200	0.003	0.226	0.239	0.252	0.014	0.027	0.039	1800	3500	5100	0.5237	0.5657
0.224	0.003	0.252	0.266	0.28	0.015	0.029	0.043	1900	3700	5200	0.4188	0.4495
0.250	0.004	0.281	0.297	0.312	0.017	0.032	0.048	2100	3900	5500	0.3345	0.3628
0.280	0.004	0.312	0.329	0.345	0.018	0.033	0.050	2200	4000	5800	0.2676	0.2882
0.315	0.004	0.349	0.367	0.384	0.019	0.035	0.053	2200	4100	6100	0.2121	0.227
0.355	0.004	0.392	0.411	0.428	0.020	0.038	0.057	2300	4300	6400	0.1674	0.1782
0.40	0.005	0.439	0.459	0.478	0.021	0.040	0.060	2300	4400	6600	0.1316	0.1407
0.45	0.005	0.491	0.513	0.533	0.022	0.042	0.064	2300	4400	6800	0.1042	0.1109
0.50	0.005	0.544	0.566	0.587	0.024	0.045	0.067	2400	4600	7000	0.08462	0.08959
0.56	0.006	0.606	0.630	0.653	0.025	0.047	0.071	2500	4600	7100	0.06736	0.07153
0.63	0.006	0.679	0.704	0.728	0.027	0.050	0.075	2600	4800	7100	0.05335	0.05638
0.71	0.007	0.762	0.789	0.814	0.028	0.053	0.080	2600	4800	7200	0.04198	0.04442
0.80	0.008	0.855	0.884	0.911	0.030	0.056	0.085	2600	4900	7400	0.03305	0.03500
0.90	0.009	0.959	0.989	1.018	0.032	0.060	0.090	2700	5000	7600	0.02612	0.02765
1.00	0.010	1.062	1.094	1.124	0.034	0.063	0.095	2700	5000	7600	0.02116	0.0224
1.12	0.011	1.184	1.217	1.248	0.034	0.065	0.098	2700	5000	7600	0.01687	0.01785
1.25	0.013	1.316	1.349	1.381	0.035	0.067	0.100	2700	5000	7600	0.01353	0.01435
1.40	0.014	1.468	1.502	1.535	0.036	0.069	0.103	2700	5000	7600	0.01079	0.01143
1.60	0.016	1.67	1.706	1.74	0.038	0.071	0.107	2700	5000	7600	0.008264	0.008749
1.80	0.018	1.872	1.909	1.944	0.039	0.073	0.110	2700	5000	7600	0.006529	0.006913
2.00	0.020	2.074	2.112	2.148	0.040	0.075	0.113	2700	5000	7600	0.005289	0.005600
2.24	0.022	2.316	2.355	2.392	0.041	0.077	0.116	2700	5000	7600	0.004218	0.004465
2.50	0.025	2.578	2.618	2.656	0.042	0.079	0.119	2700	5000	7600	0.003385	0.003584
2.65	0.027	2.731	2.772	2.811	0.043	0.081	0.123	1300	2500	3800	0.003014	0.003190
2.80	0.028	2.88	2.922	2.961	0.043	0.081	0.123	1300	2500	3800	0.002698	0.002857
3.00	0.03	3.083	3.126	3.166	0.045	0.084	0.127	1300	2500	3800	0.002351	0.002488
3.15	0.032	3.233	3.276	3.316	0.045	0.084	0.127	1300	2500	3800	0.002131	0.002258
3.35	0.034	3.436	3.479	3.521	0.046	0.086	0.130	1300	2500	3800	0.001885	0.001996
3.55	0.036	3.635	3.679	3.721	0.046	0.086	0.130	1300	2500	3800	0.001693	0.001763
4.00	0.04	4.088	4.133	4.176	0.047	0.089	0.134	1300	2500	3800	0.001334	0.001389

包装信息  
Package Information

线盘 Spool Type	绕线范围 Sizes Applicable (mm)	线盘自重 Net Weight of Spool (kg)	容线近似重量 Approximate Weight of Wires Applicable (kg)	每箱轴数 Spools per Carton
PL-2S	Φ0.020-0.050	0.13	1.2	16
PT-2	Φ0.020-0.050	0.17	2	12
PT-4	Φ0.050-0.30	0.20	7	4
PT-10	Φ0.10-0.30	0.40	12	2
PT-15	Φ0.30-0.60	0.52	18	1
PT-25	Φ0.40-2.50	0.83	30	1
PT-45	Φ0.36-4.0	2.15	45	-
PT-60	Φ0.36-4.0	2.25	70	-
PT-90	Φ0.50-4.0	3.90	90	-
PT-200	Φ0.50-4.0	7.30	200	-
PC220*200	Φ0.50-2.5	0.65	28	-
PC355*180	Φ2.00-4.0	2.50	60	-
DIN160	Φ0.05-0.40	0.35/0.30	7	-
DIN200	Φ0.20-1.50	0.60	12	-
DIN250	Φ0.60-2.50	1	21	-

线盘信息  
Spool Information

线盘型号 Type	侧板直径(mm) Reel Diameter		筒体直径(mm) Inner Diameter		内宽 (mm) H1	盘体 总高 (mm) H2	轴孔直径 (mm)	重量 (kg)	备注
	小头 直径d1	大头 直径D1	小头 直径d2	大头 直径D2					
PT4	125±0.5	140±0.5	70±0.5	80±0.5	170±1	195±1	27±0.5	0.2±0.005	
PT10	160±0.5	180±0.5	97±0.5	110±0.5	200±1	230±1	30.5±0.5	0.4±0.005	
PT15	179±0.5	200±0.5	96±0.5	107±0.5	200±1	230±1	31±0.5	0.52±0.010	
PT25	214±0.5	230±0.5	110±0.5	129.5±0.5	250±1	280±1	31±0.5	0.83±0.015	
PT45	236±0.5	250±0.5	139±0.5	159±0.5	335±1	400±1	100±0.5	2.15±0.02	
PT60	270±0.8	300±0.8	150±0.8	175±0.8	350±1	400±2	45±0.5	2.25±0.02	平角
PT60	270±0.8	300±0.8	150±0.8	175±0.8	350±1	400±2	45±0.5	2.08±0.02	圆角
PT90	300±0.5	315±0.5	180±0.5	200±0.5	424±1	499±1	100±0.5	3.9±0.05	
PT200	375±0.5	400±0.5	224±0.5	250±0.5	530±1	630±1	100±0.5	7.3±0.1	
PC500A	500	500	315	315	180	250	40	8.45	
PC500B	500	500	250	250	250	300	56	8.6	
220*200	219±0.5	219±0.5	108±0.5	108±0.5	198±1	232±1	32±0.5	0.62±0.01	
木盘线盘	355±0.5	355±0.5	150.4±0.5	150.4±0.5	180±1	210±1	40±1	/	
DIN160	160±0.5	160±0.5	100±0.5	100±0.5	130±1	160±1	22	0.35/0.30	
DIN200	200±0.5	200±0.5	125±0.5	125±0.5	160±1	200±1	22/30/37	0.60	
DIN250	250±0.5	250±0.5	160±0.5	160±0.5	160±1	200±1	40/30	1	



注: 可按照客户要求, 使用特殊线盘, 如: DIN160, 200, 250 Note: Special pools of customer, are welcomed, like DIN160, 200, 250

线规对照表  
Gauge Reference

Gauge No.	SWG		AWG	
	mm	inch	mm	inch
50	0.025	0.0010	0.0252	0.00099
49	0.031	0.0012	0.0282	0.00111
48	0.041	0.0016	0.0315	0.00124
47	0.051	0.0020	0.0356	0.00140
46	0.061	0.0024	0.0399	0.00157
45	0.071	0.0028	0.0447	0.00176
44	0.081	0.0032	0.0508	0.00198
43	0.091	0.0036	0.0559	0.00222
42	0.102	0.0040	0.0635	0.00249
41	0.112	0.0044	0.0711	0.00280
40	0.122	0.0048	0.0787	0.00314
39	0.132	0.0052	0.0889	0.00353
38	0.152	0.0060	0.102	0.00396
37	0.173	0.0068	0.114	0.00445
36	0.193	0.0076	0.127	0.00500
35	0.213	0.0084	0.142	0.00561
34	0.234	0.0092	0.16	0.00630
33	0.254	0.0100	0.18	0.00708
32	0.274	0.0108	0.203	0.00795
31	0.295	0.0116	0.226	0.00893
30	0.315	0.0124	0.254	0.0100
29	0.345	0.0136	0.287	0.0113
28	0.376	0.0148	0.32	0.0126
27	0.417	0.0164	0.361	0.0142
26	0.457	0.018	0.404	0.0159
25	0.508	0.020	0.455	0.0179
24	0.559	0.022	0.511	0.0201
23	0.610	0.024	0.574	0.0226
22	0.711	0.028	0.643	0.0253
21	0.813	0.032	0.724	0.0285
20	0.914	0.036	0.813	0.0320
19	1.016	0.040	0.912	0.0359
18	1.219	0.048	1.024	0.040
17	1.422	0.056	1.151	0.045
16	1.626	0.064	1.29	0.051
15	1.829	0.072	1.45	0.057
14	2.032	0.080	1.628	0.064
13	2.337	0.092	1.829	0.072
12	2.642	0.104	2.052	0.081
11	2.946	0.116	2.304	0.091
10	3.251	0.128	2.588	0.102
9	3.658	0.144	2.906	0.114
8	4.064	0.160	3.264	0.128
7	4.470	0.176	3.665	0.144
6	4.877	0.192	4.115	0.162
5	5.385	0.212	4.62	0.182
4	5.893	0.232	5.189	0.204
3	6.401	0.252	5.827	0.229
2	7.010	0.276	6.543	0.258
1	7.620	0.300	7.348	0.289