

**SUHRING<sup>®</sup>** 速合

专业的免焊连接方案制造商

Professional manufacturer of solder-free connection solutions

青岛速合连接技术有限公司

QINGDAO SUHE CONNECTION TECH CO.,LTD.

# Introduction

## 公司简介

速合环自 2008 年开始研发，为海尔冰箱售后、海尔空调延长管连接使用；从 2011 年成立了青岛速合连接技术有限公司，全面研发所有速合环系列产品；2018 年与青岛艾菲斯电器有限公司合作生产、销售速合单环。员工 45 人，专业技术人员 15 余名，获得了发明专利 3 项，实用新型专利 8 余项。

速合环被国内外众多用户采纳使用，2025 年速合环销售突破 8000 万个产品，已经与国内外众多冰箱、冷柜、空调企业合作，从产线配套到售后维修安装，实现制冷产品的全产业链合作供货。

速合保持一贯稳定的产品质量，通过了 ISO9001 质量认证，是国内同行业率先健全 ISO14903 和 GB-T44556-2024 试验标准的企业，完善的试验设备和试验流程，保证了速合环的优良品质。

速合作为行业中的优秀企业之一，专注于从事流体管路免焊连接技术研发、生产、销售和服务。以超前的产品创新能力，实现了速合环的先进技术水平；使用高稳定度的生产设备和质量检验设备，拥有高素质的员工队伍，遵循严谨的产品质量管理程序，保证了源源不断地向国内外客户提供稳定优质的速合环产品。

Suhring started to R&D since 2008, It was initially used for after-sales service of Haier refrigerators. Qingdao Suhring Technology Co., LTD., founded in 2011. In 2018, it cooperated with Qingdao IFAITH Electric Co., Ltd. Our company currently has 45 employees, including more than 15 professional technical engineers. Our company has obtained 3 invention patents and more than 8 model patents until now.

SUHRING rings have been adopted by numerous domestic and international users. By 2025, SUHRING ring sales exceeded 80 million units. We have partnered with leading refrigerator, freezer, and air conditioning manufacturers globally, providing comprehensive supply chain solutions from production line integration to after-sales maintenance and installation across the entire refrigeration product ecosystem.

SUHRING maintains consistent product quality, holding ISO9001 certification. As a pioneer in the domestic industry, it has established comprehensive testing standards compliant with ISO14903 and GB/T44556-2024. Sophisticated testing equipment and rigorous procedures ensure the superior quality of Quick-Connect Rings.

As a leading enterprise in the industry, SUHRING specializes in the R&D, production, sales, and service of weld-free connection technology for fluid pipelines. Through pioneering product innovation, SUHRING has achieved advanced technical standards for its quick-connect rings. Utilizing highly stable production and quality inspection equipment, supported by a highly skilled workforce and adhering to rigorous quality management procedures, SUHRING ensures a continuous supply of stable, high-quality quick-connect rings to domestic and international customers.

3 项

获得发明专利

3 invention patents

8 项<sup>+</sup>

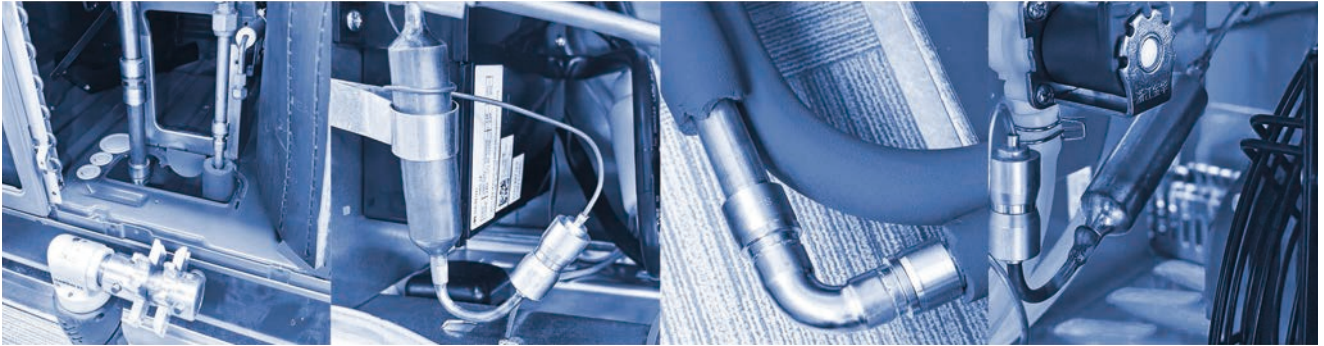
实用新型专利

more than 8 utility  
model patents

8000 万<sup>+</sup>

2025 年速合环销售量

By 2025, SUHRING ring sales  
exceeded 80 million units



## 速合产品分为两大类：单环、复合环。

SUHRING products are divided into two main categories: single rings and composite rings.

### 单环

冰箱、冷柜用单环  
汽车空调冷凝器和蒸发器用单环  
热泵热水器、冷水机、海鲜机等使用的单环  
空调用堵头和单环

### Single Rings

Single rings for refrigerators and freezers;  
Single rings for automotive air conditioning condensers and evaporators;  
Single rings for heat pump water heaters, chillers, seafood machines, etc.;  
Single rings and plugs for air conditioning systems.

### 复合环

空调安装复合环  
冰箱、冷柜维修复合环  
水系统连接复合环  
氧气管路连接复合环

### Composite Rings

Composite rings for Air conditioning installation;  
Composite rings for refrigerator and freezer repair;  
Composite rings for water system connection;  
Composite rings for oxygen pipeline connection.

### 配套工具

手动工具 SDY-25B(W)、SDY-30(W)、FRK  
电动工具 SDY-41、SDY-42、SDY-43  
分体式压钳 SDY-31、SDY-32  
单环快接工具：可以满足每天 8000 次连接  
配套密封液：SUP-1、SUP-2、SUP-3、  
SUP-4、SUP-5

### Supporting Tools

Manual tools SDY-25B(W), SDY-30(W), FRK;  
Electric Tools: SDY-41, SDY-42, SDY-43;  
Split-Type Crimping Pliers: SDY-31, SDY-32;  
Single Ring Quick-Connect Tool: Capable of 8,000 daily connections;  
Compatible Sealing Liquid: SUP-1, SUP-2, SUP-3, SUP-4, SUP-5.

### 分歧管

多联机空调安装专用分歧管

### Copper Y joints

For multi-split air conditioning installations.

## 联系我们：

Get in Touch:

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# Our Patents and Certificates

## 专利和体系证书展示

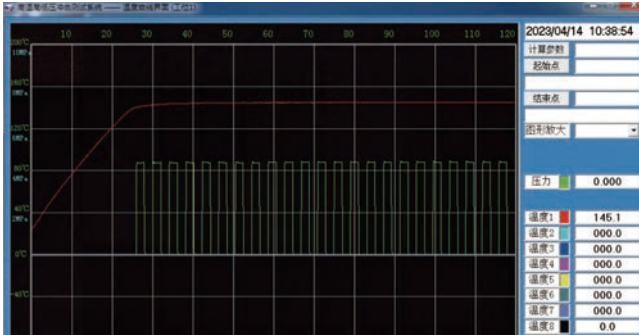


# Our Tests

## 型式试验报告

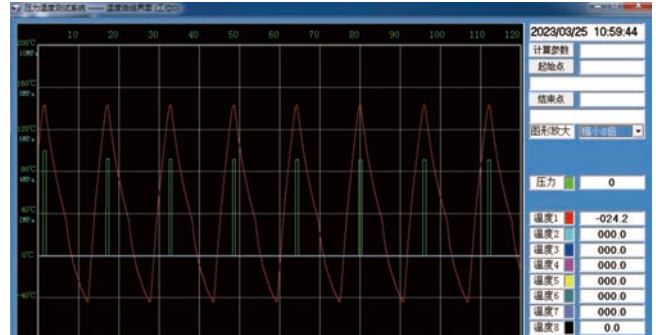
### PTV 试验

#### PTV Tests



高温恒温 + 高低压冲击测试

High temperature constant temperature plus high and low pressure alternating test

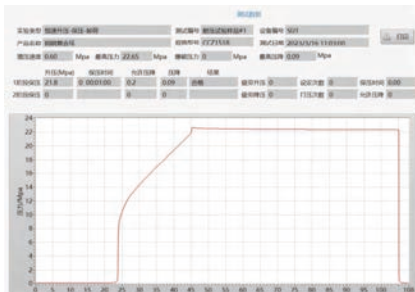


高低温和高低压交变测试

High & low temperature and high & low pressure alternating test

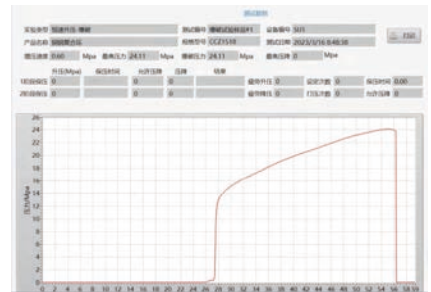
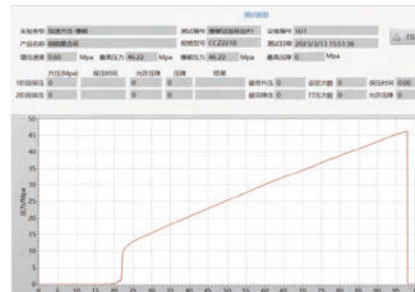
### 耐压试验

#### Withstand pressure test



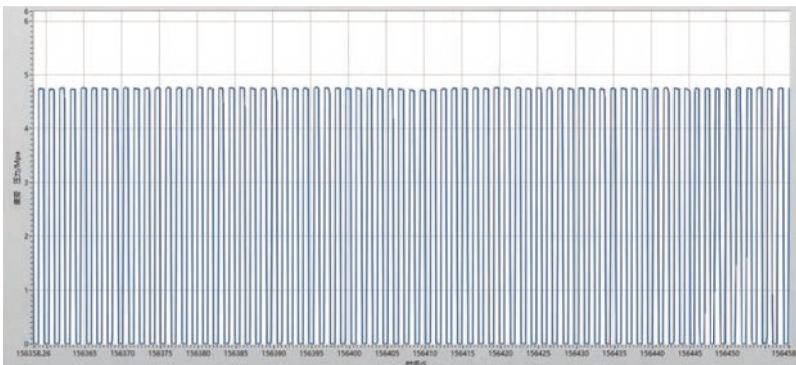
### 爆破试验

#### Blast test



### 疲劳试验

#### Fatigue test



# Product Range

## 产品系列

### 速合环

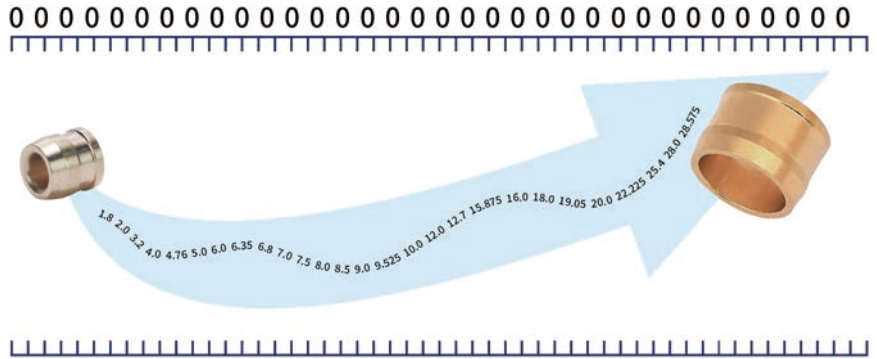
#### Suhring Connectors

速合环是应用于流体管路系统的关键部件；  
速合环质量稳定可靠、使用方便。  
Suhring connectors are key parts used in fluid piping systems;  
Suhring has the advantage of easy to use, high efficient, safe and reliable.

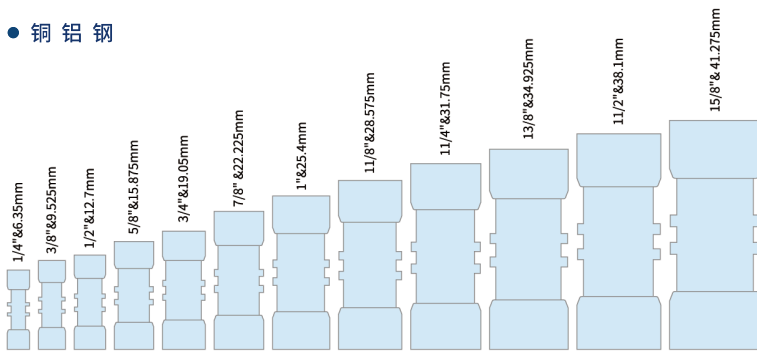
最大工作压力  $P_N=50\text{bar}$  或  $75\text{bar}$   
Maximum working pressure  $P_N=50\text{bar}$  or  $75\text{bar}$

检测最大爆破压力  $P_p=5P_N \geq 250\text{bar}$   
Maximum bursting pressure  $P_p=5P_N \geq 250\text{bar}$

使用温度范围  $-50^\circ\text{C} \sim +150^\circ\text{C}$  (或  $220^\circ\text{C}$ )  
Operating temperature range  $-50^\circ\text{C} \sim +150^\circ\text{C}$  (or  $220^\circ\text{C}$ )



● 铜 铝 钢



铜	CU		铜	CU
铜	CU		不锈钢	SS
铝	AL		铁	Fe
铜	CU		铝	AL
铜	CU		钛	Ti
铁	Fe		铁	Fe
铜	CU		铁	Fe
铝	AL		铝	AL
不锈钢	SS		不锈钢	SS

使用速合环的优点：

稳定可靠的高质量：零漏率、无电化学腐蚀、无碳无杂质无污物；

简便：提高效率、施工手续简单、降低操作难度，在商用设施维修中无须等待，随时施工；

灵活：施工中可以多工种交叉作业，轻松实现异种金属管道间的任意连接；

安全 & 环保：无高温明火，没有消防安全隐患，无需办理危险品运输、携带和施工等安全证件；

增加人才引入：技能培训只要 10 分钟，优化人才使用成本。

Advantages of Suhring Fittings:

1. Stable and reliable high products quality
2. Zero leakage rate
3. No electrochemical corrosion, no carbon, no impurities and no dirt;
4. Simplicity: Improve efficiency, simplify construction procedures, and reduce operating difficulty;
5. No need to wait during maintenance of commercial facilities, construction can be done at any time;
6. Flexible: Multiple types of work can be intertwined during construction;
7. Any connection between dissimilar metal pipes can be easily realized;
8. Safety & Environmental Protection: No high-temperature open flames, no fire safety hazards, no need to apply for safety certificates for dangerous goods transportation, carrying and construction;
9. Help you to bring in the talent workers;
10. Skills training only takes 10 minutes;
11. Optimize the cost of talent use.

## 复合环 Composite Rings

### 空调安装速合环 Air Conditioning Installation Application

#### C 系列等径复合环 Technical data for C series equal diameter composite rings

型号	英制规格	公制规格 (mm)	管子壁厚 (mm)
Part Number	British Standard	Metric Standard	Tube wall thickness
CCZ0618	1/4"	6.35	0.8
CCZ0818	5/16"	8.0	0.8
CCZ0918	3/8"	9.525	0.8
CCZ1218	1/2"	12.7	0.8
CCZ1518	5/8"	15.875	1.0
CCZ1918	3/4"	19.05	1.0
CCZ2218	7/8"	22.225	1.0
CCZ2518	1"	25.4	1.0
CCZ2818	1-1/8"	28.575	1.0
CCZ3118	1-1/4"	31.75	1.1
CCZ3518	1-3/8"	34.925	1.3
CCZ3818	1-1/2"	38.1	1.35
CCZ4118	1-5/8"	41.275	1.45



注：被连接的管子壁厚与表中所示不同，请在订货中注明。  
Note: If the wall thickness of the connected pipes is different from that shown in the table, please indicate it when place order with us.

## 制冷设备专用堵头

### Technical Data for End Cap for Refrigeration Equipment

型号	英制规格	公制规格 (mm)	管子壁厚 (mm)
Part Number	British Standard	Metric Standard	Tube wall thickness
CCP0618	1/4"	6.35	0.8
CCP0818	5/16"	8.0	0.8
CCP0918	3/8"	9.525	0.8
CCP1218	1/2"	12.7	0.8
CCP1518	5/8"	15.875	1.0
CCP1918	3/4"	19.05	1.0
CCP2218	7/8"	22.225	1.0
CCP2518	1"	25.4	1.0
CCP2818	1-1/8"	28.575	1.0
CCP3118	1-1/4"	31.75	1.1
CCP3518	1-3/8"	34.925	1.3
CCP3818	1-1/2"	38.1	1.35
CCP4118	1-5/8"	41.275	1.45



注：被连接的管子壁厚与表中所示不同，请在订货中注明。  
Note: If the wall thickness of the connected pipes is different from that shown in the table, please indicate it when place order with us.

## C 系列变径复合环

### Technical Data for C series reducing diameter composite rings

型号	英制规格	公制规格 (mm)	管子壁厚 (mm)
Part Number	British Standard	Metric Standard	Tube wall thickness
CCZ0911	3/8" -1/4"	9.525-6.35	0.8
CCZ1212	1/2" -1/4"	12.7-6.35	0.8
CCZ1211	1/2" -3/8"	12.7-9.525	0.8
CCZ1513	5/8" -1/4"	15.875-6.35	1.0 & 0.8
CCZ1512	5/8" -3/8"	15.875-9.525	1.0 & 0.8
CCZ1511	5/8" -1/2"	15.875-12.7	1.0 & 0.8
CCZ1914	3/4" -1/4"	19.05-6.35	1.0 & 0.8
CCZ1913	3/4" -3/8"	19.05-9.525	1.0 & 0.8
CCZ1912	3/4" -1/2"	19.05-12.7	1.0 & 0.8
CCZ1911	3/4" -5/8"	19.05-15.875	1.0
CCZ2214	7/8" -3/8"	22.225-9.525	1.0 & 0.8
CCZ2213	7/8" -1/2"	22.225-12.7	1.0
CCZ2212	7/8" -5/8"	22.225-15.875	1.0
CCZ2211	7/8" -3/4"	22.225-19.05	1.0
CCZ2511	1" -7/8"	25.4-22.225	1.0
CCZ2814	1 1/8" -5/8"	28.575-15.875	1.0
CCZ2813	1 1/8" -3/4"	28.575-19.05	1.0
CCZ2812	1 1/8" -7/8"	28.575-22.225	1.0
CCZ2811	1 1/8" -1"	28.575-25.4	1.0
CCZ3111	1 1/4" -1 1/8"	31.75-28.575	1.1-1.0
CCZ3512	1 3/8" -1 1/8"	34.925-28.575	1.3&1.0
CCZ3511	1 3/8" -1 1/4"	34.925-31.75	1.3&1.1
CCZ3811	1 1/2" -1 3/8"	38.1-34.925	1.35&1.3
CCZ4114	1 5/8" -1 1/8"	41.275-28.575	1.45&1.0
CCZ4113	1 5/8" -1 1/4"	41.275-31.75	1.45&1.1
CCZ4112	1 5/8" -1 3/8"	41.275-34.925	1.45&1.3
CCZ4111	1 5/8" -1 1/2"	41.275-38.1	1.45&1.35



注: 被连接的管子壁厚与表中所示不同, 请在订货中注明。  
 Note: If the wall thickness of the connected pipes is different from that shown in the table, please indicate it when place order with us.

## 90°弯头规格表

### Technical Data for 90° Elbow Fittings

型号	英制规格	公制规格 (mm)	管子壁厚 (mm)
Part Number	British Standard	Metric Standard	Tube wall thickness
CCW0618	1/4"	6.35	0.8
CCW0918	3/8"	9.525	0.8
CCW1218	1/2"	12.7	0.8
CCW1518	5/8"	15.875	1.0
CCW1918	3/4"	19.05	1.0
CCW2218	7/8"	22.225	1.0
CCW2518	1"	25.4	1.0
CCW2818	1-1/8"	28.575	1.0
CCW3118	1-1/4"	31.75	1.1
CCW3518	1-3/8"	34.925	1.3
CCW3818	1-1/2"	38.1	1.35
CCW4118	1-5/8"	41.275	1.45



注: 被连接的管子壁厚与表中所示不同, 请在订货中注明。  
 Note: If the wall thickness of the connected pipes is different from that shown in the table, please indicate it when place order with us.

## T 系列等径复合环

### Technical data for T series equal diameter composite rings

型号	英制规格	公制规格 (mm)	管子壁厚 (mm)
Part Number	British Standard	Metric Standard	Tube wall thickness
TSZ0618	1/4"	6.35	0.8
TSZ0918	3/8"	9.525	0.8
TSZ1218	1/2"	12.7	0.8
TSZ1518	5/8"	15.875	1.0
TSZ1918	3/4"	19.05	1.0
TSZ2218	7/8"	22.225	1.0
TSZ2518	1"	25.4	1.0
TSZ2818	1-1/8"	28.575	1.0
TSZ3118	1-1/4"	31.75	1.1
TSZ3518	1-3/8"	34.925	1.3
TSZ3818	1-1/2"	38.1	1.35
TSZ4118	1-5/8"	41.275	1.45



注: 被连接的管子壁厚与表中所示不同, 请在订货中注明。  
Note: If the wall thickness of the connected pipes is different from that shown in the table, please indicate it when place order with us.

## T 系列变径复合环

### Technical Data for T series reducing diameter composite rings

型号	英制规格	公制规格 (mm)	管子壁厚 (mm)
Part Number	British Standard	Metric Standard	Tube wall thickness
TSZ0911	3/8" -1/4"	9.525-6.35	0.8
TSZ1212	1/2" -1/4"	12.7-6.35	0.8
TSZ1211	1/2" -3/8"	12.7-9.525	0.8
TSZ1512	5/8" -3/8"	15.875-9.525	1.0 & 0.8
TSZ1511	5/8" -1/2"	15.875-12.7	1.0 & 0.8
TSZ1913	3/4" -3/8"	19.05-9.525	1.0 & 0.8
TSZ1912	3/4" -1/2"	19.05-12.7	1.0 & 0.8
TSZ1911	3/4" -5/8"	19.05-15.875	1.0
TSZ2213	7/8" -1/2"	22.225-12.7	1.0
TSZ2212	7/8" -5/8"	22.225-15.875	1.0
TSZ2211	7/8" -3/4"	22.225-19.05	1.0
TSZ2511	1" -7/8"	25.4-22.225	1.0
TSZ2814	1 1/8" -5/8"	28.575-15.875	1.0
TSZ2813	1 1/8" -3/4"	28.575-19.05	1.0
TSZ2812	1 1/8" -7/8"	28.575-22.225	1.0
TSZ2811	1 1/8" -1"	28.575-25.4	1.0
TSZ3111	1 1/4" -1 1/8"	31.75-28.575	1.1-1.0
TSZ3512	1 3/8" -1 1/8"	34.925-28.575	1.3&1.0
TSZ3511	1 3/8" -1 1/4"	34.925-31.75	1.3&1.1
TSZ3811	1 1/2" -1 3/8"	38.1-34.925	1.35&1.3
TSZ4114	1 5/8" -1 1/8"	41.275-28.575	1.45&1.0
TSZ4113	1 5/8" -1 1/4"	41.275-31.75	1.45&1.1
TSZ4112	1 5/8" -1 3/8"	41.275-34.925	1.45&1.3
TSZ4111	1 5/8" -1 1/2"	41.275-38.1	1.45&1.35

注: 被连接的管子壁厚与表中所示不同, 请在订货中注明。  
Note: If the wall thickness of the connected pipes is different from that shown in the table, please indicate it when place order with us.

## 铝复合环

### Technical Data for Aluminum Composite Rings

型号	英制规格	公制规格 (mm)	管子壁厚 (mm)
Part Number	British Standard	Metric Standard	Tube wall thickness
CAZ0618	1/4"	6.35	Al:0.8 ; Cu:0.8
CAZ0818	5/16"	8.0	Al:1.0 ; Cu:0.8
CAZ0918	3/8"	9.525	Al:1.0 ; Cu:0.8
CAZ1218	1/2"	12.7	Al:1.0 ; Cu:0.8
CAZ1518	5/8"	15.875	Al:1.2 ; Cu:1.0
CAZ1918	3/4"	19.05	Al:1.2 ; Cu:1.0
CAZ2218	7/8"	22.225	Al:1.3 ; Cu:1.0
CAZ2518	1"	25.4	Al:1.3 ; Cu:1.0
CAZ2818	1-1/8"	28.575	Al:1.5 ; Cu:1.0



注:被连接的管子壁厚与表中所示不同,请在订货中注明。  
Note: If the wall thickness of the connected pipes is different from that shown in the table, please indicate it when place order with us.

## 铝变径复合环

### Technical Data for Reducing Diameter Aluminum composite rings

型号	英制规格	公制规格 (mm)	管子壁厚 (mm)
Part Number	British Standard	Metric Standard	Tube wall thickness
CAZ0911	3/8" -1/4"	9.525-6.35	参考等径产品 搭配规则
CAZ1212	1/2" -1/4"	12.7-6.35	
CAZ1211	1/2" -3/8"	12.7-9.525	
CAZ1513	5/8" -1/4"	15.875-6.35	
CAZ1512	5/8" -3/8"	15.875-9.525	
CAZ1511	5/8" -1/2"	15.875-12.7	
CAZ1911	3/4" -5/8"	19.05-15.875	
CAZ2214	7/8" -3/8"	22.225-9.525	
CAZ2213	7/8" -1/2"	22.225-12.7	
CAZ2212	7/8" -5/8"	22.225-15.875	
CAZ2211	7/8" -3/4"	22.225-19.05	
CAZ2511	1" -7/8"	25.4-22.225	
CAZ2814	1 1/8" -5/8"	28.575-15.875	
CAZ2813	1 1/8" -3/4"	28.575-19.05	
CAZ2812	1 1/8" -7/8"	28.575-22.225	
CAZ2811	1 1/8" -1"	28.575-25.4	



注:被连接的管子壁厚与表中所示不同,请在订货中注明。  
Note: If the wall thickness of the connected pipes is different from that shown in the table, please indicate it when place order with us.

## T形三通

### Technical Data for T Fittings

型号	英制规格	公制规格 (mm)	管子壁厚 (mm)
Part Number	British Standard	Metric Standard	Tube wall thickness
CCT0818	5/16"	8.0	0.8
CCT0918	3/8"	9.525	0.8
CCT1218	1/2"	12.7	0.8
CCT1518	5/8"	15.875	1.0
CCT1918	3/4"	19.05	1.0
CCT2218	7/8"	22.225	1.0
CCT2518	1"	25.4	1.0
CCT2818	1-1/8"	28.575	1.0



注:被连接的管子壁厚与表中所示不同,请在订货中注明。  
Note: If the wall thickness of the connected pipes is different from that shown in the table, please indicate it when place order with us.

## 冰箱维修专用复合环

### Technical Data for Refrigerator maintenance ring

型号	公制规格 (mm)	型号	公制规格 (mm)
Part Number	Metric Standard	Part Number	Metric Standard
CAZ0201	1.8mm 等径	CAZ0607	6-4.76mm
CAZ0202	2.2mm 等径	CAZ0608	1/4"/6.35-6.35mm
CAZ0205	2.5mm 等径	CAZ0609	6-6mm
CAZ0302	3.2-1.8mm	CAZ0651	6.35-1.8mm
CAZ0351	3.8-2mm	CAZ0654	6.35-2.53mm
CAZ0401	4-1.8mm	CAZ0701	7.5-6mm
CAZ0404	4.76-4mm	CAZ0702	7-1.85mm
CAZ0408	3/16"/4.76-4.76mm	CAZ0703	7-4.76mm
CAZ0502	5-2mm	CAZ0709	7-7mm
CAZ0504	5-4mm	CAZ0806	8-6mm
CAZ0508	5-5mm	CAZ0808	5/16"/8-8mm
CAZ0601	6-1.85mm	CAZ0901	9.52-6.35mm
CAZ0602	6-2.2mm	CAZ0902	9.52-8mm
CAZ0603	6.35-4.76	CAZ0908	9.52-9.52mm
CAZ0604	6-4mm	CAZ0909	9-9mm
CAZ0605	6-5mm	CAZ1208	12.7-12.7mm
CAZ0606	6-6.35mm	CAZ1209	12-12mm



注：被连接的管子壁厚与表中所示不同，请在订货中注明。  
Note: If the wall thickness of the connected pipes is different from that shown in the table, please indicate it when place order with us.

## 制冷设备专用复合环

### Technical Data for Special composite ring forrefrigeration equipment

型号	公制规格 (mm)	型号	公制规格 (mm)
Part Number	Metric Standard	Part Number	Metric Standard
CCZ0606	6.35-6.0mm	CCZ1201	12.7-9.525mm
CCZ0609	6.0mm	CCZ1203	12.7-12mm
CCZ0608	6.35mm	CCZ1208	12.7mm
CCZ0901	9.52-6.35mm	CCZ1209	12.0mm
CCZ0909	9.0mm	CCZ1501	15.875-12.7mm
CCZ0908	9.525mm	CCZ1508	15.875mm



注：专用定制产品  
Note: Customized Products

## 冰箱维修专用堵头

### Technical Data for End Caps for Refrigerator

型号	公制规格 (mm)
Part Number	Metric Standard
CAP0409	4mm
CAP0408	3/16"/4.76mm
CAP0609	6mm
CAP0608	1/4"/6.35mm



注：专用定制产品  
Note: Customized Products

## 高档饮用水系统 - 不锈钢速合环 High-end drinking water system-stainless steel ring

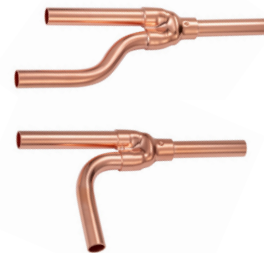
型号	公制规格 (mm)	型号	公制规格 (mm)
Part Number	Metric Standard	Part Number	Metric Standard
CTZ1509	16.0	CTX1979	20.0
CTZ1519	16.0	CTX2578	25.4
CTB1549	16.0-DN15	CTX3119	32.0
CTX1579	16.0	CTX3179	32.0



- ① 高档饮用水管道系统连接  
High-end drinking water pipeline system connection
- ② 闭式太阳能系统管道连接  
Closed solar system pipe connection

## 分歧管 Copper Branches

序号	类型	字母代码	数字代码	A 端规格	分歧器规格 :A * B * C
NO.	TYPE	LETTER CODE	DIGITAL CODE	A-end specifications	Branch pipe Specifications: A × B × C
1	汽管 & 液管 Gas Line & Liquid Line	CKY CKU CKT	091	3/8" & 1/4"	9.52*6.35*6.35
2			099	3/8";9.525	9.52*9.52*9.52
3			129	1/2";12.7	12.7*12.7*12.7
4			159	5/8";15.875	15.88*15.88*15.88
5			199	3/4";19.05	19.05*15.88*15.88
6			229	7/8";22.225	22.22*19.05*19.05
7	汽管 Gas Line	CKY CKU CKT	289	1- 1/8";28.575	28.6*22.22*22.22
8			349	1 3/8";34.925	34.9*28.6*28.6
9			419	1 5/8";41.275	41.3*34.93*34.93



注：未注规格请联系速合 SUHRING。  
Note: If you can not find the sizes in the sheet, please contact us to get more technical data.

## H 系列分歧管 H type Copper Branches

字母代码	型号	英制规格	公制规格 (mm)
Code	Part Number	British Standard	Metric Standard
HKY	097	3/8"*1/4"*1/4"	9.525*6.35*6.35
	098	3/8"*3/8"*1/4"	9.525*9.525*6.35
	099	3/8"*3/8"*3/8"	9.525*9.525*9.525
	157	5/8"*1/2"*1/2"	15.875*12.7*12.7
	158	5/8"*5/8"*1/2"	15.875*15.875*12.7
	159	5/8"*5/8"*5/8"	15.875*15.875*15.875



注：未注规格请联系速合 SUHRING。  
Note: If you can not find the sizes in the sheet, please contact us to get more technical data.

# Matching Tools

## 专用配套工具

### 复合环专用配套工具 Matching Tools for Suhring Fittings 空调安装工具 Tools--For Air conditioner installation

#### SDY-25B (SDY-25BW)

应用范围: Application:

铜管、铝管、不锈钢管、钛管、铁管

Copper tube, aluminum tube, stainless steel tube, titanium tube, iron tube

管子直径 ≤  $\Phi 19.05\text{mm}$  or 3/4"

Application: Tube dia. ≤  $\Phi 19.05\text{mm}$  or 3/4"

壁厚 ≤ 1.5mm

Wall Thickness ≤ 1.5mm

可搭配 8 对钳头: SHQ208\209\212; SHQ3(5/16"、3/8"、1/2"、5/8"、3/4")

Can be used with 8 pairs of pliers: SHQ208\209\212; SHQ3(5/16"、3/8"、1/2"、5/8"、3/4")



#### SDY-30 (SDY-30W)

应用范围: Application:

铜管、铝管、不锈钢管、钛管、铁管

Copper tube, aluminum tube, stainless steel tube, titanium tube, iron tube

管子直径 ≤  $\Phi 41.275\text{mm}$  or 1 5/8"

Tube dia. ≤  $\Phi 41.275\text{mm}$  or 1 5/8"

壁厚 ≤ 2.5mm

Wall Thickness ≤ 2.5mm

可搭配 12 对钳头: SHQ3(5/16"、3/8"、1/2"、5/8"、3/4"、7/8"、1"、1 1/8"、1 1/4"、1 3/8"、1 1/2"、1 5/8")

Can be used with 12 pairs of pliers: SHQ3(5/16"、3/8"、1/2"、5/8"、3/4"、7/8"、1"、1 1/8"、1 1/4"、1 3/8"、1 1/2"、1 5/8")



#### FRK 是速合专为冰箱、冷柜维修而设计的专用工具

FRK is especially designed for maintenance of refrigerators and freezers

应用范围: Application:

管子直径 ≤  $\Phi 8\text{mm}$  or 5/16"

tube Dia ≤  $\Phi 8\text{mm}$  or 5/16"

管子壁厚 ≤ 1mm

Wall Thickness ≤ 1mm

工具优点:

Advantage of Tools:

在冰箱、冷柜维修中, 几乎没有不可操作的空间问题;

Light and small, easy to carry and can work flexible in narrow space.

维修 R600a 系统时, 避免因明火维修造成的燃烧爆炸危险隐患;

When repairing the R600a system, avoid the risk of combustion and explosion caused by open flame repairs.



### SDY-41 便携式充电工具

SDY-41 portable electric charging tool

动力：电动液压输出 1.2t

Power: electro-hydraulic output 1.2t

电池：DC18V\2.5AH ( 标配两块 )

Battery: DC18V\2.5AH (two pieces are standard)

充电时间：2h

Charging time: 2h

重量：2.3kg (约 2.9kg 含钳头)

Weight: 2.3kg (about 2.9kg including pliers)

外形尺寸：195\*70\*362mm

Overall dimensions: 195\*70\*362mm

最大压接尺寸：≤ 22.225mm 或者 7/8"

Maximum crimping size: ≤ 22.225mm or 7/8"

标配 2 对夹头

The tool is with 2 pairs of clamp heads in standard



### SDY-42 便携式充电工具

SDY-42 portable electric charging tool

动力：电动液压输出 1.5t

Power: electro-hydraulic output 1.5t

电池：DC18V\2.5AH ( 标配两块 )

Battery: DC18V\1.5AH (two pieces are standard)

充电时间：2h

Charging time: 2h

重量：2.36kg (约 3.0kg 含钳头)

Weight: 2.36kg (about 3.0kg including pliers)

外形尺寸：212\*77\*362mm

Overall dimensions: 212\*77\*362mm

最大压接尺寸：≤ 28.575mm 或者 1 1/8"

Maximum crimp size: ≤ 28.575mm or 1 1/8"

标配 4 对夹头

The tool is with 4 pairs of clamp heads in standard



### SDY-43 便携式充电工具

SDY-43 portable electric charging tool

动力：电动液压输出 2.3t

Power: electro-hydraulic output 2.3t

电池：DC18V\2.5AH ( 标配两块 )

Battery: DC18V\1.5AH (two pieces are standard)

充电时间：2h

Charging time: 2h

重量：2.75kg (约 3.45kg 含钳头)

Weight: 2.75kg (about 3.45kg including pliers)

外形尺寸：150\*80\*405mm

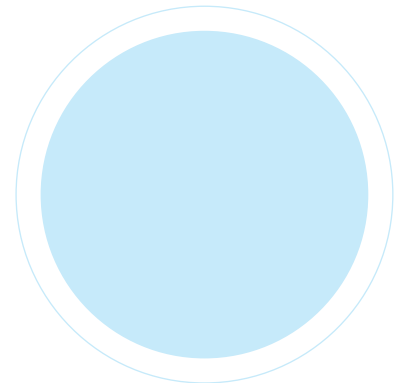
Overall dimensions: 150\*80\*405mm

最大压接尺寸：≤ 41.275mm 或者 1 5/8"

Maximum crimp size: ≤ 41.275mm or 1 5/8"

搭配钳头 12 对

Optional clamp head, 12 sets in total



### SDY-32 双缸压接钳

SDY-32 Double-cylinder crimping tool

结构：与液动力分体式  
Structure: Hydraulic split type

输出压力比：≥ 6.5 倍  
Output pressure ratio: ≥ 6.5 times

液压输出：≤ 2.0t (可扩展至 4.5t)  
Hydraulic output: ≤ 2.0t (can be expanded to 4.5t)

重量：  
weight:

外形尺寸：  
Dimensions:

应用范围：管子直径 ≤ Φ45mm (或 1 3/4")  
Application: Tube Dia ≤ Φ45mm (or 1 3/4")

选用钳头 1 1/4"、1 3/8"、1 1/2"、1 5/8"、1 3/4"  
Optional Clamp heads: 1 1/4"、1 3/8"、1 1/2"、1 5/8"、1 3/4"

优点：压接稳定，长寿命，质量可靠。  
Advantages: stable crimping, long life, reliable quality.



### 充电式泵浦 PHP3

Rechargeable pump

充电电池：DC18V\2.5AH (两块)  
Rechargeable Battery: DC18V\1.5AH (2pcs)

充电时间：2 小时  
Charging time: 2 hours

输出压力：700bar  
Output pressure: 700bar

输出油管：1.5m  
Output oil pipe: 1.5m

重量：4.7kg  
Weight: 4.7kg

体积：360\*110\*255mm  
Dimensions:: 360\*110\*255mm

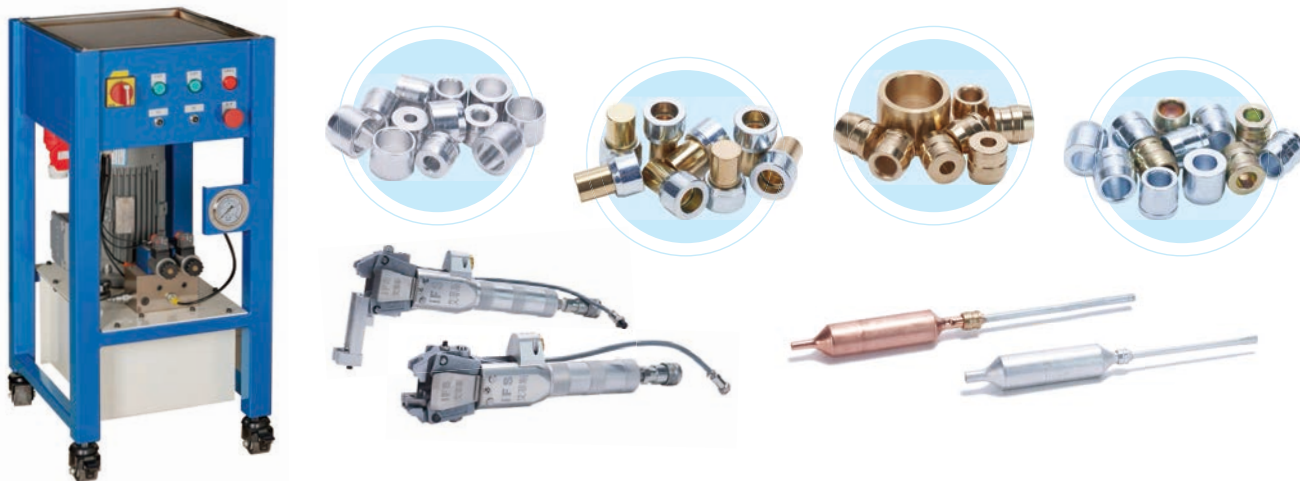


## 单环

### Single Rings

单环：应用于冰箱、冷柜、饮水机、空调等批量生产线中，连接各种金属类冷媒管道。

Single ring: used in mass-production line, such as refrigerators, freezers, water dispensers, and air conditioners, to connect various metal refrigerant pipes.



#### 单环的应用场景：

##### Applications of Single Rings:

冰箱、冷柜、饮水机、制冰机、咖啡机、海鲜机、泳池机、冷水机、精密空调、热泵热水器、家用空调等产品的生产线；

Single ring is mainly used on the production lines for refrigerators, freezers, water dispensers, ice machines, coffee machines, seafood machines, swimming pool machines, water chillers, precision air conditioners, heat pump water heaters, household air conditioners and other applications;

#### 使用条件：

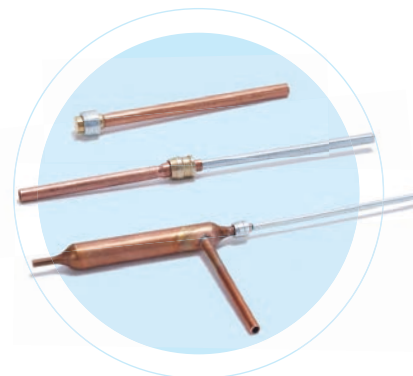
##### Using Conditions of Single Ring:

1. 在同一条批量产品生产线中，所连接的管路规格相对固定；  
The specifications of the connected pipes are relatively fixed in the same batch product line;
2. 被连接的两根管子对接部分已经做了预处理，对接部分的尺寸符合设计要求；  
The butt joints of the two pipes being connected have been pre-treated and the dimensions of the butt joints are in accordance with the design requirements;
3. 被连接的管子的壁厚 $\leq 2\text{mm}$ ；  
The wall thickness of the connected pipe is  $\leq 2\text{mm}$ ;
4. 工作压力 $\leq 5\text{MPa}$ ；  
Working pressure  $\leq 5\text{MPa}$ ;
5. 使用温度范围  $-50^{\circ}\text{C} \sim 150^{\circ}\text{C}$ ；  
Operating temperature range  $-50^{\circ}\text{C} \sim 150^{\circ}\text{C}$ ;

#### 使用单环的优点：

##### Advantage of Single Ring:

1. 低成本、简单、高效；  
Low cost, easy operating and high efficient;
2. 减少过渡焊接点，降低漏率；  
Reduce welding points and reduce leakage rate;
3. 不需要专业焊工即可操作，快速培训新技工，间接降低资源成本；  
It can be operated without the professional welders, quickly train new technicians, and indirectly reduce resource costs;
4. 减少了电化学腐蚀，保证了连接点的运行可靠性，而且漏率比火焰焊接更低，可以做到 19ppm；  
Reduces electrochemical corrosion, ensuring the operational reliability of connection points, and the leakage rate is lower than flame welding, which can reach 19ppm;
5. 安全、环保。  
Safety and environmental protection.



## 密封液

### Sealant

密封液 SUP: 将金属管子表面细小的划痕填充密闭, 获得完全的密封可靠性。

Sealant SUP: filled tiny scratch on the surface of metal tubes to ensure complete and reliable seal.

在金属管道表面不可避免的存在轴向的划痕, 比如铜管、铝管的轴向挤出痕或拉拔痕; 铁管、钛合金管、不锈钢管内壁的焊缝, 这些痕迹通过金属本身的变形挤压难以完全密封。这时就需要 SUP 密封液来填充这些细小的没有完全密封所隐含的泄漏通道, 从而获得可靠的密闭性连接。

There are inevitably axial scratches on the surface of metal pipes, such as axial extrusion marks or drawing marks on copper pipes and aluminum pipes; welds on the inner walls of iron pipes, titanium alloy pipes, and stainless steel pipes. These marks are difficult to completely seal due to the deformation and extrusion of the metal itself.

At this time, SUP sealant is needed to fill these minute leakage channels that are not completely sealed, so as to obtain a reliable airtight connection.



SUP 主要是配合速合 SUHRING 复合环和单环使用。SUP 密封液在安装速合环接头时使用, 它会渗透进缝隙中并固化, 使金属表面达到完全的密封效果。在凝固后 SUP 具有更好的弹性、韧性, 在标示的使用温度范围内, 能更好的形成长久可靠的、柔软具有弹性的密封膜状, 因此获得持久稳定的密闭效果。

SUP is mainly used with SUHRING composite rings and single rings. SUP sealing fluid is used when installing Suhring fittings. It will penetrate into the gaps and solidify to achieve a complete sealing effect on the metal surface. After solidification, SUP has better elasticity and toughness. Within the marked use temperature range, it can better form a long-lasting, reliable, soft and elastic sealing film, thus achieving a long-lasting and stable sealing effect.

SUP 密封液是一种厌氧液体, 含有甲基丙烯酸酯, 与环氧化物无需溶剂挥发就能强化。

SUP sealant is an anaerobic liquid containing methacrylate and epoxy that can be strengthened without solvent evaporation.

SUP 密封液对于不同的金属在凝固时间方面会有差别:

Solidification time of SUP is different with different metal pipes.

SUP 密封液与其他类似密封介质的作用, 已在几乎所有的工业领域中得到认可。它可以适用于冷媒介质管道、气体管道、饮用自来水管道路等。The role of SUP sealing fluid and other similar sealing media has been recognized in almost all industrial fields. It can be applied to refrigerant pipelines, gas pipelines, drinking water pipelines, etc.

SUP 密封液能够绝缘异种金属间的电化学腐蚀, 比如铜铝管连接、铜钛管连接、铜铁管连接等。SUP 密封液可以形成保护膜, 隔离两种不同材质的金属, 减小他们之间的接触面积, 使它们之间的电化学腐蚀速度降低, 确保管道系统在设计的寿命期内安全运行。

SUP sealant can reduce electrochemical corrosion, such as copper & aluminum, copper & Ti, copper & iron, etc.

SUP sealant will form a protection membrane between two different metals to minimize the contact surface which will slow down the electrochemical corrosion process and ensure safe operation of pipes during their designed working life.

密封液的使用量:

Usage amount of SUP

根据管子被连接的端部表面积的大小, 能够均匀的布满表面即可, 具体用量还要根据实际连接的管子情况确定。

Apply an Even coating on the surface of the end of the pipe to be connected. The specific usage amount will also be determined based on the actual connected pipes.

密封液的选用:

SUP-1: 使用温度 -50°C~ 150°C, 应用于一般制冷系统, 15ml 或者 50ml 两种包装;

SUP-2: 使用温度 -50°C~ 150°C, 应用于一般制冷系统, 更适合一般使用量的生产线中;

SUP-3: 使用温度 -50°C~ 220°C, 用于太阳能管道等;

SUP-4: 使用温度 -50°C~ 150°C, 应用于一般制冷系统, 应用于大批量生产线中

SUP-5: 使用温度 -50°C~ 150°C, 应用于一般制冷系统, 更适合  $\geq 22.225\text{mm}$  (或者 7/8") 的产品使用。

Selection of sealant:

SUP-1: Temp -50°C~ 150°C, Applied to common refrigeration system, available in 15ml or 50ml packages.

SUP-2: Temp -50°C~ 150°C, Applied to common refrigeration system, more suitable for production lines with general usage amount

SUP-3: Temp -50°C~ 220°C, Applied to solar energy tubes.

SUP-4: Temp -50°C~ 150°C, Applied to common refrigeration system, used in high volume production line.

SUP-5: Temp -50°C~ 150°C, Applied to common refrigeration system, more suitable for  $\geq 22.225\text{mm}$  (or 7/8") products.

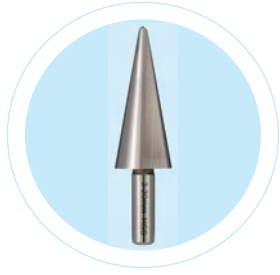


### 电动修口器 MM2

Electric Reamer

规格: 6.0~19.0mm  
Specifications: 1/4"~3/4"

优点: 快速、高效  
Advantages: High efficient, better function



### 手动修口器 MM1

Hand Reamer

规格: 4.0~44.45mm  
Specifications: 3/16"~1 3/4"

优点: 适用性广泛、耐用  
Advantages: wide applicability, durability



### 管端整形器

TES1 Tube Shaper

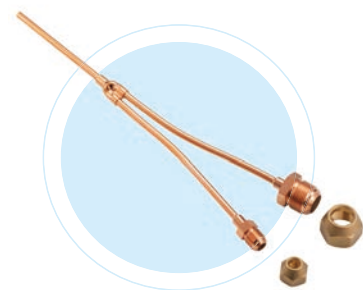
规格: 6.35、9.525、12.7、15.875、19.05mm  
Specifications: 1/4"、3/8"、1/2"、5/8"、3/4"

优点: 对管子内径和内翻边毛刺一次性整形, 简单、高效、轻便

Advantages: One-time shaping of tube ID and inner flange burrs, simple, efficient and lightweight.

适用速合环 CCZ 系列和 H 系列产品

Suitable for CCZ series and H series products.



### 免焊保压组件 SPH(1/2/3)

Solderless Pressure Retaining Assembly SPH(1/2/3)

规格: 15.875\9.525mm、19.05\9.525mm、19.05\12.7mm  
Specification: 5/8"&3/8"、3/4"&3/8"、3/4"&1/2"

优点: 配合免焊连接实现全程无火焰完成多联机空调安装; 安全、环保、质优、便捷

Advantages: With non-welding connection products to realize the whole process of multi-unit air-conditioning installation without flame; safe, environmentally friendly, high quality and convenient.

### 小型电动无屑下料机 SCM1 (铜、铝盘管或直管下料)

Small electric chipless discharging machine SCM1 (copper, aluminum coil or straight pipe discharging)

电源: AC220V\60Hz, 功率 0.9kw

Power supply: AC220V\60Hz, power 0.9kw

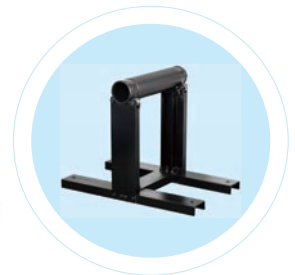
规格: 6.35、9.525、12.7、15.875、19.05mm  
Specification: 1/4"、3/8"、1/2"、5/8"、3/4"

整机重量: 80kg

Weight of the whole machine: 80kg

优点: 无需更换模具, 自由切换下料规格; 长度数控定尺, 电动切断; 可移动、高效、质优

Advantages: no need to change the mold, free to switch the specification of the material; the length of the CNC sizing, electric cut-off; movable, efficient, high quality





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Professional manufacturer of solder-free connection solutions

## 联系我们:

Get in Touch:

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