

Customized Solder Sleeve Wire Splices 定制焊锡接线端子

快速 · 可靠 · 密封: 三合一导线对接方案
Fast · Reliable · Sealed 3-in-1 Wire Splicing

该系列焊锡接线端子采用“三合一”一体化设计, 将预涂助焊剂的锡环、热缩绝缘管及防水密封胶圈完美融合。施工时无需烙铁, 仅需热风枪加热, 即可同步完成锡焊连接、绝缘防护与防水密封。其高透明度套管让焊接效果一目了然, 便于质检。这种标准化的施工方式不仅大幅缩短了工时, 更消除了人工焊接的质量差异, 确保在汽车制造、轨道交通及高端精密工业线束应用中, 每一次连接都稳定可靠。

Our Solder Sleeve Wire Splices feature an all-in-one design that integrates a pre-fluxed solder preform, heat-shrink insulation, and environmental sealing rings into a single, easy-to-install unit. This design eliminates the need for soldering irons, allowing for simultaneous soldering, insulating, and sealing with just a heat gun. The transparent sleeve permits immediate visual verification of the solder joint quality. By streamlining the workflow, this solution significantly reduces installation time and guarantees process consistency across automotive, rail transit, and high-precision industrial wiring harnesses.

系列概览

- **SW125B系列:** 聚烯烃外层套管, 耐温125°C(257°F), 锡环符合环保要求, 采用细环设计; 随着尺寸增大, 大规格型号配置双锡环或三锡环。锡环熔点 138°C。
- **SW125C系列:** 聚烯烃外层套管, 耐温125°C(257°F)。锡环熔点 138°C。
- **SW150F系列:** PVDF外层套管, 耐温150°C(302°F), 耐浸没级密封。锡环熔点 183°C, 带热致变色示温器。
- **SW150AP系列:** PVDF外层套管, 耐温150°C(302°F), 不带热熔胶环。锡环熔点 183°C。

Series Overview

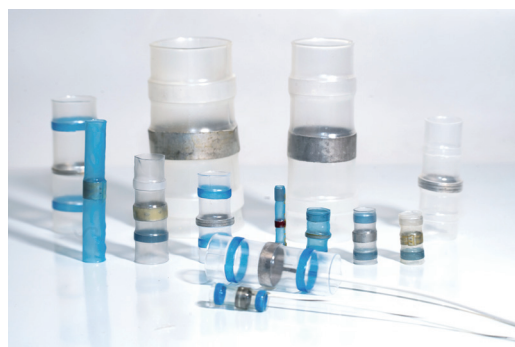
- SW125B Series: Polyolefin outer sleeve, 125°C (257°F), environmental solder ring features a slim profile; larger sizes are equipped with dual or triple solder rings. Solder ring melts at 138°C
- SW125C Series: Polyolefin outer sleeve, 125°C (257°F), 138°C solder melt
- SW150F Series: PVDF outer sleeve, 150°C (302°F), immersion sealing, 183°C solder melt, featuring a Thermochromic Temperature Indicator.
- SW150AP Series: PVDF outer sleeve, 150°C (302°F) without adhesive lining. Solder ring melts at 183°C.

备注:

- 可按需提供定制尺寸和颜色。技术规格如有变更, 恕不另行通知。最小起订量 (MOQ) 可能与标准包装数量不同。
- 如果您需要带有集成屏蔽线的焊锡套管, 请选择我们的“SS”系列。
- 如需完整的材料规格书, 请联系我们索取 Datasheet。
- 当接头两端需要连接不同线径的导线 (异径对接) 时, 请选择“CA”系列。

Notes:

- Custom sizes and colors are available upon request. Technical specifications are subject to change without prior notice. Minimum order quantities (MOQ) may differ from standard packaging quantities.
- If you need a solder-sleeve splice that comes with an integrated shield (drain) wire, choose our “SS” Series.
- For complete material specifications, please contact us to request the data sheet.
- When different wire gauges are required on the two ends of the splice, opt for the “CA” Series.



特性与优势 Features and benefits

- **三大系列:** 量身定制, 满足不同的耐温等级与密封要求。
- **透明套管:** 定位无忧, 便于进行目视质量管控。
- **热缩封装:** 加热后同步完成绝缘包裹与机械抗拉加固, 并有效阻隔腐蚀性介质侵入。
- **行业权威验证:** 历经汽车制造、轨道交通及高端重工设备的长期实战检验, 性能稳定可靠。
- Three series tailored to distinct temperature and sealing demands
- Clear sleeve for hassle-free placement and visual quality control
- Encapsulated Protection: Heat-shrink sealing provides robust insulation, mechanical reinforcement, and superior corrosion resistance in one step.
- Field-Proven Reliability: Trusted performance across automotive, rail transit, and high-precision industrial equipment worldwide.

颜色 COLOR

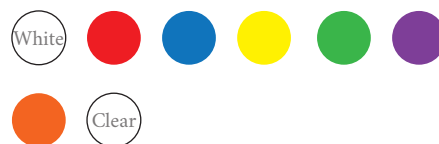


表 A. 产品选项
Table A. Product Options

产品系列 Product Series	导线最低耐温等级 Minimum Wire Temperature Rating	最高工作温度 Maximum Operating Temperature	预期应用环境 Intend Application Environment
SW125B	85°C [185°F]	125°C [257°F]	防溅 Splashproof
SW125C	85°C [185°F]	125°C [257°F]	防溅 Splashproof
SW150AP	125°C [257°F]	150°C [302°F]	防溅 Splashproof
SW150F	125°C [257°F]	150°C [302°F]	耐浸没 Immersion sealed

注: 针对 125°C [257°F] 的工作温度, 可提供无镉选项。本系列可提供 150°C 耐高温版本。根据环保需求, 可选 SW150B (无铅) 或 SW150C (含铅) 系列。如需详细规格或选型支持, 请咨询鼎元。

Note: Cadmium-free option is available for operating temperature of 125°C [257°F]. Available in 150°C high-temperature versions. Choose between SW150B (Lead-free) or SW150C (Leaded) series based on your environmental requirements. Please contact the DINGYUAN for details.

表 B. 微细导线对接头
Table B. Fine Wire Splices

产品编号 Part No.	内径 Inside Diameter		
	供货状态* As Supplied*	完全收缩后** Fully Recovered**	长度*** Length***
SW150AP-71	0.9[0.035]	0.6[0.025]	4.7[0.185]
SW150AP-213	0.9[0.035]	0.6[0.025]	4.2[0.165]
SW150AP-214	0.6[0.035]	0.3[0.013]	6.3[0.250]
SW150AP-217	1.0[0.040]	0.6[0.025]	9.1[0.360]
SW150AP-40	0.6[0.025]	0.5[0.021]	5.1[0.200]

注: 微细焊锡接线端子专门用于连接 26 AWG [0.15 mm²] 以下的细导线。

* 最小值。导线的绝缘层外径必须小于此数值 (以便顺利穿入)。

** 最大值。导线绝缘层与导体组合后的总直径必须大于此数值 (以确保回缩后能紧密包裹)。

*** 标称值。导线的剥皮长度应约为该长度的二分之一。

Note: Micro Solder Sleeve terminations are used for splicing wires smaller than 26 awg [0.15 mm²].

*Minimum. Wire insulation must be smaller than this

**Maximum. Wire insulation and combined conductor diameters must be greater than this

***Nominal Wire strip length must be approximately one-half of this

表 C. 典型 AWG 导体的 CMA 对照表
Table C. CMA of Typical AWG Conductors

AWG	28	26	24	22	20	18	16	14	12
CMA	177	304	475	754	1216	1900	2426	3831	5874
mm ²	0.09	0.15	0.23	0.38	0.62	0.96	1.23	1.44	2.97

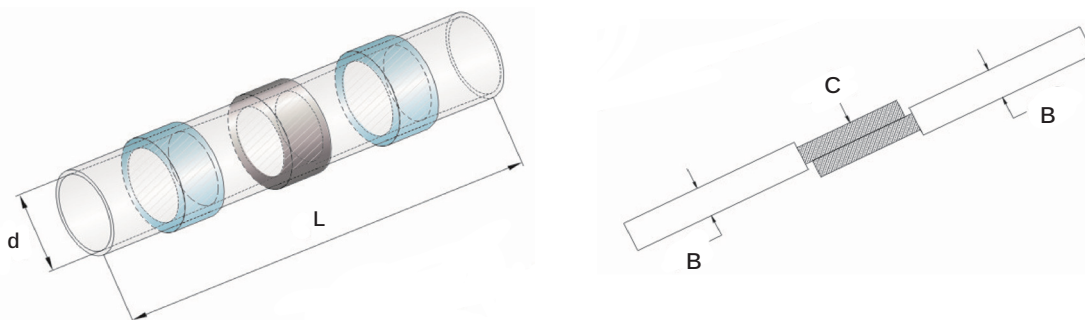


表 D. 产品特性
Table E. Product Characteristics

材料规格 Material	
绝缘层 (SW150F, SW150AP) Insulation (SW150F, SW150AP)	辐照交联热缩型聚偏二氟乙烯 Radiation-crosslinked, heat-shrinkable polyvinylidene fluoride
绝缘层 (SW125B) Insulation (SW125B)	辐照交联热缩型聚烯烃 Radiation-crosslinked, heat-shrinkable polyolefin
焊料 (SW150F, SW150AP) Solder (SW150F, SW150AP)	焊料: Sn63 Pb37 Solder: Sn63 Pb37
焊料 (SW125B) Solder (SW125B)	焊料: Sn42Bi58 Solder: Sn42Bi58
焊料 (SW125C) Solder (SW125C)	焊料: Sn50 Pb32 Cd18 Solder: Sn50 Pb32 Cd18
热熔密封环 (SW125B, SW150F) Melttable inserts (SW125B, SW150F)	可溶性热塑材料 Melttable thermoplastic
典型性能 Typical Performance	
电压降 Voltage drop	2.0mv
抗张强度 Tensile strength	超过导线本体强度 Exceeds strength of conductor
介电强度 Dielectric strength	2.0kv
额定温度 Temperature rating (SW125B)	-55°C to +125°C [-67°F to 257°F]
额定温度 Temperature rating (SW150F, SW150AP)	-55°C to +150°C [-67°F to 302°F]
绝缘电阻 Insulation resistance	1000 MΩ

表 E. SW125B 系列
Table E. SW125B Series

产品编号 Part No.	颜色 Color Code	产品尺寸 Product Dimensions		电线尺寸 Wire Dimensions		选择指南 Selection Guide				锡环数量 Solder Ring Qty
		L Max.	d Min.	B Min.	B Max.	Total mm ²		Total CMA		
						Min	Max	Min	Max	
SW125B-G1	透明 Clear	26.0 [1.025]	1.7 [0.065]	0.4 [0.015]	1.7 [0.065]	0.3	0.8	450	1500	1
SW125B-G2	红色 Red		2.7 [0.105]	1.3 [0.050]	2.7 [0.105]	0.8	2.0	1250	3500	2
SW125B-G3	蓝色 Blue	42.0 [1.655]	4.5 [0.180]	1.8 [0.070]	4.5 [0.180]	2.0	4.0	2500	7200	2
SW125B-G4	黄色 Yellow		6.0 [0.235]	2.8 [0.110]	6.0 [0.235]	4.0	6.0	6100	19000	2
SW125B-G5	灰色 Grey		7.0 [0.275]	3.2 [0.125]	7.0 [0.275]	6.0	10.0	12000	25000	2

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表 F. SW125C 系列
Table F. SW125C Series

产品编号 Part No.	颜色 Color Code	产品尺寸 Product Dimensions		电线尺寸 Wire Dimensions		选择指南 Selection Guide			
		L Max.	d Min.	B Min.	B Max.	Total mm ²		Total CMA	
						Min	Max	Min	Max
SW125C-G1	透明 Clear	26.0 [1.025]	1.7 [0.065]	0.4 [0.015]	1.7 [0.065]	0.3	0.8	450	1500
SW125C-G2	红色 Red	42.0 [1.655]	2.7 [0.105]	1.3 [0.050]	2.7 [0.105]	0.8	2.0	1250	3500
SW125C-G3	蓝色 Blue		4.5 [0.180]	1.8 [0.070]	4.5 [0.180]	2.0	4.0	2500	7200
SW125C-G4	黄色 Yellow		6.0 [0.235]	2.8 [0.110]	6.0 [0.235]	4.0	6.0	6100	19000
SW125C-G5	灰色 Grey		7.0 [0.275]	3.2 [0.125]	7.0 [0.275]	6.0	10.0	12000	25000

表 G. SW150AP 系列
Table G. SW150AP Series

产品编号 Part No.	颜色 Color Code	套管尺寸 Sleeve Dimensions		锡环尺寸 Solder Ring Dimensions	
		L	d Min.	最小内径 I.D. Min.	
SW150AP-28	蓝色 Blue	18.54±1.27 [0.73±0.05]	1.52 [0.060]	1.27 [0.050]	
SW150AP-35	蓝色 Blue	26.67±2.54 [1.05±0.10]	1.91 [0.075]	1.78 [0.070]	
SW150AP-40	蓝色 Blue	5.08±0.51 [0.20±0.02]	0.63 [0.025]	0.53 [0.021]	
SW150AP-41	蓝色 Blue	Max: 27.6 [1.090]	3.2 [0.125]	2.7 [0.105]	
SW150AP-71	蓝色 Blue	4.57±0.51 [0.18±0.02]	0.89 [0.035]	0.84 [0.033]	
SW150AP-83	蓝色 Blue	54.10±2.54 [2.13±0.10]	8.76 [0.345]	/	
SW150AP-101	蓝色 Blue	36.80±2.54 [1.45±0.10]	4.32 [0.17]	/	
SW150AP-181	蓝色 Blue	38.10±1.30 [1.50±0.05]	4.45 [0.175]	/	
SW150AP-213	蓝色 Blue	4.20±0.50 [0.165±0.02]	0.9 [0.035]	/	
SW150AP-214	透明 Clear	6.40±0.80 [0.25±0.03]	0.53 [0.021]	0.66 [0.026]	

表 H. SW150F 系列
Table H. SW150F Series

产品编号 Part No.	CMA 范围 CMA Range	套管尺寸 Sleeve Dimensions		锡环尺寸 Solder Ring Dimensions	电线尺寸 Wire Dimensions	
		L Max.	d Min.	最小内径 I.D. Min.	B Max.	B Min.
SW150F-01	350 - 2000	29.70 [1.170]	1.90 [0.075]	2.40 [0.095]	1.90 [0.075]	0.50 [0.020]
SW150F-02	2000 - 4000	30.15 [1.187]	2.80 [0.110]	3.15 [0.125]	2.80 [0.110]	0.80 [0.030]
SW150F-03	4000 - 10000	29.60 [1.165]	4.60 [0.180]	5.10 [0.200]	4.57 [0.180]	1.30 [0.050]
SW150F-04	10000 - 13000	30.00 [1.180]	7.11 [0.280]	7.62 [0.300]	7.11 [0.280]	2.00 [0.080]