

## C-11(S) 自密封型热缩套管 Self-Sealing Heat Shrinkable Tubing



### 产品特性:

- 管壁厚，绝缘强度高
- 径向收缩比：3:1，纵向收缩率≤10%
- 收缩温度：开始收缩温度90℃，完全收缩温度121℃
- 工作温度：-55℃~110℃
- 阻燃
- 耐冲击，耐磨损；
- 耐化学试剂，耐腐蚀及耐候；
- 可选择套管内壁是否涂胶，以增强其防水、防潮、防流体等密封性能；

### Features:

- Heavy wall tubing, high insulating strength
- Shrink ratio (Radial change): 3:1, shrink ratio in longitudinal≤10%
- Min. shrink temperature: 90℃; Full recovery temperature: 121℃
- Continuous Operating Temperature: -55℃~110℃
- Flame-retardant
- Mechanically tough, High impact and abrasion resistance
- Excellent chemical and solvent resistance properties
- Optional Thermoplastic Adhesive Liner for complete environmental protection and insulation

### 用途:

套管管壁厚，可为电线电缆的中间连接、终端提供非常可靠的绝缘保护，适用于各种恶劣环境中；带有热熔胶的套管，不仅能提供密封保护，还能达到机械应力消除的效果。

### Applications:

Provides a simple, positive splice-sealing method that offers protection under adverse environmental conditions. Tubing supplied with standard sealant provides water sealing and environmental protection. The thermoplastic adhesive not only seals, but also provides mechanical strain relief. The polymer tubing has excellent insulating, abrasion-resistance, and strain-relief properties.



FLAME  
RETARDANT  
阻燃



SHRINK  
RATIO 3:1  
收缩比 3:1



ABRASION  
RESISTANCE  
抗磨损



MOISTURE  
BLOCKING  
防潮

### 技术指标 Performance

| 项目<br>Items        | 性能                        | Property  | 指标<br>Requirements      | 典型值<br>Typical Performance | 测试标准<br>Test Method |
|--------------------|---------------------------|---|-------------------------|----------------------------|---------------------|
| 机械性能<br>Mechanical | 拉伸强度                      | Tensile Strength                                      | ≥ 10.4MPa               | 14MPa                      | UL 224              |
|                    | 断裂伸长率                     | Ultimate elongation                                   | ≥200%                   | 450%                       | UL 224              |
|                    | 老化后拉伸强度<br>(150℃/168hrs)  | Tensile Strength after Heat Aging<br>(150℃/168hrs)    | ≥9.1MPa                 | 13MPa                      | UL 224              |
|                    | 老化后断裂伸长率<br>(150℃/168hrs) | Ultimate elongation after Heat Aging<br>(150℃/168hrs) | ≥300%                   | 400%                       | UL 224              |
|                    | 硬度 (Shore D)              | Hardness (Shore D)                                    |                         | 55-65                      | ASTM D2240          |
| 电性能<br>Electrical  | 耐压                        | Dielectric withstand voltage                          | AC.2.5KV/60seconds      | Pass                       | UL 224              |
|                    | 介电强度                      | Dielectric breakdown voltage                          | AC.2.5KV/60seconds      | 25kV                       | UL 224              |
|                    | 体积电阻率                     | Volume Resistivity                                    | >10 <sup>14</sup> Ω .cm | >10 <sup>14</sup> Ω .cm    | ASTM D 257          |
| 化学性能<br>Chemical   | 铜腐蚀                       | Copper Corrosion                                      | No Corrosion            | Pass                       | UL 224              |
|                    | 铜稳定                       | Stability   | Elongation>100%         | Pass                       | UL 224              |
|                    | 燃烧性能C-11S(FR)             | Flammability  | Pass                    | Pass                       | UL 224              |

规格尺寸 Dimensions

| 规格<br>ORDER<br>REF.Size |       | 内径<br>Inside Diameter                      |      |   |      | 完全收缩后平均壁厚<br>Recovered Wall Thickness<br>After Heating(NOM) |       | 标准长度<br>Standard Length |       |
|-------------------------|-------|--|------|---|------|---|-------|-------------------------|-------|
|                         |       | 收缩前最小内径<br>Minimum Expanded<br>as Supplied |      | 收缩后最大内径<br>Maximum Recovered<br>After Heating |      |   |       |                         |       |
| mm                      | inch  | mm   | inch | mm  | inch | mm  | inch  | mm                      | inch  |
| 10                      | 13/32 | 10.0                                       | 0.39 | 3.0   | 0.12 | 1.0   | 0.039 | 1220                    | 48.03 |
| 16                      | 21/32 | 16.0                                       | 0.63 | 5.0   | 0.20 | 1.5   | 0.059 | 1220                    | 48.03 |
| 25                      | 1     | 25.0                                       | 0.98 | 8.0   | 0.31 | 2.0   | 0.079 | 1220                    | 48.03 |
| 35                      | 1 3/8 | 35.0                                       | 1.38 | 12.0  | 0.47 | 2.2   | 0.087 | 1220                    | 48.03 |
| 50                      | 2     | 50.0                                       | 1.97 | 16.0  | 0.63 | 2.2   | 0.087 | 1220                    | 48.03 |
| 63                      | 2 1/2 | 63.0                                       | 2.48 | 19.0  | 0.75 | 2.5   | 0.098 | 1220                    | 48.03 |
| 75                      | 3     | 75.0                                       | 2.95 | 22.0  | 0.87 | 2.7   | 0.106 | 1220                    | 48.03 |
| 85                      | 3 3/8 | 85.0                                       | 3.35 | 25.0  | 0.98 | 2.8   | 0.110 | 1220                    | 48.03 |
| 95                      | 3 3/4 | 95.0                                       | 3.74 | 29.0  | 1.14 | 3.1   | 0.122 | 1220                    | 48.03 |
| 115                     | 4 1/2 | 115.0                                      | 4.53 | 34.0  | 1.34 | 3.1   | 0.122 | 1220                    | 48.03 |
| 140                     | 5 1/2 | 140.0                                      | 5.51 | 42.0  | 1.65 | 3.1   | 0.122 | 1220                    | 48.03 |
| 160                     | 6 1/4 | 160.0                                      | 6.30 | 50.0  | 1.97 | 3.2   | 0.126 | 1220                    | 48.03 |
| 180                     | 7     | 180.0                                      | 7.09 | 60.0  | 2.36 | 3.2   | 0.126 | 1220                    | 48.03 |