

# Heat Shrink for Automotive Parts

## S3TA-DWP Flexible Adhesive Lined Polyolefin Heat-shrinkable Tubing

### Introduction

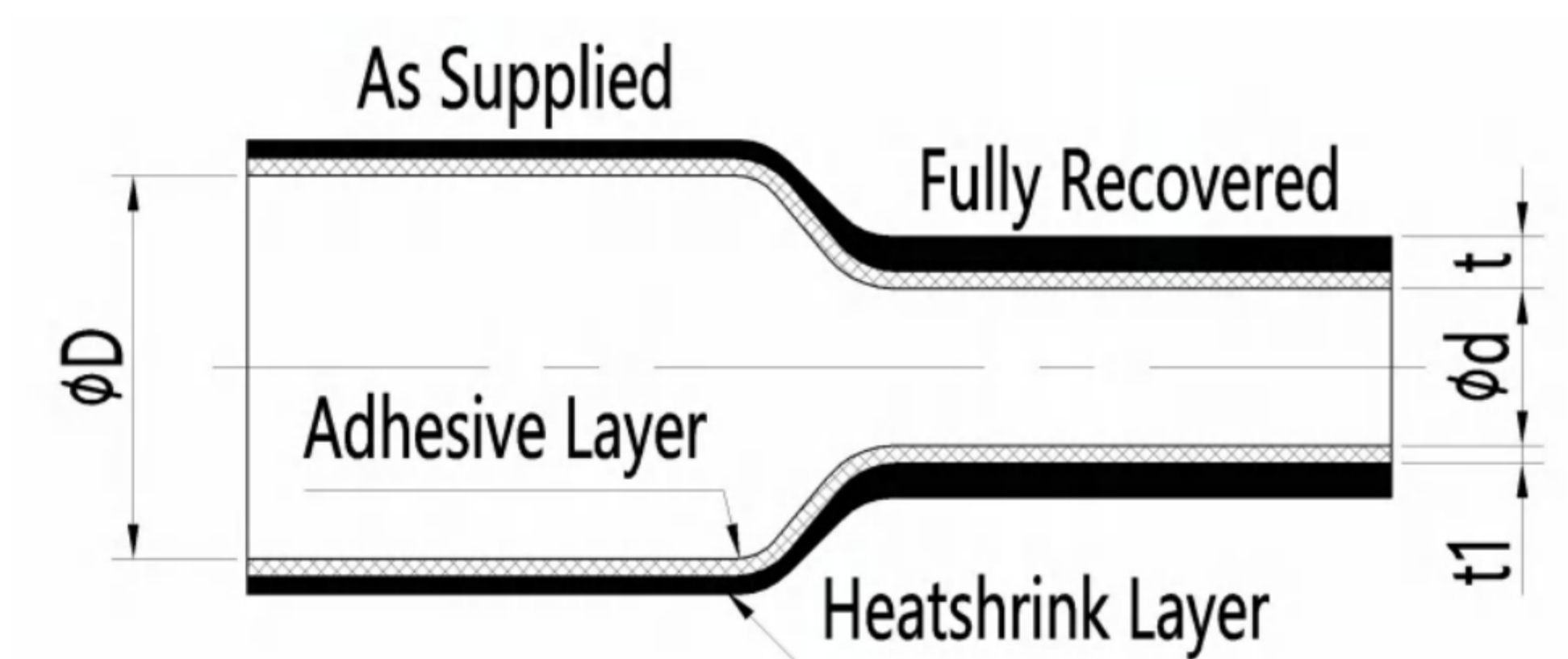
A flame-retardant (except transparent) and adhesive-lined cross-linked polyolefin heat-shrinkable tube, which is very suitable for applications that require insulation, corrosion resistance and mechanical stress relief, including connectors, wiring harnesses, electronic components, etc.

### Features

- Operating temperature: -40~110°C
- Minimum full recovery temperature: 125 °C
- Environmentally friendly, ELV & RoHS compliant
- Shrink ratio: 3:1
- Standard color: Black
- Unstandard: Clear, White, Red, Yellow, Blue, Green

### Dimensions

Part No. S3TA-DWP	As supplied (mm)		After recovered (mm)		
	Inner diameter D (min.)	Inner diameter d (max.)	Wall thickness t (nom.)	Adhesive Wall thickness t1 (nom.)	
3.2	3.2	1.0	1.03	0.40	
4.8	4.8	1.5	1.40	0.51	
6.4	6.4	2.0	1.45	0.56	
9.5	9.6	3.0	1.65	0.68	
12.7	12.7	4.0	1.78	0.76	
19.1	19.1	6.0	2.03	0.76	
25.4	25.4	8.0	2.50	0.76	
38.1	38.1	13.5	2.50	0.76	
50.8	50.8	20.0	2.50	0.76	



### Technical Data

Property	Test method	Requirement
Longitudinal change	ASTM D2671	≥-10 %
Tensile strength	ASTM D2671	≥10.4 MPa
Ultimate elongation	ASTM D2671	≥200%
Secant modulus 2% (as supplied)	ASTM D2671	≤137 Mpa
Low-temperature flexibility (-30°C/1hr)	ASTM D2671	No cracking
Heat shock (225°C/4hrs)	ASTM D2671	No cracking
Heat aging (158°C/168hrs)	ASTM D2671	
Followed by tests for:		
Tensile strength	ASTM D2671	70% minimum of original
Ultimate elongation	ASTM D2671	≥100%
Flexibility	ASTM D2671	No cracking
Dielectric withstand at 2500 V	ASTM D2671	≥60S
Dielectric breakdown	ASTM D2671	50% minimum of unaged specimens
Dielectric strength	ASTM D2671	≥19.7 kV/mm
Restricted shrinkage	ASTM D2671	Pass
Dielectric strength	ASTM D2671	≥19.7 kV/mm
Dielectric withstand at 2500 V	ASTM D2671	≥60S
Volume resistivity	ASTM D2671	≥1 × 10 <sup>14</sup> Ω · cm
Corrosive effect (158°C/168h)	ASTM D2671 Procedure B	No corrosive
Copper stability (158°C/168h)	ASTM D 2671	No brittleness, glazing, cracking, or severe discoloration of tubing.
Followed by test for:	Procedure B	No pitting or blackening of copper.
Ultimate elongation	ASTM D 2671	≥100%
Flammability (colors only)	UL224, all tubing	Pass