

## FEATURES

- **Very flexible**
- **2:1 shrinkage ratio, shrinks to half its original diameter**
- **Flame retardant**
- **Operating temperature range of -55 to 135°C and up to 200°C for short time durations**
- **Shrink temperature of 90°C minimum**
- **Excellent electrical insulation properties**
- **Resistant to common fluids and solvents**
- **Meets requirements of SAE-AMS-DTL-23053/5 Class 1**

## RS PRO Heat Shrink Tubing, Black 19.1mm Sleeve Dia. x 1.2m Length 2:1 Ratio

RS Stock No.: 398-155



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

## Product Description

Heat shrink tubing is a type of extruded plastic tubing that can be cut to size and fitted over a wire or cable joint to protect and insulate the connection. When heated is applied the tubing shrinks permanently providing a protective seal. The amount it shrinks depends on its shrink ratio. When you buy the tubing it is in its expanded state, this expanded tubing has memory so when it is heated it returns to its original state. Larger shrink ratios are required to cover materials with a greater size variation.

## General Specifications

<b>Sleeve Type</b>	Heat Shrink
<b>Colour</b>	Black
<b>Adhesive Lined</b>	No
<b>Shrink Ratio</b>	2:1
<b>Material</b>	Polyolefin
<b>Flame Retardant</b>	Yes
<b>Halogen Free</b>	No
<b>Application</b>	Electrical insulation and protection of resistors and capacitors, Environmental protection against moisture, dust, and chemicals, Mechanical protection to wires and small parts from abrasion, Mechanical strain relief on cable and connector joints to prevent damage caused by flexing or bending, Bundling and organizing harness wires, cable, and tubing, Colour coded identification of cables, wires, and components

## Electrical Specifications

<b>Dielectric Strength</b>	19.7KV/mm
----------------------------	-----------

### Mechanical Specifications

<b>Sleeve Diameter</b>	19.1mm
<b>Shrunk Diameter</b>	9.5mm
<b>Sleeve Length</b>	1.2m
<b>Wall Thickness</b>	0.76mm
<b>Tensile Strength</b>	10.3MPa (min.)
<b>Elongation</b>	200% (min.)
<b>Low Temperature Flexibility</b>	No cracking, during mandrel bend after 4 hours at -55°C
<b>Flexibility</b>	Highly flexible
<b>Heat Shock</b>	No dripping, flowing or cracking after 4 hours at 250°C
<b>Specific Gravity</b>	1.35 (max.)
<b>Longitudinal Change</b>	0±5%

### Chemical Properties

<b>Fluid Resistance</b>	Resistant to common fluids and solvents
<b>Flammability</b>	Flame Retarded
<b>Tensile Strength</b>	10.3MPa (min.)
<b>Dielectric Strength</b>	19.7KV/mm
<b>Corrosion</b>	Non-corrosive

### Operation Environment Specifications

<b>Operating Temperature</b>	-55°C to 135°C
<b>Shrink Temperature</b>	90°C

### Approvals

<b>Compliance/Certifications</b>	SAE-AMS-DTL-23053/5 class 1; UL224, VW-1; CSA C22.2 No.198.1
<b>Standards Met</b>	BS3G 198 Part 3 11B, CSA C22.2 No. 198.1, IEC 60684-3-212 A&B, MIL SAE-AMS-DTL 23053/5 Class 1, RoHS Compliant, UL 224 VW-1 E48762, VG 95343 Part 5 A&B



Part Number	Color	Dimensions		
		As Supplied (mm)	After Recovery (mm)	Wall Thickness Shrink
		D (I.D.min. )	d (I.D.max.)	w (mm)
700-4453	Clear	3.0	1.0	0.60±0.10
700-4456	Clear	6.0	2.0	0.70±0.10
700-4450	Clear	9.0	3.0	0.80±0.15
700-4469	Clear	12.0	4.0	0.85±0.15
700-4462	Clear	18.0	6.0	1.00±0.15
700-4466	Clear	24.0	8.0	1.20±0.20
700-4475	Yellow	3.0	1.0	0.60±0.10
700-4478	Yellow	6.0	2.0	0.70±0.10
700-4472	Yellow	9.0	3.0	0.80±0.15
700-4481	Yellow	12.0	4.0	0.85±0.15
700-4484	Yellow	18.0	6.0	1.00±0.15
700-4488	Yellow	24.0	8.0	1.20±0.20
700-4497	Blue	3.0	1.0	0.60±0.10
700-4490	Blue	6.0	2.0	0.70±0.10
700-4494	Blue	9.0	3.0	0.80±0.15
700-4504	Blue	12.0	4.0	0.85±0.15
700-4507	Blue	18.0	6.0	1.00±0.15
700-4501	Blue	24.0	8.0	1.20±0.20
700-4510	Red	3.0	1.0	0.60±0.10
700-4513	Red	6.0	2.0	0.70±0.10
700-4517	Red	9.0	3.0	0.80±0.15
700-4526	Red	12.0	4.0	0.85±0.15
700-4529	Red	18.0	6.0	1.00±0.15
700-4523	Red	24.0	8.0	1.20±0.20
700-4532	Black	3.0	1.0	0.60±0.10
700-4535	Black	6.0	2.0	0.70±0.10
700-4539	Black	9.0	3.0	0.80±0.15
700-4548	Black	12.0	4.0	0.85±0.15
700-4541	Black	18.0	6.0	1.00±0.15
700-4545	Black	24.0	8.0	1.20±0.20
700-4554	White	3.0	1.0	0.60±0.10
700-4557	White	6.0	2.0	0.70±0.10
700-4551	White	9.0	3.0	0.80±0.15
700-4560	White	12.0	4.0	0.85±0.15
700-4567	White	18.0	6.0	1.00±0.15
700-4573	White	24.0	8.0	1.20±0.20
700-4582	Green / Yellow	3.0	1.0	0.60±0.10
700-4589	Green / Yellow	6.0	2.0	0.70±0.10
700-4595	Green / Yellow	9.0	3.0	0.80±0.15
700-4608	Green / Yellow	12.0	4.0	0.85±0.15
700-4611	Green / Yellow	18.0	6.0	1.00±0.15
700-4618	Green / Yellow	24.0	8.0	1.20±0.20

**CROSS REFERENCE LIST**

<b>RS Stock No.</b>	<b>Description</b>
700-4453	Heatshrink tube clear 3/1mm
700-4456	Heatshrink tube clear 6/2mm
700-4450	Heatshrink tube clear 9/3mm
700-4469	Heatshrink tube clear 12/4mm
700-4462	Heatshrink tube clear 18/6mm
700-4466	Heatshrink tube clear 24/8mm
700-4475	Heatshrink tube yellow 3/1mm
700-4478	Heatshrink tube yellow 6/2mm
700-4472	Heatshrink tube yellow 9/3mm
700-4481	Heatshrink tube yellow 12/4mm
700-4484	Heatshrink tube yellow 18/6mm
700-4488	Heatshrink tube yellow 24/8mm
700-4497	Heatshrink tube blue 3/1mm
700-4490	Heatshrink tube blue 6/2mm
700-4494	Heatshrink tube blue 9/3mm
700-4504	Heatshrink tube blue 12/4mm
700-4507	Heatshrink tube blue 18/6mm
700-4501	Heatshrink tube blue 24/8mm
700-4510	Heatshrink tube red 3/1mm
700-4513	Heatshrink tube red 6/2mm
700-4517	Heatshrink tube red 9/3mm
700-4526	Heatshrink tube red 12/4mm
700-4529	Heatshrink tube red 18/6mm
700-4523	Heatshrink tube red 24/8mm
700-4532	Heatshrink tube black 3/1mm
700-4535	Heatshrink tube black 6/2mm
700-4539	Heatshrink tube black 9/3mm
700-4548	Heatshrink tube black 12/4mm
700-4541	Heatshrink tube black 18/6mm
700-4545	Heatshrink tube black 24/8mm
700-4554	Heatshrink tube white 3/1mm
700-4557	Heatshrink tube white 6/2mm
700-4551	Heatshrink tube white 9/3mm
700-4560	Heatshrink tube white 12/4mm
700-4567	Heatshrink tube white 18/6mm
700-4573	Heatshrink tube white 24/8mm
700-4582	Heatshrink tube green/yellow 3/1mm
700-4589	Heatshrink tube green/yellow 6/2mm
700-4595	Heatshrink tube green/yellow 9/3mm
700-4608	Heatshrink tube green/yellow 12/4mm
700-4611	Heatshrink tube green/yellow 18/6mm
700-4618	Heatshrink tube green/yellow 24/8mm