

FEATURES

- Very flexible
- 2:1 shrinkage ratio, shrinks to half its original diameter
- Operating temperature range of -55 to 135°C
- Shrink temperature of 110°C minimum
- Excellent electrical insulation properties
- Resistant to common fluids and solvents
- Excellent abrasion resistance
- SAE-AMS-DTL-23053/5 Class 2 approved

RS PRO Halogen Free Heat Shrink Tubing, Clear 2.4mm Sleeve Dia. x 1.2m Length 2:1 Ratio

RS Stock No.: 399-906



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

From RS Pro a range of high quality, easy to use heat shrink tubing made from flexible, transparent polyolefin. This clear heat shrink tubing allows marker tags and identification marks on cables and wires to be viewed through the tubing after it has been applied. The shrink ratio of this clear heat shrink tubing is 2:1 which means it shrinks to half of its original diameter and is SAE-AMS-DTL-23053 approved

General Specifications

| | |
|------------------------|---|
| Sleeve Type | Heat Shrink |
| Colour | Clear |
| Adhesive Lined | No |
| Shrink Ratio | 2:1 |
| Material | Polyolefin |
| Flame Retardant | No |
| Halogen Free | Yes |
| Application | 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

| | |
|----------------------------|-----------|
| Dielectric Strength | 19.7KV/mm |
|----------------------------|-----------|

Mechanical Specifications

| | |
|------------------------------------|---|
| Sleeve Diameter | 2.4mm |
| Shrunk Diameter | 1.2mm |
| Sleeve Length | 1.2m |
| Wall Thickness | 0.51mm |
| Tensile Strength | 10.3MPa (min.) |
| Elongation | 200% (min.) |
| Low Temperature Flexibility | No cracking, during mandrel bend after 4 hours at -55°C |
| Flexibility | Very flexible |
| Heat Shock | No dripping, flowing or cracking after 4 hours at 250°C |
| Specific Gravity | 1.0 (max.) |
| Longitudinal Change | 0±5% |

Chemical Properties

| | |
|----------------------------|---|
| Fluid Resistance | Resistant to common fluids and solvents |
| Flammability | Not Flame Retarded |
| Tensile Strength | 10.3MPa (min.) |
| Dielectric Strength | 19.7KV/mm |
| Corrosion | Non-corrosive |

Operation Environment Specifications

| | |
|------------------------------|----------------|
| Operating Temperature | -55°C to 135°C |
| Shrink Temperature | 110°C |

Approvals

| | |
|----------------------------------|---|
| Compliance/Certifications | SAE-AMS-DTL-23053/5 class2 |
| Standards Met | 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 |



Dimensions

Ordering Information

The largest size which will recover snugly over the component to be covered should be ordered.

The wall thickness of the tubing will be less than specified if recovery is restricted during shrinkage.

As supplied



| Ordering size mm | Inside diameter | | Wall thickness |
|---------------------|---|--|--|
| | D(min) Expanded as supplied mm | d(max) Recovered after heating mm | W(nom) Recovered After heating mm |
| 1.6 | 1.6 | 0.8 | 0.43 |
| 2.4 | 2.4 | 1.2 | 0.51 |
| 3.2 | 3.2 | 1.6 | 0.51 |
| 4.8 | 4.8 | 2.4 | 0.51 |
| 6.4 | 6.4 | 3.2 | 0.64 |
| 9.5 | 9.5 | 4.8 | 0.64 |
| 12.7 | 12.7 | 6.4 | 0.64 |
| 19.0 | 19.0 | 9.5 | 0.76 |
| 25.4 | 25.4 | 12.7 | 0.89 |
| 38.1 | 38.1 | 19.1 | 1.02 |
| 50.8 | 50.8 | 25.4 | 1.14 |

Standard colour Clear only

| Part Number | Color | Dimensions | | |
|-------------|----------------|------------------|---------------------|-----------------------|
| | | As Supplied (mm) | After Recovery (mm) | Wall Thickness Shrunk |
| | | 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

| RS Stock No. | Description |
|---------------------|-------------------------------------|
| 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 |