

## SM3-12

# Flexible Polyolefin

## 2:1 Shrink Ratio

### Applications:

- Wire identification
- Wire protection
- Fluid resistance
- Strain relief
- Abrasion Protection

### Product Features:

- 2:1 shrink ratio
- Operating temperature range -55°C to +135°C and up to 200°C for short durations
- Continuous design for cut-to-length requirements and cost savings
- Colors - white, black, yellow. Others by request



### Specifications:

SAE AS23053/5, Class 1 & 3  
(2" size does not meet Class 3)  
UL 224 125°C, 600v  
UL/CSA VW-1

### Required Printer & Ribbon:

Printer - Sumimark™ IV PLUS  
Marking System  
Ribbon - Sumimark™ SM3

### Print Performance:

Adherence: SAE-AS5942  
MIL-STD-202G, Method 215  
Store in original packaging



### Product Overview

**Quality Counts!** Sumimark™ SM3-12, 2:1 heat shrink tubing is a rounded, continuous, markable product, manufactured to the highest quality controls and industry standards. When used in conjunction with the Sumimark™ IV PLUS Marking System and Sumimark™ ribbon, Sumimark™ SM3-12 tubing provides highly legible, mil-spec mark permanence.

**Lower Cost!** Due to open and continuous design, SM3-12 provides significantly lower installation cost versus pre-cut formats.

**How can we help?** Contact us for more information:

800 758 3515  
customerservice@seipusa.com  
www.seipusa.com

## SM3-12

### Flexible Polyolefin 2:1 Shrink Ratio

**Technical Specifications:**

SAE AS23053, Class 1 & 3  
(2" size does not meet Class 3)  
UL 224 125°C, 600v  
UL/CSA VW-1, 125°C, 600 volts  
RoHS/RoHS2 Compliant

**Electrical**

**Chemical**

**Print Adherence**

Property	Test Method	Requirement
Tensile strength (psi)	ASTM D 638	1500 min.
Elongation (%)	ASTM D 638	200 min.
Specific gravity	ASTM D 792	1.35 max.
Low temperature flex (-55°C)	AMS-DTL-23053	no cracking
Heat shock (250°C, 4 hrs.)	AMS-DTL-23053	no cracking
Heat resistance (175°C, 168 hrs)		
Secant modulus (psi)	ASTM D 882	2.5 x 10 <sup>4</sup> max.
Longitudnal change (%)	AMS-DTL-23053	+/-5
<b>Dielectric strength (volts/mil)</b>	ASTM D 876	500 min.
<b>Volume resistivity (ohm-cm)</b>	ASTM D 876	1.0 x 10 <sup>14</sup> min.
<b>Corrosion (175°C, 16 hrs.)</b>	AMS-DTL-23053	no corrosion
<b>Water absorption (%)</b>	ASTM D 570	0.5 max.
<b>Fluid resistance (23°C, 24 hrs.)</b>		
<b>Tensile strength (psi)</b>	AMS-DTL-23053	1000 min.
<b>Flammability</b>	UL 224 VW-1	Pass
<b>Shrink temperature, nominal</b>		90°C
<b>Abrasion (eraser method)</b>	SAE-A55942	30 rubs
<b>Fluid Resistance:</b>	MIL-STD-202G, Method 215	
<b>Isopropyl Alcohol/Mineral Spirts Blend</b>		10 rubs (x3)
<b>Terpene Defluxer</b>		10 rubs (x3)
<b>H<sub>2</sub>O/PGME/Monoethanolamine</b>		10 rubs (x3)

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Product insight

Rev. A, May 2022

**Standard Sizes:**

Please see table to the right for standard sizes. Custom sizes and colors are available with minimum order quantities.

**Standard Colors:**

White, black, yellow. Other colors available per factory quote and acceptance.

**Dimensional Information:**

Please refer to diagram to the right for dimensions.

**Standard Package:**

Continuous, spooled. Feet.

**How to order:**

Example: SM3-12, 1/4", White

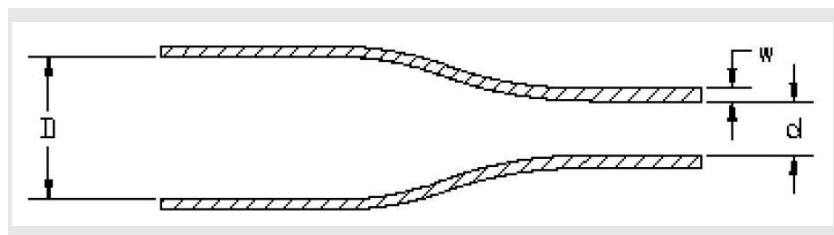
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Size	ID Min (as supp.)		ID Max (after recov.)		Wall Thickness Nom (after recov.)		Packaging (per spool)
	inch	mm	inch	mm	inch	mm	
1/16	.063	1.6	.031	0.8	.017	0.43	1,000
3/32	0.93	2.4	.046	1.2	.020	0.51	500
1/8	.125	3.2	.062	1.6	.020	0.51	500
3/16	.187	4.8	.093	2.4	.020	0.51	200
1/4	.250	6.4	.125	3.2	.025	0.64	200
3/8	.375	9.5	.187	4.8	.025	0.64	200
1/2	.500	12.7	.250	6.4	.025	0.64	200
3/4	.750	19.1	.375	9.5	.030	0.76	200
1	1.00	25.4	.500	12.7	.035	0.89	100
1.5	1.50	38.1	.750	19.1	.040	1.02	100
2*	2.00	50.8	1.00	25.4	.045	1.14	100

**Note**

\* Size does not meet /5, Class 3 (size not listed on Class 3 size table).



Type of material	Size	Color	Packaging
SM3-12	1/4	White	Spool

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