

## Technical Data Sheet

Issue: 04/2021/v05

Product-Line: HTX-S3  
Material: Polyolefin, shrink ratio 3:1  
TEXTIT-Material-Code: TMC-1045

### Material data:

<b>Description</b>	The HTX-S3 3:1 Heat Shrinkable Wire Markers are made of a very flexible, highly flame retardant, high grade polyolefin tubing. SAE-AMS-DTL, UL 224 and CSA recognized. Meets the requirements of a wide range of industrial and high-tech standards. Very versatile through excellent balance of chemical, electrical and mechanical properties.
<b>Standard Colours</b>	Yellow, white
<b>Material</b>	Crosslinked polyolefin, shrink ratio 3:1
<b>Operating temperature</b>	-55°C to + 135°C
<b>Minimum shrink temperature</b>	90°C
<b>Carrier liner</b> (valid for organized version)	White, non-coated, medium range thermal sensitive paper cardstock Thickness: 185 ± 10 µm Width: 109 mm ± 0,5 mm
<b>Adhesive backing</b> (valid for organized version)	Clear, polyethylene film coated with an acrylic-based pressure sensitive adhesive Thickness: 0,10 mm Width: 72/85 mm
<b>Storage</b>	Store in original packaging Recommended temperature at +10°C to +25°C and 45-55% relative humidity Use within 4 years from date of manufacture
<b>Applications</b>	Common uses include marking, insulation, Wire bundling and mechanical protection

<b>Specifications</b>	<ul style="list-style-type: none"> <li>• CSA C 22.2 No. 198.1: 125°C 600V VW-1</li> <li>• SAE-AMS-DTL-23053/5 class 1&amp;3 (except sizes / LC)</li> <li>• UL 224, 125°C 600V VW-1 (File no. E48762)</li> </ul>
<b>RoHS-compliant</b>	Yes

<b>Physical Properties</b>		
<b>Properties</b>	<b>Test Method</b>	<b>Typical value</b>
Tensile strength	ASTM D 638	13 N/mm <sup>2</sup>
Elongation at break	ASTM D 638	≥ 400%
Longitudinal change	ASTM D 2671	- 7%
Specific gravity	ASTM D 792	1,34 g/cm <sup>3</sup>
Secant Modulus	ASTM D 882	65 MPa

<b>Electrical Properties</b>		
<b>Properties</b>	<b>Test Method</b>	<b>Typical value</b>
Dielectric strength	UL 224	≥ 37 kV/mm
Volume resistivity	ASTM D 876	3,1 x 10 <sup>14</sup> Ω cm
Voltage rating	UL 224	600 V
Dielectric Voltage Withstand (2,5 kV x60s)	UL 224	Pass, no breakdown

<b>Chemical Properties</b>		
<b>Properties</b>	<b>Test Method</b>	<b>Typical value</b>
Fungus resistance	ASTM G 21	Pass, no growth
Fluid resistance (after immersion 23°C x 24h)	SAE-AMS-DTL-23053	7,25 - 14 MPa

Thermal Properties		
Properties	Test Method	Typical value
Heat shock (250°C x 4h)	SAE-AMS-DTL-23053	No dripping, cracking or flowing, pass
Elongation after heat aging (158°C x 4h)	SAE-AMS-DTL-23053	≥ 400%
Copper corrosion (158°C x 168h)	SAE-AMS-DTL-23053	Pass
Stability against copper (158°C + 168h)	SAE-AMS-DTL-23053	Pass
Low temperature flexibility (-55°C + 4h)	SAE-AMS-DTL-23053	No cracking
Flammability	UL 224	VW-1, pass

Printer and ribbons recommended	
Printer	Ribbons
<ul style="list-style-type: none"> <li>- TEXTIT DRU-TX4/300</li> <li>- TEXTIT-DRU-TX4M/300</li> </ul>	<ul style="list-style-type: none"> <li>- FTI-X-110x300-BK</li> </ul>

Dimensions				
Size, Inches	Size, mm	Minimum ID as supplied (mm)	Maximum ID, recovered	TEXTIT Order Codes
1/8	3,0	3,0	1,0	HTX-S3-030...
3/16	4,8	4,8	1,6	HTX-S3-048...
1/4	6,0	6,0	2,0	HTX-S3-060...
3/8	9,0	9,0	3,0	HTX-S3-090...
1/2	12,0	12,0	4,0	HTX-S3-120...
3/4	18,0	18,0	6,0	HTX-S3-180...
1	24,0	24,0	8,0	HTX-S3-240...
1 ½	39,0	39,0	13,0	HTX-S3-390...