

HEAT-SHRINKABLE TUBING

HTS-FE3

SUMITUBE®, Made of Fluorelastomer, Thin-walled, Flexible, High temperature resistant



Highlights

- Operating temperature
- 55 °C bis 200 °C
- Very flexible and abrasion resistant
- Resistant to many oils, hydraulic fluids and solvents
- Flame resistant
- Shrink rate 2:1
- Shrink temperature: 150°C
- RoHS and REACH conform
- Approvals: SAE (MIL)

Dimensions

Art.-No.	Before Shrinkage (mm)		After Shrinkage (mm)		Standard Packaging	
	Inch	Inner Diameter (min)	Inner Diameter (max.)	Wall Thickness (nom.)	Spool (m)	Box (m)
Z85194	1/8	3.20	1.60	0.80	30	300
Z85195	3/16	4.80	2.40	0.90	30	300
Z85196	1/4	6.40	3.20	0.90	30	300
Z85197	3/8	9.50	4.75	0.90	30	150
Z85198	1/2	12.7	6.40	0.90	30	150
Z85199	3/4	19.1	9.50	1.10	30	90
Z85200	1	25.4	12.7	1.20	30	90

Technical characteristics

Property	Test	Inspection requirements	Typical values
Physical	Longitudinal change by shrinking	SAE-AS23053, ± 20%	-8%
	Density	ASTM D 792	1.96
	Tensile strength	SAE-AS23053, min. 8.2 MPa	≥ 10 MPa
	Elongation at break	SAE-AS23053, min. 250%	≥ 400%

Created by: VS 20.11.2020

We reserve the right to make product changes.

**RELIABLE, FLEXIBLE,
CUSTOMER-ORIENTED**

HEINRICH THULESIUS GMBH & CO. KG
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SERVICE

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**SUMITOMO
ELECTRIC
GROUP**

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Technical characteristics

Property	Test	Inspection requirements	Typical values
Thermal	Operating Temperature	SAE-AS23053	-40 °C to 200 °C
	Min. Shrink Temperature	Shrink-Curve for complete shrinkage	150 °C
	Shrinkage begins at	Shrink-Curve	50 °C
	Heat Shock (300°C x 4h)	SAE-AS23053, no cracking, flowing or dripping	Passed
	Tensile strength after thermal aging	SAE-AS23053, min. 8.2 MPa	Passed
	Elongation after thermal aging (250 °C x 168 h)	SAE-AS23053, min. 200%	≥ 300%
	Cold impact strength (-40 °C)	SAE-AS23053, legible markings	Passed
Chemical	Copper corrosion (175 °C x 16 h)	SAE-AS23053, no cracks	Passed
	Flammability	ASTM D 876, max. 15 Sek.	Passed
	Water absorption	ASTM D 570, max. 0.5%	≤ 0.4%
	Fluid resistance (24 °C x 24 h)	SAE-AS23053, min. 8.2 MPa (tensile strength) SAE-AS23053, min. 250% (elongation)	Passed Passed
Electrical	Flammability	SAE-AS23053, ASTM G 21	Passed
	Nominal voltage		600V
	Breakdown test (2.5 kV x 60 sec.)	ASTM D 149, no breakdown	Passed
	Volume resistance	ASTM D 876, min. 10 ⁹ Ω cm	≥ 10 ¹² Ω cm
	Dielectric strength	ASTM D 876, min. 7.9 kV/mm	≥ 15 kV/mm

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