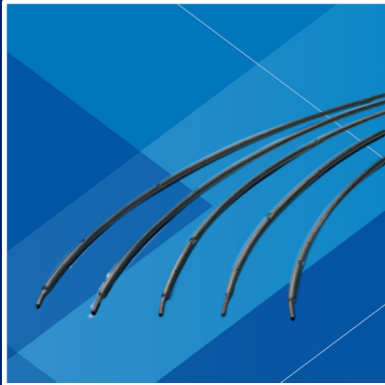


HEAT-SHRINKABLE TUBING

HTS-O2

SUMITUBE[®], Made of Polyolefin, Thin-walled, Halogen free, Semi-rigid, With Adhesive



Highlights

- Operating temperature - 35 °C to 105 °C
- Excellent corrosion protection for brake and fuel lines
- Very good mechanical resistance
- Shrink rate 2:1
- RoHS and REACH conform
- Norms: ASTM, ISO, JASO M, JIS C

Dimensions

Art.-No.	Before Shrinkage (mm)		After Shrinkage (mm)		Standard Packaging	
	Inch	Inner Diameter (min)	Inner Diameter (max.)	Wall Thickness (nom.)	Coil (m)	Box (m)
Z85440	6 x 0.70	6.00	4.50	1.20	200	1000
ZXXXX	9 x 0.60	9.00	6.10	1.20	100	500
Z85451	10,3	10.3	3.50	0.85	100	500
Z85452	11 x 0.70	11.0	7.90	1.30	100	500
Z85439	14.0	14.0	4,50	1.20	100	400

Technical characteristics

Property	Test	Inspection Requirements	Typical Values
Physical	Longitudinal change	ASTM D 2671, max. ±5%	-1%
	Density	ASTM D 792, max. 1.00	0.95%
	Tensile strength	ASTM D638, min. 12 MPa	≥ 18 MPa
	Elongation at break	ASTM D638, min. 300%	≥ 460%
	Hit test (-30 °C)	JIS C 3005, no cracks	Passed
	Tension crack resistance (50 °C x 24 h)	(Immersion IGEPAL 10%), no growth	Passed

Created by: VS 20.11.2020

We reserve the right to make product changes.

**RELIABLE, FLEXIBLE,
CUSTOMER-ORIENTED**

HEINRICH THULESIUS GMBH & CO. KG
Zum Panrepel 15, D-28307 Bremen, GERMANY



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HTS-O2

SUMITUBE[®], Made of Polyolefin, Thin-walled, Halogen free, Semi-rigid,
With Adhesive

Technical characteristics

Property	Test	Inspection Requirements	Typical Values
Thermal	Operating temperature	-55 °C to 105 °C	-55 °C to 105 °C
	Min. Shrink temperature	For complete shrinkage	115 °C
	Shrinkage begins at		80 °C
	Elongation after thermal aging (120 °C x 24 h)	ASTM D638, min. 270%	≥ 500%
	Tensile strength after thermal aging (120 °C x 24 h)	ASTM D638, min. 12 MPa	≥ 14 MPa
	Heat shock (200 °C x 4 h)	ASTM D 2671, no cracking, flowing or dripping	Passed
Chemical	Embrittlement point	ASTM D 746, max. -55 °C (under 2 kg/cm ² x 5 min)	-70 °C
	Deformation resistance (140 °C x 10 min)	min. 60%	≥ 75%
Chemical	Flammability	FMVSS 302	Passed
	Water absorption	ISO 62, Max. 0,5%	Passed
Other Properties*	Adhesion test	(T-Peel on ALU-pipe at 23 °C), min. 10N/10mm	≥ 20N / 10mm
	Longitudinal change	ASTM D 2671, 0 bis -10%	-3%
	Notch toughness (-40 °C)	DIN VDE 0472, no cracks	Passed
	Notch toughness (-35 °C x 4 h)	(-30 °C x 0,5 h), no cracks	Passed
	Salt water spray test (3000 Std.)	NF-X 41.002, no corrosion	Passed
	Heat shock (200 °C x 20 Min)	ASTM D 2671, no cracking, flowing or dripping	Passed
	Decomposition resistance	JASO M104, no rust	Passed
	Fluid resistance (23 °C x 72 h)	Impact-Test, no cracks	Passed
	Bending test (5x on 25mm diameter)	(Visual inspection within 20 sec.), no cracks	Passed
	Stickiness (tightness) (after 120 °C x 20 min.)	(Visual inspection), glued with wire, no peeling	Passed
Hit test	(-30 °C x 0,5 h), no cracks	Passed	

* Tubing shrunked on metal wire

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