

HEAT-SHRINKABLE TUBING

HTS-NH(TW)

SUMITUBE®, Made of Polyolefin, Very thin-walled, Halogen free, Flexible



Highlights

- Temperaturbeständigkeit von - 40 °C bis 105 °C
- Halogenfrei
- Sehr geringe Rauchentwicklung
- Geeignet für Bahntechnik
- Flammwidrig
- Sehr flexibel
- Schrumpfverhältnis 2:1
- Schrumpftemperatur: 120 °C
- Farbe: schwarz, andere auf Anfrage lieferbar
- RoHS, REACH
- Zulassungen: EN 45545-2, UL, LUL, ASTM D, SAE-AS23053

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)
Z85XXX	1/16	1.60	0.80	0.43	300	900
Z85XXX	3/32	2.40	1.20	0.51	150	900
Z85120	1/8	3.20	1.60	0.51	150	900
Z85121	3/16	4.80	2.40	0.51	60	600
Z85122	1/4	6.40	3.20	0.51	60	300
Z85123	3/8	9.50	4.80	0.64	60	300
Z85124	1/2	12.70	6.40	0.64	60	300
Z85125	3/4	19.10	9.50	0.64	60	180
Z85126	1	25.40	12.70	0.89	60	180
Z85127	1-1/2	38.10	19.10	1.02	60	180
Z85128	2	50.80	25.40	1.27	60	120

Technische Daten

Property	Test	Inspection Requirements	Typical Values
Physical	Longitudinal change	IEC, +5 to -10%	-5%
	Density	ASTM D 792,	1,49
	Tensile strength	ASTM D 2671 (B), min. 10,4 MPa	≥ 11,4 MPa
	Elongation at break	ASTM D 2671, min. 200%	≥ 400%
	Secant modulus	ASTM D 2671, max. 130 MPa	100 MPa

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



SERVICE

Tel: +49 (0) 421-48 95-0
Fax: +49 (0) 421-48 95-225
E-Mail: info@thulesius.de
www.thulesius.de

HEAT-SHRINKABLE TUBING

HTS-NH(TW)

SUMITUBE[®], Made of Polyolefin, Very thin-walled, Halogen free, Flexible

Technical characteristics

Property	Test	Inspection Requirements	Typical Values
Thermal	Operating temperature		-40 °C to 105 °C
	Min. Shrink temperature	For complete shrinkage	120 °C
	Shrinkage begins at		60 °C
	Heat shock (225 °C x 4 h)	SAE-AS23053, no cracking, flowing or dripping	Passed
	Elongation after thermal aging (136 °C x 168 h)	ASTM D 2671, min. 100%	≥ 170%
	Tensile strength after thermal aging (136 °C x 168 h)	ASTM D 2671, min. 7,3 MPa	Passed
	Low temperature flexibility (-40 °C x 4 h)	SAE-AS23053, no cracks	Passed
	Copper corrosion (175 °C x 16 h)	SAE-AS23053, no corrosion	Passed
Chemical	Halogen content	NFX-70-100 BS 6853, Zero	Zero
	Flammability	Japanese Railway, flame retardant	Passed
	Water absorption	SAE-AS23053, max. 1,0%	0,005
	Flammability index	ASTM E162, nom. 14	Passed
	Oxygen index	BS EN ISO 4589-2 Part 2, min. 35	≥ 38
	Flammability temperature index	NES 715 BS EN ISO 4589-3, min. 250 °C Ia (300 °C) & Ib (250 °C)	> 354 °C Passed
	Smoke index	NES 711, max. 10,0	8,4
	Smoke development	BS 6853 1999 Annex D 8.3, A0 < 0,017 m ² /g	0,0044 m ² /g
	Toxic gas development (equiv. % of HCL)	MIL-C-24643, max. 0,2%	0,0007
	Toxic smoke emission	LUL E1042 A6(2002), < 0,015	Passed
	Toxic gas generation	BSS 7239, ASTM D 2671, min. 5,5 MPa (tensile strength)	Passed
Fluid resistance (23 °C x 24 h)	ASTM D 2671, min. 100% (elongation)	≥ 300%	
Ozone resistance	NF F 00-608, no cracking or sweating	Passed	
Electrical	Nominal voltage	600V	Passed
	Breakdown test (2.5 kV x 60 sec.)	UL 224, no breakdown	Passed
	Volume resistance	ASTM D 876, min. 10 ¹² Ω/cm	≥ 10 ¹³ Ω/cm

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



SERVICE

Tel: +49 (0) 421-48 95-0

Fax: +49 (0) 421-48 95-225

E-Mail: info@thulesius.de

www.thulesius.de

**SUMITOMO
ELECTRIC
GROUP**