

## HTBM100

Medical Grade Electrical Insulator Approved to ISO10993

HTBM100 is a metrically sized semi-rigid heat shrinkable tubing offering superior electrical, chemical, abrasion, and cut through resistance. It has a continuous operating temperature of 175°C and has been designed for use on medical and surgical devices such as electrotomes and endoscopes. HTBM100 is certified to FDA USP Biological Test Classification VI, and holds further approval to ISO 10993.

### Features & Benefits

- Lubricity, resistance to abrasion.
- Excellent physical, chemical and electrical properties.
- USP Class VI material
- Compatible with gamma, ETO, steam and dry heat sterilization methods.

### Applications

- Electrical insulation of electrosurgical instruments.
- Strain relief at high temperatures.
- Abrasion and solvent resistance.

General Information	
Material	Polyvinylidene Fluoride
Shrink Ratio	2:1
Operating temperature	-55°C to 175°C
Installation temperature	175°C
Specifications	FDA USP Class V1 ISO 10993 UL224 VW-1 RoHS Compliant



Available Colors:

BLACK	TRANSPARENT
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Ordering Description	Nominal Size (mm)	Minimum Supplied ID (mm)	Maximum Recovered ID (mm)	Recovered Wall Thickness (mm)	Standard Spool Quantity (m)
HTBM100-1.2	1.2	1.5 ± 0.3	0.6	0.25 ± 0.05	200
HTBM100-1.6	1.6	1.9 ± 0.4	0.8	0.25 ± 0.05	200
HTBM100-2.4	2.4	2.9 ± 0.4	1.2	0.25 ± 0.05	200
HTBM100-3.2	3.2	3.8 ± 0.4	1.6	0.25 ± 0.05	200
HTBM100-4.8	4.8	5.3 ± 0.4	2.4	0.25 ± 0.05	100
HTBM100-6.4	6.4	6.9 ± 0.4	3.2	0.30 ± 0.08	100
HTBM100-9.5	9.5	10.2 ± 0.4	4.8	0.30 ± 0.08	100
HTBM100-12.7	12.7	13.5 ± 0.5	6.4	0.30 ± 0.08	100
HTBM100-19.1	19.1	20.5 ± 1.0	9.5	0.43 ± 0.08	50
HTBM100-25.4	25.4	26.5 ± 1.0	12.7	0.48 ± 0.08	50

Full details on technical specifications, test methods and values are available on request.



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### Technical Data

Property	Specification Requirement	Test Method	Typical Value
Tensile strength	$\geq 34.5$ Mpa	ASTM D 638	$\geq 35$ Mpa
Ultimate elongation	$\geq 150\%$	ASTM D 638	$\geq 150\%$
Volume resistivity	$\geq 10^{12}$ $\Omega$ cm	ASTM D 876	$\geq 10^{12}$ $\Omega$ cm
Dielectric Voltage Withstand and breakdown	AC2500V, 60S	ASTM D 2671	Pass
Heat shock (300°C for 4 hours)	No cracking	ASTM D 2671	Pass
Cold bend (-55°C for 4 hours)	No cracking	ASTM D 2671	Pass
Elongation after aging	$\geq 100\%$	ASTM D 638 250°C for 168 hours	$\geq 100\%$
Flamability	VW-1	UL224	Pass
Corrosion	No Corrosion	ASTM D 2671	Pass

Excellent electrical insulation properties

USP Class VI material, No heavy metals

Compatibility with Gamma and ETO sterilization

