

## TTU-X

### UNIQUE, SHRINKABLE INSULATION FOR MULTIPURPOSE USE

- Consists of two layers.
- Outside layer shrinks. Inside layer of adhesive melts.
- The adhesive seals the connection completely, making it strong and perfectly waterproof.
- Excellent corrosion, U.V., water, chemical and acid resistance.
- Can be applied directly to copper.
- Durable.
- THERMO TUBE X moulds to any shape.
- Fast, simple and safe to use.
- Flame retardant and permanently flexible.
- Easy to apply.



### Notice

All information including images are given with the greatest care. Still, it is appropriate to users regardless of the test the suitability of each product for their own purposes. Tech-Masters is not liable for the completeness and accuracy of information and refuses warranty for your specific use. The guarantee, which Tech-Masters products provide, relates only to the standard conditions of sale of this product. In no case Tech-Masters can be held responsible for incidental damages, or damages for improper use or sale of the product to another customer.

### General Information

THERMO TUBE X is a flexible, heat shrinkable dual wall tubing with an integrally bonded meltable adhesive inner lining, designed to provide permanent moisture proof encapsulation to a wide variety of substrates and uses.

THERMO TUBE X has a unique inner wall which melts when heated and is forced into the crevices and interstices by the shrinking of the outer wall.

When cooled the entire mass becomes a flexible, tough homogeneous covering with a controlled wall thickness. THERMO TUBE X is manufactured from radiation cross-linked polyolefins. THERMO TUBE X shrinks to 1/3 of its supplied diameter and thus only a few sizes (8) are required to cover a full range of irregular shapes in a wide variety of applications.

### Technical Information

Temperature resistance:  
 continuous: from -55 + 110°C  
 heat shock (ASTM D 2671): 4 hours at 225°C  
 heat resistance (ASTM D 2671): 168 hours at 150°C  
 Shrink temperature: 125°C.  
 Shrink ratio: 3/1.  
 Tensile strength ISO 37: 11.5 MPa.  
 Ultimate elongation ISO 37: 490%.  
 Flexibility: flexible.  
 Dielectric strength IEC 243: 30 MV/m (VDE 0303 Pt2).

Electrical resistance: 10<sup>13</sup> Ohm  
 Flame retardancy ASTM D 876, ASTM D 2671:  
 Inner wall: no.  
 Outer wall: yes, retardant.  
 Fluid resistance ISO 1817 and ISO 37  
 Immersion 24h at 23°C:  
 Hydraulic fluid: excellent  
 Aviation fuel F 40: good  
 Lubricating oil O-149: good  
 Diesel fuel F-54: good

### Application and Use

- can be used on all electrical applications (cables - cables splicing - connections), to insulate, to protect and to seal. Can be used in contact with chemicals. Is not resistant to earth alkalines. Protects metal tubing against corrosion and wear.
- insulation and protection of wires and components
- wire terminal protection
- reinforcement of wire splits
- prevention of electrolytic corrosion
- insulation and protection of automotive electrical parts
- protection of coaxial cable connectors
- synthetic, fuel and hydraulic oil resistant applications

Article nr	Name	Content	Shelf Life	Catalog
T800320	Thermo Tube X 3,2/1	1 pc.	-	ELECTRICAL CONNECTIONS
T800450	Thermo Tube X 4,8/1,5	1 pc.	-	ELECTRICAL CONNECTIONS
T800640	Thermo Tube X 6,4/2	1 pc.	-	ELECTRICAL CONNECTIONS
T800940	Thermo Tube X 9,4/3	1 pc.	-	ELECTRICAL CONNECTIONS
T801270	Thermo Tube X 12,7/4	1 pc.	-	ELECTRICAL CONNECTIONS
T801910	Thermo Tube X 19,1/7,9	1 pc.	-	ELECTRICAL CONNECTIONS
T802540	Thermo Tube X 25,4/10	1 pc.	-	ELECTRICAL CONNECTIONS
T804000	Thermo Tube X 40/13	1 pc.	-	ELECTRICAL CONNECTIONS

