



Technical Data Sheet

HEATSHRINK

TTP HARD drills Limited
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TTP Dual Wall Heatshrink



**Adhesive Lined
Dual Wall 3:1 ratio
polyolefin heat shrink tubing.**

Description

3:1 shrink ratio, flexible, flame retardant,
inner liner of **hot** melt adhesive.. RoHS
Compliant.

Typical Features & Applications

The heat shrink outer sleeving and hot melt adhesive
lining is designed to insulate and seal electrical
and mechanical products against water and
moisture. Widely used in marine, automotive and various

Consumer and industrial applications. Large 3:1 shrinkage ratio for easy
installation on irregular or large components.



Applications - component covering, water proofing,
mechanical protection, strengthening, shock protection,

abrasion protection, corrosion protection, encapsulation, insulation, dust proofing,
sterilization, splicing, cable binding

Colours

Standard Colour - Black

Attributes

and tying, strain relief, marking, and coding

Size (mm)	Supplied diameter (mm)	Shrunk diameter (mm)	Nominal wall thickness (mm)
3/1	3.0	1.0	1.00
4.5/1.5	4.5	1.5	1.10
6/2	6.0	2.0	1.20
9/3	9.0	3.0	1.40
12/4	12.0	4.0	1.70
19/6	19.0	6.0	2.10
24/8	24.0	8.0	2.10
40/13	40.0	13.0	2.40

The information contained herein are given in good faith based on our current knowledge and experience on the product when properly stored, handled and applied under normal conditions in accordance with our recommendations. In practice the differences in materials, substrates and actual site conditions are such that no warranty in respect to merchantability or fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred from this data sheet. The recommendations or suggestions contained in this data sheet are made without guarantee as to results. We suggest that you test the product's suitability for the intended application and purpose prior to use. Our responsibility for claims arising from breach of warranty, negligence or otherwise is limited to the purchase price of the material. TTP HARD drills Limited reserves the right to change the properties of this product. The proprietary rights of third parties must be observed.



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Properties	Typical Values	Test Methods
General		
Operating Temperature	-55°C - +110°C (jacket)	
Shrink temperature	95°C	
Shrink Ratio	3:1	
Physical		
Tensile Strength	15MPa	IEC 60684-2
Ultimate elongation	400%	IEC 60684-2
Specific gravity	1.25g/cm ³ (blk) 1.00g/cm ³ (clr)	ASTM D 792 A-I
Longitudinal change	-15% max (blk), -18% max (clr)	ASTM D 2671
Water absorption	0.15% (blk), 0.17% clr	VDE 0472
Thermal		
Flammability	Pass (jacket)	ASTM D 876 (blk), FMVss 302 (clr)
Heat shock (4hrs)	at 200°C, elongation 360% (blk), 380% (clr) tensile 15MPa (blk), 16MPa (clr)	IEC 811-1-1-2
Low temperature flexibility (4hrs @ -55°C)	Does not break	ASTM D 2671 Meth. C
Heat ageing (168hrs)	at 150°C, elongation 320% (blk) 360% (clr), tensile 14MPa (blk) 15MPa (clr)	IEC 811-1-2
Electrical		
Dielectric strength	22kV/mm (blk), 23kV/mm (clr)	VDE 0303 Part 2
Volume resistivity	10 ¹⁴ Ωcm	VDE 0303 Part 3
Chemical		
Chemical resistance	Good	
Copper corrosion	Non-corrosive	ASTM D 2671 meth A
Copper stability	Non-corrosive	ASTM D 2671 meth B

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