

#### **HEAT SHRINKABLE TUBING**

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# **Company Overview**



# Wherever you find electricity you will find TransTechnical Solutions

TTS is a leader in the manufacture and supply of the electrical accessories for commercial, mining and industrial sectors, as well as maintenance and repair markets.

The majority of TransTechnical Solutions' range is dedicated to management, protection and connection of electrical cable. This means that ranges such as cable ties and accessories, heat shrinkage tubing, flexible conduit systems and cable glands are at the core of the line-up. With well-known and trusted world class brands, TTS is well-positioned to supply your day-to-day requirements and provide technical specified products with specific performance criteria.







## **Introduction to Shrink-Tech®**

## Protect Against Moisture, Corrosion and Abrasion

#### TTS Has You Covered When it Comes to Insulation

- Easy to use
- Heat shrinkable
- Products with heavy, medium and thin wall
- End caps and breakouts

#### **Shrink-Tech Thin Wall**

Manufactured from stabilised polyolefin, these insulators are used to insulate bare copper connectors and splices. They also provide a degree of strain relief and may be used to harness wires.

Available in per metre or 200 metre coils

- Halogen free non-lined 2:1 thin wall tubing
- Extra clear heat shrink for use on power and data cables

#### Shrink-Tech Thin Wall - Adhesive Lined

Environmentally friendly thin wall adhesive lined is produced from flame retardant, cross linked polyolefin with an inner layer of hot melt adhesive.

- Shrink Ratio of 2:1 & 3:1 & 4:1
- Flexible and flame retardant
- Waterproof
- RoHS compliant
- UL tested

#### **Shrink-Tech Medium Wall**

More flexible than heavy wall products, with excellent resistance to impact & abrasion.

- Seals and protects cable splices and terminations
- Adhesive lining provides complete environmental protection and insulation









#### TTS' State of the Art Protection Products Will Ensure Maximum Product Lifetime

- Halogen free
- Multi colours available
- Largest range of sizes available
- Dispensable boxes and kits
- UL approved



Manufactured from stabilised polyolefin, these insulators are used to insulate bare copper connectors and splices.

They also provide a degree of strain relief and may be used to

Available in per metre coils



## **Shrink-Tech High Voltage**

Specifically designed radiated cross-linked polyolefin heat shrink tubing that provides high creep resistance and anti-tracking properties for high voltage applications up to 42kV.



## **Shrink-Tech Military Grade**

Military grade heat shrink tubing that meets military requirement MIL-DTL23053/5 classes 1 and 3. Flame retardant properties with high flexibility and resistance to abrasion & chemicals.





## **TTWHS Series - Thin Wall**

#### **Resists common fluids & solvents**

TTS Halogen Free heat Shrinkable Tube is newly developed environmentally friendly, flame retardant tube using specially designed formulation of advanced polymers. The product demonstrates excellent flexibility, quick shrinking and stable performance over time making it ideal for a wide variety of applications in electronics and communications including insulating harnessing, mechanical protection, identification and corrosion and rust proofing.

#### **Characteristics:**

- Halogen free (black only)
- Operating temperature –55°C to 125°C
- Shrink Ratio 2:1 and 3:1 (for 3:1 enquire at closest branch)
- Shrink Temperature start at 70 °C and shrunk totally at 120 °C
- Flexible and flame retardant (Clear is non-flame retardant)
- Meets UL 224, CSA, REACH and RoHS standards



TTWHS SERIES	5 - THIN WALL	FLAME RETARDA	NT HEAT SHRIN	K		
Ratio: 2:1		As Supplied (mm)	After Re	ecovery (mm)		
Part Number	Size (mm)	ID	Max ID	Average WT	Shape	Application Range (mm)
TTWHS/1.0/*	1.0	≥ 1.3	≤ 0.65	0.18 +/- 0.10	Round	0.75 - 1.20
TTWHS/1.5/*	1.5	≥ 1.8	≤ 0.85	0.22 +/- 0.10	Round	0.95 - 1.70
TTWHS/2.5/*	2.5	≥ 2.8	≤ 1.30	0.28 +/- 0.10	Round	1.40 - 2.70
TTWHS/3.0/*	3.0	≥ 3.3	≤ 1.50	0.30 +/- 0.10	Round	1.60 - 3.3
TTWHS/5.0/*	5.0	≥ 5.3	≤ 2.50	0.45 +/- 0.10	Round	2.60 - 5.20
TTWHS/7.0/*	7.0	≥ 7.2	≤ 3.50	0.45 +/- 0.10	Flat	3.60 - 7.10
TTWHS/10.0/*	10.0	≥ 10.2	≤ 5.00	0.50 +/- 0.10	Flat	5.10 - 10.10
TTWHS/13.0/*	13.0	≥ 13.2	≤ 6.50	0.55 +/- 0.10	Flat	6.60 - 13.10
TTWHS/20.0/*	20.0	≥ 20.5	≤ 10.0	0.65 +/- 0.10	Flat	10.10 - 20.4

Black - BL

TTWHS/25.0/\*

TTWHS/30.0/\*

TTWHS/40.0/\*

TTWHS/50.0/\*

TTWHS/80.0/\*

TTWHS/100.0/\*

Blue - BU

25.0

30.0

40.0

50.0

80.0

100.0

Red - RE

≥ 25.5

≥ 30.5

≥ 40.5

≥ 50.0

≥80.0

>> 100.0

Yellow - Y

≤ 12.5

≤ 15.0

≤ 20.0

≤ 25.0

≤ 41.0

≤ 51.0

Yellow/Green - YG

0.75 +/- 0.10

0.80 +/- 0.10

0.85 +/- 0.10

0.85 +/- 0.10

1.26 +/- 0.10

1.26 +/- 0.10

Green - G

Flat

Flat

Flat

Flat

Flat

Flat

Clear - CL

White - WH

12.6 - 25.4

15.1 - 30.4

20.1 - 40.4

25.1 - 49.9

41.1 - 79.9

51.1 - 99.9

Due to ongoing product development specification changes may result. Picture is an example of products and for display purposes, products may differ from picture given.

<sup>\*</sup> TTS' TTWHS Series heat shrink is available in a full range of colours as below. To create part number replace \* above with below colour code: (Eg: TTWHS/1.0/BK)



# TTWAHS Series - Thin Wall Adhesive Lined

## For general purpose commercial and industrial applications

TTS' environmentally friendly thin wall adhesive lined (dual wall) product is produced from flame retardant, cross linked polyolefin with an inner coating of hot melt adhesive. This product provides both electrical insulation and mechanical protection as well as a moisture proof environmental seal.

#### **Characteristics:**

- Operating temperature –55°C to 125°C
- Shrink ratio 2:1 and 3:1 and 4:1 (for 4:1 enquire at closest branch)
- Shrink temperature start at 70°C and shrunk totally at 120°C
- Inner layer glue melt temperature 70 90°C
- Flexible and flame retardant
- Waterproof

TTWAHS/3-1/50.0/BK

50.0

≥ 50.0

≤ 17.0

- Meets RoHS standards
- Complies with UL224, IEC243, IEC93 and ASTM standards



Ratio: 2:1		As Supp	plied (mm)	After Rec	overy (mm)		
Part Number	Size (mm)	ID	Max ID	Total W.T.	A. L.W.T.	Shape	Application Range (mm)
TTWAHS/2-1/3.2/BK	3.2	≥3.2	≤1.6	0.85 +/- 0.08	0.45 +/- 0.10	Round	1.5 - 3.1
TTWAHS/2-1/4.8/BK	4.8	≥ 4.8	≤ 2.4	0.95 +/- 0.08	0.50 +/- 0.10	Round	2.5 - 4.7
TTWAHS/2-1/6.4/BK	6.4	≥ 6.4	≤ 3.2	0.95 +/- 0.08	0.50 +/- 0.10	Round	3.3 - 6.3
TTWAHS/2-1/9.5/BK	9.5	≥ 9.5	≤ 4.8	1.05 +/- 0.08	0.55 +/- 0.10	Flat	4.7 - 9.4
TTWAHS/2-1/12.7/BK	12.7	≥ 12.7	≤ 6.4	1.15 +/- 0.08	0.55 +/- 0.10	Flat	6.5 - 12.6
TTWAHS/2-1/19.1/BK	19.1	≥ 19.1	≤ 9.5	1.20 +/- 0.10	0.60 +/- 0.10	Flat	9.5 - 19.0
TTWAHS/2-1/25.4/BK	25.4	≥ 25.4	≤ 12.7	1.30 +/- 0.10	0.60 +/- 0.10	Flat	12.8 - 25.3
TTWAHS/2-1/38.1/BK	38.1	≥ 38.1	≤19	1.45 +/- 0.10	0.60 +/- 0.10	Flat	19.1 - 38.0
TTWAHS/2-1/50.8/BK	50.8	≥ 50.8	≤ 25.4	1.75 +/- 0.10	0.65 +/- 0.10	Flat	25.5 - 50.7
Ratio: 3:	1	As Supp	olied (mm)	After Recovery (mm)			
Part Number	Size (mm)	ID	Max ID	Total W.T.	A. L.W.T.	Shape	Application Range (mm)
TTWAHS/3-1/3.2/BK	3.2	≥ 3.2	≤ 1.0	1.04 +/- 0.08	0.43 +/- 0.10	Round	1.5 - 3.1
TTWAHS/3-1/4.8/BK	4.8	≥ 4.8	≤ 1.6	1.18 +/- 0.08	0.48 +/- 0.10	Round	2.5 - 4.7
TTWAHS/3-1/6.4/BK	6.4	≥ 6.4	≤ 2.2	1.28 +/- 0.08	0.53 +/- 0.10	Round	3.3 - 6.3
TTWAHS/3-1/9.5/BK	9.5	≥ 9.5	≤ 3.2	1.53 +/- 0.08	0.58 +/- 0.10	Flat	4.7 - 9.4
TTWAHS/3-1/12.7/BK	12.7	≥ 12.7	≤ 4.2	1.78 +/- 0.08	0.58 +/- 0.10	Flat	6.5 - 12.6
TTWAHS/3-1/19.1/BK	19.1	≥ 19.1	≤ 6.3	2.10+/- 0.10	0.65 +/- 0.10	Flat	9.5 - 19.0
TTWAHS/3-1/25.4/BK	25.4	≥ 25.4	≤ 8.5	2.20 +/- 0.10	0.65+/- 0.10	Flat	12.8 - 25.3
TTWAHS/3-1/39.0/BK	39.0	≥ 39.0	≤13.5	2.50 +/- 0.10	0.70 +/- 0.10	Flat	19.1 - 38.0
11 WAI13/3-1/39.0/ DK	33.0	≥ 33.0	3 13.3	2.30 ./ 0.10	0.70 1/- 0.10	Tiut	15.1 - 30.0

Due to ongoing product development specification changes may result. Picture is an example of products and for display purposes, products may differ from picture given.

2.80 +/- 0.10

0.80 +/- 0.10

Flat

25.5 - 50.7



# TMWHS Series - Medium Wall Adhesive Lined

### General purpose, waterproof and flexible

TTS' environmentally friendly medium wall, adhesive lined heat shrinkable tubing is designed form co-extruded polyolefin with an inner coating of hot melt adhesive. This product provides excellent electrical and mechanical protection as well as a moisture proof environmental seal.

#### **Characteristics:**

- · Environmentally seals and protects cable joints and wire terminations
- · High resistance to impact, abrasion and UV
- High electrical insulation
- Operating temperature –55°C to 125°C
- Shrink ratio 3:1
- Shrink temperature start at 80°C and shrunk totally at 120°C
- Flexible and lighter weight
- Meets RoHS and REACH standards
- Tested to UL224, IEC243, IEC93 and ASTM standards









		As Supplied (mm)	After R	ecovery (mm)	
Part Number	Size (mm)	ID	Max ID	Average WT	Length (m)
TMWHS/8/2/BK	8/2	≥ 8	≤ 2	1.75 +/- 0.25	1.2
TMWHS/12/3/BK	12/3	≥ 12	≤ 3	1.85+/- 0.25	1.2
TMWHS/16/5/BK	16/5	≥ 16	≤ 5	2.20 +/- 0.25	1.2
TMWHS/28/6/BK	28/6	≥ 28	≤ 6	2.50 +/- 0.25	1.2
FMWHS/33/8/BK	33/8	≥ 33	≤ 8	2.50 +/- 0.25	1.2
ΓMWHS/40/12/BK	40/12	≥ 40	≤ 12	2.50 +/- 0.25	1.2
ΓMWHS/55/16/BK	55/16	≥ 55	≤ 16	2.70 +/- 0.30	1.2
ΓMWHS/65/19/BK	65/19	≥ 65	≤ 19	2.80 +/- 0.30	1.2
ΓMWHS/75/22/BK	75/22	≥ 75	≤ 22	3.00 +/- 0.50	1.2
ΓMWHS/85/25/BK	85/25	≥ 85	≤ 25	3.00 +/- 0.50	1.2
ΓMWHS/115/34/BK	115/34	≥ 115	≤ 34	3.30 +/- 0.50	1.2
ΓMWHS/140/42/BK	140/42	≥ 140	≤ 42	3.50 +/- 0.60	1.2
TMWHS/160/50/BK	160/50	≥ 160	≤ 50	3.50 +/- 0.60	1.2
MWHS/180/58/BK	180/58	≥ 180	≤ 58	3.50 +/- 0.60	1.2

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# THWHS Series - Heavy Wall Adhesive Lined

## Maximum reliability for insulating and protecting cable joints and terminals

TTS' environmentally friendly heavy wall, adhesive lined heat shrinkable tubing is designed form co-extruded polyolefin with an inner coating of hot melt adhesive. This product provides excellent electrical and mechanical protection as well as a moisture proof environmental seal.

#### **Characteristics:**

- Completely seals and protects electrical and communication cable joints and terminations
- · High impact, corrosion, chemical and abrasion resistance
- Thermoplastic lining allows complete environmental protection and insulation
- Operating temperature –55°C to 125°C
- Shrink ratio 3:1
- Shrink temperature -start at 80°C and shrunk totally at 125°C
- Inner layer glue melt temperature 70 90°C
- · Meets RoHS and REACH standards
- · Complies with UL224, IEC243, IEC93 and ASTM standards

ALC CEDIES - NAEDILINA WALL A DIJECTVE LINED LIEAT CUDI









		As Supplied (mm)	After Re	ecovery (mm)	
Part Number	Size (mm)	ID	Max ID	Average WT	Length (m)
THWHS/9/3BK	9/3	≥ 9.0	≤ 3.0	1.8 +/- 0.25	1.2
THWHS/13/4/BK	13/4	≥ 13.0	≤ 4.0	2.4 +/- 0.25	1.2
THWHS/22/6/BK	22/6	≥ 22.0	≤ 6.0	2.7 +/- 0.25	1.2
THWHS/33/8/BK	33/8	≥33.0	≤8.0	3.2 +/- 0.35	1.2
THWHS/45/12/BK	45/12	≥ 45.0	≤12.0	4.1 +/- 0.35	1.2
THWHS/55/16/BK	55/16	≥ 55.0	≤16.0	4.1 +/- 0.35	1.2
THWHS/75/22/BK	75/22	≥ 75.0	≤22.0	4.1 +/- 0.35	1.2
THWHS/85/25/BK	85/25	≥85.0	≤ 25.0	4.3 +/- 0.35	1.2
THWHS/95/30/BK	95/30	≥95.0	≤ 30.0	4.3 +/- 0.35	1.2

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# **THVHS Series - High Voltage**

## Anti-tracking high voltage heat shrink tube

TTS' environmentally friendly THVHS series heat shrink is specifically designed with a radiation cross linked polyolefin to ensure maximum insulation resistance and protection for cable terminations, load-break switches and circuit breakers.

#### **Characteristics:**

- · High creep resistance and anti-tracking property
- UV resistance
- Voltage application of up to 42kV
- Operating temperature –55°C to 105°C
- Shrink ratio 3:1
- Shrink temperature -start at 110°C and shrunk totally at 110°C
- Meets RoHS and REACH standards









THVHS SERIES - H	HIGH VOLTA	GE HEAT SHRINK				
		As Supplied (mm)	After Red	covery (mm)		
Part Number	Size (mm)	ID	Max ID	Average WT	Shape	Application Range (mm)
THVHS/19/6/R/FL	19.0	≥ 19.0	≤ 6.0	2.5 +/- 0.10	Flat	6.1 - 18.9
THVHS/30/10/R/FL	30.0	≥ 30.0	≤ 10.0	2.8 +/- 0.10	Flat	10.1 - 29.9
THVHS/30/10/R/RO	30.0	≥ 30.0	≤ 10.0	2.8 +/- 0.10	Round	10.1 - 29.9
THVHS/38/12/R/FL	38.0	≥ 38.0	≤ 12.0	2.8 +/- 0.10	Flat	12.1 - 37.9
THVHS/40/12/R/RO	40.0	≥ 40.0	≤ 12.0	2.8 +/- 0.10	Round	12.1 - 37.9
THVHS/49/16/R/RO	49.0	≥ 49.0	≤ 16.0	2.9 +/- 0.10	Round	16.1 - 48.9
THVHS/49/16/R/FL	49.0	≥ 49.0	≤ 16.0	2.9 +/- 0.10	Flat	16.1 - 48.9
THVHS/55/18/R/RO	55.0	≥ 55.0	≤ 18.0	2.9 +/- 0.10	Round	18.1 - 54.9
THVHS/55/18/R/FL	55.0	≥ 55.0	≤ 18.0	2.9 +/- 0.10	Flat	18.1 - 54.9
THVHS/65/21/R/FL	65.0	≥ 65.0	≤21.0	3.2 +/- 0.10	Flat	21.1 - 64.5
THVHS/65/21/R/RO	65.0	≥ 65.0	≤21.0	3.2 +/- 0.10	Round	21.1 - 64.5
THVHS/75/25/R/FL	75.0	≥ 75.0	≤ 25.0	3.4 +/- 0.10	Flat	24.9 - 74.9
THVHS/75/25/R/RO	75.0	≥ 75.0	≤ 25.0	3.4 +/- 0.10	Round	24.9 - 74.9
THVHS/85/29/R/FL	85.0	≥ 85.0	≤ 29.0	3.5 +/- 0.10	Flat	28.9 - 84.9
THVHS/85/29/R/RO	85.0	≥ 85.0	≤ 29.0	3.5 +/- 0.10	Round	28.9 - 84.9

Round Shape are only available in 1.2m Lengths and flat shapes are available per meter

Due to ongoing product development specification changes may result. Picture is an example of products and for display purposes, products may differ from picture given.



# **TMILHS Series - Military Grade**

## For general purpose commercial and industrial applications

TTS TMILHS military grade is a flexible, flame retardant, heat shrinkable polyolefin tube. It is designed for a wide range of high specification applications including, military vehicles, military aircrafts as well as military ships.

#### **Characteristics:**

- Operating temperature –55°C to 135°C
- Shrink ratio 2:1 and 3:1 (3:1 ratios available enquire at nearest branch)
- Shrink temperature -start at 70°C and shrunk totally at 120°C
- Inner layer glue melt temperature 70-90°C
- Flexible and flame retardant (except Clear)

**TMILHS SERIES - MILITARY GRADE HEAT SHRINK** 

Meets MIL-DTL23053/5 Class 1&3, UL224 and CSA standards

≥ 101.6

· Meets RoHS and REACH standards









D.11. 0.4	·		• 6 -		·	
Ratio 2:1		As Supplied (mm)	After Red	covery (mm)		
Part Number	Size (mm)	ID	Max ID	Average WT	Shape	Application Range (mm)
TMILHS/1.0/*	1.0	≥ 1.6	≤ 0.8	0.35 +/- 0.08	Round	0.9 - 1.5
TMILHS/2.0/*	2.0	≥ 2.4	≤ 1.2	0.43 +/- 0.08	Round	1.3 - 2.3
TMILHS/3.0/*	3.0	≥3.2	≤ 1.6	0.43 +/- 0.08	Round	1.7 - 3.1
TMILHS/4.5/*	4.5	≥ 4.8	≤ 2.4	0.43 +/- 0.08	Round	2.5 - 4.7
TMILHS/6/*	6.0	≥ 6.4	≤ 3.2	0.56 +/- 0.10	Round	3.3 - 6.3
TMILHS/9/*	9.0	≥ 9.5	≤ 4.0	0.56 +/- 0.10	Flat	4.1 - 9.4
TMILHS/12/*	12.0	≥ 12.7	≤ 4.8	0.56 +/- 0.10	Flat	4.9 - 12.6
TMILHS/16/*	16.0	≥ 15.9	≤ 6.4	0.56 +/- 0.10	Flat	6.5 - 15.8
TMILHS/18/*	18.0	≥ 19.1	≤8.0	0.68 +/- 0.10	Flat	8.1 - 19.0
TMILHS/20/*	20.0	≥ 20.0	≤ 10.0	0.70 +/- 0.10	Flat	10.1 - 19.9
TMILHS/25/*	25.0	≥ 25.4	≤ 12.7	0.77 +/- 0.10	Flat	12.8 - 25.3
TMILHS/30/*	30.0	≥ 31.8	≤ 15.9	0.90 +/- 0.10	Flat	16.0 - 31.7
TMILHS/40/*	40.0	≥ 38.1	≤19.1	0.90 +/- 0.10	Flat	19.2 - 38.0
TMILHS/50/*	50.0	≥ 50.8	≤ 25.4	1.02 +/- 0.10	Flat	25.5 - 50.7
TMILHS/80/*	80.0	≥ 76.2	≤ 38.1	1.15 +/- 0.10	Flat	38.2 - 76.1

<sup>\*</sup> TTS' TMILHS Series heat shrink is available in a full range of colours as below. To create part number replace \* above with below colour code: (Eg: TMILHS/1.0/BK)

≤50.8

Black - BL Blue - BU Red - RE Yellow - Y Green - G Clear - CL White - WH

1.20 +/- 0.10

Clear is Class 2

TMILHS/100/\*

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# **TBRHS Series - Breakouts**

#### Resists common fluids and solvents

TTS' LV heat shrinkable breakouts are made from radiation cross linked polyolefin. It is widely used for protecting multi-conductor cable and conduit breakouts.

#### **Characteristics:**

- · UV resistant, weather, fluids and solvent resistant
- Operating temperature –55°C to 110°C
- Shrink Temperature -start at 100°C and shrunk totally at 120°C
- Flexible and flame retardant
- Mechanical abrasion protection
- RoHS compliant

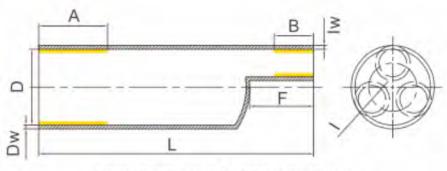








		D (	mm)	I (r	nm)	After Reco	very (mm)	After Recove	ry WT (mm)
Part Number	Size (mm)	A (mm)	B (max)	A (mm)	B (max)	L (mm)	F (mm)	DW (mm)	IW (mm)
TBR3HS38/16	38/16	38	16	15	4.5	110	35	2.1	2.1
TBR3HS40/16	40/16	40	16	15	4.5	125	35	2.1	2.1
TBR3HS60/24	60/24	60	24	25	8.0	165	50	3.0	2.5
TBR3HS60/25	60/25	60	25	25	8.0	180	45	3.2	2.8
TBR3HS80/38-1	80/38	80	38	35	11.0	185	55	3.5	3.5
TBR3HS80/38-2	80/38	80	38	35	11.0	215	57	4.0	4.0
TBR3HS110/50	110/50	110	50	46	17.5	250	65	4.0	4.0
TBR3HS125/57	125/57	125	57	55	20.0	260	75	4.0	4.0
TBR3HS140/70	140/70	140	70	62	26.0	280	75	4.0	4.0
TBR3HS170/77	170/77	170	77	75	28.0	280	80	4.0	4.0



Hot melt adhesive A=50mm B=25mm

Due to ongoing product development specification changes may result. Picture is an example of products and for display purposes, products may differ from picture given.



# **TECHS Series - End Caps**

## For general purpose commercial and industrial applications

TTS' LV heat shrinkable end caps are recommended for use with both open air and underground cable systems using PVC, Lead or XLPE insulations. Definitive recovery with the layer of spiral coated hot melt adhesive.

#### **Characteristics:**

- UV resistant, weather, fluids and solvent resistant
- Operating temperature –55°C to 110°C
- Shrink Ratio 3:1
- Voltage rating up to 1000V
- Simple easy installation
- Flexible and flame retardant
- Waterproof
- Protection against oxidation and UV-radiation
- RoHS compliant

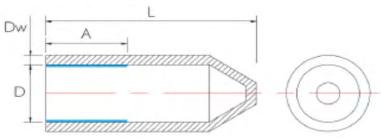








		As Supplied (mm)		After Recovery	(mm)		
Part Number	Size (mm)	D (Min)	D (Max)	A (±10 %)	L (±10 %)	D <sub>w</sub> (±5 %)	Cable Diameter (mm)
TECHS12/4	12/4	12.0	4.0	15	40	2.6	4-10
TECHS14/5	14/5	14.0	5.0	18	42	2.2	5-12
TECHS20/6	20/6	20.0	6.0	25	55	2.5	6-16
TECHS25/8.5	25/8.5	25.0	8.5	30	65	2.5	10-20
TECHS35/16	35/16	35.0	16.0	35	83	3.3	17-30
TECHS40/15	40/15	40.0	15.0	40	75	3.3	18-32
TECHS55/26	55/26	55.0	26.0	50	105	3.5	28-48
TECHS75/36	75/36	75.0	36.0	55	115	4.2	45-68
TECHS100/52	100/52	100.0	52.0	70	130	4.0	55-90
TECHS120/60	120/60	120.0	60.0	70	150	4.2	65-110
TECHS145/60	145/60	145.0	60.0	70	150	4.2	70-130
TECHS160/82	160/82	160.0	82.0	70	133	4.5	90-150
ΓECHS200/90	200/90	200.0	90.0	70	145	4.5	100-180



Due to ongoing product development specification changes may result. Picture is an example of products and for display purposes, products may differ from picture given.



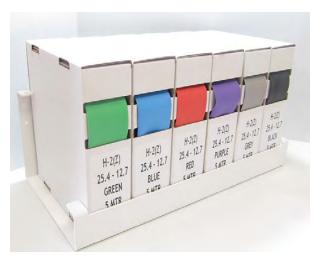
# **TMBHS Series - Mini Boxes**

## **Mini-Box Polyolefin Heat Shrink Tubing Dispensers**

TTS' Halogen Free heat Shrinkable Tube is newly developed environmentally friendly, flame retardant tube using specially designed formulation of advanced polymers. The product now is available in easily dispensable boxes that are ideal for wholesalers and electrical work shops.

#### **Characteristics:**

- Halogen free (black only)
- Operating temperature –55°C to 125°C
- Shrink ratio 2:1
- Shrink temperature -start at 70°C and shrunk totally at 120°C
- Flexible and flame retardant (excluding White)
- Meets RoHS standards
- Complies with UL2224 VW-1,C-UL CSA C22.2 OFT standards









#### **TMBHS SERIES - FLAME RETARDANT MINI BOXES**

		As Supplied (mm)	After Recovery (mm)	
Part Number	Size (mm)	ID	Max ID	Length per Mini-Box (m)
TMBHS/1.6/*	1.6	≥ 1.6	≤ 0.8	15
TMBHS/2.4/*	2.4	≥ 2.4	≤ 1.2	15
TMBHS/3.2/*	3.2	≥ 3.2	≤ 1.6	15
TMBHS/4.8/*	4.8	≥ 4.8	≤ 2.4	10
TMBHS/6.4/*	6.4	≥ 6.4	≤ 3.2	10
TMBHS/9.5/*	9.5	≥ 9.5	≤ 4.75	10
TMBHS/12.7/*	12.7	≥12.7	≤ 6.35	5
TMBHS/19.1/*	19.1	≥ 19.1	≤ 9.5	5
TMBHS/25.4/*	25.4	≥ 25.4	≤12.7	5

\* TTS' TMBHS Series is available in a full range of colours as below. To create part number replace \* above with below colour code: (Eg: TMBHS/1.6/BK)

Black - BL

Blue - BU

Red - RE

Yellow - Y

Yellow/Green - YG

Green - G

Clear - CL

White - WH

Due to ongoing product development specification changes may result. Picture is an example of products and for display purposes, products may differ from picture given.



# **TPBHS Series - Plastic Box Kits**

## Polyolefin heat shrink plastic box kits

TTS' environmentally friendly thin wall adhesive lined (dual wall) product is produced from flame retardant, cross linked polyolefin with an inner coating of hot melt adhesive. This product provides both electrical insulation and mechanical protection as well as a moisture proof envi-

#### **Characteristics:**

- Halogen free (black only)
- Operating temperature –55°C to 125°C
- Shrink ratio 2:1
- Shrink temperature -start at 70°C and shrunk totally at 120°C
- Flexible and flame retardant (excluding White)
- Meets RoHS standards
- Complies with UL2224 VW-1,C-UL CSA C22.2 OFT standards









### **TPBHS SERIES - THIN WALL ADHESIVE LINED PLASTIC BOX KITS**

Part Number	Part Description	Heat Shrink Tubing	Content of kit
TPBHS-1-TTWHS	Heat shrink kit: Plastic box case, various sizes, black only	TTWHS Series - Thin Wall	35 ea. of 2.5 mm & 3.2 mm 21 ea. of 4.7 mm & 6.4 mm 7 ea. of 9.5 mm & 12.7 mm
TPBHS-1-TMILHS	Heat shrink kit: Plastic box case, various sizes, black only	TMILHS Series - Military Grade	35 ea. of 2.5 mm & 3.2 mm 21 ea. of 4.7 mm & 6.4 mm 7 ea. of 9.5 mm & 12.7 mm
TPBHS-2-TTWHS	Heat shrink kit: Plastic box case, various sizes, various colours	TTWHS Series - Thin Wall	35 ea. (5 of ea. colour) of 2.5 mm & 3.2 mm 21 ea. (3 of ea. colour) of 4.7 mm & 6.4 mm 7 ea. (1 of ea. colour) of 9.5 mm & 12.7 mm
TPBHS-2-TMILHS	Heat shrink kit: Plastic box case, various sizes, various colours	TMILHS Series - Military Grade	35 ea. (5 of ea. colour) of 2.5 mm & 3.2 mm 21 ea. (3 of ea. colour) of 4.7 mm & 6.4 mm 7 ea. (1 of ea. colour) of 9.5 mm & 12.7 mm
TPBHS-3-TTWAHS	Thin wall adhesive lined heat shrink kit: Plastic box case, various sizes, black only	TTWAHS Series - Thin Wall - Adhesive Lined	14 ea. of 2.5 mm 12 ea. of 6.5 mm 10 ea. of 9.5 mm 6 ea. of 12.7 mm 3 ea. of 19.0 mm 2 ea. of 25.0 mm

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