

A. System Overview

UL **FM** **CS** **Thick Wall Polyolefin Heat Shrink**

B1. Cable Ties

- Applications include insulating and protecting wires and cables
- Adhesive-lined inner wall seals and protects against moisture
- Thick wall suitable for direct burial according to UL 486D and provides excellent protection

- UL Listed, UL Recognized and CSA Certified (Except HST3.0 and HST3.5)
- Mil Spec: AMS-DTL-23053/15
- Temperature range: -67°F to 230°F (-55°C to 110°C)
- For wet locations
- Suitable for outdoor, direct sunlight applications (Black only)
- Material: Adhesive lined black and red cross-linked Polyolefin

B2. Cable Accessories

- Voltage rating: UL 486D Listed for 600 V 90°C continuous use
- Shrink ratio: 3:1
- Flammability: Flame retardant outer wall meets UL 224 VW-1

B3. Stainless Steel Ties



C1. Wiring Duct

C2. Surface Raceway

C3. Abrasion Protection

C4. Cable Management

D1. Terminals

D2. Power Connectors

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Part Number	Min. Expanded I.D.		Max. Recovered I.D.		Nominal Recovered Wall Thickness		Length		Std. Pkg. Qty.	Std. Ctn. Qty.
	In.	mm	In.	mm	In.	mm	In.	mm		
HST0.4-3-Q2Y*	0.40	10.2	0.16	4.1	0.08	2.0	3.0	76.2	25	100
HST0.4-3-QY*	0.40	10.2	0.16	4.1	0.08	2.0	3.0	76.2	25	100
HST0.4-48-5-2Y*	0.40	10.2	0.16	4.1	0.08	2.0	48.0	1219.2	5	20
HST0.4-48-5Y*	0.40	10.2	0.16	4.1	0.08	2.0	48.0	1219.2	5	20
HST0.4-6-3Y*	0.40	10.2	0.16	4.1	0.08	2.0	6.0	152.4	3	30
HST0.4-6-X2Y*	0.40	10.2	0.16	4.1	0.08	2.0	6.0	152.4	10	100
HST0.4-6-XY*	0.40	10.2	0.16	4.1	0.08	2.0	6.0	152.4	10	100
HST0.8-12-5-2Y*	0.75	19.1	0.22	5.6	0.09	2.3	12.0	304.8	5	50
HST0.8-12-5Y*	0.75	19.1	0.22	5.6	0.09	2.3	12.0	304.8	5	50
HST0.8-48-5-2Y*	0.75	19.1	0.22	5.6	0.09	2.3	48.0	1219.2	5	20
HST0.8-48-5Y*	0.75	19.1	0.22	5.6	0.09	2.3	48.0	1219.2	5	20
HST0.8-6-3Y*	0.75	19.1	0.22	5.6	0.09	2.3	6.0	152.4	3	30
HST0.8-6-X2Y*	0.75	19.1	0.22	5.6	0.09	2.3	6.0	152.4	10	100
HST0.8-6-XY*	0.75	19.1	0.22	5.6	0.09	2.3	6.0	152.4	10	100
HST0.8-9-X2Y*	0.75	19.1	0.22	5.6	0.09	2.3	9.0	228.6	10	100
HST0.8-9-XY*	0.75	19.1	0.22	5.6	0.09	2.3	9.0	228.6	10	100
HST1.1-12-5-2Y	1.10	27.9	0.38	9.5	0.12	3.0	12.0	304.8	5	50
HST1.1-12-5Y	1.10	27.9	0.38	9.5	0.12	3.0	12.0	304.8	5	50
HST1.1-48-5-2Y	1.10	27.9	0.38	9.5	0.12	3.0	48.0	1219.2	5	20
HST1.1-48-5Y	1.10	27.9	0.38	9.5	0.12	3.0	48.0	1219.2	5	20
HST1.1-6-3Y	1.10	27.9	0.38	9.5	0.12	3.0	6.0	152.4	3	30
HST1.1-6-X2Y	1.10	27.9	0.38	9.5	0.12	3.0	6.0	152.4	10	100
HST1.1-6-XY	1.10	27.9	0.38	9.5	0.12	3.0	6.0	152.4	10	100
HST1.1-9-2Y	1.10	27.9	0.38	9.5	0.12	3.0	9.0	228.6	2	20
HST1.1-9-X2Y	1.10	27.9	0.38	9.5	0.12	3.0	9.0	228.6	10	100
HST1.1-9-XY	1.10	27.9	0.38	9.5	0.12	3.0	9.0	228.6	10	100
HST1.5-12-1Y	1.50	38.1	0.50	12.7	0.16	4.1	12.0	304.8	1	10
HST1.5-12-5Y	1.50	38.1	0.50	12.7	0.16	4.1	12.0	304.8	5	50
HST1.5-48-5-2Y	1.50	38.1	0.50	12.7	0.16	4.1	48.0	1219.2	5	15
HST1.5-48-5Y	1.50	38.1	0.50	12.7	0.16	4.1	48.0	1219.2	5	15
HST1.5-9-XY	1.50	38.1	0.50	12.7	0.16	4.1	9.0	228.6	10	100
HST2.0-12-2Y	2.00	50.8	0.67	16.9	0.16	4.1	12.0	304.8	2	20
HST2.0-48-2Y	2.00	50.8	0.67	16.9	0.16	4.1	48.0	1219.2	2	8
HST2.0-9-5Y	2.00	50.8	0.67	16.9	0.16	4.1	9.0	228.6	5	50
HST2.7-12-2Y	2.70	68.6	0.87	22.1	0.16	4.1	12.0	304.8	2	20
HST2.7-48-2Y	2.70	68.6	0.87	22.1	0.16	4.1	48.0	1219.2	2	8
HST3.0-12-2	3.00	76.2	1.00	25.4	0.16	4.1	12.0	304.8	2	20
HST3.0-48-2	3.00	76.2	1.00	25.4	0.16	4.1	48.0	1219.2	2	8
HST3.5-12-2Y	3.50	88.9	1.20	30.5	0.16	4.1	12.0	304.8	2	20
HST3.5-48-2Y	3.50	88.9	1.20	30.5	0.16	4.1	48.0	1219.2	2	6

*Product meets performance requirements of AMS-DTL-23053/15; some dimensions differ from specification.

Recommended Tubing Size for Common Wire Types Based on Location For Insulated Wire, Non-Insulated Wire, and Insulated Wire with Copper Connectors

Instructions for Tube Selection:

1) Determine location type.

LOCATION:

DRY: A location not normally subject to dampness or wetness. A location classified as dry may be temporarily subject to dampness or wetness, as in the case of a building under construction.

DAMP: Partially protected locations under canopies, marquees, roofed open porches and like locations, and interior locations subject to moderate degrees of moisture, such as some basements, barns, and cold-storage warehouses.

WET: Installations underground or in concrete slabs or masonry in direct contact with the earth, and locations subject to saturation with water or other liquids, such as vehicle washing areas, and locations exposed to weather and unprotected.

- 2) Match wire size to location type under required application – insulated wire, non-insulated wire, or insulated wire with copper connectors.
- 3) Read corresponding part number.
- 4) Part numbers with “-Y” are packages containing 6 inch pieces. Part numbers with “-48” are 48 inch pieces.
- 5) Part numbers shown below are for black heat shrink.

Wire Size	Insulated Wire with Copper Connector			Uninsulated Wire		
	Dry-Shrink™	Damp-Shrink™	Wet-Shrink™	Dry-Shrink™	Damp-Shrink™	Wet-Shrink™
24	HSTT09-Y	HSTTA19-Y	—	—	—	—
22	HSTT09-Y	HSTTA19-Y	—	HSTT05-Y	—	—
20	HSTT12-Y	HSTTA19-Y	—	HSTT05-Y	—	—
18	HSTT12-Y	HSTTA19-Y	—	HSTT06-Y	—	—
16	HSTT19-Y	HSTTA25-Y	—	HSTT09-Y	—	—
14	HSTT19-Y	HSTTA25-Y	—	HSTT09-Y	HSTTA19-Y	—
12	HSTT25-Y	HSTTA38-Y	—	HSTT012-Y	HSTTA19-Y	—
10	HSTT25-Y	HSTTA38-Y	HST0.4-48-5Y	HSTT19-Y	HSTTA25-Y	—
8	HSTT38-Y	HSTTA50-Y	HST0.4-48-5Y	HSTT19-Y	HSTTA25-Y	—
6	HSTT50-Y	HSTTA50-Y	HST0.8-48-5Y	HSTT25-Y	HSTTA38-Y	HST0.4-48-5Y
4	HSTT50-Y	HSTTA75-Y	HST0.8-48-5Y	HSTT38-Y	HSTTA50-Y	HST0.4-48-5Y
3	HSTT50-Y	HSTTA75-Y	HST0.8-48-5Y	HSTT38-Y	HSTTA50-Y	HST0.4-48-5Y
2	HSTT75-Y	HSTTA100-Y	HST1.1-48-5Y	HSTT38-Y	HSTTA50-Y	HST0.8-48-5Y
1	HSTT75-Y	HSTTA100-Y	HST1.1-48-5Y	HSTT50-Y	HSTTA75-Y	HST0.8-48-5Y
1/0	HSTT75-Y	HSTTA100-Y	HST1.1-48-5Y	HSTT50-Y	HSTTA75-Y	HST0.8-48-5Y
2/0	HSTT100-Y	HSTTA150-Y	HST1.5-48-5Y	HSTT50-Y	HSTTA100-Y	HST0.8-48-5Y
3/0	HSTT100-Y	HSTTA150-Y	HST1.5-48-5Y	HSTT75-Y	HSTTA100-Y	HST1.1-48-5Y
4/0	HSTT100-Y	HSTTA150-Y	HST1.5-48-5Y	HSTT75-Y	HSTTA100-Y	HST1.1-48-5Y
250	HSTT100-Y	HSTTA150-Y	HST2.0-48-2Y	HSTT100-Y	HSTTA100-Y	HST1.1-48-5Y
300	HSTT150-48-5	HSTTA150-Y	HST2.0-48-2Y	HSTT100-Y	HSTTA150-Y	HST1.5-48-5Y
350	HSTT150-48-5	HSTTA150-Y	HST2.0-48-2Y	HSTT100-Y	HSTTA150-Y	HST1.5-48-5Y
400	HSTT150-48-5	HSTTA150-Y	HST2.0-48-2Y	HSTT100-Y	HSTTA150-Y	HST1.5-48-5Y
500	HSTT150-48-5	HSTTA150-Y	HST2.0-48-2Y	HSTT100-Y	HSTTA150-Y	HST1.5-48-5Y
600	HSTT200-48-5	HSTTA150-Y	HST2.0-48-2Y	HSTT150-48-5	HSTTA150-Y	HST2.0-48-2Y
700	HSTT200-48-5	HSTTA150-Y	HST2.0-48-2Y	HSTT150-48-5	HSTTA150-Y	HST2.0-48-2Y
750	HSTT200-48-5	HSTTA150-Y	HST3.0-48-2Y	HSTT150-48-5	HSTTA150-Y	HST2.0-48-2Y
800	HSTT200-48-5	HSTTA150-Y	HST3.0-48-2Y	HSTT150-48-5	HSTTA150-Y	HST2.0-48-2Y
900	HSTT200-48-5	—	HST3.0-48-2Y	HSTT150-48-5	HSTTA150-Y	HST2.0-48-2Y
1000	HSTT200-48-5	—	HST3.0-48-2Y	HSTT150-48-5	HSTTA150-Y	HST2.0-48-2Y
1250	HSTT200-48-2	—	HST3.0-48-2Y	HSTT200-48-5	HSTTA150-Y	HST2.0-48-2Y
1500	HSTT300-48-2	—	HST3.0-48-2Y	HSTT200-48-5	—	HST2.0-48-2Y
1750	HSTT300-48-2	—	HST3.0-48-2Y	HSTT200-48-5	—	HST2.0-48-2Y
2000	HSTT300-48-2	—	HST3.0-48-2Y	HSTT200-48-5	—	HST2.0-48-2Y

Sizing information is based on the following wire types: MTW, THHN, THWN, TFN, THW, TW, TF, RHW, RH, RHH and UL 1015.

THHN is the most common wire type.

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A.
System
Overview

B1.
Cable Ties

B2.
Cable
Accessories

B3.
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C1.
Wiring
Duct

C2.
Surface
Raceway

C3.
Abrasion
Protection

C4.
Cable
Management

D1.
Terminals

D2.
Power
Connectors

D3.
Grounding
Connectors

E1.
Labeling
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E2.
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PANDUIT® ELECTRICAL SOLUTIONS

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B1. Cable Ties	GPQC15-1/0	D3.5	H200X025H1T-B	E2.13	HL8-1-X	D2.130
	GPQC17-1/0	D3.5	H200X034H1T	E2.13	HL8-2-X	D2.132
	GPQC20-1/0	D3.5	H200X034H1T-2	E2.15	HL8-2N-X	D2.133
	GS2B	B1.111	H200X034H1T-2-B	E2.15	HLA13-1-90-5	D2.131
B2. Cable Accessories	GS4EH	B1.111	H200X034H1T-B	E2.13	HLA21-1-90-5	D2.131
	GS4H	B1.111	H200X044H1T	E2.13	HLA4-1-90-X	D2.131
	GS4MT	B3.14	H200X044H1T-2	E2.15	HLA8-1-90-X	D2.131
	GTH	B1.111	H200X044H1T-2-B	E2.15	HLB2S-C0	B1.87
B3. Stainless Steel Ties	GTS	B1.111	H200X044H1T-B	E2.13	HLB4-1-X	D2.130
	GTSL	B1.111	H200X064H1T	E2.13	HLM-15R0	B1.87
	GU-13-3	D3.26	H200X064H1T-2	E2.15	HLS-15R0	B1.87
	GU-2-X	D3.26	H200X064H1T-2-B	E2.15	HLS-75R0	B1.87
C1. Wiring Duct	GU-4-X	D3.26	H200X064H1T-B	E2.13	HLS1.5S-X0	B1.87
	GUBC500-6	D3.10	H200X084H1T	E2.13	HLS-15R0	B1.87
	H					
	H000X025H1C	E1.8	H200X084H1T-2	E2.15	HLS3S-X0	B1.87
C2. Surface Raceway	H000X025H2C	E1.8	H200X084H1T-2-B	E2.15	HLS5S-X0	B1.87
	H000X034H1C	E1.8	H200X084H2T	E2.13	HLS-75R0	B1.87
	H000X034H2C	E1.8	H200X122H1T-2	E2.15	HLSP1.5S-X0	B1.88
	H000X044H1C	E1.8	H200X165H1T	E2.13	HLSP1.5S-X12	B1.88
C3. Abrasion Protection	H000X044H2C	E1.8	H200X165H1T-2	E2.15	HLSP3S-X0	B1.88
	H000X064H1C	E1.8	H200X165H2T	E2.14	HLSP3S-X12	B1.88
	H000X064H2C	E1.8	H2L13-2N-2	D2.134	HLSP5S-X0	B1.88
	H000X084H1C	E1.8	H2L21-2N-2	D2.134	HLSP5S-X12	B1.88
C4. Cable Management	H000X084H2C	E1.8	H2L30-2N-1	D2.134	HLT2I-X0	B1.87
	H050X025H1T	E2.12	H2L4-2N-X	D2.134	HLT3I-X0	B1.87
	H050X025H1T-B	E2.12	H2L8-2N-2	D2.134	HLTP2I-X0	B1.88
	H050X044H1T	E2.12	H2X2LG6	C1.11	HLTP2I-X12	B1.88
D1. Terminals	H050X044H1T-B	E2.12	H2X3LG6	C1.11	HLTP3I-X0	B1.88
	H050X064H1T	E2.12	H2X4LG6	C1.11	HLTP3I-X12	B1.88
	H050X064H1T-B	E2.12	H3X3LG6	C1.11	HLWM1.5S-X0	B1.91
	H075X025H1T	E2.12	H3X4LG6	C1.11	HLWM3S-X0	B1.91
D2. Power Connectors	H075X025H1T-B	E2.12	H4X4LG6	C1.11	HN1.5X2LG6	C1.11
	H075X034H1T	E2.12	HB2SP19-X	B2.51	HN1.5X3LG6	C1.11
	H075X034H1T-B	E2.12	HB2SP25-X	B2.51	HN2X2LG6	C1.11
	H075X044H1T	E2.12	HBN.75-T	B2.49	HN2X3LG6	C1.11
D3. Grounding Connectors	H1.5X2LG6	C1.11	HBN1-T	B2.49	HN2X4LG6	C1.11
	H1.5X3LG6	C1.11	HBN1.5-T	B2.49	HN3X3LG6	C1.11
	H100X025H1C	E1.9	HBN2-T	B2.49	HN3X4LG6	C1.11
	H100X025H1T	E2.13	HBN2.5-T	B2.49	HN4X4LG6	C1.11
E1. Labeling Systems	H100X025H1T-2	E2.14	HBN3-T	B2.49	HS1.5X2LG6NM	C1.11
	H100X025H1T-2-B	E2.14	HBN4-T	B2.49	HS1.5X3LG6NM	C1.11
	H100X025H1T-B	E2.12	HBUA-X	B2.51	HS2X2LG6NM	C1.11
	H100X025H2C	E1.9	HC1.5LG6	C1.11	HS2X3LG6NM	C1.11
E2. Labels	H100X034H1C	E1.9	HC2LG6	C1.11	HS2X4LG6NM	C1.11
	H100X034H1T	E2.12	HC3LG6	C1.11	HS3X3LG6NM	C1.11
	H100X034H1T-2	E2.14	HC4LG6	C1.11	HS3X4LG6NM	C1.11
	H100X034H1T-2-B	E2.14	HC13-3	D2.135	HS4X4LG6NM	C1.11
E3. Pre-Printed & Write-On Markers	H100X034H2C	E1.9	HC21-1	D2.135	HSC.25-L	B2.41
	H100X044H1C	E1.9	HC30-1	D2.135	HSC.25-L100	B2.41
	H100X044H1T	E2.12	HC4-3	D2.135	HSEC0.5-X	C3.39
	H100X044H1T-2	E2.14	HC50-1	D2.135	HSEC0.8-X	C3.39
E4. Permanent Identification	H100X044H1T-2-B	E2.14	HC8-3	D2.135	HSEC1.0-X	C3.39
	H100X044H1T-B	E2.12	HCMEO4Y09-C30	B2.45	HSEC1.5-5	C3.39
	H100X044H2C	E1.9	HCME06A12-C130	B2.45	HSEC2.0-5	C3.39
	H100X064H1C	E1.9	HCME06Y12-C30	B2.45	HSEC4.0-2	C3.39
E5. Lockout/Tagout & Safety Solutions	H100X064H1T	E2.12	HCMP06B12-C20	B2.44	HSECFR0.5-XY	C3.39
	H100X064H1T-B	E2.12	HCMP06C12-C20	B2.44	HSECFR0.8-XY	C3.39
	H100X064H2C	E1.9	HHL13-2N-5	D2.133	HSECFR1.0-XY	C3.39
	H100X084H1C	E1.9	HHL21-2N-5	D2.133	HSECFR1.5-5Y	C3.39
F. Index	H100X084H1T	E2.13	HHL30-22N-1	D2.133	HSECFR2.0-5Y	C3.39
	H100X084H1T-2	E2.14	HHL8-2N-X	D2.133	HSG-115V-650	C3.40
	H100X084H1T-2-B	E2.14	HKBS	C3.16	HSG-A1	C3.40, E2.15
	H100X084H2C	E1.9	HL1-2-25-X	D2.132	HSG-A2	C3.40, E2.15
F. Index	H100X122H1T-2	E2.14	HL1-25-X	D2.130	HSG-A4	C3.40, E2.15
	H100X165H1T	E2.13	HL13-1-5	D2.130	HSG-P1	C3.40, E2.15
	H100X165H1T-2	E2.14	HL13-2-5	D2.132	HSG-P2	C3.40, E2.15
	H150X025H1T	E2.14	HL13-2N-5	D2.133	HSG-P3	C3.40, E2.15
F. Index	H150X034H1T	E2.13	HL21-1-5	D2.130	HSG-P7	C3.40, E2.15
	H150X044H1T	E2.14	HL21-2-5	D2.132	HST0.4-3-Q2Y	C3.38
	H200X025H1T	E2.13	HL21-2N-5	D2.133	HST0.4-3-QY	C3.38
	H200X025H1T-2	E2.15	HL30-1-2	D2.130	HST0.4-48-5-2Y	C3.38
F. Index	H200X034H1T	E2.13	HL30-2-2	D2.132	HST0.4-48-5Y	C3.38
	H200X034H1T-2	E2.15	HL30-2N-2	D2.133	HST0.4-6-3Y	C3.38
	H200X044H1T	E2.13	HL4-1-X	D2.130	HST0.4-6-X2Y	C3.38
	H200X044H1T-2	E2.15	HL4-2-X	D2.132	HST0.4-6-XY	C3.38
F. Index	H200X064H1T	E2.13	HL50-1-2	D2.130	HST0.8-12-5-2Y	C3.38
	H200X064H1T-2	E2.15	HL50-2-2	D2.132	HST0.8-12-5Y	C3.38
	H200X084H1T	E2.13				
	H200X084H1T-2	E2.15				