

Heat Shrinkable Tubing

Thermo-Shrink® UF Splice Kits



- Direct burial rated
- 14/3 with and without ground thru 8/3 without ground, UF cable range
- Stretcher kit repairs a 7 in. to 10 in. section damaged or destroyed by a trencher
- 600V Maximum, 105°C rating
- Meets the requirements of the 2002 NEC Code 110-14(b) and UL486D



Description	Cat. No.
UF Splice Kit - 14-8 AWG, Tubing 1.1 in. x 8 in.	46-400
UF Stretcher Kit* - 14-8 AWG, Tubing 1.1 in. x 18 in.	46-410

*Stretcher kit connector is 11.5 in.

Thermo-Shrink® Al/Cu Splice Kits



- Direct burial rated, underground splice kits
- Heavy-wall heat shrink tubing with adhesive liner provides complete insulation and protection
- Connector can be used for aluminum and/or copper cable
- Meets the requirements of the 2005 NEC Code 110-14(B)
- 600V maximum, 105°C rating

Description	Cat. No.
Underground Splice Kit – 8 to 4 AWG, Tubing 3/4 in. x 6 in.	46-401
Underground Splice Kit – 4 AWG to 1/0, Tubing 1.1 in. x 8 in.	46-402
Underground Splice Kit – 1/0 to 250 KCMIL, Tubing 1-1/2 in. x 12 in.	46-403

Thermo-Shrink® Copper Butt Splice Kits

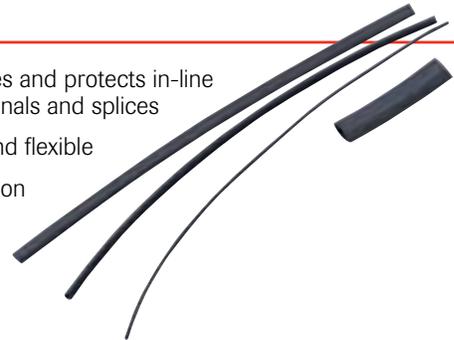
- UL Listed
- Provides a fully-insulated butt splice
- 600V Maximum, 105°C rating



Description	Cat. No.
Butt Splice Kit – Copper 14-8 AWG	46-404
Butt Splice Kit – Copper 8-2 AWG	46-405

BUCHANAN Thin-Wall Heat Shrink Tubing

- Electrically insulates and protects in-line components, terminals and splices
- Flame-retardant and flexible
- Resistant to common fluids and solvents
- Meets UL 224 125°C VW-1 600V
- RoHS compliant
- 2:1 shrink ratio
- Minimum shrink temperature: 70°C
- Operating temperature: -55°C to +125°C



Description	Nominal Size (in.)	Color	Length (ft.)	Cat. No.
Thin Wall Heat Shrink	1/6	Black	4	772-1/16-BL
Thin Wall Heat Shrink	3/32	Black	4	772-3/32-BL
Thin Wall Heat Shrink	1/8	Black	4	772-1/8-BL
Thin Wall Heat Shrink	3/16	Black	4	772-3/16-BL
Thin Wall Heat Shrink	1/4	Black	4	772-1/4-BL
Thin Wall Heat Shrink	3/8	Black	4	772-3/8-BL
Thin Wall Heat Shrink	1/2	Black	4	772-1/2-BL
Thin Wall Heat Shrink	3/4	Black	4	772-3/4-BL
Thin Wall Heat Shrink	1	Black	4	772-1-BL

Heat Shrink

Thermo-Shrink® Thin-Wall Heat Shrinkable Tubing

- Polyolefin material electrically insulates and protects in-line components, disconnect terminals and splices with its high strength and excellent resilience
- Use to bundle wires for very flexible light-duty harnesses
- Highly flame-retardant and flexible
- Resistant to common fluids and solvents
- Meets UL 486D 125°C VW-1 600V
- Material: No PBB's, PBBE's, conforms to ROHS
- 2:1 shrink ratio
- Minimum shrink temperature: 70°C
- Operating temperature: -55°C to +125°C



Heat Shrink

Technical Data		
Property	Test Method	Typical Data
Tensile strength	ASTM D 638	14MPa
Elongation at break	ASTM D 638	600%
Elongation after aging at 175°C for 168 hours	UL 224	350%
Flammability	UL 224 VW-1	Pass
Heat shock (250°C/4 hours)	UL 224	No cracking
Cold bend test (-55°C/4 hours)	UL 224	No cracking
Dielectric strength	ASTM D 150	20KV/mm
Volume resistance	ASTM D 876	1014Ω.cm
Copper corrosion	UL 224	Pass
Chemical resistance	UL 224	Pass
Longitudinal shrinkage	UL 224	0±5%
Eccentricity	UL 224	30%

Normal Size (in.)	Expanded I.D. (Min.)	Nominal Recovered I.D. (Max.)	Recovered Wall Thickness +/- 10%	Cable Range AWG*	Length (Pkg.)	Cat. No.
3/64	0.063"/1.6mm	0.024"/0.6mm	0.013"/0.33mm	22-18	4 ft. (Disk)	46-600
1/16	0.079"/2.0mm	0.031"/0.8mm	0.014"/0.36mm	16	4 ft. (Disk)	46-601
3/32	0.122"/3.1mm	0.047"/1.2mm	0.017"/0.44mm	14-12	4 ft. (Disk)	46-602
1/8	0.146"/3.7mm	0.063"/1.6mm	0.017"/0.44mm	24-20	6 in. (Bag)	46-310
					4 ft. (Disk)	46-603
					1,000 ft. (Spool)	46-312
3/16	0.205"/5.2mm	0.094"/2.4mm	0.020"/0.50mm	20-14	6 in. (Bag)	46-313
					4 ft. (Disk)	46-604
					1,000 ft. (Spool)	46-315
1/4	0.268"/6.8mm	0.126"/3.2mm	0.022"/0.56mm	14-8	6 in. (Bag)	46-316
					4 ft. (Disk)	46-605
					500 ft. (Spool)	46-318
5/16	0.346"/8.8mm	0.157"/4.0mm	0.022"/0.56mm	10-6	4 ft. (Disk)	46-606
					6 in. (Bag)	46-319
3/8	0.421"/10.7mm	0.185"/4.7mm	0.022"/0.56mm	8-4	4 ft. (Disk)	46-607
					200 ft. (Spool)	46-321
					6 in. (Bag)	46-322
1/2	0.539"/13.7mm	0.252"/6.4mm	0.026"/0.65mm	4-1	4 ft. (Disk)	46-608
					200 ft. (Spool)	46-324
					6 in. (Bag)	46-325
3/4	0.807"/20.5mm	0.374"/9.5mm	0.027"/0.69mm	2-250 MCM	4 ft. (Disk)	46-609
					200 ft. (Spool)	46-327
					6 in. (Bag)	46-328
1	1.043"/26.5mm	0.500"/12.7mm	0.031"/0.80mm	2/0-500 MCM	4 ft. (Disk)	46-610
					100 ft. (Spool)	46-330
					6 in. (Bag)	46-328

*Reference only - Consult the wire manufacturer's catalog for specific O.D. of wire and insulation.

Thermo-Shrink® Heavy-Wall Heat Shrinkable Tubing

- TS-46 irradiated cross-linked polyolefin with 3:1 standard shrink ratio
- Adhesive liner provides complete insulation and protection to electrical splices in above-grade, underground or underwater applications
- Maximum flame retardancy
- Meets UL 486D, CSA C22.2 No. 198.2, ANSI C119.1, Western Underground Guides Nos. 2.4, 2.5, MIL-DTL-23053/15, IEEE 383 Vertical Flame Test, ANSI C37.20.2, ICEA S-19-8 and NEMA insulation thickness requirements
- Continuous operating temperature from -55°C to 110°C
- Rated for 600V, 90°C continuous use
- Shrink temperature of 120°C



Model	Expanded I.D. (Min.) (In.)	Recovered I.D. (Max.) (In.)	Nominal Recovered Wall Thickness (In.)	Cable Range*	Length (In.)	Cat. No.
TS-46-400	.400	.150	.060	12-6 AWG	6	46-343
					9	46-344
					48	46-346
TS-46-750	.750	.240	.090	8-1/0 AWG	6	46-347
					9	46-348
					48	46-350
TS-46-1100	1.100	.350	.120	2-4/0 AWG	6	46-351
					9	46-352
					48	46-354
TS-46-1500	1.500	.470	.160	3/0 AWG-400 KCMIL	9	46-356
					12	46-357
					48	46-358
TS-46-2000	2.000	.630	.160	250-750 KCMIL	9	46-369
					18	46-371
					48	46-372

*Reference only. Consult the wire manufacturer's catalog for specific O.D. of wire and insulation.



Properties	Heavy Wall
Shrink Temperatures	120°C to 250°C (200°C recommended)
Continuous Operating Temperature	-55°C to 110°C
Tensile Strength (PSI)	2,100 PSI min.
Ultimate Elongation	600% min.
Secant Modulus @ 2% Strain	25,000 PSI max.
Specific Gravity	1.20 max.
Heat Aging, 168 hrs. @ 175°C Tensile Strength Elongation	500%
Heat Shock, 4 hrs. @ 225°C	No cracks, flowing or dripping
Flammability	Self-extinguishing
Low Temperature Brittle Point	-55°C
Volume Resistivity	1013ohm-cm min.
Dielectric Strength	500V/mil (20kV/min.)
Corrosive Effect	Non-corrosive
Solvent Resistance 24 hrs. Immersion per MIL-DTL-23053	Good to excellent
Water Absorption	0.5%
Fungus Resistance	No growth
Longitudinal Change, 3 min.	+1%/-10%

All values are typical performance data and are not to be used as design data.

Heat Shrink

Thermo-Shrink® Medium-Wall Heat Shrinkable End Caps

- Creates a watertight seal to protect ends of power and control cords
- Protects against oxidation, ozone, UV radiation, etc.
- Coated with hot melt adhesive to ensure environment seal
- Fits easily over end of cable
- Protect power cables up to 1000V and telecommunication cable
- Recommended for both open air and underground power distribution cables with PVC, lead or XLPE sheaths
- Thermally stabilized cross-linked polyolefin, coated with specially designed hot melt adhesive



Technical Data		
Property	Test Method	Typical Data
Operating Temperature	IEC 216	-55°C to +110°C
Tensile Strength	ASTM D 638	>14 MPa
Elongation at break	ASTM D 638	>400%
Density	ASTM D 792	1.05g/cm ³
Elongation of break after aging	150°C, 168 hrs.	>300%
Dielectric Strength	IEC 243	>15KV/mm
Volume Resistance	IEC 93	1014Ω.cm

Expanded I.D. (Min.)	Recovered I.D. (Max.)	Recovered Wall Thickness +/-10%	Cable Dia. Range*	Length	Cat. No.
0.55"/14mm	0.18"/4.5mm	0.079"/2.0mm	0.20"/5mm - 0.47"/12mm	1.77"/ 45mm	46-381
0.98"/25mm	0.31"/8mm	0.091"/2.3mm	0.39"/10mm - 0.71"/18mm	2.76"/ 70mm	46-382
1.38"/35mm	0.59"/15mm	0.118"/3.0mm	0.67"/17mm - 1.18"/30mm	3.35"/ 85mm	46-383
2.95"/75mm	1.38"/35mm	0.138"/3.5mm	1.77"/45mm - 2.76"/70mm	5.12"/ 130mm	46-384

*Consult the wire manufacturer's catalog for specific O.D. of wire and insulation.

Thermo-Shrink® Heat Shrink Kit

Kit includes:

- Heat Elite Pro Heat Gun
- Eleven sizes of thin-wall heat shrinkable tubing disks (3/64 in. – 1 in.)
- Small deflector
- Premium T®-Cutter Wire Cutter



Description	Cat. No.
Kit includes: 46-203, 45-223, 46-941, & 46-600 through 46-610	46-007

Heat Elite Heat Gun Kit

- Temperature range – 930°F (500°C)
- Two-step switch for heat and air flow adjustments
- Double-insulated power cord
- Ergonomical distribution of weight
- Comfortable non-slip handle for ease of use



Description	Cat. No.
Heat Elite Kit - Includes #46-202 Heat Gun, #46-941 Small Deflector and #46-954 Wide-Slot Adapter	46-202



Heat Elite Pro Heat Gun Kit

- Temperature range – 180°F - 1020°F (100 - 550°C)
- Two-step switch for heat and air flow adjustments
- Double-insulated power cord
- Ergonomical distribution of weight
- Comfortable non-slip handle for ease of use



Description	Cat. No.
Heat Elite Pro Kit - Includes #46-203 Heat Gun, #46-941 Small Deflector, #46-950 Reduction Adapter and #46-954 Wide-Slot Adapter	46-203



Heat Elite Plus LCD Heat Gun Kit

- Temperature range – 180°F - 1200°F (80 - 650°C)
- Double-insulated power cord
- Ergonomical distribution of weight
- Comfortable non-slip handle for ease of use
- LCD display with memory functions
- Temperature and airflow adjustments
- Stand-by mode to minimize the energy consumption
- Ceramic heating element ensures long-term coil performance



Description	Cat. No.
Heat Elite Plus LCD Kit - Includes #46-204 Heat Gun, #46-941 Small Deflector, #46-952 Welding Adapter, #46-953 Solder Reflector Adapter, #46-955 Overlap Welding Adapter, #46-956 Pressure Roller	46-204



Heat Gun Accessories



Description	Cat. No.
Small Deflector, 1-1/4 in. diameter (For use with all Heat Elite Heat Guns)	46-941
Reduction Adapter (For use with 46-203 and 46-204)	46-950
Glass Protection Adapter (For use with all Heat Elite Heat Guns)	46-951
Welding Adapter (For use with 46-203 and 46-204)	46-952
Solder Reflector Adapter (For use with 46-204)	46-953
Wide-Slot Adapter (For use with all Heat Elite Heat Guns)	46-954
Overlap Adapter (For use with 46-203 and 46-204)	46-955
Pressure Roller (For use with 46-204)	46-956