

HEAT SHRINK

- Easy to install underground splice kits to help save time and money
- Protects cable during storage with watertight seal provided by IDEAL End Caps



Thermo-Shrink® UF Splice Kits

- Direct burial rated, UV resistant
- 14/3 with and without ground through 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
- One wire per fitting



Description	Part 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
- UV resistant



Description	Part 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® Self-Sealing UF Splice Kit

- Fully waterproof, submersible and re-enterable to make future changes or repairs
- Meets the requirements of the 2002 NEC Code 110-14 (b) and UL486D
- Accommodates 14 to 10 AWG wire range
- 600V Maximum, 105°C rating



Description	Part No.
Self Sealing UF Splice Kit	46-411

Thermo-Shrink® Copper Butt Splice Kits

- UL Listed
- UV resistant
- Provides a fully-insulated butt splice
- 600V Maximum, 105°C rating
- Not rated for direct burial



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

Thermo-Shrink® Heat Shrink Kit



Description	Part No.
Thermo-Shrink® Heat Shrink Kit	46-007
Kit Includes:	
HEAT ELITE PRO™ Heat Gun	46-203
3/64 in. Heat Shrinkable Tubing (4 ft. disk)	46-600
1/16 in. Heat Shrinkable Tubing (4 ft. disk)	46-601
3/32 in. Heat Shrinkable Tubing (4 ft. disk)	46-602
1/8 in. Heat Shrinkable Tubing (4 ft. disk)	46-603
3/16 in. Heat Shrinkable Tubing (4 ft. disk)	46-604
1/4 in. Heat Shrinkable Tubing (4 ft. disk)	46-605
5/16 in. Heat Shrinkable Tubing (4 ft. disk)	46-606
3/8 in. Heat Shrinkable Tubing (4 ft. disk)	46-607
1/2 in. Heat Shrinkable Tubing (4 ft. disk)	46-608
3/4 in. Heat Shrinkable Tubing (4 ft. disk)	46-609
1 in. Heat Shrinkable Tubing (4 ft. disk)	46-610
Small Deflector, 1-1/4 in. diameter	46-941
Premium T®-Cutter Wire Cutter	45-123

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 224, CSA 22.2 125°C VW-1 600V; Material: No PBB's, PBBE's
- 2:1 shrink ratio; Minimum shrink temperature: 70°C; Operating temperature: -55°C to +125°C
- RoHS compliant
- UV resistant



Normal Size (in.)	Expanded I.D. (Min.)	Nominal Recovered I.D. (Max.)	Recovered Wall Thickness +/- 10%	Cable Range AWC*	Length (Pkg.)	Part No.
3/64	.047/1.2	0.024"/0.6mm	0.013"/0.33mm	22-18	4 ft. (Disk)	46-600
1/16	.063/1.6	0.031"/0.8mm	0.014"/0.36mm	16		46-601
3/32	.094/2.4	0.047"/1.2mm	0.017"/0.44mm	14-12		46-602
1/8	.126/3.2	0.063"/1.6mm	0.017"/0.44mm	24-20	6 in. (Bag)	46-310
					4 ft. (Disk)	46-603
3/16	.189/4.8	0.094"/2.4mm	0.020"/0.56mm	20-14	6 in. (Bag)	46-313
					4 ft. (Disk)	46-604
1/4	.251/6.4	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	.315/8.0	0.157"/4.0mm	0.022"/0.56mm	10-6	4 ft. (Disk)	46-606
3/8	.374/9.5	0.185"/4.7mm	0.022"/0.56mm	8-4	6 in. (Bag)	46-319
					4 ft. (Disk)	46-607
					200 ft. (Spool)	46-321
1/2	.5/12.7	0.252"/6.4mm	0.026"/0.65mm	4-1	6 in. (Bag)	46-322
					4 ft. (Disk)	46-608
					200 ft. (Spool)	46-324
3/4	.751/19.1	0.374"/9.5mm	0.027"/0.80mm	2-250 MCM	6 in. (Bag)	46-325
					4 ft. (Disk)	46-609
					200 ft. (Spool)	46-327
1	1/25.4	0.500"/12.7mm	0.031"/0.90mm	2/0-500 MCM	6 in. (Bag)	46-328
					4 ft. (Disk)	46-610
					100 ft. (Spool)	46-330

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



Specifications

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)		No cracking
Dielectric strength	ASTM D 150	20KV/mm
Volume resistance	ASTM D 876	1014Ωcm
Copper corrosion	UL 224	Pass
Chemical resistance		Pass
Longitudinal shrinkage		0±5%
Eccentricity		30%

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 retardant
- 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
- Rated for 600V, 90°C continuous use



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	.130	.070	12-8 AWG	6	46-343
					9	46-344
					48	46-346
TS-46-750	.750	.220	.090	6-2/0 AWG	6	46-347
					9	46-348
					48	46-350
TS-46-1100	1.100	.350	.120	1/0-3/0 AWG	6	46-351
					9	46-352
					48	46-354
TS-46-1500	1.500	.470	.160	2/0 AWG-350 KCMIL	9	46-356
					12	46-357
					48	46-358
TS-46-2000	2.000	.630	.160	250-500 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.



Specifications

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	Flame retardant
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	0.2%
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.

Thermo-Shrink® Medium-Wall Heat Shrinkable Tubing 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
- UV resistant



Expanded I.D. (Min.)	Recovered I.D. (Max.)	Recovered Wall Thickness +/-10%	Cable Dia. Range*	Length	Part 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.

Specifications

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 again	150°C, 168 hrs.	>300%
Dielectric strength	IEC 243	>15KV/mm
Volume resistance	IEC 93	1014Ωcm

Heat Elite Heat Gun Kit

- Temperature range: 660°-930°F (300°-500°C)
- Two-step switch for heat and air flow adjustments
- Double-insulated power cord
- Ergonomic distribution of weight
- Comfortable non-slip handle for ease of use



Description	Part No.
Heat Elite Heat Gun Kit, 1200 Watts	46-202
Kit Includes:	Part No.
Heat Elite Heat Gun, 1200 Watts	46-202
Small Deflector, 1-1/4 in. diameter	46-941
Wide-Slot Adapter	45-954

HEAT ELITE PRO™ Heat Gun Kit

- Temperature range: 180°F - 1020°F (80° - 550°C)
- Double-insulated power cord
- Ergonomic 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	Part No.
HEAT ELITE PRO™ Heat Gun Kit, 1500 Watts	46-203
Kit Includes:	Part No.
HEAT ELITE PRO™ Heat Gun, 1500 Watts	46-203
Small Deflector	46-941
Reduction Adapter	46-950
Wide-Slot Adapter	46-954

Heat Elite Plus LCD Heat Gun Kit

- Temperature range: 180° - 1200°F (80° - 650°C)
- Two-step switch for heat and air flow adjustments
- Double-insulated power cord
- Ergonomic distribution of weight
- Comfortable non-slip handle for ease of use
- Infinite temperature adjustment



Description	Part No.
Heat Elite Plus LCD Heat Gun Kit, 1500 Watts	46-204
Kit Includes:	Part No.
Heat Elite Plus LSD Heat Gun, 1500 Watts	46-204
Small Deflector	46-941
Welding Adapter	46-952
Solder Reflector Adapter	46-953
Overlap Adapter	46-955
Pressure Roller	46-956

Heat Gun Accessories



Description	For Use With:	Part No.
Small Deflector, 1-1/4 in. diameter	46-202, 46-203, 46-204	46-941
Reduction Adapter	46-203, 46-204	46-950
Glass Protection Adapter	46-202, 46-203, 46-204	46-951
Welding Adapter	46-203, 46-204	46-952
Solder Reflector Adapter	46-204	46-953
Wide-Slot Adapter	46-202, 46-203, 46-204	46-954
Overlap Adapter	46-203, 46-204	46-955
Pressure Roller	46-204	46-956