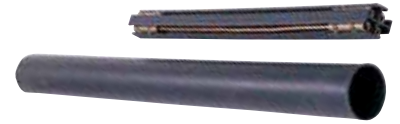


## Thermo-Shrink® UF Splice Kits

- 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
- UV resistant



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
- UV resistant



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
- UV resistant
- 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

## Thermo-Shrink® Heat Shrink Kit

- Kit includes: HEAT ELITE PRO™ Heat Gun 46-203, Eleven sizes of thin-wall heat shrinkable tubing disks (3/64 in. – 1 in.) 46-600 through 46-610, Small deflector 46-941, Premium T®-Cutter Wire Cutter 45-123



Description	Cat. No.
Thermo-Shrink® Heat Shrink Kit	46-007

## 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
- RoHS compliant
- UV resistant



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)	<b>46-600</b>
1/16	0.079"/2.0mm	0.031"/0.8mm	0.014"/0.36mm	16	4 ft. (Disk)	<b>46-601</b>
3/32	0.122"/3.1mm	0.047"/1.2mm	0.017"/0.44mm	14-12	4 ft. (Disk)	<b>46-602</b>
1/8	0.146"/3.7mm	0.063"/1.6mm	0.017"/0.44mm	24-20	6 in. (Bag)	<b>46-310</b>
					4 ft. (Disk)	<b>46-603</b>
					1,000 ft. (Spool)	<b>46-312</b>
3/16	0.205"/5.2mm	0.094"/2.4mm	0.020"/0.50mm	20-14	6 in. (Bag)	<b>46-313</b>
					4 ft. (Disk)	<b>46-604</b>
					1,000 ft. (Spool)	<b>46-315</b>
1/4	0.268"/6.8mm	0.126"/3.2mm	0.022"/0.56mm	14-8	6 in. (Bag)	<b>46-316</b>
					4 ft. (Disk)	<b>46-605</b>
					500 ft. (Spool)	<b>46-318</b>
5/16	0.346"/8.8mm	0.157"/4.0mm	0.022"/0.56mm	10-6	4 ft. (Disk)	<b>46-606</b>
3/8	0.421"/10.7mm	0.185"/4.7mm	0.022"/0.56mm	8-4	6 in. (Bag)	<b>46-319</b>
					4 ft. (Disk)	<b>46-607</b>
					200 ft. (Spool)	<b>46-321</b>
1/2	0.539"/13.7mm	0.252"/6.4mm	0.026"/0.65mm	4-1	6 in. (Bag)	<b>46-322</b>
					4 ft. (Disk)	<b>46-608</b>
					200 ft. (Spool)	<b>46-324</b>
3/4	0.807"/20.5mm	0.374"/9.5mm	0.027"/0.69mm	2-250 MCM	6 in. (Bag)	<b>46-325</b>
					4 ft. (Disk)	<b>46-609</b>
					200 ft. (Spool)	<b>46-327</b>
1	1.043"/26.5mm	0.500"/12.7mm	0.031"/0.80mm	2/0-500 MCM	6 in. (Bag)	<b>46-328</b>
					4 ft. (Disk)	<b>46-610</b>
					100 ft. (Spool)	<b>46-330</b>

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

# 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	Cat. No.
0.55"/14mm	0.18"/4.5mm	0.079"/2.0mm	0.20"/5mm - 0.47"/12mm	1.77"/ 45mm	<b>46-381</b>
0.98"/25mm	0.31"/8mm	0.091"/2.3mm	0.39"/10mm - 0.71"/18mm	2.76"/ 70mm	<b>46-382</b>
1.38"/35mm	0.59"/15mm	0.118"/3.0mm	0.67"/17mm - 1.18"/30mm	3.35"/ 85mm	<b>46-383</b>
2.95"/75mm	1.38"/35mm	0.138"/3.5mm	1.77"/45mm - 2.76"/70mm	5.12"/ 130mm	<b>46-384</b>

\*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 <sup>3</sup>
Elongation of break after again	150°C, 168 hrs.	>300%
Dielectric strength	IEC 243	>15KV/mm
Volume resistance	IEC 93	1014Ωcm

## 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
- 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	.150	.060	12-6 AWG	6	<b>46-343</b>
					9	<b>46-344</b>
					48	<b>46-346</b>
TS-46-750	.750	.240	.090	8-1/0 AWG	6	<b>46-347</b>
					9	<b>46-348</b>
					48	<b>46-350</b>
TS-46-1100	1.100	.350	.120	2-4/0 AWG	6	<b>46-351</b>
					9	<b>46-352</b>
					48	<b>46-354</b>
TS-46-1500	1.500	.470	.160	3/0 AWG-400 KCMIL	9	<b>46-356</b>
					12	<b>46-357</b>
					48	<b>46-358</b>
TS-46-2000	2.000	.630	.160	250-750 KCMIL	9	<b>46-369</b>
					18	<b>46-371</b>
					48	<b>46-372</b>

\*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	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.