FIT® Heat-Shrink Tubing







FIT® Heat-Shrink Tubing





Whether your concerns are mechanical strain relief, environmental sealing, or organizing wires, Alpha Wire's FIT heat-shrink tubing is ideal for solving many challenges in electrical and electronic wiring:

- **Protect** substrates from moisture, UV light, corrosion, oxidation, dust, chemicals, abrasion, environmental conditions, solder joints, and encapsulates
- **Insulate** wire terminations and connections, entire printed circuit boards, from electrical and environmental conditions
- **Repair** cable splices, insulation damage and cuts, cable jackets, and connections, with permanent or temporary quick fixes
- **Relieve** strain on cables and connectors to prevent harmful flexing or bending
- **Bundle and organize** wire harness, cable, tubing, and hose dressing on OEM equipment, breakouts, bundle in small spaces, conform to odd shapes
- **Seal** connections, backshells, and other gaps from moisture and other contaminants
- **Identify** circuits through color coding, grouping, and labeling

FIT heat-shrink products

Our FIT heat-shrink tubing offers a reliable way to protect and seal terminations or add additional mechanical ruggedness. FIT preferred heat-shrink products are made from premium compounds under the tightest manufacturing controls. This means FIT tubing consistently provides excellent physical characteristics such as low longitudinal shrinkage and wide temperature ranges while providing an elegant appearance when used alone or on OEM equipment.

The FIT line consists of various tubing types, each designed with unique attributes that offer tubing solutions for the broadest possible range of applications and environments. FIT products are always in stock and come in an unprecedented variety of package sizes.

Beyond the widely used polyolefin tubing that is suited to the broadest range of general-purpose needs, we offer a number of other materials for higher or lower shrink temperatures, wider operating temperatures, and such special needs as outstanding chemical resistance or increased flexibility.

Specifications subject to change. For complete specifications and availability, visit www.alphawire.com.

Material	Features	Shrink Temperature	Shrink Ratio (approx.)	FIT Family
Single-Wall Cross-linked Polyolefin for General-Purpose Use				
Cross-linked polyolefin	General-purpose heat-shrink tubing Range of shrink ratios	90°C	2:1	FIT-221
		90°C	4:1	FIT-421
Flame-retardant cross-linked polyolefin	Low shrink temp Passes UL VW-1 flame test	90°C	2:1	FIT-221V
		90°C	3:1	FIT-321V
Cross-linked polyolefin	Approved for 600-V ground lead identification Green with yellow stripe Passes UL VW-1 flame test	90°C	2:1	FIT-260
Semirigid cross-linked polyolefin	30% stronger and 25% stiffer than standard polyolefin	110°C	2:1	FIT-295
Dual-Wall Polyolefin for Additional Sealing				
Surface cross-linked, dual extruded	Meltable inner wall to encapsulate without adhesive	140°C	2.5:1	FIT-300
		110°C	3:1	FIT-321
		121°C	5.6:1	FIT-621
Bonding, thermoplastic adhesive lined	Bonds to most materials High voltage: to 2 kV at 90°C continuous use	120°C	3:1	FIT-700
Bonding, adhesive lined	Permanent water and corrosion protection	110°C	2:1	FIT-750
Special-Application Tubing				
Irradiated PVC	Low shrink temperature Passes UL VW-1 flame test 30% stronger than standard polyolefin	100°C	2:1	FIT-105
Cross-linked PVDF	High shrink temperature Fast recovery time Excellent chemical, heat, and flame resistance Passes UL VW-1 flame test 3x the tensile strength of standard polyolefin	170°C	2:1	FIT-350
FEP	High shrink temperature Excellent chemical resistance Excellent dielectric properties Thinnest wall thickness available	200°C	1.2:1	FIT-400
PTFE	High shrink temperature Excellent chemical resistance Excellent dielectric properties Very thin wall thickness	250°C	1.5:1	FIT-500
Chlorinated polyolefin	Highly flexible Oil and abrasion resistant Passes UL VW-1 flame test	130°C	2:1	FIT-600
Flexible fluoroelastomer	High shrink temperature Excellent chemical resistance Flexible	120°C	2:1	FIT-650
Polyethylene/ polyester	Superior abrasion resistance Excellent flexibility Resists harsh environments	80°C	2:1	FIT-FABRIC
Cross-linked silicone rubber	High flexibility available Pliable Scrape abrasion resistant Passes UL VW-1 flame test	200°C	1.7:1	FIT-FLEX
Cross-linked PVDF	Transparent after shrink Fast recovery time Excellent chemical, heat, and flame resistance Passes UL VW-1 flame test 2x the tensile strength of standard polyolefin	150°C	2:1	FIT-CLEAR

Heat Guns

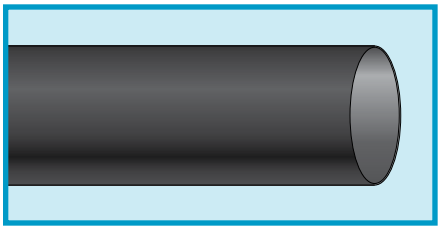
Alpha heat guns are the perfect complement to our tubing, making it easy to apply FIT heat-shrink tubing quickly and efficiently.

The lightweight, durable guns are designed to make application of heat-shrink tubing fast and reliable. They are well suited to both industrial production and field use.



Heat-Shrink Tubing

FIT®-105 Heat-Shrink Tubing
2:1 Shrink Ratio, Irradiated PVC



AMS DTL-23053/2 Class 1 (except longitudinal shrinkage)
UL 224 VW-1
CSA 198

- Low shrink temperature
- Fast recovery time
- 30% stronger than standard polyolefin
- Low water absorption
- UV resistant

Operating Temperature
- -20°C to +105°C

Shrink Temperature
- 100°C min.
- 105°C full recovery

Material
- Irradiated PVC

Color
- Black

Physical Properties
- Tensile strength: 3000 psi (20.68 N/mm²)
- Elongation: 300% min
- Longitudinal change: +1%/-25%
- Specific gravity: 1.32
- Flame retardant
- Shelf life: 1 year at 18°C to 35°C

Chemical Properties
- Corrosive effect: none
- Fungus resistance: no growth
- Water absorption: 1.0% max.
- Lead free

Electrical Properties
- 600 V (UL, CSA)
- Dielectric strength: 1083 V/mil (426.3 kV/cm)
- Volume resistivity: 10^{12} ohm-cm

Availability
See table

Spools may contain multiple lengths

Part No.	Supplied ID, Min.		Recovered ID, Max.		Recovered Wall Thickness, Nom.		Availability	
	Inch	mm	Inch	mm	Inch	mm	Ft	m
FIT-105-3/64	0.046	1.17	0.023	0.58	0.020	0.51	25, 100, 500, 1000	7.6, 30.5, 152, 305
FIT-105-1/16	0.062	1.57	0.031	0.79	0.020	0.51	25, 100, 500, 1000	7.6, 30.5, 152, 305
FIT-105-3/32	0.093	2.36	0.046	1.17	0.020	0.51	25, 100, 1000	7.6, 30.5, 305
FIT-105-1/8	0.125	3.18	0.062	1.57	0.025	0.64	25, 100, 1000	7.6, 30.5, 305
FIT-105-3/16	0.187	4.75	0.093	2.36	0.025	0.64	25, 100, 1000	7.6, 30.5, 305
FIT-105-1/4	0.250	6.35	0.125	3.18	0.025	0.64	25, 100, 1000	7.6, 30.5, 305
FIT-105-3/8	0.375	9.53	0.187	4.75	0.030	0.76	25, 100, 500	7.6, 30.5, 152
FIT-105-1/2	0.500	12.70	0.250	6.35	0.030	0.76	25, 100, 250	7.6, 30.5, 76.2
FIT-105-3/4	0.750	19.05	0.375	9.53	0.035	0.89	25, 100, 250	7.6, 30.5, 76.2
FIT-105-1IN	1.000	25.40	0.500	12.70	0.040	1.02	25, 100, 250	7.6, 30.5, 76.2
FIT-105-1-1/2	1.500	38.10	0.750	19.05	0.045	1.14	25, 100	7.6, 30.5

Packaged Assortments

Assorted sizes of 6” (15 cm) lengths

FIT-105-MS-1

Contents	Tubing Size		Quantity
	Inch	mm	
FIT-105-3/64	0.046	1.17	10
FIT-105-1/16	0.062	1.57	10
FIT-105-3/32	0.093	2.36	10
FIT-105-1/8	0.125	3.18	10
FIT-105-3/16	0.187	4.75	10
FIT-105-1/4	0.250	6.35	10

FIT-105-MS-2

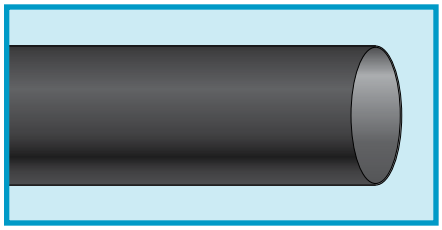
Contents	Tubing Size		Quantity
	Inch	mm	
FIT-105-3/8	0.375	9.53	10
FIT-105-1/2	0.500	12.70	10
FIT-105-3/4	0.750	19.05	10
FIT-105-1 IN	1.000	25.40	10

CA PROP 65 RoHS Compliant

Specifications subject to change. For complete specifications and availability, visit www.alphawire.com.

Heat-Shrink Tubing

FIT®-221 Heat-Shrink Tubing
2:1 Shrink Ratio, XLPO



AMS-DTL-23053/5 Class 1 (except clear)
AMS-DTL-23053/5 Class 2 (clear)
UL 224 (except clear)
CSA 198 (except clear)

- Excellent general-purpose tubing
- Low water absorption
- UV resistant (black only)

Operating Temperature

- -55°C to +135°C
- -55°C to +125°C (UL, CSA)

Shrink Temperature

- 90°C min.
- 121°C full recovery

Material

- Cross-linked polyolefin

Color

- Black, white, red, yellow, blue, green, clear*

*Clear tubing may exhibit some color tint that is the result of the product's chemistry; the tint is variable and can be any color

Physical Properties

- Tensile strength: 1500 psi (10.34 N/mm²)
- Elongation: 200% min
- Longitudinal change: ±5%
- Specific gravity: 1.35 (colors)/ 1.00 (clear)
- Flame retardant
- Shelf life: 5 years at 18°C to 35°C

Chemical Properties

- Corrosive effect: none
- Fungus resistance: no growth
- Water absorption: 0.5% max.
- Fluid resistance: 1000 psi (6.89 N/mm²)
- Lead free

Electrical Properties

- 600 V (UL, CSA)
- Dielectric strength: 500 V/mil (197 kV/cm)
- Volume resistivity: 10^{14} ohm-cm

Availability

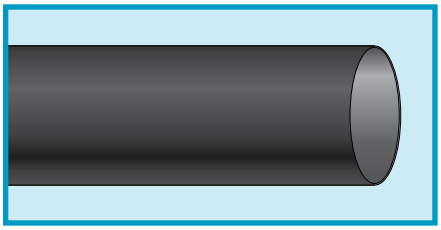
See table, next page

Spools may contain multiple lengths

Part No.	Supplied ID, Min.		Recovered ID, Max.		Recovered Wall Thickness, Nom.	
	Inch	mm	Inch	mm	Inch	mm
FIT-221-3/64	0.046	1.17	0.023	0.58	0.016	0.41
FIT-221-1/16	0.063	1.60	0.031	0.79	0.017	0.43
FIT-221-3/32	0.093	2.36	0.046	1.17	0.020	0.51
FIT-221-1/8	0.125	3.18	0.062	1.57	0.020	0.51
FIT-221-3/16	0.187	4.75	0.093	2.36	0.020	0.51
FIT-221-1/4	0.250	6.35	0.125	3.18	0.025	0.64
FIT-221-3/8	0.375	9.53	0.187	4.75	0.025	0.64
FIT-221-1/2	0.500	12.70	0.250	6.35	0.025	0.64
FIT-221-3/4	0.750	19.05	0.375	9.53	0.030	0.76
FIT-221-1IN	1.000	25.40	0.500	12.70	0.035	0.89
FIT-221-1-1/2	1.500	38.10	0.750	19.05	0.040	1.02
FIT-221-2IN	2.000	50.80	1.000	25.40	0.045	1.14
FIT-221-3IN	3.000	76.20	1.500	38.10	0.050	1.27
FIT-221-4IN	4.000	101.60	2.000	50.80	0.055	1.40

Heat-Shrink Tubing

FIT®-221 Heat-Shrink Tubing
2:1 Shrink Ratio, XLPO



AMS-DTL-23053/5 Class 1 (except clear)
AMS-DTL-23053/5 Class 2 (clear)
UL 224 (except clear)
CSA 198 (except clear)

Availability

Part No.	Spools		Qty, Cut Pieces at Length			
	Ft	m	4 ft (1.2 m)	6" (152 mm)	1" (25.4 mm)	0.5" (12.7 mm)
FIT-221-3/64	1000*	305*	25	40	1000	1000
FIT-221-1/16	70, 100*, 1000	21.3, 30.5*, 305	25	36	1000	1000
FIT-221-3/32	65, 100*, 500	19.8, 30.5*, 152	25	32	1000	1000
FIT-221-1/8	60, 100*, 500	18.2, 30.5*, 152	25	28	1000	1000
FIT-221-3/16	50, 100*, 500	15.2, 30.5*, 152	25	24	1000	1000
FIT-221-1/4	40, 100*, 250	12.2, 30.5, 76.2*	25	20	1000	1000
FIT-221-3/8	35, 50*, 200	10.6, 15.2*, 60.9	25	16	1000	1000
FIT-221-1/2	32, 50*, 150	9.7, 15.2*, 45.7	5	14	—	—
FIT-221-3/4	24, 50*, 250	7.3, 15.2*, 76.2	5	12	—	—
FIT-221-1IN	16, 50*, 250	4.8, 15.2, 76.2	5	8	—	—
FIT-221-1-1/2	125*	38.1*	5	5	—	—
FIT-221-2IN	125*	38.1*	5	3	—	—
FIT-221-3IN	100*	30.5*	2	2	—	—
FIT-221-4IN	50*	15.2*	2	—	—	—

*Black and clear tubing only.

Spools may contain multiple lengths.

Packaged Assortments

Assorted sizes of 6" (152 mm) lengths

Each length is size identified.

FIT-221-MS-1 Assorted colors: Black, blue, red, green, yellow

Contents	Tubing Size		Quantity
	Inch	mm	
FIT-221-3/64	0.046	1.17	6
FIT-221-1/16	0.063	1.60	6
FIT-221-3/32	0.093	2.36	6
FIT-221-1/8	0.125	3.18	6
FIT-221-3/16	0.187	4.75	6

FIT-221-MS-2 Assorted colors: Black, blue, red, yellow

Contents	Tubing Size		Quantity
	Inch	mm	
FIT-221-1/4	0.250	6.35	4
FIT-221-3/8	0.375	9.53	4
FIT-221-1/2	0.500	12.70	4
FIT-221-3/4	0.750	19.05	4

FIT-221 Kits

FIT-KIT-221BK
Colors: Black

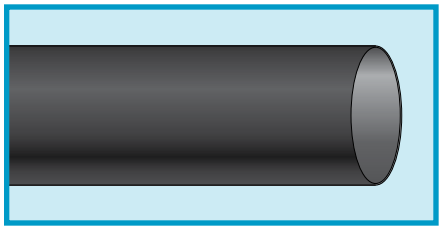
Contents	Tubing Size		Quantity
	Inch	mm	
FIT-221-3/16	0.187	4.75	25
FIT-221-1/4	0.250	6.35	20
FIT-221-3/8	0.375	9.53	15
FIT-221-1/2	0.500	12.70	10
FIT-221-3/4	0.750	19.05	6
FIT-221-1IN	1.000	25.40	4

FIT-KIT-221C Assorted colors: Black, blue, red, white, green, yellow, clear

Contents	Tubing Size		Quantity	
	Inch	mm	Each Color	Total
FIT-221-3/32	0.093	2.36	4	28
FIT-221-1/8	0.125	3.18	3	21
FIT-221-3/16	0.187	4.75	3	21
FIT-221-1/4	0.250	6.35	3	21
FIT-221-3/8	0.375	9.53	2	14
FIT-221-1/2	0.500	12.70	2	14

Heat-Shrink Tubing

FIT®-221B Heat-Shrink Tubing
2:1 Shrink Ratio, XLPO, Bulk Packaging



AMS-DTL-23053/5 Class 1 (except clear)
AMS-DTL-23053/5 Class 2 (clear)
UL 224 (except clear)
CSA 198 (except clear)

- Excellent general-purpose tubing
- Low shrink temperature
- Fastest recovery time
- Low water absorption
- UV resistant (black only)

Operating Temperature
- -55°C to +135°C
- -55°C to +125°C (UL, CSA)

Shrink Temperature
- 90°C min.
- 121°C full recovery

Material
- Cross-linked polyolefin

Colors
- Black, blue, clear*

*Clear tubing may exhibit some color tint that is the result of the product's chemistry; the tint is variable and can be any color

Physical Properties
- Tensile strength: 1500 psi (10.34 N/mm²)
- Elongation: 200% min
- Longitudinal change: ±5%
- Specific gravity: 1.35 (colors)/ 1.00 (clear)
- Flame retardant
- Shelf life: 5 years at 18°C to 35°C

Chemical Properties
- Corrosive effect: none
- Fungus resistance: no growth
- Water absorption: 0.5% max.
- Fluid resistance: 1000 psi (6.89 N/mm²)
- Lead free

Electrical Properties
- 600 V (UL, CSA)
- Dielectric strength: 500 V/mil (197 kV/cm)
- Volume resistivity: 10^{14} ohm-cm

Availability
See table

Spools may contain multiple lengths

Part No.	Supplied ID, Min.		Recovered ID, Max.		Recovered Wall Thickness, Nom.	
	Inch	mm	Inch	mm	Inch	mm
FIT-221B-3/64	0.046	1.17	0.023	0.58	0.016	0.41
FIT-221B-1/16	0.063	1.60	0.031	0.79	0.017	0.43
FIT-221B-3/32	0.093	2.36	0.046	1.17	0.020	0.51
FIT-221B-1/8	0.125	3.18	0.062	1.57	0.020	0.51
FIT-221B-3/16	0.187	4.75	0.093	2.36	0.020	0.51
FIT-221B-1/4	0.250	6.35	0.125	3.18	0.025	0.64
FIT-221B-3/8	0.375	9.53	0.187	4.75	0.025	0.64
FIT-221B-1/2	0.500	12.70	0.250	6.35	0.025	0.64
FIT-221B-3/4	0.750	19.05	0.375	9.53	0.030	0.76
FIT-221B-1IN	1.000	25.40	0.500	12.70	0.035	0.89

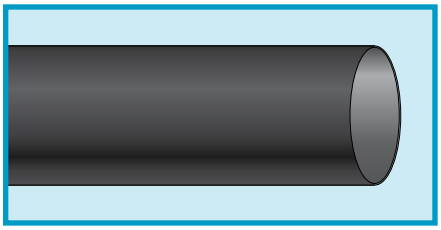
Availability

Part No.	Spools (Length x No. of Spools)		Qty, Cut Pieces at Length
	Ft	m	4 ft (1.2 m)
FIT-221B-3/64	1000 x 3	305 x 3	250
FIT-221B-1/16	1000 x 3	305 x 3	250
FIT-221B-3/32	500 x 3	152 x 3	250
FIT-221B-1/8	500 x 3	152 x 3	250
FIT-221B-3/16	500 x 2	152 x 2	250
FIT-221B-1/4	250 x 2	76.2 x 2	250
FIT-221B-3/8	200 x 2	60.9 x 2	250
FIT-221B-1/2	150 x 2	45. 7 x 2	200
FIT-221B-3/4	250 x 1 250 x 2	76.2 x 1 76.2 x 2	125
FIT-221B-1IN	250 x 1	76.2 x 1	75

CA PROP 65 RoHS Compliant

Heat-Shrink Tubing

FIT®-221V Heat-Shrink Tubing
2:1 Shrink Ratio, XLPO, Low Shrink Temperature



AMS DTL-23053/5 Class 1 and 3
UL 224 VW-1
CSA 198

- Excellent general-purpose tubing
- Low shrink temperature
- Fastest recovery time
- Low water absorption
- UV resistant (black only)

Operating Temperature
- -55°C to +135°C
- -55°C to +125°C (UL, CSA)

Shrink Temperature
- 90°C min.
- 121°C full recovery

Material
- Cross-linked polyolefin

Colors
- Black, white, red, yellow, green, blue

Physical Properties
- Tensile strength: 1500 psi (10.34 N/mm²)
- Elongation: 200% min
- Longitudinal change: ±5%
- Specific gravity: 1.35
- Flame retardant
- Shelf life: 5 years at 18°C to 35°C

Chemical Properties
- Corrosive effect: none
- Fungus resistance: no growth
- Water absorption: 0.5% max.
- Fluid resistance: 1000 psi (6.89 N/mm²)
- Lead free

Electrical Properties
- 600 V (UL, CSA)
- Dielectric strength: 500 V/mil (197 kV/cm)
- Volume resistivity: 10^{14} ohm-cm

Availability
See table

Spools may contain multiple lengths

Part No.	Supplied ID, Min.		Recovered ID, Max.		Recovered Wall Thickness, Nom.	
	Inch	mm	Inch	mm	Inch	mm
FIT-221V-3/64	0.046	1.17	0.023	0.58	0.016	0.41
FIT-221V-1/16	0.063	1.60	0.031	0.79	0.017	0.43
FIT-221V-3/32	0.093	2.36	0.046	1.17	0.020	0.51
FIT-221V-1/8	0.125	3.18	0.062	1.57	0.020	0.51
FIT-221V-3/16	0.187	4.75	0.093	2.36	0.020	0.51
FIT-221V-1/4	0.250	6.35	0.125	3.18	0.025	0.64
FIT-221V-3/8	0.375	9.53	0.187	4.75	0.025	0.64
FIT-221V-1/2	0.500	12.70	0.250	6.35	0.025	0.64
FIT-221V-3/4	0.750	19.05	0.375	9.53	0.030	0.76
FIT-221V-1IN	1.000	25.40	0.500	12.70	0.035	0.89
FIT-221V-1-1/2	1.500	38.10	0.750	19.05	0.040	1.02
FIT-221V-2IN	2.000	50.80	1.000	25.40	0.045	1.14

Availability

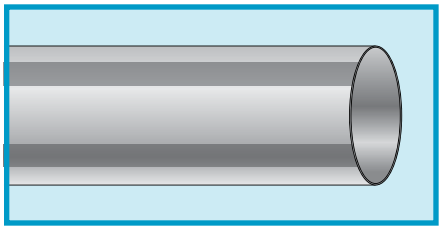
Part No.	Spools (Length x No. of Spools)		Qty, Cut Pieces at Length	
	Ft	m	4 ft (1.2 m)	6" (152 mm)
FIT-221V-3/64	1000 x 3	305 x3	25, 250	40
FIT-221V-1/16	1000 x 1, 1000 x 3	305 x 1, 305 x 3	25, 250	36
FIT-221V-3/32	500 x 1, 500 x 3	152 x 1, 152 x 3	25, 250	32
FIT-221V-1/8	500 x 1, 500 x 3	152 x 1, 152 x 3	25, 250	28
FIT-221V-3/16	500 x 1, 500 x 2	152 x 1, 152 x 2	25, 250	24
FIT-221V-1/4	250 x 1, 250 x 2	76.2 x 1, 76.2 x 2	25, 250	20
FIT-221V-3/8	200 x 1, 200 x 2	60.9 x 1, 60.9 x 2	25, 250	16
FIT-221V-1/2	150 x 1, 150 x 2	45.7 x 1, 45.7 x 2	5, 200	14
FIT-221V-3/4	250 x 1	76.2 x 1	5, 125	12
FIT-221V-1IN	250 x 1	76.2 x 1	5, 75	8
FIT-221V-1-1/2	125 x 1	38.1 x 1	5	5
FIT-221V-2IN	125 x 1	38.1 x 1	5	3

RoHS Compliant

Specifications subject to change. For complete specifications and availability, visit www.alphawire.com.

Heat-Shrink Tubing

FIT®-260 Heat-Shrink Tubing
2:1 Shrink Ratio, XLPO, Ground Lead Identification



UL 224 VW-1
CSA 198

- Excellent general-purpose tubing
- Low water absorption

Operating Temperature
- -55°C to +135°C
- -55°C to +125°C (UL, CSA)

Shrink Temperature
- 90°C min.
- 120°C full recovery

Material
- Cross-linked polyolefin

Color
- Green/yellow

Physical Properties
- Tensile strength: 1500 psi (10.34 N/mm^2)
- Elongation: 200% min
- Longitudinal change: ±5%
- Specific gravity: 1.35
- Flame retardant
- Shelf life: 25 years at 18°C to 35°C

Chemical Properties
- Corrosive effect: none
- Fungus resistance: no growth
- Water absorption: 0.5% max.
- Fluid resistance: 1000 psi (6.89 N/mm^2)
- Lead free

Electrical Properties
- 600 V (UL, CSA)
- Dielectric strength: 500 V/mil (197 kV/cm)
- Volume resistivity: 10^{14} ohm-cm

Availability
See table

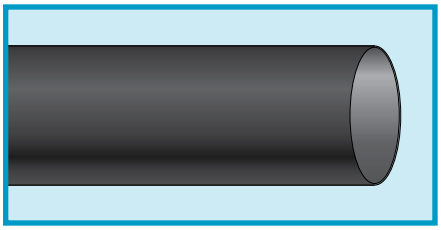
Spools may contain multiple lengths

Part No.	Supplied ID, Min.		Recovered ID, Max.		Recovered Wall Thickness, Nom.		Availability	
	Inch	mm	Inch	mm	Inch	mm	Ft	m
FIT-260-1/8	0.125	3.18	0.062	1.57	0.020	0.51	500	152
FIT-260-1/4	0.250	6.35	0.125	3.18	0.025	0.64	250	76.2
FIT-260-3/8	0.375	9.53	0.187	4.75	0.025	0.64	250	76.2
FIT-260-1/2	0.500	12.70	0.250	6.35	0.025	0.64	250	76.2
FIT-260-3/4	0.750	19.05	0.375	9.53	0.030	0.76	250	76.2
FIT-260-1	1.000	25.40	0.500	12.70	0.035	0.89	100	30.5

CA PROP 65 RoHS Compliant

Heat-Shrink Tubing

FIT®-295 Heat-Shrink Tubing
2:1 Shrink Ratio, Semirigid XLPO



AMS-DTL-23053/6 Class 1 (Black)
AMS-DTL-23053/6 Class 2 (Clear)
UL 224 VW-1 (Black)
CSA 198 (Black)

- 30% stronger than standard XLPO
- 25% stiffer than standard XLPO
- Low water absorption
- UV resistant (black only)

Operating Temperature
- -55°C to +135°C
- -55°C to +125°C (UL, CSA)

Shrink Temperature
- 110°C min.
- 135°C full recovery

Material
- Semirigid cross-linked polyolefin

Colors
- Black, clear

Physical Properties
- Tensile strength: 2000 psi (17.79 N/mm^2)
- Elongation: 200% min
- Longitudinal change: ±5%
- Specific gravity: 1.35 (black)/1.00 (clear)
- Flame retardant
- Shelf life: 5 years at 18°C to 35°C

Chemical Properties
- Corrosive effect: none
- Fungus resistance: no growth
- Water absorption: 0.5% max. (black)/0.02% max. (clear)
- Lead free

Electrical Properties
- 600 V (UL, CSA)
- Dielectric strength: 500 V/mil (197 kV/cm)
- Volume resistivity: 10^{14} ohm-cm

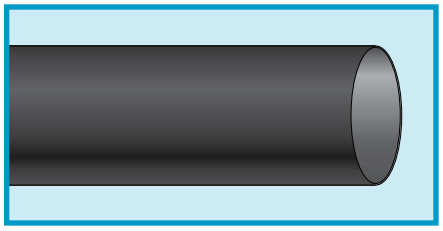
Availability
See table

Part No.	Supplied ID, Min.		Recovered ID, Max.		Recovered Wall Thickness, Nom.		Availability Qty, Cut Pieces at Length	
	Inch	mm	Inch	mm	Inch	mm	4 ft (1.2 m)	6" (152 mm)
FIT-295-3/64	0.046	1.17	0.023	0.58	0.020	0.51	25	40
FIT-295-1/16	0.063	1.60	0.031	0.79	0.020	0.51	25	36
FIT-295-3/32	0.093	2.36	0.046	1.17	0.020	0.51	25	32
FIT-295-1/8	0.125	3.18	0.062	1.57	0.020	0.51	25	28
FIT-295-3/16	0.187	4.75	0.093	2.36	0.025	0.64	25	24
FIT-295-1/4	0.250	6.35	0.125	3.18	0.025	0.64	25	20
FIT-295-3/8	0.375	9.53	0.187	4.75	0.030	0.76	25	16
FIT-295-1/2	0.500	12.70	0.250	6.35	0.030	0.76	5	14

CA PROP 65 RoHS Compliant

Heat-Shrink Tubing

FIT®-300 Heat-Shrink Tubing
2.5:1 Shrink Ratio, Dual-Wall Semirigid XLPO



AMS-DTL-23053/4 Class 1
UL 224 (Except clear)

- Meltable inner wall for encapsulation without adhesives
- Thicker wall for added protection
- High shrink ratios
- Excellent dielectric properties

Applications
- Temporary sealing without sticky residue
- Substrates requiring filled interstices

Operating Temperature
- -55°C to +135°C
- -55°C to +125°C (UL)

Shrink Temperature
- 140°C min.

Material
- Dual-wall semirigid cross-linked polyolefin

Colors
- Black, white, red, yellow, blue, slate, brown

Physical Properties
- Tensile strength: 1500 psi (10.34 N/mm^2)
- Elongation: 200% min
- Longitudinal change: +1%/-10%
- Specific gravity: 0.99
- Shelf life: 3 years at 18°C to 35°C

Chemical Properties
- Corrosive effect: none
- Fungus resistance: no growth
- Water absorption: 0.5% max
- Fluid resistance: 1000 psi (6.89 N/mm^2)
- Lead free
- Halogen free

Electrical Properties
- 600 V (UL, CSA)
- Dielectric strength: 500 V/mil (197 kV/cm)
- Volume resistivity: 10^{16} ohm-cm

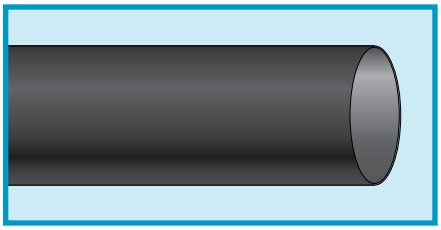
Availability
See table

Part No.	Supplied ID, Min.		Recovered ID, Max.		Recovered Wall Thickness, Nom.		Availability Qty, Cut Pieces at Length	
	Inch	mm	Inch	mm	Inch	mm	4 ft (1.2 m)	6" (152 mm)
FIT-300-1/8	0.125	3.18	0.023	0.58	0.038	0.97	25	14
FIT-300-3/16	0.187	4.75	0.060	1.52	0.043	1.09	25	12
FIT-300-1/4	0.250	6.35	0.080	2.03	0.047	1.19	25	10
FIT-300-3/10	0.300	7.62	0.050	1.27	0.100	2.54	25	4
FIT-300-3/8	0.375	9.53	0.135	3.43	0.050	1.27	25	8
FIT-300-1/2	0.500	12.70	0.195	4.95	0.055	1.40	5	6
FIT-300-3/4	0.750	19.05	0.313	7.95	0.065	1.65	5	4
ST-3001-IN	1.000	25.40	0.400	10.16	0.075	1.91	5	--

RoHS Compliant

Heat-Shrink Tubing

FIT®-321 Heat-Shrink Tubing
3:1 Shrink Ratio, Dual-Wall XLPO, Adhesive Lined



AMS-DTL-23053/4 Class 3
UL 224
CSA 198

- Thicker wall for increased durability
- Water-resistant inner permanent-bonding adhesive

Operating Temperature
- -55°C to +125°C

Shrink Temperature
- 110°C min.
- 110°C full recovery

Material
- Dual-wall flexible polyolefin with thick-wall adhesive

Color
- Black

Physical Properties
- Tensile strength: 1500 psi (10.34 N/mm²)
- Elongation: 250% min
- Longitudinal change: +1%/-15%
- Flame tested
- Shelf life: 3 years at 18°C to 35°C

Chemical Properties
- Corrosive effect: none
- Fungus resistance: no growth
- Water absorption: 1.0% max
- Fluid resistance: 900 psi (6.20 N/mm²)
- UV resistant
- Lead free

Electrical Properties
- 600 V (UL, CSA)
- Dielectric strength: 300 V/mil (118 kV/cm)
- Volume resistivity: 10^{12} ohm-cm

Availability
See table

Part No.	Supplied ID, Min.		Recovered ID, Max.		Recovered Wall Thickness, Nom.		Recovered Melt Wall Thickness, Nom.	
	Inch	mm	Inch	mm	Inch	mm	Inch	mm
FIT-321-1/8	0.125	3.18	0.024	0.61	0.037	0.94	0.020	0.51
FIT-321-1/4	0.252	6.40	0.073	1.85	0.047	1.19	0.020	0.51
ST-303-3/8	0.374	9.50	0.118	3.00	0.051	1.30	0.025	0.64
FIT-321-1/2	0.500	12.70	0.157	3.99	0.071	1.80	0.030	0.76
ST-303-3/4	0.748	19.00	0.236	5.99	0.071	1.80	0.035	0.89
FIT-321-1	0.945	24.00	0.315	8.00	0.098	2.49	0.040	1.02
FIT-321-1-1/2	1.575	40.01	0.512	13.00	0.098	2.49	0.040	1.02

Availability

Part No.	Qty, Cut Pieces at Length	
	4 ft (1.2 m)	6" (152 mm)
FIT-321-1/8	25	28
FIT-321-1/4	25	20
FIT-321-1/2	5	14
FIT-321-1	5	8
FIT-321-1-1/2	5	5

Packaged Assortments
Assorted sizes of 6" (15 cm) lengths

FIT-321-MS-1 Colors: Black

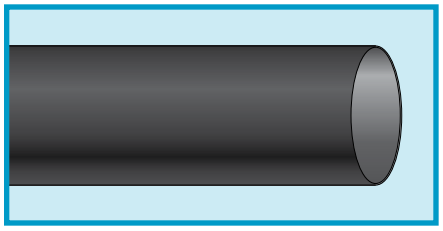
	Size		Quantity
	Inch	mm	
FIT-321-1/8	0.125	3.18	5
FIT-321-1/4	0.252	6.40	5
FIT-321-1/2	0.500	12.70	5
FIT-321-1	0.945	24.00	5

CA PROP 65 RoHS Compliant

Specifications subject to change. For complete specifications and availability, visit www.alphawire.com.

Heat-Shrink Tubing

FIT®-321V Heat-Shrink Tubing
3:1 Shrink Ratio, Flexible XLPO, Thin Wall



AMS-DTL-23053/5 Class 1 and 3 (except dimensions)
UL 224 VW-1
CSA 198

- Low shrink temperature
- Fast recovery time
- Reduced wall thickness

Operating Temperature
- -55°C to +135°C
- -55°C to +125°C (UL, CSA)

Shrink Temperature
- 90°C min.
- 135°C full recovery

Material
- Flexible cross-linked thin-wall polyolefin

Colors
- Black, white

Physical Properties
- Tensile strength: 1500 psi (10.34 N/mm²)
- Elongation: 200% min
- Longitudinal change: +5%/-15%
- Specific gravity: 1.35
- Flame retardant
- Shelf life: 25 years at 18°C to 35°C

Chemical Properties
- Corrosive effect: none
- Fungus resistance: no growth
- Water absorption: 0.5% max
- Fluid resistance: 1000 psi (6.89 N/mm²)

Electrical Properties
- 600 V (UL, CSA)
- Dielectric strength: 500 V/mil (197 kV/cm)
- Volume resistivity: 10^{14} ohm-cm

Availability
See table

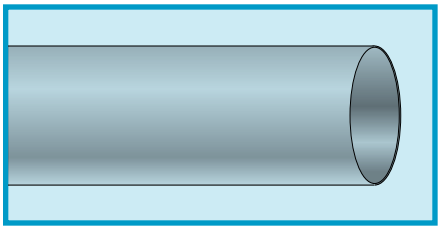
Spools may contain multiple lengths

Part No.	Supplied ID, Min.		Recovered ID, Max.		Recovered Wall Thickness, Nom.		Availability	
	Inch	mm	Inch	mm	Inch	mm	Ft	m
FIT-321V-3/32	0.060	1.52	0.020	0.51	0.020	0.51	500	152
FIT-321V-1/8	0.120	3.05	0.040	1.02	0.024	0.61	500	152
FIT-321V-1/4	0.240	6.10	0.080	2.03	0.028	0.71	250	76.2
FIT-321V-3/8	0.360	9.14	0.120	3.05	0.031	0.79	200	60.9
FIT-321V-1/2	0.472	11.99	0.160	4.06	0.033	0.84	150	45.7
FIT-321V-3/4	0.720	18.29	0.240	6.10	0.039	0.99	250	76.2
FIT-321V-1IN	0.945	24.00	0.315	8.00	0.048	1.22	250	76.2

CA PROP 65 RoHS Compliant

Heat-Shrink Tubing

FIT®-350 Heat-Shrink Tubing
2:1 Shrink Ratio, PVDF



AMS-DTL-23053/8
UL 224 VW-1

- Chemical resistant
- Heat resistant
- 3x the tensile strength of standard XLPO

Operating Temperature
- -55°C to +135°C
- -55°C to +150°C (UL)

Shrink Temperature
- 170°C min.
- 175°C full recovery

Material
- Cross-linked polyvinylidene fluoride

Color
- Clear

Physical Properties
- Tensile strength: 5000 psi (34.47 N/mm²)
- Elongation: 150% min
- Longitudinal change: ±10%
- Specific gravity: 1.80
- Flame retardant
- Shelf life: 5 years at 18°C to 35°C

Chemical Properties
- Corrosive effect: none
- Fungus resistance: no growth
- Water absorption: 0.5% max
- Fluid resistance: 5000 psi (34.47 N/mm²)
- Lead free

Electrical Properties
- 600 V (UL)
- Dielectric strength: 800 V/mil (315 kV/cm)
- Volume resistivity: 10^{13} ohm-cm

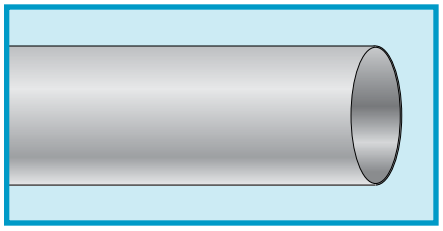
Availability
See table

Part No.	Supplied ID, Min.		Recovered ID, Max.		Recovered Wall Thickness, Nom.		Availability	
	Inch	mm	Inch	mm	Inch	mm	4 ft (1.2 m)	6" (152 mm)
FIT-350-3/64	0.046	1.17	0.023	0.58	0.010	0.25	25	32
FIT-350-1/16	0.063	1.60	0.031	0.79	0.010	0.25	25	28
FIT-350-3/32	0.093	2.36	0.046	1.17	0.010	0.25	25	24
FIT-350-1/8	0.125	3.18	0.062	1.57	0.010	0.25	25	20
FIT-350-3/16	0.187	4.75	0.093	2.36	0.010	0.25	25	16
FIT-350-1/4	0.250	6.35	0.125	3.18	0.012	0.30	25	12
FIT-350-3/8	0.375	9.53	0.187	4.75	0.012	0.30	25	8
FIT-350-1/2	0.500	12.70	0.250	6.35	0.012	0.30	5	4
FIT-350-3/4	0.750	19.05	0.375	9.53	0.017	0.43	5	2
FIT-350-1IN	1.000	25.40	0.500	12.70	0.019	0.48	5	1

CA PROP 65 RoHS Compliant

Heat-Shrink Tubing

FIT®-400 Heat-Shrink Tubing
1.2:1 Shrink Ratio, FEP



AMS-DTL-23053/11 Class 1

- Chemical resistant
- Wide temperature range
- Excellent dielectric properties
- Thinnest wall thickness available
- Lower recovery temperature than PTFE

Operating Temperature
- -75°C to +200°C

Shrink Temperature
- 175°C full recovery

Material
- FEP

Color
- Natural

Physical Properties
- Tensile strength: 2000 psi (13.79 N/mm^2)
- Elongation: 200% min
- Longitudinal change: ±15%
- Specific gravity: 2.17
- Flame rating: UL 94V-0
- Shelf life: 4 years at 18°C to 35°C

Chemical Properties
- Corrosive effect: none
- Fluid resistance: pass
- Fungus resistance: no growth
- Water absorption: 0.01% max
- Lead free

Electrical Properties
- Dielectric strength: 2000 V/mil (787 kV/cm)
- Volume resistivity: 10^{17} ohm-cm

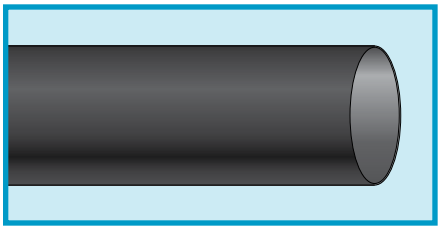
Availability
See table

Part No.	Supplied ID, Min.		Recovered ID, Max.		Recovered Wall Thickness, Nom.		Availability Qty, Cut Pieces at Length	
	Inch	Mm	Inch	mm	Inch	mm	4 ft (1.2 m)	2 ft (0.6 m)
FIT-400-24	0.031	0.79	0.027	0.69	0.008	0.20	25	–
FIT-400-22	0.036	0.91	0.032	0.81	0.008	0.20	25	–
FIT-400-20	0.045	1.14	0.039	0.99	0.008	0.20	25	–
FIT-400-18	0.060	1.52	0.049	1.24	0.008	0.20	25	–
FIT-400-16	0.075	1.91	0.061	1.55	0.009	0.23	25	–
FIT-400-14	0.092	2.34	0.072	1.83	0.009	0.23	25	–
FIT-400-12	0.115	2.92	0.089	2.26	0.009	0.23	25	–
FIT-400-10	0.141	3.58	0.114	2.90	0.010	0.25	25	–
FIT-400-9	0.158	4.01	0.124	3.15	0.010	0.25	25	–
FIT-400-8	0.180	4.57	0.143	3.63	0.010	0.25	25	–
FIT-400-7	0.197	5.00	0.158	4.01	0.011	0.28	25	–
FIT-400-6	0.225	5.72	0.180	4.57	0.011	0.28	25	–
FIT-400-5	0.248	6.30	0.198	5.03	0.011	0.28	–	50
FIT-400-4	0.290	7.37	0.226	5.74	0.011	0.28	–	50
FIT-400-3	0.310	7.87	0.249	6.32	0.011	0.28	–	50
FIT-400-2	0.365	9.27	0.280	7.11	0.012	0.30	–	50
FIT-400-1	0.400	10.16	0.311	7.90	0.012	0.30	–	50
FIT-400-0	0.440	11.18	0.349	8.86	0.012	0.30	–	50

CA PROP 65 RoHS Compliant

Heat-Shrink Tubing

FIT®-421 Heat-Shrink Tubing
4:1 Shrink Ratio, XLPO



AMS-DTL-23053/5 Class 1
UL 224 VW-1

- High-shrink ratio
- Large supplied diameters
- Conforms to irregular shapes
- Low water absorption
- UV resistant

Operating Temperature
- -55°C to +135°C
- -55°C to +125°C (UL)

Shrink Temperature
- 90°C min.
- 121°C full recovery

Material
- Cross-linked polyolefin

Color
- Black

Physical Properties
- Tensile strength: 1500 psi (10.34 N/mm^2)
- Elongation: 200% min
- Longitudinal change: +5%/-15%
- Specific gravity: 1.35
- Flame retardant
- Shelf life: 5 years at 18°C to 35°C

Chemical Properties
- Corrosive effect: none
- Fungus resistance: no growth
- Water absorption: 0.5% max
- Fluid resistance: 1000 psi (6.89 N/mm^2)
- UV resistant
- Lead free

Electrical Properties
- 600 V (UL)
- Dielectric strength: 500 V/mil (197 kV/cm)
- Volume resistivity: 10^{14} ohm-cm

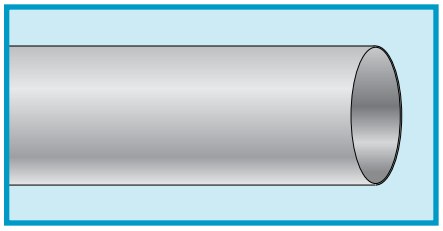
Availability
See table

Part No.	Supplied ID, Min.		Recovered ID, Max.		Recovered Wall Thickness, Nom.		Availability Qty, Cut Pieces at Length	
	Inch	mm	Inch	mm	Inch	mm	4 ft (1.2 m)	15 ft (4.5 m)
FIT-421-1IN	1.000	25.40	0.260	6.60	0.045	1.14	5	—
FIT-421-1-1/2	1.500	38.10	0.375	9.53	0.045	1.14	5	—
FIT-421-2IN	2.000	50.80	0.550	13.97	0.045	1.14	5	—
FIT-421-3IN	3.000	76.20	0.810	20.57	0.045	1.14	2	—
FIT-421-4IN	4.000	101.60	1.050	26.67	0.045	1.14	2	

CA PROP 65 RoHS Compliant

Heat-Shrink Tubing

FIT®-500 Heat Shrink Tubing
1.5:1 Shrink Ratio, PTFE



AMS-DTL-23053/12 Class 3

- Excellent chemical resistance
- Widest temperature range
- High tensile strength
- Excellent dielectric properties
- Extremely thin wall thickness
- Low friction coefficient

Operating Temperature
- -75°C to +260°C

Shrink Temperature
- 327°C full recovery

Material
- PTFE

Color
- Natural

Physical Properties
- Tensile strength: 2500 psi (17.21 N/mm^2)
- Elongation: 200% min
- Longitudinal change: ±20%
- Specific gravity: 2.20
- Flame rating: UL 94V-0
- Shelf life: 4 years at 18°C to 35°C

Chemical Properties
- Corrosive effect: none
- Fungus resistance: no growth
- Water absorption: 0.01% max
- Fluid resistance: pass
- Lead free

Electrical Properties
- Dielectric strength: 800 V/mil (315 kV/cm)
- Volume resistivity: 10^{18} ohm-cm

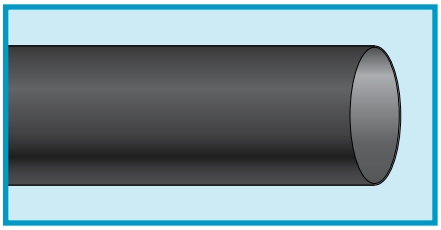
Availability
See table

Part No.	Supplied ID, Min.		Recovered ID, Max.		Recovered Wall Thickness, Nom.		Availability, Cut Pieces at Length
	Inch	mm	Inch	mm	Inch	mm	2 ft (0.6 m)
FIT-500-30	0.034	0.86	0.015	0.38	0.009	0.23	50
FIT-500-28	0.038	0.97	0.018	0.46	0.009	0.23	50
FIT-500-26	0.046	1.17	0.022	0.56	0.010	0.25	50
FIT-500-24	0.050	1.27	0.027	0.69	0.010	0.25	50
FIT-500-22	0.055	1.40	0.032	0.81	0.012	0.30	50
FIT-500-20	0.060	1.52	0.039	0.99	0.012	0.30	50
FIT-500-18	0.076	1.93	0.049	1.24	0.012	0.30	50
FIT-500-16	0.093	2.36	0.061	1.55	0.012	0.30	50
FIT-500-14	0.120	3.05	0.072	1.83	0.012	0.30	50
FIT-500-12	0.150	3.81	0.089	2.26	0.012	0.30	25
FIT-500-10	0.191	4.85	0.112	2.84	0.012	0.30	25
FIT-500-8	0.240	6.10	0.141	3.58	0.015	0.38	25
FIT-500-6	0.302	7.67	0.178	4.52	0.015	0.38	10
FIT-500-4	0.370	9.40	0.224	5.69	0.015	0.38	10
FIT-500-2	0.430	10.92	0.278	7.06	0.015	0.38	10
FIT-500-0	0.470	11.94	0.347	8.81	0.015	0.38	10

CA PROP 65 RoHS Compliant

Heat-Shrink Tubing

FIT®-600 Heat Shrink Tubing
2:1 Shrink Ratio, Chlorinated PO



AMS-DTL-23053/1 Class 1 and 2

- More flexible than standard XLPO
- 2x the tensile strength of silicone rubber
- Large tubing diameters
- Oil resistant
- Abrasion resistant

Operating Temperature
- -75°C to +121°C

Shrink Temperature
- 130°C min.
- 130°C full recovery

Material
- Chlorinated polyolefin

Color
- Black

Physical Properties
- Tensile strength: 1500 psi (10.34 N/mm^2)
- Elongation: 250% min
- Longitudinal change: +1%/-10%
- Specific gravity: 1.30
- Flame retardant
- Shelf life: 1 year at 18°C to 35°C

Chemical Properties
- Corrosive effect: none
- Fungus resistance: no growth
- Water absorption: 1.0% max
- Fluid resistance: 1000 psi (6.89 N/mm^2)
- UV resistant
- Lead free

Electrical Properties
- Dielectric strength: 300 V/mil (118 kV/cm)
- Volume resistivity: 10^{11} ohm-cm

Availability
See table

Spools may contain multiple lengths

Part No.	Supplied ID, Min.		Recovered ID, Max.		Recovered Wall Thickness, Nom.		Availability	
	Inch	mm	Inch	mm	Inch	mm	Ft	m
FIT-600-1/4	0.250	6.35	0.143	3.63	0.035	0.89	25, 150	7.6, 46
FIT-600-3/8	0.375	9.53	0.211	5.36	0.040	1.02	25, 150	7.6, 46
FIT-600-1/2	0.500	12.70	0.286	7.26	0.048	1.22	25, 150	7.6, 46
FIT-600-5/8	0.625	15.88	0.357	9.07	0.052	1.32	25, 150	7.6, 46
FIT-600-3/4	0.750	19.05	0.428	10.87	0.057	1.45	25, 100	7.6, 30.5
FIT-600-7/8	0.875	22.23	0.500	12.70	0.065	1.65	25, 100	7.6, 30.5
FIT-600-1IN	1.000	25.40	0.570	14.48	0.070	1.78	25, 100	7.6, 30.5
FIT-600-1-1/4	1.250	31.75	0.714	18.14	0.087	2.21	25, 100	7.6, 30.5
FIT-600-1-1/2	1.500	38.10	0.857	21.77	0.095	2.41	25, 100	7.6, 30.5
FIT-600-1-3/4	1.750	44.45	1.000	25.40	0.107	2.72	25, 75	7.6, 22.8
FIT-600-2IN	2.000	50.80	1.140	28.96	0.110	2.79	25, 75	7.6, 22.8
FIT-600-3IN	3.000	76.20	1.710	43.43	0.125	3.18	25, 50	7.6, 15.2

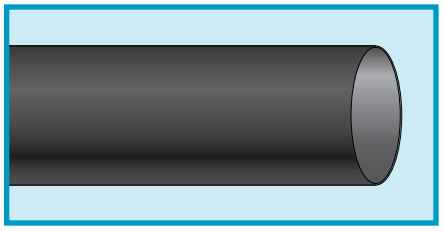
CA PROP 65 RoHS Compliant

Specifications subject to change. For complete specifications and availability, visit www.alphawire.com.

Heat-Shrink Tubing

FIT®-621 Heat Shrink Tubing

5.6:1 Shrink Ratio, Dual-Wall Flexible PO, Adhesive-Lined Inner Thick Wall



- High shrink ratios
- Heavy-duty adhesive lining
- Low water absorption
- Oil resistant
- Chemical resistant
- Abrasion resistant

Operating Temperature

- -55°C to +90°C

Shrink Temperature

- 121°C full recovery

Material

- Polyolefin

Color

Black

Physical Properties

- Tensile strength: 1200 psi (8.27 N/mm²)
- Elongation: 200% min
- Longitudinal change: -10%
- Specific gravity: 1.40
- Shelf life: 5 years at 18°C to 35°C

Chemical Properties

- Corrosive effect: none
- Fungus resistance: no growth
- Water absorption: 0.5% max
- Fluid resistance: 750 psi (5.17 N/mm²)
- Halogen free
- Lead free

Electrical Properties

- Dielectric strength: 200 V/mil (79 kV/cm)
- Volume resistivity: 10^{13} ohm-cm

Availability

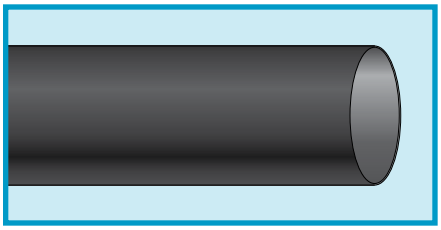
See table

Part No.	Supplied ID, Min.		Recovered ID, Max.		Recovered Wall Thickness, Nom.		Recovered Adhesive Wall Thickness, Min.		Availability, Qty, Cut Pieces at Length
	Inch	mm	Inch	mm	Inch	mm	Inch	mm	6" (152 mm)
FIT-621-5/8	0.600	15.24	0.150	3.81	0.060	1.52	0.050	1.27	3, 10
FIT-621-1-1/4	1.250	31.75	0.220	5.59	0.060	1.52	0.050	1.27	3, 10
FIT-621-2	2.000	50.80	0.374	9.50	0.106	2.69	0.050	1.27	3, 10, 24
FIT-621-2-1/2	2.500	63.50	0.500	12.70	0.120	3.05	0.050	1.27	3, 10
FIT-621-3	3.000	76.20	0.748	19.00	0.140	3.56	0.050	1.27	3, 10
FIT-621-4	4.000	101.60	0.898	22.81	0.155	3.94	0.050	1.27	3, 10

CA PROP 65 RoHS Compliant

Heat-Shrink Tubing

FIT®-650 Heat Shrink Tubing
2:1 Shrink Ratio, Flexible Fluoroelastomer



AMS-DTL-23053/13

- Excellent chemical resistance
- Wide temperature range
- Flexible
- Oil resistant
- Fuel resistant

Operating Temperature
- -40°C to +200°C

Shrink Temperature
- 130°C min.
- 175°C full recovery

Material
- Flexible fluoroelastomer

Colors
- Black

Physical Properties
- Tensile strength: 1200 psi (8.27 N/mm^2)
- Elongation: 250% min
- Longitudinal change: ±20%
- Flammability: self-extinguishing
- Shelf life: 2 years at 18°C to 35°C

Chemical Properties
- Corrosive effect: none
- Fungus resistance: no growth
- Water absorption: 0.50% max
- Fluid resistance: 1200 psi (8.27 N/mm^2)
- Lead free

Electrical Properties
- Dielectric strength: 200 V/mil (79 kV/cm)
- Volume resistivity: 10^9 ohm-cm

Availability
100 ft (30.5 m)
Spools may contain multiple lengths

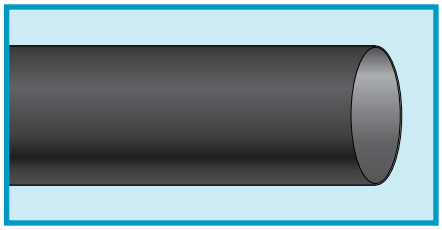
Part No	Supplied ID, Min.		Recovered ID, Max.		Recovered Wall Thickness, Nom.	
	Inch	mm	Inch	mm	Inch	mm
FIT-650-1/8	0.125	3.18	0.062	1.57	0.031	0.79
FIT-650-3/16	0.187	4.75	0.093	2.36	0.035	0.89
FIT-650-1/4	0.250	6.35	0.125	3.18	0.035	0.89
FIT-650-3/8	0.375	9.53	0.187	4.75	0.035	0.89
FIT-650-1/2	0.500	12.70	0.250	6.35	0.035	0.89
FIT-650-3/4	0.750	19.05	0.375	9.53	0.042	1.07
FIT-650-1	1.000	25.40	0.500	12.70	0.049	1.24
ST-650-1-1/2*	1.500	38.10	0.750	19.50	0.055	1.40

*Available in 50 ft (76 m) spools only.

CA PROP 65 RoHS Compliant

Heat-Shrink Tubing

FIT®-700 Heat Shrink Tubing
3:1 Shrink Ratio, Heavy-Wall XLPO, Thermoplastic Adhesive Lined



ANSI C119:1
UL 486
CSA 198

- Thermoplastic adhesive bonds to most materials
- Rated for 1 kV, 90°C continuous use
- Superior strength

Operating Temperature
- -55°C to +110°C

Shrink Temperature
- 120°C min.
- 120°C full recovery

Material
- Heavy-wall cross-linked polyolefin
- Thermoplastic adhesive

Color
- Black

Physical Properties
- Tensile strength: 2100 psi (14.48 N/mm^2)
- Elongation: 600% min
- Longitudinal change: +1%/-10%
- Specific gravity: 1.10
- Flame retardant
- Shelf life: 25 years at 18°C to 35°C

Chemical Properties
- Corrosive effect: none
- Fungus resistance: no growth
- Water absorption: 0.10% max
- Fluid resistance: excellent
- UV resistant
- Lead free

Electrical Properties
- Dielectric strength: 500 V/mil (196.9 kV/cm)
- Volume resistivity: 10^{17} ohm-cm

Availability
Cut pieces (see table)

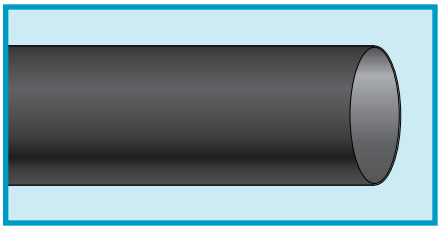
Part No.	Supplied ID, Min.		Recovered ID, Max.		Recovered Wall Thickness, Nom.		Recovered Adhesive Wall Thickness, Min.		Availability, Qty, Cut Pieces at Length
	Inch	mm	Inch	mm	Inch	mm	Inch	mm	12" (304 mm)
FIT-700-21	0.750	19.05	0.240	6.10	0.120	3.05	0.050	1.27	6
FIT-700-22	1.100	27.94	0.350	8.89	0.120	3.05	0.050	1.27	6
FIT-700-23	1.500	38.10	0.470	11.94	0.140	3.56	0.050	1.27	6
FIT-700-24	2.000	50.80	0.630	16.00	0.140	3.56	0.050	1.27	6
FIT-700-25*	3.000	76.20	1.250	31.75	0.160	4.06	0.050	1.27	6
FIT-700-26*	4.500	114.30	1.750	44.45	0.160	4.06	0.050	1.27	6

*Not UL or CSA listed

CA PROP 65 RoHS Compliant

Heat-Shrink Tubing

FIT®-750 Heat Shrink Tubing
2:1 Shrink Ratio, XLPO, Adhesive Lined



AMS-DTL-23053/4 Class 2
UL 224 VW-1
CSA 198

- General-purpose adhesive-lined tubing
- Total encapsulation
- Bonding to substrates

Operating Temperature
- -55°C to +110°C
- -55°C to +125°C (UL, CSA)

Shrink Temperature
- 110°C min.
- 110°C full recovery

Material
- Adhesive-lined cross-linked polyolefin

Color
- Black

Physical Properties
- Tensile strength: 1500 psi (10.34 N/mm^2)
- Elongation: 200% min
- Longitudinal change: +1%/-5%
- All tubing flame tested
- Self-extinguishing within 1 minute
- Shelf life: 3 years at 18°C to 35°C

Chemical Properties
- Corrosive effect: none
- Fungus resistance: no growth
- Water absorption: 0.5% max
- Fluid resistance: 1000 psi (6.89 N/mm^2)
- UV resistance
- Lead free

Electrical Properties
- 600 V (UL, CSA)
- Dielectric strength: 500 V/mil (197 kV/cm)
- Volume resistivity: 10^{12} ohm-cm

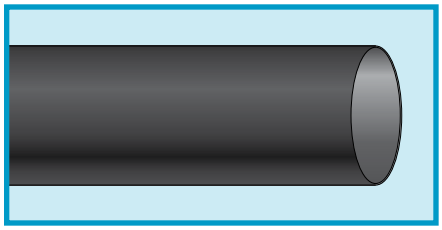
Availability
See table

Part No.	Supplied ID, Min.		Recovered ID, Max.		Recovered Wall Thickness, Nom.		Recovered Adhesive Wall Thickness, Min.		Availability, Qty, Cut Pieces at Length
	Inch	mm	Inch	mm	Inch	mm	Inch	mm	4' (1219 mm)
ST-302-1/8	0.125	3.18	0.063	1.60	0.027	0.69	0.002	0.05	25
ST-302-3/16	0.187	4.75	0.093	2.36	0.027	0.69	0.002	0.05	25
FIT-750-1/4	0.250	6.35	0.125	3.18	0.030	0.76	0.004	0.10	25
FIT-750-3/8	0.375	9.53	0.187	4.75	0.031	0.79	0.004	0.10	25
FIT-750-1/2	0.500	12.70	0.250	6.35	0.032	0.81	0.005	0.13	5
FIT-750-3/4	0.750	19.05	0.375	9.53	0.037	0.94	0.005	0.13	5
FIT-750-1IN	1.000	25.40	0.500	12.70	0.039	0.99	0.007	0.18	5
FIT-750-1-1/2	1.500	38.10	0.750	19.05	0.046	1.17	0.007	0.18	5

CA PROP 65 RoHS Compliant

Heat-Shrink Tubing

FIT®-FABRIC Woven Fabric Heat-Shrink Tubing
2:1 Shrink Ratio



UL 1441 (125°C)
MVSS 302

- Excellent abrasion resistance
- Outstanding flexibility and durability
- Easy installation: cuts with scissors

Operating Temperature
- -40°C to +125°C

Shrink Temperature
- 80°C min.
- 135°C full recovery

Material
- Polyethylene-polyester fabric

Color
- Black

Physical Properties
- Flame retardant
- Shelf life: 25 years at 18°C to 35°C

Chemical Properties
- Corrosive effect: none
- Fungus resistance: no growth
- Lead free
- Halogen free
- UV resistant

Availability
See table

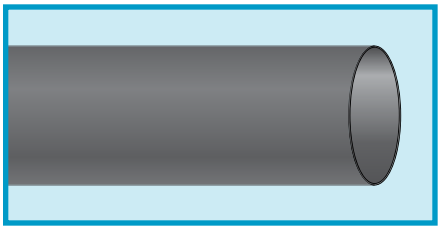
Spools may contain multiple lengths

Part No.	Supplied ID, Min.		Recovered ID, Max.		Recovered Wall Thickness, Nom.		Availability	
	Inch	mm	Inch	mm	Inch	mm	Ft	m
FIT-FAB-1	0.472	11.99	0.236	5.99	0.040	1.02	50, 200	15.2, 60.9
FIT-FAB-2	0.787	19.99	0.394	10.01	0.040	1.02	50, 200	15.2, 60.9
FIT-FAB-3	1.181	30.00	0.591	15.01	0.040	1.02	50, 200	15.2, 60.9
FIT-FAB-4	1.575	40.01	0.787	19.99	0.040	1.02	50, 200	15.2, 60.9
FIT-FAB-5	1.969	50.01	0.984	24.99	0.040	1.02	25, 100	7.6, 30.5
FIT-FAB-6	2.362	59.99	1.181	30.00	0.040	1.02	25, 100	7.6, 30.5
FIT-FAB-7	2.756	70.00	1.378	35.00	0.040	1.02	25, 100	7.6, 30.5

CA PROP 65 RoHS Compliant

Heat-Shrink Tubing

FIT®-FLEX Highly Flexible Heat-Shrink Tubing
1.7:1 Shrink Ratio, Cross-linked Silicone Rubber



UL 224 VW-1

- Highly flexible over wide temperature range
- Scrape abrasion resistant
- Pliable

Operating Temperature
- -50°C to +200°C

Shrink Temperature
- 80°C min.
- 135°C full recovery

Material
- Cross-linked silicone rubber

Color
- Slate

Physical Properties
- Tensile strength: 870 psi (5.99 N/mm^2)
- Elongation: 350% min
- Longitudinal change: -15%
- Specific gravity: 1.20
- Flammability: self-extinguishing
- Shelf life: 25 years at 18°C to 35°C

Chemical Properties
- Corrosive effect: none
- Fungus resistance: no growth
- Water absorption 1.0% max
- Lead free

Electrical Properties
- 600 V
- Dielectric strength: 200 V/mil (79 kV/cm)
- Volume resistivity: 10^{12} ohm-cm

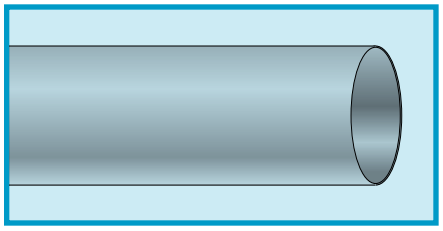
Availability
25 ft (7.6 m)
100 ft (30.5 m)
Spools may contain multiple lengths

Part No.	Supplied ID, Min.		Recovered ID, Max.		Recovered Wall Thickness, Nom.	
	Inch	mm	Inch	mm	Inch	mm
FIT-FLEX-2	0.165	4.19	0.071	1.80	0.055	1.40
FIT-FLEX-3	0.263	6.68	0.114	2.90	0.055	1.40
FIT-FLEX-5	0.394	10.01	0.173	4.39	0.055	1.40
FIT-FLEX-6	0.512	13.00	0.244	6.20	0.055	1.40
FIT-FLEX-9	0.757	19.23	0.354	8.99	0.059	1.50
FIT-FLEX-12	0.984	24.99	0.492	12.50	0.079	2.01
FIT-FLEX-20	1.378	35.00	0.748	19.00	0.079	2.01

CA PROP 65 RoHS Compliant

Heat-Shrink Tubing

FIT®-CLEAR Heat-Shrink Tubing
2:1 Shrink Ratio, Cross-Linked PVDF



AMS-DTL-23053/18 Class 1
UL 224 VW-1

- Excellent heat and chemical resistance
- Mechanical abrasion and cut-through resistance

Operating Temperature
- -55°C to +175°C
- -55°C to +150°C (UL)

Shrink Temperature
- 150°C full recovery

Material
- Cross-linked polyvinylidene fluoride

Color
- Clear

Physical Properties
- Tensile strength: 3500 psi (24.13 N/mm^2)
- Elongation: 200% min
- Longitudinal change: ±10%
- Specific gravity: 2.0
- Flame retardant
- Shelf life: 5 years at 18°C to 35°C

Chemical Properties
- Corrosive effect: none
- Fungus resistance: no growth
- Water absorption 0.5% max
- Fluid resistance: 2000 psi (13.79 N/mm^2)
- Lead free

Electrical Properties
- 600 V (UL)
- Dielectric strength: 400 V/mil (158 kV/cm)
- Volume resistivity: 10^{11} ohm-cm

Availability
See table

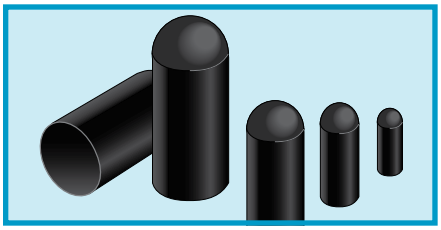
Spools may contain multiple lengths

Part No.	Supplied ID, Min.		Recovered ID, Max.		Recovered Wall Thickness, Nom.		Availability	
	Inch	mm	Inch	mm	Inch	mm	Ft	m
FIT-CLEAR-3/64	0.046	1.17	0.023	0.58	0.010	0.25	100	30.5
FIT-CLEAR-1/16	0.063	1.60	0.031	0.79	0.010	0.25	100	30.5
FIT-CLEAR-3/32	0.093	2.36	0.046	1.17	0.010	0.25	100	30.5
FIT-CLEAR-1/8	0.125	3.18	0.062	1.57	0.010	0.25	100	30.5
FIT-CLEAR-3/16	0.187	4.75	0.093	2.36	0.010	0.25	100	30.5
FIT-CLEAR-1/4	0.250	6.35	0.125	3.18	0.012	0.30	100	30.5
FIT-CLEAR-3/8	0.375	9.53	0.187	4.75	0.012	0.30	100	30.5
FIT-CLEAR-1/2	0.500	12.70	0.250	6.35	0.012	0.30	50	15.2
FIT-CLEAR-3/4	0.750	19.05	0.375	9.53	0.017	0.43	50	15.2
FIT-CLEAR-1IN	1.000	25.40	0.500	12.70	0.019	0.48	50	15.2
FIT-CLEAR-1-1/2	1.500	38.10	0.750	19.05	0.020	0.51	50	15.2
FIT-CLEAR-2IN	2.000	50.80	1.000	25.40	0.020	0.51	50	15.2

CA PROP 65 RoHS Compliant

Heat-Shrink Tubing

CAP Molded Heat-Shrink End Caps
2:1 Shrink Ratio, Semirigid Polyolefin



- Abrasion resistant
- Moisture resistant

Operating Temperature

- -55°C to +135°C

Shrink Temperature

- 135°C full recovery

Material

- Semirigid polyolefin

Color

- Black

Physical Properties

- Tensile strength: 2500 psi (1.76 N/mm^2)
- Elongation: 300% min
- Recovered parts may have angularity of 30° to 45°
- Specific gravity: 1.25
- Flammability: self-extinguishing
- Shelf life: 25 years at 18°C to 35°C

Chemical Properties

- Corrosive effect: none
- Fungus resistance: no growth
- Water absorption 0.1% max
- UV resistant
- Lead free

Electrical Properties

- Dielectric strength: 700 V/mil (276 kV/cm)
- Volume resistivity: 10^{16} ohm-cm

Availability

25-piece packages

Part No.	Supplied ID, Min.		Recovered ID, Max.		Recovered Wall Thickness, Nom.		Recovered Length, Nom.	
	Inch	mm	Inch	mm	Inch	mm	Inch	mm
CAP-21	0.200	5.08	0.080	2.03	0.040	1.02	0.900	22.86
CAP-22	0.290	7.37	0.130	3.30	0.050	1.27	1.000	25.40
CAP-23	0.400	10.16	0.180	4.57	0.060	1.52	1.200	30.48
CAP-24	0.600	15.24	0.250	6.35	0.070	1.78	1.600	40.64
CAP-25	0.810	20.57	0.370	9.40	0.080	2.03	2.400	60.96
CAP-26	1.000	25.40	0.450	11.43	0.090	2.29	2.700	68.58
CAP-27	1.550	39.37	0.710	18.03	0.100	2.54	3.600	91.44

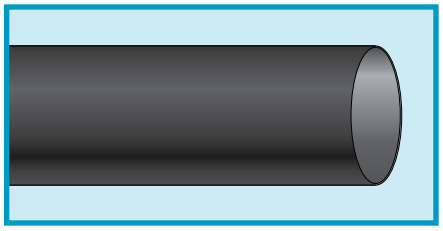
CA PROP 65 RoHS Compliant

Specifications subject to change. For complete specifications and availability, visit www.alphawire.com.

Heat-Shrink Tubing

SPC Heat Shrink Tubing

3:1 Shrink Ratio, XLPO, Heavy-Wall Thermoplastic Bonding Layer



AMS DTL-23053/15 Class 1

- Adhesive lined for sealing
- Thick wall for extra abrasion resistance
- Rated to 1 kV

Operating Temperature

- -55°C to +110°C

Shrink Temperature

- 120°C min.

Material

- Cross-linked polyolefin

Color

- Black

Physical Properties

- Tensile strength: 2400 psi (138 N/mm^2)
- Elongation: 475% min
- Longitudinal change: +1%/-10%
- Specific gravity: 1.28
- Flame retardant, self-extinguishing
- Shelf life: 25 years at 18°C to 35°C

Chemical Properties

- Corrosive effect: none
- Fungus resistance: no growth
- Water absorption: 0.02%
- Fluid resistance: pass
- UV resistant
- Lead free

Electrical Properties

- Dielectric strength: 500 V/mil (197 kV/cm)
- Volume resistivity: 10^{15} ohm-cm

Availability

Sold in individual pieces
6 in. (0.1 m)
12 in. (0.3 m)
48 in. (1.2 m) bulk

Part No.	Supplied ID, Min.		Recovered ID, Max.		Recovered Wall Thickness, Nom.		Recovered Adhesive Wall Thickness, Min.	
	Inch	mm	Inch	mm	Inch	mm	Inch	mm
SPC-400*	0.400	10.16	0.150	3.81	0.060	1.52	0.050	1.27
SPC-800*	0.800	20.32	0.200	5.08	0.060	1.52	0.050	1.27
SPC-110*	1.100	27.94	0.375	9.53	0.105	2.67	0.050	1.27
SPC-150	1.500	38.10	0.500	12.70	0.120	3.05	0.050	1.27
SPC-200	2.000	50.80	0.750	19.05	0.120	3.05	0.050	1.27
SPC-300	3.000	76.20	1.000	25.40	0.120	3.05	0.050	1.27

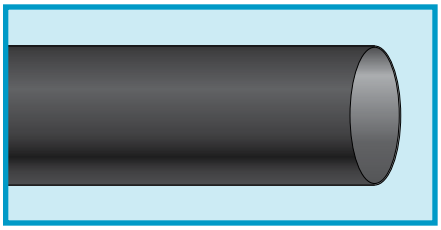
*Availability includes 6 in. (0.1 m) lengths.

CA PROP 65 RoHS Compliant

Heat-Shrink Tubing

SPCM Heat Shrink Tubing

3:1 Shrink Ratio, XLPO, Medium Wall, Thermoplastic Bonding Layer



AMS DTL-23053/15 Class 2

- Adhesive lined for sealing
- Medium wall for abrasion resistance
- Rated to 1 kV

Operating Temperature

- -55°C to +200°C

Shrink Temperature

- 120°C min.

Material

- Cross-linked polyolefin

Color

- Black

Physical Properties

- Tensile strength: 2400 psi (1.38 N/mm^2)
- Elongation: 475% min
- Longitudinal change: +1%/-10%
- Specific gravity: 1.25
- Self-extinguishing
- Shelf life: 25 years at 18°C to 35°C

Chemical Properties

- Corrosive effect: none
- Fungus resistance: no growth
- Water absorption: 0.02%
- Fluid resistance: pass
- UV resistant
- Lead free

Electrical Properties

- Dielectric strength: 500 V/mil (197 kV/cm)
- Volume resistivity: 10^{15} ohm-cm

Availability

Sold in individual pieces
6 in. (0.1 m)
12 in. (0.3 m)
48 in. (1.2 m)

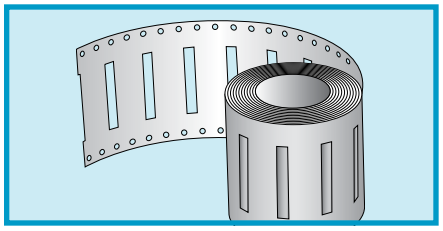
Part No.	Supplied ID, Min.		Recovered ID, Max.		Recovered Wall Thickness, Nom.		Recovered Adhesive Wall Thickness, Min.	
	Inch	mm	Inch	mm	Inch	mm	Inch	mm
SPCM400*	0.400	10.16	0.150	3.81	0.050	1.27	0.040	1.02
SPCM800*	0.800	20.32	0.220	5.59	0.060	1.52	0.040	1.02
SPCM110*	1.100	27.94	0.375	9.53	0.065	1.65	0.040	1.02
SPCM130	1.300	33.02	0.375	9.53	0.065	1.65	0.040	1.02
SPCM150	1.500	38.10	0.500	12.70	0.080	2.03	0.040	1.02
SPCM170	1.700	43.18	0.500	12.70	0.100	2.54	0.040	1.02
SPCM200	2.000	50.80	0.750	19.05	0.100	2.54	0.040	1.02
SPCM300	3.000	76.20	1.000	25.40	0.100	2.54	0.040	1.02

*Availability includes 6 in. (0.1 m) lengths.

CA PROP 65 RoHS Compliant

Heat-Shrink Tubing

FIT®-PRINT Heat-Shrinkable Identification System
3:1 Shrink Ratio, XLPO



UL 224
CSA 198
MIL-STD-202F Method 215J

- Permanent, smear-resistant marking
- Identification for cable or harness assemblies

Operating Temperature
- -30°C to +105°C

Shrink Temperature
- 90°C min.
- 125°C full recovery

Material
- Cross-linked polyolefin

Colors
- White, yellow

Physical Properties
- Tensile strength: 1160 psi (8.0 N/mm^2)
- Elongation: 150% min
- Longitudinal change: 20%
- Flame retardant
- Shelf life: 3 years at 18°C to 35°C

Chemical Properties
- Corrosive effect: none
- Fungus resistance: no growth
- Water absorption: 0.5%

Electrical Properties
- Dielectric strength: 20 V/mil (7.9 kV/cm)
- Volume resistivity: 10^{14} ohm-cm

Availability
250 tubing pieces per package

Part No	Range			Supplied ID, Min.		Recovered ID, Max.		Recovered Wall Thickness, Nom.	
	AWG	Inch	mm	Inch	mm	Inch	mm	Inch	mm
FIT-PRINT-1/8	22 – 16	0.344 – 1.374	8.74 – 34.90	0.125	3.18	0.042	1.07	0.023	0.58
FIT-PRINT-1/4	16 – 8	1.374 – 3.264	34.90 – 82.92	0.250	6.35	0.083	2.11	0.023	0.58
FIT-PRINT-1/2	8 – 2	3.264 – 6.543	82.92 – 166.19	0.500	12.70	0.166	4.22	0.023	0.58
FIT-PRINT-1	2 – 4/0	6.543 – 10.2	166.19 – 259.08	1.000	25.40	0.333	8.46	0.023	0.58

To economically meet the wire identification needs of the electronic interconnect, industrial, computer office automation, marine, and electrical markets, FIT-PRINT sleeves allow smear-resistant, permanent identification. The sleeves, available in white or high-visibility bright yellow, feed directly into dot matrix printers (high carbon content ribbon recommended). A standard ball-point pen may also be used.

CA PROP 65 RoHS Compliant

Heat-Shrink Tubing

FIT®-KIT

Assorted Heat-Shrink Tubing



- **For use in R&D labs, engineering development, and maintenance departments**

FIT-KIT-1 for General-Purpose Indoor Applications

Tubing supplied in 6" (15.2 cm) lengths unless otherwise noted.

Family	Material	Sizes	Range	Total Quantity
FIT-105	PVC	9	3/64" – 3/4"	18
FIT-221	XLPO	9	3/64" – 3/4"	19
FIT-295	SR-XLPO	8	3/64" – 1/2"	12
FIT-300	XLPO	5	1/8" – 1/2"	10
FIT-350	PVDF	7	3/64" – 3/8"	14
FIT-CRIMP	Nylon	22 – 10 AWG	—	3 pc*
Caps	XLPO	22, 23, 24 AWG	—	6 pc

*1 each of FIT-CRIMP 1, 2, and 3.

FIT-KIT-2 for General-Purpose Indoor and Outdoor Applications

Tubing supplied in 6" (15.2 cm) lengths unless otherwise noted.

Family	Material	No. of Sizes	Range	Total Quantity
FIT-105	PVC	9	3/64" – 3/4"	18
FIT-221	XLPO	9	3/64" – 3/4"	19
FIT-295	SR-XLPO	8	3/64" – 1/2"	12
FIT-300	XLPO	5	1/8" – 1/2"	10
FIT-321	Adhesive-Lined XLPO	2	1/4" – 1/2"	16, 24*
FIT-350	PVDF	7	3/64" – 3/8"	14
FIT-400	FEP	6	24 – 12 AWG	22
FIT-500	PTFE	5	26 – 18 AWG	17
FIT-600	Chlorinated PO	5	1/4" – 1"	8
FIT-700	Thermoplastic Adhesive-Lined XLPO	2	21 – 22	2
FIT-750	Adhesive-Lined XLPO	1	3/8"	10*
FIT-CRIMP	Nylon	22 – 10 AWG	—	3 pc**
Caps	XLPO	22, 23, and 24	—	6 pc

*1"/25.4 mm length.
**1 each of FIT-CRIMP 1, 2, and 3.

FIT-KIT-7 for General-Purpose Indoor and Outdoor Applications

Tubing supplied in 6" (15.2 cm) lengths unless otherwise noted.

Family	Material	No. of Sizes	Range	Total Quantity
FIT-105	PVC	7	1/16" – 1/2"	14
FIT-221	XLPO	7	1/16" – 1/2"	28
FIT-260	XLPO (Ground Lead)	3	1/8" – 1/2""	6
FIT-300	XLPO	4	3/8" – 1/2"	8
FIT-321	Adhesive-Lined XLPO	3	1/8" – 1/2"	6
FIT-350	PVDF	7	1/6" – 1/2"	14
FIT-400	FEP	7	24 – 12 AWG	14
FIT-750	Adhesive-Lined XLPO	5	1/4" – 1"	10
FIT-CRIMP	Nylon	22 – 10 AWG	—	12 pc*

*4 each of FIT-CRIMP 1, 2, and 3.

Heat-Shrink Tubing

FIT®-MGKIT-1

Convenient Kit with FIT Minigun and FIT-221 Variety Pack



FIT Minigun Characteristics

- UL 499
- To 300°C nozzle temperature
- 6 ft (1.83 m) power cord
- 10.3 oz (0.39 kg) net weight
- Workbench storage loop included
- 120 V
- 350 W
- 3 A
- Color: blue

FIT-221-R Variety Kit

- UL 224
- CSA 198
- AMS-DTL-23053/5 Class 1
- 60 6" (15.2 cm) pieces in five sizes and various colors
- Cross-linked polyolefin
- 2:1 shrink ratio

FIT-MGKIT-1 Contents

Part No.	Description	Quantity
FIT MINIGUN	Lightweight, portable heat gun	1
FIT-221-R	FIT-221R Variety Pack	1 kit/60 pieces

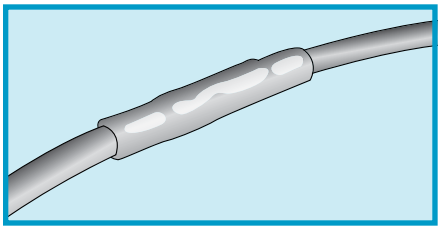
FIT-221-R Kit Contents

	Tubing Size		Number of 6" (15.2 cm) Pieces					
	Inch	Mm	Black	White	Red	Blue	Yellow	Green
FIT-221-1/8	0.125	3.18	4	3	2	2	2	1
FIT-221-3/16	0.187	4.75	4	3	2	2	2	1
FIT-221-1/4	0.250	6.35	4	3	2	2	2	1
FIT-221-3/8	0.375	9.53	3	2	1	1	1	1
FIT-221-1/2	0.500	12.70	3	2	1	1	1	1

RoHS Compliant

Heat-Shrink Tubing

FIT®-CRIMP Heat-Shrinkable Crimp Splices
2:1 Shrink Ratio, Nylon



UL ZMVV

Operating Temperature

- -55°C to +125°C

Materials

- Heat-shrinkable nylon
- Polyamide-based adhesive
- Tin-plated copper base metal

Physical Properties

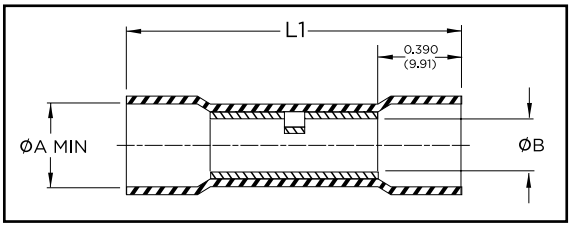
- Shelf life: 25 years at 18°C to 35°C
- Not flame retardant

Chemical Properties

- Solvent resistance: isopropyl alcohol, trichloroethylene, gasoline, battery acid, diesel fuel, motor oil, anti-freeze, brake fluid, 5% salt water

Availability

100-piece packages
500-piece packages



Part No.	Wire Range		Color	Length		Supplied ID, Min.				Recovered ID, Max.	
				L1		A		B		A	
	AWG	mm²		Inch	mm	Inch	mm	Inch	mm	Inch	mm
FIT-CRIMP 1	22 – 18	0.26 – 0.96	Red	1.50	38.10	0.170	4.32	0.058	1.47	0.055	1.40
FIT-CRIMP 2	16 – 14	1.04 – 2.62	Blue	1.50	38.10	0.197	5.00	0.092	2.34	0.080	2.03
FIT-CRIMP 3	12 – 10	2.62 – 6.64	Yellow	1.70	43.18	0.255	6.48	0.138	3.51	0.110	2.79

Alpha's heat-shrinkable pre-insulated crimp splices completely seal electrical connections from corrosion caused by water, salts, and other contaminants. Unlike conventional splices, these adhesive-lined butt connectors provide a strong reinforced connection. They are lightweight and easy to install, too.

Simply insert the wires. The sleeve's transparent nylon insulation lets you inspect wire location and position your crimping tool fast.

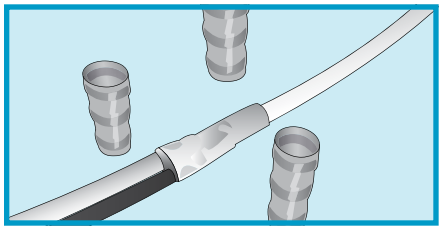
Crimp the splice and then shrink and seal it with a common heat gun or other heat source. Reliable sealing plus quick and easy installation add up to protection you can count on whenever wire splices are required, including automobile and truck wiring, outdoor electrical equipment, marine equipment, telecommunications equipment, recreational equipment, and household appliances.

RoHS Compliant

Specifications subject to change. For complete specifications and availability, visit www.alphawire.com.

Heat-Shrink Tubing

FIT®-SLV Soldering Sleeves



ANSI J-STD-004
ANSI J-STD-006
NAS 1745

Operating Temperature

- -55°C to +105°C (SLV 12 – 16)
- -55°C to +125°C (SLV 22 – 26)

Sleeve Color

- Transparent blue

Materials

- PVDF heat-shrinkable sleeve

Solder Preform:

- 105°C Series: 51.2% tin, 30.6% lead, 18.2% cadmium (143°C melting temperature)
- 125°C Series: 63% tin, 37% lead (183°C melting temperature)

Physical Properties:

- Shelf life: 25 years at 18°C to 35°C

Availability

25-piece packages
100-piece packages

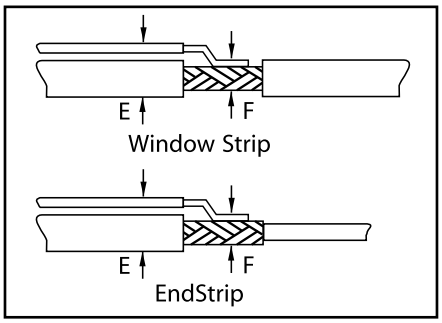
Part No.		Dimensions					
		D1 min.		D min.		L nom.	
105°C	125°C	Inch	mm	Inch	mm	Inch	mm
FIT-SLV-12	**FIT-SLV-22**	0.125	3.18	0.110	2.79	0.625	15.88
FIT-SLV-14	**FIT-SLV-24**	0.200	5.08	0.180	4.57	0.625	15.88
FIT-SLV-16	**FIT-SLV-26**	0.300	7.62	0.280	7.11	0.750	19.05

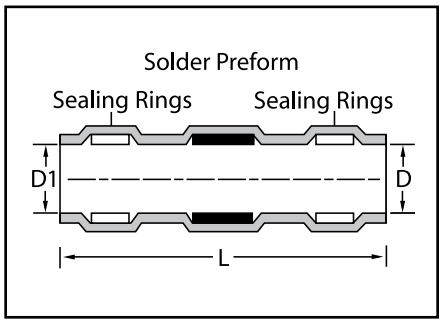
Alpha's FIT-SLV soldering sleeve is a one piece, shield ground termination system featuring a strong, low-cost soldered connection that is completely insulated and encapsulated. It consists of a heat-shrinkable thermoplastic sleeve containing a precisely engineered preform of fluxed solder and thermoplastic inserts at each end. When placed over a cable shield and heated, the solder melts and flows, connecting the ground lead and shield. The outer sleeve shrinks and the thermoplastic inserts melt, encapsulating the termination. The result is a perfectly soldered, strain-relieved and environmentally protected termination.

A solder preform ensures exact quantity of solder and flux, producing optimum solder connections for maximum strength and lowest voltage drop. Transparent heat-shrinkable insulating sleeve allows inspection of termination, and provides long-life strain relief. Meltable inserts insure complete environmental protection.

Selection Guide

1. Measure maximum diameter (E) and minimum diameter (F) of combined cable and ground lead.
2. Find appropriate Alpha part number and sleeve size in the cable and sleeve dimensions chart.





Heat-Shrink Tubing

FIT® Heat Guns

	FIT-GUN-1	FIT-GUN-3	FIT-Minigun
			
Temperature, Low	60°C (140°F)	316°C (600°F)	—
Temperature, High	566°C (1050°F)	510°C (950°F)	300°C (572°F)
Temperature Selection	Slider switch: Off, Low, Medium, High	Slider switch: Off, Low, High	Rocker switch: Off, On
Power	1400 W	1300 W	350 W
Voltage	120 VAC/60 Hz	120 VAC/60 Hz	120 VAC/60 Hz
Current	11.6 A	10.0 A	3 A
Power Cord Length	6.5 ft (2 m)	6.5 ft (2 m)	6 ft (1.8 m)
Net Weight	2.2 lb (1 kg)	1.6 lb (0.68 kg)	10.3 oz (0.39 kg)
Color	Black/gray	Black/gray	Blue
Nozzle Attachments	Reflector nozzle	—	Workbench loop
Approvals	UL 499 c UL us RoHS Compliant	UL 499 c UL us RoHS Compliant	UL 499 UL LISTED
Part No.	**FIT-GUN1**	**FIT-GUN3**	**FIT-MG1**

OCEAN CHIPS
Океан Электроники
Поставка электронных компонентов

Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «**JONHON**», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «**FORSTAR**».

AVIC JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).

FORSTAR®

Телефон: 8 (812) 309-75-97 (многоканальный)
Факс: 8 (812) 320-03-32
Электронная почта: ocean@oceanchips.ru
Web: http://oceanchips.ru/
Адрес: 198099, г. Санкт-Петербург, ул. Калинина, д. 2, корп. 4, лит. А