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### **INTRODUCTION**

BURNDY wiring accessories have been designed to supplement and enhance BURNDY connector selection and use. All have been designed and engineered for easy installation and long life, reflecting over 65 years of experience and resulting contributions to all aspects of the electrical industry.

# **PENETROX®**

### HOW TO INSTALL CONNECTORS:

#### 1. Select the right connector.

Always use an aluminum connector for aluminum or copper conductor. And choose a connector that's marked for the wire size you're using. Never use a copper connector on aluminum conductor.

#### 2. Strip carefully.

Remove the insulation without nicking the wire.

#### 3. Brush thoroughly.

Always wire-brush the stripped portion of the wire. An unplated terminal pad, and the surface to which the terminal will be attached should also be wire-brushed.





#### 4. Apply PENETROX®

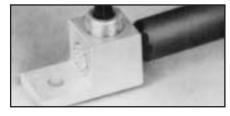
For mechanical connectors, apply PENE-TROX<sup>®</sup> joint compound liberally to the conductor to prevent the formation of surface oxides once the connection is made. Also apply PENETROX<sup>®</sup> to any terminal pad.



#### 5. Tighten completely.

M-2

For mechanical connectors, use wrench or screwdriver to securely tighten the aluminum connectors, as recommended by BURNDY.



#### 6. Crimp.

For compression connectors, choose the right die and the right tool. Insert the wire completely and make the recommended number of crimps. BURNDY takes the guesswork out of aluminum connections because the connectors and crimp dies are color coded. Crimps can be easily located between marks.



Accessories

**BURNDY** 



### TYPES PENETROX<sup>®</sup> A, A-13 AND E

#### OXIDE-INHIBITING JOINT COMPOUNDS

PENETROX<sup>®</sup> oxide-inhibiting compounds produce low initial contact resistance, seal out air and moisture, prevent oxidation or corrosion, exhibit superior weathering characteristics, are usable over wide temperature ranges, and provide a high conductivity "gastight" joint. All PENETROX<sup>®</sup> compounds contain homogeneously suspended metal particles. The suspended metal particles assist in penetrating thin oxide films, act as electrical "bridges" between conductor strands, aid in gripping the conductor, improve electrical conductivity and enhance the integrity of the connection.

The specially formulated PENETROX® compounds are for use with compression and bolted connectors providing an improved service life for both copper and aluminum connections. Additionally, the non-toxic compounds are an excellent lubricant for threaded applications reducing galling and seizing.





#### PENA-1 LB

PENA-1 LB is a 1 lb. cartridge filled with PENETROX-A. It's designed to fit standard caulking guns for easy insertion into transmission and distribution connectors. Additionally, this packaging design provides a convenient method for applying PENETROX<sup>®</sup> to many different applications.



#### PENETROX A-13

PENETROX A-13 is a synthetic base compound with evenly suspended zinc particles. It is recommended for aluminum to aluminum, aluminum to copper connection plus aluminum conduit threads. It is compatible with rubber, polyethylene and other insulating materials. UL listed for all voltages.



#### PENETROX A

PENETROX A is a natural (petroleum) base compound with evenly suspended zinc particles. It is recommended for aluminum to aluminum, aluminum to copper connections and aluminum conduit threads. It is not recommended for use with rubber or polyethylene insulated conductors. UL listed to 600V.



#### PENETROX E

PENETROX E is a synthetic base compound with evenly suspended copper particles. It is recommended for copper to copper, copper threads and all grounding applications. UL listed.





# PENETROX A, A-13 AND E

#### **TECHNICAL INFORMATION**

#### PENETROX A

PENETROX A consists of a natural (petroleum) base vehicle in which zinc particles are suspended. For aluminum to aluminum, aluminum to copper applications and aluminum conduit threads. It is not recommended for use with rubber and polyethylene insulated conductors. UL listed to 600 volts.

#### PENETROX A-13

PENETROX A-13 consists of a nonpetroleum base vehicle in which zinc particles are suspended. Recommended for aluminum to aluminum, aluminum to copper applications and aluminum conduit threads. Compatible with insulating materials such as rubber, or polyethylene. UL listed and recommended for all voltages.

#### PENETROX E

PENETROX E consists of a non-petroleum base vehicle in which copper granules are suspended. Recommended for copper to copper applications, grounding and for use on copper conduit threads. UL listed.

#### Easy to apply:

- 1. Scratch brush the conductor surfaces until bright and clean.
- 2. Immediately apply PENETROX<sup>®</sup> to the conductive surfaces.
- 3. For EHV applications, remove all excess PENETROX<sup>™</sup> after installation is complete.

#### SHELF LIFE

When stored in its original container in cool (under 100° F) dry environment, PENE-TROX<sup>®</sup> oxide inhibiting compound will remain workable and functional for (5) years from the date marked on the container provided it is mixed per instructions prior to use.





### **PROPERTIES OF PENETROX®**

PROPERTY	VALUE PENETROX® DEFINITION	PENETROX <sup>®</sup> E & A13	А
PENETRATION (UNWORKED)	The value in accordance to ASTM D217 indi- cates the consistency of a grease. The higher the number, the softer the grease.	250	230
Dropping Point (Min)	The temperature at which the grease passes from the semi-solid to a liquid state under test conditions.	500° F	230° F
POUR POINT (MAX.)	The lowest temperature at which the compound will flow. Pour point is the lubricant's ability to perform in cold conditions.	–10° F	–15° F

\* MSDS sheets available through customer service.

### **ORDERING INFORMATION**

CATALOG NUMBER		CONTAINER	CONTAINER	
PENETROX® A	PENETROX <sup>®</sup> A-13	PENETROX® E	ТҮРЕ	SIZE
PEN 1/2-03	PEN A13-3	-	TUBE	3 oz.
PEN A-4	PEN A13-4	PEN E-4	SQUEEZE BOTTLE	4 oz.
P8A	PEN A13-8	PEN E-8	SQUEEZE BOTTLE	8 oz.
PEN A-1LB	PENA13-1LB	-	CARTRIDGE	1 lb.*
PEN A-QT	PEN A13-QT	PEN E-QT	PLASTIC TUB	1 QUART
PEN A-GAL	PEN A13-GAL	PEN E-GAL	CAN	1 GALLON
PEN A-5GAL	PEN A13-5GAL	PEN E-5GAL	PAIL	5 GALLONS
PEN A-55GAL	PEN A13-55GAL	PEN E-55GAL	DRUM	55 GALLONS

\* 1 lb. cartridge will fit standard caulking guns.





### **UNIRAP<sup>TM</sup>**

**F**1

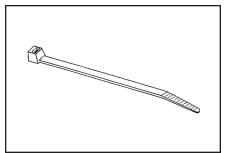
**NYLON CABLE TIES** 

EQUIVALENT TABLES

MILITARY SPECIFICATIONS

BURNDY equivalents to Military Standard MIL-S-23190 in accordance with specification MS 3367 and MS 3368 QPL listed.





MS	TYPE	CLASS		BURNDY N	JMBER(S)	
3367-4	I	1	TF3D, TF3D-3 *	TF3, TF3-3 *	TF3DX	TF3X
3367-4	1		TF3D-4	TF3-4		
3367-4	1		TF3D-5	TF3-5		
3367-4	I	II	TF3D-8	TF3-8		
3367-5	I		TF4D-6	TF4, TF4-6	TF4DX	TF4X
3367-1	I		TF45D-8	TF45-8		
3367-7	1					
3367-2	I		TF45D-14	TF45-14		
3367-1	I	1	TF5D, TF5D-8	TF5, TF5-8	TF5DX	TF5X
3367-7	I		TF6D, TF6D-11	TF6, TF6-11	TF6DX	TF6X
3367-2	1	1	TF8D, TF8D-15	TF8, TF8-15	TF8DX	TF8X
3367-3	1		TF7D, TF7D-15	TF7, TF7-15	TF7DX	TF7X
3367-6	I		TF9D-29			
3367-3	I	II	TF10D-15			
3367-3	1		TF10D-21			
3367-6	1	II	TF10D-32			
3368-5-E	II		TF3LD-4	TF3L-4		
3368-1-A	II		TF5LD-8	TF5L-8		
3368-3-C	II		TF5LD-8D			
3368-4-D	II		TF5LD-8T			
3368-2-A	I		TF5LD-15	TF5L-15		

 $^*$  TF3D-3-HAL, TF3-3HAL Available: Matl. Halar fluoropolymer. Color maroon. 94VO rated. Radiation resistant to 100 megarads. Low smoke density when burned. Operating temperature range 284° F to  $-50^\circ$  F (140° C to  $-46^\circ$  C).

Accessories

BURNDY



### **UNIRAP<sup>TM</sup>**

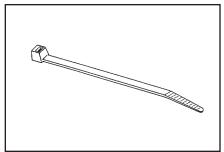
### **NYLON CABLE TIES**

UNIRAP<sup>™</sup> cable ties are fabricated of onepiece nylon with no metal parts. The straps are tough, resilient, lightweight and abrasion resistant. They offer high tensile strength and are chemically resistive to solvents, alkalies, oils, grease and diluted acids. Self-locking, they secure without twisting or leaving sharp projections.

Compact heads and prebent tips facilitate cable bundling in a minimum of time and space.



UNIRAP™ cable ties are designed for both field and production line use and may be installed easily by hand. See previous page for mil-spec table.





CATALOG NUMBER	MAXIMUM BUNDLE DIAMETER	MINIMUM TENSILE UNLOCKING STRENGTH	LENGTH	WIDTH	INSTALLATION TOOLS	BULK CATALOG NUMBER
TF3D	3/4"	18 lbs.	3.60"	.100"		TF3
TF3D-3	5/8"	18 lbs.	3.37"	.100"		TF3-3
TF3D-4	3/4"	18 lbs.	4.00"	.100"		TF3-4
TF3D-5	1-1/4"	18 lbs.	5.75"	.100"		TF3-5
TF3D-8	2"	18 lbs.	8.00"	.100"	1	TF3-8
TF4D	1-1/4"	30 lbs.	5.40"	.145"		TF4
TF4D-6	1-1/4"	30 lbs.	6.00"	.140"	1	TF4-6
TF4D-8	2"	30 lbs.	8.00"	.140"	1	TF4-8
TF4D-11	3"	30 lbs.	11.25"	.140"	1	TF4-11
TF4D-14	4"	30 lbs.	14.50"	.140"	UT-1,	TF4-14
TF45D-8	2"	40 lbs.	8.50"	.150"	1	TF45-8
TF45D-14	4"	40 lbs.	14.50"	.150"	1	TF45-14
TF5D-6	1-1/4"	50 lbs.	6.50"	.180"	1	TF5-6
TF5D	1-3/4"	50 lbs.	7.25"	.190"	1	TF5
TF5D-8	1-3/4"	50 lbs.	8.00"	.180"	1	TF5-8
TF6D	3"	50 lbs.	11.70"	.190"	1	TF6
TF6D-11	3"	50 lbs.	11.75"	.180"		TF6-11
TF8D	4"	50 lbs.	14.62"	.190"		TF8
TF8D-15	4"	50 lbs.	15.50"	.180"	1	TF8-15
TF7D-8	2"	120 lbs.	8.875"	.300"		TF7-8
TF7D-11	3"	120 lbs.	11.875"	.300"	]	TF7-11
TF7D	3-1/2"	120 lbs.	13.80"	.310"	]	TF7
TF7D-15	4"	120 lbs.	15.25"	.300"	1	TF7-15
TF9D-29	9"	120 lbs.	29.75"	.300"	]	-
TF10D-15	4"	175 lbs.	15.00"	.350"	UT-2.	-
TF10D-21	6"	175 lbs.	21.00"	.350"		-
TF10D-32	9"	175 lbs.	32.00"	.350"	]	-
TF10D-36	11"	175 lbs.	36.00"	.350"	]	-
TF10D-34	10"	175 lbs.	34.00"	.370"		-
TF10D-42	13"	175 lbs.	42.00"	.350"	]	-
TF10D-52	16"	175 lbs	52.00"	.350"	]	-

\* For weatherproof UNIRAP™ ties add suffix "X" to catalog

number (example: TF3DX). For other materials and lengths contact factory. See Tooling Section N for installation tool details.

TF3D-4-HAL and TF5D-8-HAL available in 60% HALAR™

for Plenum applications. HALAR is a registered trademark of Allied Fiber and Plastic.



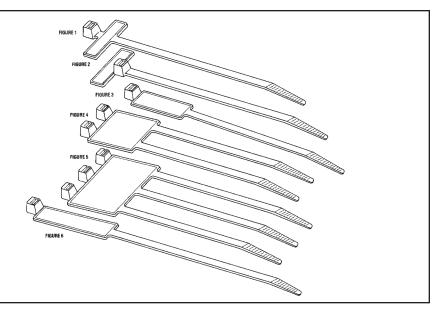
### **UNIRAP<sup>TM</sup>**

### **IDENTIFICATION CABLE TIES**

Identification cable ties are used in both bundling and identifying wire groups at the same time.







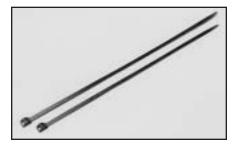
CATALOG NUMBER	MAXIMUM BUNDLE DIAMETER	BUNDLE UNLOCKING		WIDTH	FIGURE NUMBER	INSTALLATION TOOLS	BULK CATALOG NUMBER
TF3LD-4	3/4"	18 lbs.	4.00"	.100"	1	UT-1	TF3L-4
TF3LD-4F	3/4"	18 lbs.	4.50"	.100"	2	UT-1	TF3L-4F
TF5LD	1 3/4"	50 lbs.	7.20"	.190"	3	UT-1	TF5L
TF5LD-8D	1 3/4"	50 lbs.	8.00"	.180"	4	UT-1	
TF5LD-8T	1 3/4"	50 lbs.	8.00"	.180"	5	UT-1	
TF5LD-15	4"	50 lbs.	15.00"	.180"	6	UT-1	TF5L-15

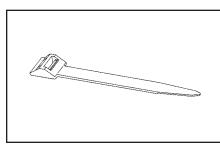
## **UNIRAP™**

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### RELEASABLE HEAVY DUTY CABLE TIES

Releasable cable ties are ideal for temporary installations in both industrial and commercial construction applications.





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CATALOG NUMBER	MAXIMUM BUNDLE DIAMETER	MINIMUM TENSILE UNLOCKING STRENGTH	LENGTH	WIDTH
TF11D-9R	2"	250 lbs.	9.00"	.500"
TF11D-20R	5"	250 lbs.	20.00"	.500"
TF11D-22R	6"	250 lbs.	22.00"	.500"
TF11D-29R	8"	250 lbs.	29.00"	.500"
TF11D-35R	10"	250 lbs.	35.00"	.500"
TF11D-41R	12"	250 lbs.	41.00"	.500"

\* For weatherproof UNIRAP™ ties add suffix "-X" to catalog number (example: TF11D-9RX).



**FI** 



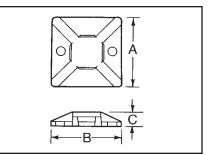
### **UNIRAP™**

### **MOUNTING CABLE TIES**

4-WAY

BURNDY mounting bases are available in adhesive or screw mount forms. The 4-way mounting bases come in 3 sizes to accomodate UNIRAPs™ from 18 lbs. tensile strength up to 175 lbs. All bases are made of standard nylon and are offered in weather resistant forms





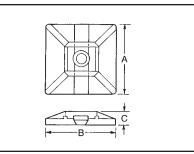
CATALOG	MAXIMUM	MOUNTING		<b>DIMENSIONS - INCHES</b>	6
NUMBER	TIE WIDTH	TECHNIQUE	Α	В	С
TFB3D-4S	.140"	#4 Screw	.750"	.750"	.150"
TFB3D-4A	.140"	Adhesive	.750"	.750"	.150"
TFB5D-4S	.190"	#8 Screw	1.125"	1.125"	.190"
TFB5D-4A	.190"	Adhesive	1.125"	1.125"	.190"
TFB7D-4S	.350"	#8 Screw	1.500"	1.500"	.250"
TFB7D-4A	.350" Adhesive		1.500"	1.500"	.250"

\* For weatherproof UNIRAP™ bases add suffix "-X" to catalog number (example: TFB3D-4SX).

2-WAY

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	CATALOG	MAXIMUM	MOUNTING	ſ	DIMENSIONS - INCHES	5
	NUMBER			Α	В	С
	TFB5D-2S	.190"	#6 Screw	1.125"	1.125"	.210"
8	TFB5D-2A	.190"	Adhesive	1.125"	1.125"	.210"

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For weatherproof UNIRAP™ bases add suffix "-X" to catalog number (example: TFB5D-2SX).



# **TYPE TFV-B**

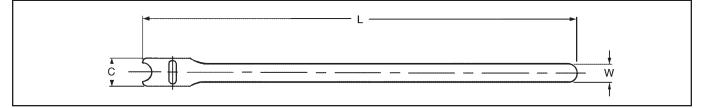
#### **DATAQIK® HOOK AND LOOP STRAPS**

Reusable and flexible BURNDY® Hook and Loop Straps are a unique self-gripping fastening system. Cables can be added or subtracted easily.

The TFV-V2 series straps are UL Listed Wire Positioning Devices (ZODZ), UL94-V2 rated for use in air handling spaces in accordance with the NEC section 300-22 (c) and (d). Perfect for plenum areas.

25 straps are conveniently packaged in each polybag, suitable for displaying on DataQik® merchandising rack.





CATALOG NUMBER	PRODUCT DESCRIPTION	С	L	w	т	MAX. BUNDLE DIA.	AVG. SHEER (PSI)	AVG. PEEL (PIW)	PKG. QTY.
TFV3B12V2**	VELCRO® hook and loop strap, 3/4" $ imes$ 12", Black, 25pk	0.75″	12.00″	.50″	.09″	3.0″	29	.6	*1
TFV3B18V2**	VELCRO® hook and loop strap, $3/4''  imes 18''$ , Black, 25pk	0.75″	18.00″	.50″	.09″	5.0″	29	.6	*1
TFV3BLU12	VELCRO® hook and loop strap, $3/4'' \times 12''$ , Royal Blue, 25pk	0.75″	12.00″	.50″	.09″	3.0″	23	.5	*1
TFV3BLU18	VELCRO® hook and loop strap, 3/4" $\times$ 18", Royal Blue, 25pk	0.75″	18.00″	.50″	.09″	5.0″	23	.5	*1

\* Straps sold by the package, quantity 1 package equals 25 straps.
 \*\* UL94-V2 listed. DataQik® is a registered trademark of FCI USA, Inc. VELCRO® is a registered trademark of Velcro USA, Inc.

# **TYPE HP-N**

# **NYLOCLIP®**

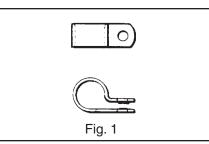
### **CABLE HANGER**

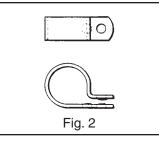
NYLOCLIP® cable hangers are fabricated one-piece nylon, with no metal parts. Tough, resilient, lightweight and abrasion resistant, NYLOCLIP® cable hangers offer high tensile strength and are resistant to solvents, alkalies, oils grease and diluted acids.

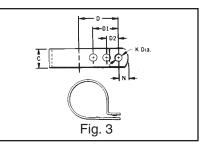
Available in white or black UV/weather resistant material.

Meets Mil spec M-20693, ASTM STD D4066 Group 1 Class 1.









CATALOG	FIG.							SCREW	WIRE B	WIRE BUNDLE DIAMETER		BULK CATALOG
NUMBER	NO.	С	D*	D1	D2	Ν	K DIA.	SIZE	HOLE 1	HOLE 2	HOLE 3	NUMBER
HP-2N BOX	1	.38	.37	-	-	.19	.17	#8	.10	-	-	HP-2N
HP-3N BOX	1	.38	.40	-	-	.19	.17	#8	.18	-	-	HP-3N
HP-4N BOX	1	.38	.43	-	-	.19	.17	#8	.22	-	-	HP-4N
HP-5N BOX	1	.38	.46	-	-	.19	.17	#8	.29	-	-	HP-5N
HP-6N BOX	1	.38	.50	-	-	.19	.17	#8	.33	-	-	HP-6N
HP-7N BOX	1	.38	.52	-	-	.19	.17	#8	.42	-	-	HP-7N
HP-8N BOX	1	.38	.54	-	-	.19	.17	#8	.47	-	-	HP-8N
HP-9N BOX	1	.38	.57	-	-	.19	.17	#8	.53	-	-	HP-9N
HP-10N BOX	1	.38	.61	-	-	.19	.17	#8	.62	-	-	HP-10N
HP-11N BOX	1	.50	.65	-	-	.25	.20	#10	.66	-	-	HP-11N
HP-12N BOX	1	.50	.69	-	-	.25	.20	#10	.70	-	-	HP-12N
HP-13N BOX	1	.50	.72	-	-	.25	.20	#10	.82	-	-	HP-13N
HP-14N BOX	2	.50	.76	.31	-	.25	.20	#10	.84	.73	-	HP-14N
HP-16N BOX	2	.50	.82	.31	-	.25	.20	#10	.96	.88	-	HP-16N
HP-18N BOX	2	.50	.86	.31	-	.25	.20	#10	1.05	.95	-	HP-18N
HP-24N BOX	3	.50	.95	.62	.31	.25	.20	#10	1.47	1.38	1.23	HP-24N
HP-32N BOX	3	.50	1.25	.81	.38	.25	.20	#10	1.92	1.82	1.72	HP-32N

For weatherproof UNIRAP™ ties add suffix "-X" to catalog number (example: HP-24NX BOX or HP-24NX). D - Distance from hole 1 centerline of cable bundle.





# STAINLESS STEEL STRAP AND ACCESSORIES

Stainless Steel straps are designed for use in many applications where a wrap around method is required for securing objects to outside perimeter surfaces. The FCI Stainless Steel Strap system includes strap in convenient tote carrying packages, buckles for securing the strap and installation tooling designed for a convenient and reliable clamping application. Straps and buckles are manufactured from a type 301 stainless steel which provides a high strength and corrosion resistant application.

# TOTES

FCI offers two sizes of stainless steel strap for banding applications. Straps are marked to identify 1 foot increments and are packaged in easy to use totes. The color coded totes incorporate a rewind feature for convenient storage of unused strap after installation.

101.7 ft per roll (31 m)

Type 301 Stainless Steel



Catalog Number	Satalog Number Tote		Width		ness	Weight		
	Color	Inches	mm	Inches	mm	Lbs	Kg	
F107C31	Yellow	.39	10	.028	.70	4.31	1.955	
F207C31	Red	.79	20	.028	.70	7.75	3.515	

## **BUCKLES**

Type 301 Stainless Steel buckles are designed to provide secure installation of stainless straps.



Catalog Number	Wi	Width Weight per 100		Width Weight per 100 For U			
Number	Inches	mm	Lbs	Kg			
A100	0.433	11	0.771	0.350	F107C31		
A200	0.826	21	1.830	0.830	F207C31		





## STAINLESS STEEL STRAP INSTALLATION TOOLS

### **TYPE OPV**

OPV - Bench screw type band installation tool with carrying case. Bench screw type tool provides tensioning capability with a built in cutter. This tool incorporates a gripper to secure the strap and a spin handle for easy tensioning.

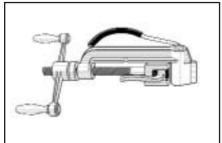
4 lbs. 1.8 kg

### **TYPE OPC**

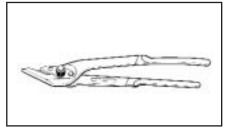
The OPC cutting tool is manufactured from heat treated steel and includes a strap cutting guide for safe, easy cutting operations.

1.50 lbs. 0.68 kg









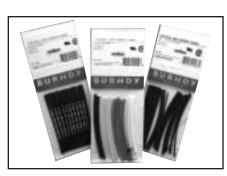
# **TYPE HS-T-PF**

#### THIN WALL HEAT SHRINK TUBING

**CROSS-LINKED POLYOLEFIN** 

#### **6 INCH LENGTHS**

Type HS-T-PF is a flexible thin wall, flame retardant heat shrink tubing made of cross-linked polyolefin. The 2:1 shrink ratio allows for faster shrink recovery, covering wire sizes: #18 AWG to 300 kcmil. Operating temperatures from  $-55^{\circ}$  C to  $135^{\circ}$  C with a shrink temperature of  $120^{\circ}$  C.





Meets MIL-I-25053/5 600 VOLTS

BURNDY

**Accessories** 

						Pcs. per	Package
Catalog Number	Nominal Diameter Inches	Min. Exp. ID In.	Max. Recov. ID In.	Nom. Wall Thickness In.	Conductor Range	# Pcs. Black	# Pcs. Ea. Color
HSM116T6PF26	1/16	0.06	0.03	0.018	#18	8	3
HSB116T6PF26	1/16	0.06	0.03	0.018	#18	26	0
HSM332T6PF24	3/32	0.09	0.05	0.020	#18-16	6	3
HSB332T6PF24	3/32	0.09	0.05	0.020	#18-16	24	0
HSM18T6PF20	1/8	0.12	0.06	0.020	#18-14	2	3
HSB18T6PF20	1/8	0.12	0.06	0.020	#18-14	20	0
HSM316T6PF18	3/16	0.19	0.09	0.020	#18-12	6	2
HSB316T6PF18	3/16	0.19	0.09	0.020	#18-12	18	0
HSM14T6PF14	1/4	0.25	0.12	0.180	#14-10	2	2
HSB14T6PF14	1/4	0.25	0.12	0.180	#14-10	14	0
HSM38T6PF12	3/8	0.38	0.19	0.020	#8-6	6	1
HSB38T6PF12	3/8	0.38	0.19	0.020	#8-6	12	0
HSM12T6PF10	1/2	0.50	0.12	0.020	#6-2	4	1
HSB12T6PF10	1/2	0.50	0.12	0.020	#6-2	10	0
HSM34T6PF8	3/4	0.75	0.38	0.020	#1 - 3/0	2	1
HSB34T6PF8	3/4	0.75	0.38	0.020	#1 - 3/0	8	0
HSM100T6PF7	1	1.00	0.50	0.180	2/0 - 300	1	1
HSB100T6PF7	1	1.00	0.50	0.180	2/0 - 300	7	0

HSB series - all black

HSM series - multiple colors: black, blue, clear, green, red, white, yellow

HSB11612T6PF14	1/16, 3/32,1/8, 3/16,1/4, 3/8,1/2		14	0
HSB38100T6PF8	3/8,1/2,3/4,1"		8	0

Multiple diameter packages contain two pieces of each size listed: Black only.



### **TYPE HS-T-PF**

#### THIN WALL HEAT SHRINK TUBING

**CROSS-LINKED POLYOLEFIN** 

### **4 FOOT REELS**

Type HS-T-PF is a flexible thin wall, flame retardant heat shrink tubing made of cross-linked polyolefin. The 2:1 shrink ratio allows for faster shrink recovery, covering wire sizes #18 AWG to 300 kcmil. Operating temperatures from  $-55^{\circ}$  C to  $135^{\circ}$  C with a shrink temperature of  $120^{\circ}$  C.



Meets MIL-I-25053/5 600 VOLTS



SPECIFY COLOR CODE IN THIRD POSITION OF CATALOG NUMBER:

Example: HSC116T48PF

- B: BLACK
- BL: BLUE
- C: CLEAR
- G: GREEN
- R: RED
- W: WHITE
- Y: YELLOW

Catalog Number	Nominal Diameter Inches	Min. Exp. ID In.	Max. Recov. ID In.	Nom. Wall Thickness In.	Conductor Range
HS_116T48PF	1/16	0.06	0.03	0.018	#18
HS_332T48PF	3/32	0.09	0.05	0.020	#18-16
HS_18T48PF	1/8	0.12	0.06	0.020	#18-14
HS_316T48PF	3/16	0.19	0.09	0.020	#18-12
HS_14T48PF	1/4	0.25	0.12	0.180	#14-10
HS_38T48PF	3/8	0.38	0.19	0.020	#8-6
HS_12T48PF	1/2	0.50	0.12	0.020	#6-2
HS_34T48PF	3/4	0.75	0.38	0.020	#1 - 3/0
HS_100T48PF	1	1.00	0.50	0.180	2/0 - 300
HS_150T48PF	1-1/2	1.50	.75	0.180	2/0 - 350
HS_200T48PF	2	2.00	1.00	0.180	250 - 500





# **TYPE HS-T-PF**

#### THIN-WALL HEAT SHRINK TUBING

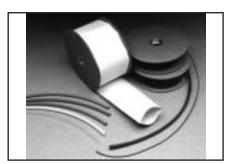
**CROSS-LINKED POLYOLEFIN** 

#### 25 FOOT REELS

Type HS-T-PF is a flexible thin wall, flame retardant heat shrink tubing made of cross-linked polyolefin. The 2:1 shrink ratio allows for faster shrink recovery, covering wire sizes #18 AWG to 300 kcmil. Operating temperatures from  $-55^{\circ}$  C to  $135^{\circ}$  C with a shrink temperature of  $120^{\circ}$  C.



Meets MIL-I-25053/5 600 VOLTS



SPECIFY COLOR CODE IN THIRD POSITION OF CATALOG NUMBER:

B:	BLACK

- BL: BLUE
- C: CLEAR
- G: GREEN R: RED

W: WHITE

Y: YELLOW

Catalog Number	Nominal Diameter Inches	Min. Exp. ID In.	Max. Recov. ID In.	Nom. Wall Thickness In.	Conductor Range
HS_116T300PF	1/16	0.06	0.03	0.018	#18
HS_332T300PF	3/32	0.09	0.05	0.020	#18-16
HS_18T300PF	1/8	0.12	0.06	0.020	#18-14
HS_316T300PF	3/16	0.19	0.09	0.020	#18-12
HS_14T300PF	1/4	0.25	0.12	0.180	#14-10
HS_38T300PF	3/8	0.38	0.19	0.020	#8-6
HS_12T300PF	1/2	0.50	0.12	0.020	#6-2
HS_34T300PF	3/4	0.75	0.38	0.020	#1 - 3/0
HS_100T300PF	1	1.00	0.50	0.180	2/0 - 300





# **TYPE HS-SR-PF**

#### SEMI-RIGID HEAT SHRINK TUBING

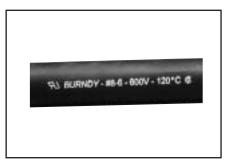
CROSS-LINKED POLYOLEFIN

**4 FOOT STICKS** 

Type HS-SR-PF is a semi-rigid, flame retardant heat shrink tubing made of cross-linked polyolefin. The shrink ratio is 3:1, and the inside diameter is coated with an adhesive sealant to protect against moisture and corrosion. Accomodates #18 AWG to 300 kcmil conductors. Operating temperatures from  $-40^{\circ}$  C to  $110^{\circ}$  C with a shrink temperature of  $125^{\circ}$  C.







SURFACE MARKED

Catalog Number	Nominal Diameter Inches	Min. Exp. ID In.	Max. Recov. ID In.	Nom. Wall Thickness In.	Conductor Range
HSB18SR48PF5	1/8	0.13	0.04	0.040	#18
HSB316SR48PF5	3/16	0.19	0.06	0.050	#18-14
HSB14SR48PF5	1/4	0.25	0.08	0.060	#18-10
HSB38SR48PF5	3/8	0.38	0.12	0.070	#14-6
HSB12SR48PF5	1/2	0.50	0.16	0.070	#8-2
HSB34SR48PF5	3/4	0.75	0.23	0.080	#4-3/0
HSB100SR48PF5	1	1.00	0.32	0.100	#1-300

Available in black only.





# **TYPE HS-H-PF**

#### HEAVY WALL HEAT SHRINK TUBING

**CROSS-LINKED POLYOLEFIN** 

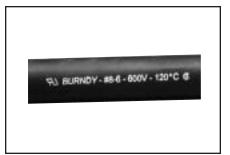
# CUT LENGTHS AND 4 FOOT STICKS

Type HS-H-PF is a heavy wall, flame retardant heat shrink tubing made of cross-linked polyolefin. The shrink ratio is 3:1, and the inside diameter is coated with an adhesive sealant to protect against moisture and corrosion. UL486D listed for direct burial applications. Accommodates #14 AWG - 500 kcmil conductors. Operating temperatures from -55° C to 135° C with a shrink temperature of 120° C.





600 VOLTS



SURFACE MARKED

		Nominal	Min.	Max.	Nom. Wall		Number
Catalog		Diameter	Exp.	Recov.	Thickness	Conductor	of Pcs.
Number	Length	Inches	ID In.	ID In.	In.	Range	Per Package
HSB35H3PF25	3″	.350	.350	.150	0.070	#14-10	25
HSB35H6PF25	6″	.350	.350	.150	0.070	#14-10	25
HSB35H48PF5	4′	.350	.350	.150	0.070	#14-8	5
HSB34H6PF10	6″	.750	.750	.220	0.090	#6-2	10
HSB34H9PF10	9″	.750	.750	.220	0.090	#6-2	10
HSB34H48PF5	4′	.750	.750	.220	0.090	#6-2	5
HSB110H6PF5	6″	1.100	1.100	.400	0.120	#1-3/0	5
HSB110H9PF5	9″	1.100	1.100	.400	0.120	#1-3/0	5
HSB110H48PF5	4′	1.100	1.100	.400	0.120	#1-3/0	5
HSB150H9PF3	9″	1.500	1.500	.500	0.160	2/0-350	3
HSB150H12PF3	12″	1.500	1.500	.500	0.160	2/0-350	3
HSB150H48PF5	4′	1.500	1.500	.500	0.160	2/0-350	5
HSB200H9PF2	9″	2.000	2.000	.750	0.160	250-500	2
HSB200H12PF2	12″	2.000	2.000	.750	0.160	250-500	2
HSB200H48PF2	4′	2.000	2.000	.750	0.160	250-500	2

Available in black only.





# **TYPE HSIC - FR**

#### HEAVY WALL HEAT SHRINKABLE END CAP

#### UL LISTED TO 600V

Type HSIC-FR, Heat Shrink Insulating End Cap Fire Retardant is a heavy wall, fire retardant end cap made of cross-linked thermally stabilized black polyolefin. Used to insulate exposed conductors in energized applications. The 3:1 shrink ratio offers greater range, accommodating copper wire sizes, #8 AWG thru 2500+ kcmil. Performs effectively over lead, aluminum, steel, polyethylene, EPR, and PVC jacketed materials. Blue thermal chromatic lines disappear indicating correct installation temperature and provide inspectability. I.D. adhesive provides superior moisture and weather resistant characteristics.

#### **Features and Benefits**

- Minimum 28 Oxygen index, UL94-VO rated.
- Self-extinguishing flame retardant properties.
- 3:1 shrink ratio.
- ♦ Minimum inventory required.
- Thermal chromatic lines.
   A Indicate proper installation.
- Low shrink temperature, 150°C.
- Only requires common hot air gun to apply.
- Meets sealing requirements: ANSI-C119.1, UL486D
- $\Diamond$  Weather and moisture resistant.





				RNAL IETER		ALL KNESS	LEN	GTH	NUMBER
CATALOG	600V	CABLE	(MIN)	(MAX)		REC.	± 2	0%	OF PCS. PER
NUMBER	CODE	FLEX	EXP.	REC.	EXP.	± 20%	EXP.	REC.	PACKAGE
HSIC8-1FR	#8 - #1	#8 - #4	.50	.16	.034	.080	3.0	2.50	10
HSIC4-40FR	#4 - 4/0	#4 - 2/0	.75	.24	.030	.080	3.5	2.50	10
HSIC10-500FR	1/0 - 500 kcmil	#1 - 313.1 kcmil	1.10	.35	.039	.120	4.0	3.00	5
HSIC30-1000FR	3/0 - 1000 kcmil	2/0 - 646 kcmil	1.50	.47	.054	.160	4.5	3.25	5
HSIC200FR	300 - 1750 kcmil	250 - 1111 kcmil	2.00	.63	.050	.160	4.5	3.50	5
HSIC269FR	600 - 2500 kcmil	_	2.68	.87	.050	.160	5.0	4.00	5
HSIC350FR	1250 kcmil (min)	_	3.50	1.18	.051	.160	5.0	4.50	5



1. Slide the HSIC-FR end cap onto the cable and hold in place using forefinger or thumb.



 Beginning at closed end apply heat, blue thermochromatic lines will begin to disappear at 150° C. Gradually, move heat source to open end and around cap. Once lines are no longer visible and adhesive flows out of open end, discontinue heating.



### **TYPE HSC-FR**

#### **VISI-SHRINK**

#### FIRE RETARDANT CLEAR HEAT SHRINK TUBING

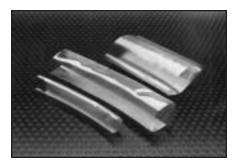
### UL RECOGNIZED TO 600V

Type HSC-FR is a flexible polyvinyl chloride clear heat-shrink tubing. Excellent flame retardant properties and a 2:1 shrink ratio, the VISI-SHRINK tubing enables inspectors to read die index embossments on installed connectors easily. UL recognized,  $105^{\circ}$  C, 600V, the operating temperature from  $-20^{\circ}$  C to  $105^{\circ}$  C with a shrink temperature of  $135^{\circ}$  C.

#### **Features and Benefits**

- UL 224, VW-1 Rated.
  - Self-extinguishing flame retardant properties.
- Clear Tubing.
- Allows inspection of die index embossed and shiner after installation is complete. Should any corrosion occur it will be visible during inspection.
- Low Shrink Temperature.
- Only requires common hot air guns to apply.





				CONDUCTOR RANGE		STANDARD
CATALOG NUMBER	ID EXPANDED	ID AFTER RECOVERY	WALL THICKNESS	CODE	FLEX	REEL SIZE (FEET)
HSC18FR	.125	.062	.025	#16-#14	#16-#14	50
HSC18FR250	.125	.062	.025	#16-#14	#16-#14	250
HSC14FR	.250	.125	.025	#12-#8	#12-#10	50
HSC14FR250	.250	.125	.025	#12-#8	#12-#10	250
HSC38FR	.375	.187	.025	#6-#4	#8-#6	50
HSC38FR250	.375	.187	.025	#6-#4	#8-#6	250
HSC12FR	.500	.250	.025	#4-#1	#6-#4	50
HSC12FR250	.500	.250	.025	#4-#1	#6-#4	250
HSC34FR	.750	.375	.030	1/0-3/0	#2-1/0	50
HSC34FR250	.750	.375	.030	1/0-3/0	#2-1/0	250
HSC100FR	1.00	.500	.035	4/0-3/0	1/0-4/0	25
HSC100FR100	1.00	.500	.035	4/0-3/0	1/0-4/0	100
HSC112FR	1.50	.750	.040	350-750	250-500	25
HSC112FR100	1.50	.750	.040	350-750	250-500	100
HSC200FR	2.00	.750	.045	800-1000	500-750	25
HSC200FR100	2.00	.750	.045	800-1000	500-750	100

#### NOTES:

Shrink temperature is 135° C (275° F). For best results move heat gun along the length of heat shrink to avoid concentrations. To extend useful life, store material below 70°F. For additional Heat Shrinkable Tubing see "URD" section Type RYAC and RK169-2, RK170-2 in this section.





# **TYPE HS-FR**

### THIN-WALL HEAT SHRINK

#### FIRE RETARDANT HEAT SHRINK TUBING

### UL RECOGNIZED TO 600V

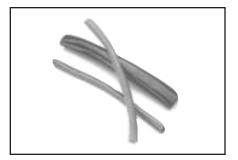
Type HS-FR is a flexible polyvinyl chloride thin-wall heat-shrink. Offering insulating, color identification and strain relieving properties for terminations and splices. The 2:1 shrink ratio allows for faster shrink recovery, covering wire sizes: #16AWG to 1000 kcmil. UL recognized,  $105^{\circ}$  C, 600V, operating temperatures from  $-20^{\circ}$  C to  $105^{\circ}$  C with a shrink temperature of  $135^{\circ}$  C.

### **Features and Benefits**

- UL 224, VW-1 Rated
- Self-extinguishing flame retardant properties.
- Multi-use Tubing
   Insulate, strain relief.
- Easy Identification
- ◊ Available in wide range of colors.
  Low Shrink Temperature
- Only requires common hot air guns to apply.

How to Order Ex: HSB18FR

В	-	Black
BLU	-	Blue
G	-	Green
R	-	Red
W	-	White
Y	-	Yellow



) 17

Ostalari	ID		)4/~/J	Conductor Range		Standard
Catalog Number	ID Expanded	ID After Recovery	Wall Thickness	Code	Flex	Reel Size (Feet)
HS_18FR	.125	.062	.025	#16-#14	#16-#14	50
HS 18FR250		.062	.025	#16-#14	#16-#14	250
HS_14FR	.250	.125	.025	#12-#8	#12-#10	50
HS_14FR250	.250	.125	.025	#12-#8	#12-#10	250
HS_38FR	.375	.187	.025	#6-#4	#8-#6	50
HS_38FR250	.375	.187	.025	#6-#4	#8-#6	250
HS_12FR	.500	.250	.025	#4-#1	#6-#4	50
HS_12FR250	.500	.250	.025	#4-#1	#6-#4	250
HS_34FR	.750	.375	.030	1/0-3/0	#2-1/0	50
HS_34FR250	.750	.375	.030	1/0-3/0	#2-1/0	250
HS_100FR	1.00	.500	.035	4/0-3/0	1/0-4/0	25
HS_100FR100	1.00	.500	.035	4/0-3/0	1/0-4/0	100
HS_112FR	1.50	.750	.040	350-750	250-500	25
HS_112FR100	1.50	.750	.040	350-750	250-500	100
HS_200FR	2.00	.750	.045	800-1000	500-750	25
HS_200FR100	2.00	.750	.045	800-1000	500-750	100

#### NOTES:

Shrink temperature is 105° C (221° F).

For best results move heat gun along the length of heat shrink to avoid concentrations.

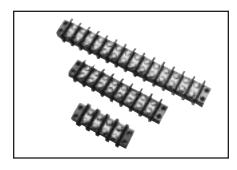
To extend useful life, store material below 70° F.

For additional Heat Shrinkable Tubing see "URD" section Type RYAC and RK169-2, RK170-2 in this section.





## MISCELLANEOUS ACCESSORIES



NUMBER OF CIRCUITS	OVERALL LENGTH	GENERAL DESCRIPTION	CATALOG NUMBER
2	2-3/32"	Moulded General	RK149-2
4	3-7/32"	Purpose Phenolic Base	RK150-2
6	4-11/32"	30 amps, #10 studs.	RK225-2
8 10 12	5-15/32" 6-19/32" 7-23/32"	1 pc, per card 600-volt rating	RK151-2 RK152-2 RK226-2
14	8-27/32"		RK153-2
16	9-31/32"		RK227-2

For bulk pack contact factory.

**TERMINAL BLOCKS** 

Meets UL component requirements:

CLASS B: Commercial Equipment	600 V RMS
CLASS C: General Industrial	600 V RMS
Withstands volts, Vdc	10,500

#### PANEL LIGHTS

#### **SNAP-IN TYPES\***



VOLTAGE RATING	LENS COLOR	MOUNTING HOLE DIAMETER	LEADS	CATALOG NUMBER	CARD QUANTITY	]
125V	Red	1/2"	6"	RK160-2	1	
125V	Yellow	1/2"	6"	RK161-2	1	
125V	Green	1/2"	6"	RK162-2	1	
125V	Red	5/16"	6"	RK236-2	1	
125V	Yellow	5/16"	6"	RK237-2	1	
125V	Green	5/16"	6"	RK238-2	1	
28V	Red	1/2"	6"	RK231-2	1	
28V	Yellow	1/2"	6"	RK230-2	1	
28V	Green	1/2"	6"	RK232-2	1	
12V	Red	1/2"	6"	RK163-2	1	M-21
12V	Yellow	1/2"	6"	RK164-2	1	
12V	Green	1/2"	6"	RK165-2	1	

\* Available in convenience packaging only.





### **PIGTAIL WIRE CONNECTORS\***

PACKAGE	WIRE COMBINATION RANGE	CATALOG
QUANTITY	AND COLOR CODE	NUMBER
25 25 25	25 Orange 22-14 AWG-Min. 3#20 Max. 3#16 & 1#18	
20	Red 18-10 AWG-Min. 2#14 Max. 2#10 & 2#14	RK242-2
10	Blue 12-6 AWG-Min. 1#10 & 1#12 Max. 1#6 & 2#8	RK257-2

\* Available in convenience packaging only.

#### **ALLIGATOR CLIPS\***



WIRE RANGE	LENGTH	JAW LENGTH	CATALOG NUMBER	CARD QUANTITY
22-16 AWG	1-11/16"	5/16"	RK154-2	4
22-14 AWG	2"	7/16"	RK155-2	4
22-10 AWG	2-7/8"	3/4"	RK229-2	4

\* Available in convenience packaging only.

### **HEAT SHRINK TUBING\***

DESCRIPTION	CATALOG NUMBER
Heat Shrink Tubing Assortment 1/16" dia. to 3/8" dia. x 6" long. 20 pcs. per bag.	RK169-2
Heat Shrink Tubing 1/4" dia. x 12" long. 8 pcs per bag.	RK170-2

\* Available in convenience packaging only.



# TYPE HL1802E

### STEINEL® HOT AIR GUN

120° – 1100° F (50° – 650° C)

STEINEL® professional hot air gun and accessories are recommended for all of your BURNDY heat shrink applications. The HL1802E hot air gun is UL and CSA listed for 120 volts. It has a temperature range of 120° – 1100° F (50° – 650° C) and a cool air stage.

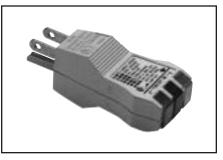


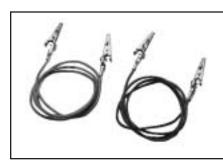
	TECHNICAL SPECIFICATIONS:	UL / CSA LISTED:
VOLTAGE:	230 V AC	120 V AC
OUTPUT:	2,000 WATTS	1,500 WATTS
TEMPERATURE:	SETTING 1: 50°C	120°F
	SETTING 2: 50°C - 650°C	120 - 1100° F
	SETTING 3: 50°C - 650°C	120 - 1100° F
AIR FLOW:	SETTING 1: 8.8 cfm	
	SETTING 2: 9.5 cfm	
	SETTING 3: 17.6 cfm	
WEIGHT:	30.7 oz	
NOISE:	< 70 dB (A)	

### ACCESSORIES

CATALOG #	DESCRIPTION
HSREDUCER        3/8" Reduction Nozzle for concentrated air flow          HSREFLECTOR1        1 1/4" Reflector Nozzle accommodating up to 1" tubing	
HSSTAND Metal Stand for bench work applications.	

# MISCELLANEOUS ACCESSORIES





### **CIRCUIT TESTER**

FOR 3 WIRE 125V CIRCUITS

VOLTAGE RATING	GENERAL DESCRIPTION	CATALOG NUMBER
125V	Indicates: Correct wiring, open ground, reverse polarity, open hot wire, open neutral, hot and ground reversed, and hot on neutral and hot open.	RK228-2

#### **ALLIGATOR TEST LEADS**

JUMPER	LENGTH	CATALOG NUMBER
600V 18 AWG	32"	RK191-2

### Did you know...

that you have a direct line to FCI BURNDY Products Tooling Center (800) 426-8720?



"Our service and tool warranty programs are second to none."

*Bill Benedict* Service Manager



"So that our products meet the needs of our customers, we participate in many standards committees."

*Ronald Lai* Director of Eng Services & Standards

### Did you know...

that **FCI BURNDY Products** invented the *first* electrical connector as recorded with the U.S. Patent and Trademark Office, and has over **150** patents in force at this time?