

# CABLE MANAGEMENT AND IDENTIFICATION SOLUTIONS



**HellermannTyton**



onHellermannTytonHel

## HellermannTyton

HellermannTyton is a leading, global manufacturer of systems and solutions which help world-class customers better manage and identify wire, cable, and components.

HellermannTyton is proud to manufacture products in Milwaukee, Wisconsin, our North American corporate headquarters and employ a growing number of workers in its offices and plants. With thanks to customers like you, we continue to expand our commitment to growing our manufacturing presence in the USA.



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# Differentiated Solutions from HellermannTyton

## Product Differentiation

At HellermannTyton, we use cutting-edge materials and distinctive designs to manufacture the products which improve performance, exceed safety guidelines, and deliver reliable implementation at the lowest cost. Our varied and ever-evolving collection of solutions offer the differentiated advantage that enables project wins and delivers a point of difference to end-users.

## Product Depth

The breadth and depth of HellermannTyton's product line covers a range of highly engineered products from bundling and securing to routing, protection, insulation, network connectivity and identification solutions. We have all the major categories covered with our comprehensive line of products that offer a combination of flexibility, simplicity and value to an end-user customer. In this catalog, see what HellermannTyton offers in cable management and identification solutions. Check out our other catalogs or website for the full range of products.

## Vertical Market Support

Through advanced product suites, market specific tools and resources, HellermannTyton holds leading industry positions in key markets.

OEM  
MRO/Industrial  
Industrial Automation  
Renewable Energies  
Wire Processing  
Datacom

Let us know how we can lend our industry expertise and experience in these markets to your project.



Renewable Energy / Solar



Renewable Energy / Wind



OEM



MRO / Industrial



Wire Processing



Datacom



Industrial Automation



## Quality Certifications, Specifications & Warranty

### **ISO 9001**

#### ISO 9001:2000

The International Standards Organization (ISO) establishes worldwide standards for products and services in recognition of increasing globalization of markets. The ISO program determines the requirements for the quality assurance programs. HellermannTyton has achieved ISO 9001 certifications at all of its U.S. locations.



#### International Electro-Technical Commission (IEC)

Representatives from key industry suppliers participate in creating standards that provide continuous improvement for products and services. HellermannTyton chaired the committee that created standard 62275 (replaced 1565) for Wire Positioning Devices.

### **ISO/TS 16949**

#### ISO/TS16949

ISO / TS16949 is a recognized quality supplier standard for manufacturers servicing the automotive industry. HellermannTyton has achieved and maintains registration to this standard.



#### RoHS / WEEE

The scope of the European Union's Restriction of Hazardous Substances (RoHS) and the Waste Electrical and Electronic Equipment (WEEE) directives covers all electrical and electronic equipment and their components sold into the European Union. Throughout this catalog, you will see designations where materials are RoHS compliant.

### **ISO 14001**

#### ISO 14001

ISO 14001 is a voluntary standard for Environmental Management Systems established by the International Organization for Standardization. Its goal is to provide benchmarks for reviewing and improving environmental performance. HellermannTyton takes an active role in this process of continuous improvement.

## Trade Level Affiliations

#### National Association of Electrical Distributors (NAED)



#### National Electrical Manufacturers Association (NEMA)



#### Building Consulting Services International



**HellermannTyton** has worked very closely with its material suppliers to develop resins that are specifically formulated for fastener and cable tie production. HellermannTyton has spearheaded material advancements in component manufacturing to assure customers the finest quality of products. Environmental factors can have an adverse effect on fasteners. It is very important to use the most suitable material for each application. HellermannTyton fasteners are available in a variety of materials ranging from polyamides (nylon) to fluoropolymers. **All materials listed below are RoHS compliant.**



#### Polyamide 6.6 – General Purpose

General purpose polyamide 6.6 features lightweight, high strength and a wide temperature range. Polyamide 6.6 is hygroscopic, and therefore, absorbs or releases moisture depending on its environment. Thus, the moisture level of the material will affect tensile strength, stiffness and elongation of the product.

#### Polyamide 6.6 – Heat Stabilized

With similar properties and benefits as polyamide 6.6, products manufactured with heat stabilized polyamide 6.6 material have a chemical stabilizer added for higher continuous temperature applications.

#### \*Polyamide 6.6 – UV Resistant

Chemical inhibitors are used to give polyamide 6.6 material added properties to fight against premature aging of products due to the effects of ultraviolet rays.

#### Polyamide 6.6 – UV Stabilized (2% Carbon for Military Specification)

The physical properties of this material include carbon, which acts as a UV stabilizer, prolonging the life of the product under ultraviolet conditions. It also allows HellermannTyton black cable ties to meet the particular military specification for cable ties.

#### Polyamide 6.6 – V0 Flame Retardant

This material meets UL 94V-0 flammability requirements. Flame retardant additives generally reduce tensile strength when compared to general purpose polyamide 6.6, but this resin has been formulated to minimize such effects.

#### \*Polyamide 6.6 – Impact Modified, Heat Stabilized and UV Resistant

Impact modified polyamide 6.6 offers the increased flexibility, heat resistance and UV resistance of the high impact material with the added feature of greater resistance to vibration, heat and sunlight for mobile applications.

#### Polyamide 6.6 – Impact Modified, Heat Stabilized, UV Stabilized

This material has impact modifiers that increase flexibility, impact strength and improves resistance to moisture fluctuations. Heat stabilizers are added to increase heat resistance and UV stabilizers are added to increase UV resistance.

#### Polyamide 4.6

Polyamide 4.6, like polyamide 6.6, offers lightweight and high strength benefits, but offers an even wider temperature range. This material can be used at a higher continuous operating temperature than polyamide 6.6 - heat stabilized. In addition to having excellent heat resistance, polyamide 4.6 has low creep effects and retention of stiffness at elevated temperatures.

#### Polypropylene

Polypropylene is used in environments where chemical effects on polyamide are a concern. It is not affected by inorganic acids (hydrochloric), polyhydric alcohols (ethyleneglycol), neutral salts (sodium chloride) and basic salts (sodium bicarbonate). Polypropylene also resists a number of other chemicals with good results, although it has lower tensile strength than polyamide 6.6 (about half). Polypropylene has good UV resistance.

#### Polyamide 11

Polyamide 11 is a renewably sourced material which has excellent UV resistance and is resistant to many chemicals including metal oxides. Although it is not as strong as Polyamide 6.6 materials, it absorbs very little moisture which makes it ideal for outdoor applications.

#### Polyamide 12

Polyamide 12 possesses many of the same characteristics as Polyamide 11, however it absorbs slightly less moisture, making it ideal for outdoor applications.

#### Ethyltertrafluorethylene - ETFE

ETFE is resistant to a wide range of chemicals, such as concentrated hydrofluoric and sulfuric acids, but it is not as strong as polyamide 6.6 materials. It is also a low water absorbing material, therefore, is not adversely affected by water. ETFE is radiation resistant up to 200 megarads and meets the fire and smoke requirements of IEEE 383. ETFE also withstands high temperatures and ultraviolet light exposure. Products made from ETFE material also have non-outgassing properties for zero gravity applications.

#### Polyacetal

Polyacetal has excellent dielectric properties, UV and chemical resistance, and a UL94-HB flame rating. It has been tested for excellent weatherability against moisture, sunlight, and other environmental conditions.

#### Polyetheretherketone – PEEK

This material is an excellent choice for high temperature environments. It also has excellent chemical resistance and is resistant to abrasion. PEEK material has a relatively high tensile strength and it has the ability to retain its tensile strength when continuously conditioned in water at elevated temperatures and pressures.

#### Thermoplastic Vulcanizate (TPV)

TPV is a durable rubber material that is chemical and abrasion resistant and remains flexible at low temperatures.

**For more information on RoHS/WEEE Compliance, go online to: <http://www.hellermann.tyton.com/rohs.asp>**

\* UV Resistant = Material contains less than 2% carbon or a UV additive to improve UV resistance.

Material Specifications

MATERIAL	CONTINUOUS OPERATING TEMPERATURE		TENSILE STRENGTH AT 73°F DRY AS MOLDED ASTM D-638 (PSI)	UL FLAME RATING	OXYGEN INDEX %	GAMMA RADIATION RESISTANCE	UV RESISTANCE	MILITARY, FEDERAL, ASTM AND FDA SPECIFICATIONS
	MAX.	MIN.						
<b>Polyamide 6.6 - General Purpose (PA66)</b>	185°F 85°C	-40°F -40°C	12,000	94V-2	28	1 x 10 <sup>5</sup> Rads	Poor	ASTM D-4066PA0111, FDA CFR177.1500
<b>Polyamide 6.6 - Heat Stabilized (PA66HS)</b>	221°F 105°C	-40°F -40°C	12,000	94V-2	26	1 x 10 <sup>5</sup> Rads	Poor	ASTM D-4066PA0121
<b>*Polyamide 6.6 - UV resistant (PA66UV)</b>	185°F 85°C	-40°F -40°C	12,000	94V-2	26	1 x 10 <sup>5</sup> Rads	Good	-
<b>Polyamide 6.6 - 2% Carbon UV stabilized (OUV)</b>	185°F 85°C	-40°F -40°C	12,000	94V-2	26	1 x 10 <sup>5</sup> Rads	Very Good	ASTM D-4066PA0181, MS3367/8
<b>Polyamide 6.6 - Flame Retardant (PA66VO)</b>	185°F 85°C	-40°F -40°C	10,800	94V-0	34	1 x 10 <sup>5</sup> Rads	Poor	ASTM D-4066PA0110
<b>*Polyamide 6.6 - Impact Mod. Heat Stabilized, UV Resistant (PA66HIRHS)</b>	230°F 110°C	-40°F -40°C	9,500	94-HB	N/A	N/A	Very Good	ASTM D-4066PA0161
<b>*Polyamide 6.6 - Impact Mod. Heat Stabilized, UV Stabilized (PA66HIRHSUV)</b>	230°F 110°C	-40°F -40°C	8,900	94-HB	19	1 x 10 <sup>5</sup> Rads	Very Good	ASTM D-4066PA0151
<b>Polyamide 4.6 - Heat Stabilized (PA46)</b>	275°F 135°C	-40°F -40°C	14,400	94V-2	27	9 x 10 <sup>6</sup> Rads	Poor	ASTM D-4066PA0922
<b>Polypropylene - Chemical Resistant (PP)</b>	239°F 115°C	-40°F -40°C	3,400	94-HB	N/A	1 x 10 <sup>5</sup> Rads	Good	ASTM D-4101PP0327
<b>Polyamide 11 – UV Resistant (PA11)</b>	203°F 95°C	-40°F -40°C	6,600	94-V2	N/A	1 x 10 <sup>5</sup> Rads	Excellent	ASTM D-4000PA0321
<b>*Polyamide 12 - UV resistant (PA12)</b>	203°F 95°C	-40°F -40°C	6,600	94-V2	N/A	1 x 10 <sup>5</sup> Rads	Excellent	ASTM D-4066PA411
<b>Ethlenterafluorineethylene (ETFE)</b>	302°F 150°C	-112°F -80°C	5,800	94V-0	30	2 x 10 <sup>8</sup> Rads	Oustanding	UL2043, ASTM D-3159 Type 1 Grade 1
<b>Polyacetal (POM)</b>	185°F 85°C	-40°F -40°C	6,500	94-HB	N/A	N/A	Excellent	-
<b>Polyetheretherketone (PEEK)</b>	500°F 260°C	-67°F -55°C	14,600	94V-0	24	1 x 10 <sup>8</sup> Rads	Poor	21CFR 177.2415, EEC 93/9/EEC 151G
<b>Thermoplastic Vulcanizate (TPV)</b>	392°F 200°C	-50°F -45°C	n/a	94V-0	N/A	N/A	Excellent	-

\* UV Resistant = Material contains less than 2% carbon or a UV additive to improve UV resistance.

Material Performance Guide

ATTRIBUTE	POLYAMIDE 6.6 GENERAL PURPOSE	POLYAMIDE 6.6 HEAT STABILIZED	POLYAMIDE 6.6 UV RESISTANT	POLYAMIDE 6.6 - 2% CARBON UV RESISTANT	POLYAMIDE 6.6 FLAME RETARDANT VO	POLYAMIDE 6.6 IMPACT MODIFIED, HEAT STABILIZED UV RESISTANT	POLYAMIDE 6.6 IMPACT MODIFIED, HEAT STABILIZED UV STABILIZED	POLYAMIDE 4.6 HEAT STABILIZED	POLYPROPYLENE	POLYAMIDE 11	POLYAMIDE 12 UV RESISTANT	ETHLENTERAFLUORINE-ETHYLENE — ETFE	POLYACETAL	PEEK	TPV
<b>Tensile Strength</b>	8	8	8	9	7	8	7	10	2	6	6	5	5	10	-
<b>High Temperature</b>	2	3	2	2	2	3	2	9	2	1	1	10	3	10	10
<b>Flammability</b>	5	5	5	5	10	2	2	5	2	2	2	10	2	10	2
<b>UV Resistance</b>	1	1	5	7	1	7	2	1	5	8	8	10	9	1	1
<b>Radiation</b>	3	3	3	3	3	3	3	6	3	3	3	8	3	10	-
<b>Chemical Resistance</b>	6	6	6	6	6	6	6	6	8	8	8	10	-	10	-
- Hydrocarbons	8	8	8	8	8	8	8	8	6	8	8	10	8	10	4
- Chlorinated Hydrocarbons	6	6	6	6	6	6	6	6	3	8	8	10	5	10	4
- Acids	2	2	2	2	2	2	2	2	8	5	5	10	8	5	8
- Bases	8	6	6	6	6	6	6	6	8	6	6	10	8	10	8
- Salts	3	3	3	3	3	3	3	3	10	8	8	10	8	10	8
<b>Relative Cost</b>	Low	Low	Med	Med	Med	Med	Med	Med	Med	Med	Med	High	Med	High	Med

10 = Most Recommended  
1 = Least Recommended

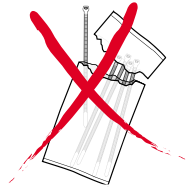


## Optimum storage conditions for cable ties made of polyamide (PA)

HellermannTyton cable ties and mounts are manufactured from high-quality polyamide (PA). This material is mainly processed using injection molding, but can also be extruded.

Polyamide is a hygroscopic material. This means that the material absorbs and loses moisture. For optimum handling of cable ties, it is important that the material is in a condition of equilibrium with a water content of approximately 2.5%.

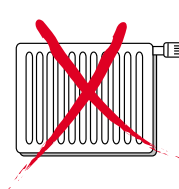
The packaging used by HellermannTyton ensures that the water content in the material remains constant. Therefore, it is important to store the products in their original packaging to preserve the quality of the ties and mounts.



Once opened you should use the ties as quickly as possible.

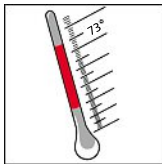


Do not expose the product to direct sunlight

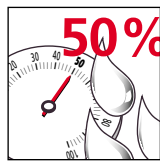


Store the product away from direct sources of heat

## Ideal storage conditions:



73 °F



50%  
relative  
humidity



# BUNDLING AND SECURING SOLUTIONS

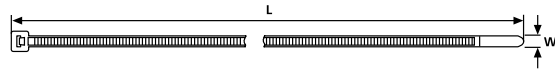
Cable Ties	9-15
Cable Ties - High Temperature	16-18
Cable Ties - Special Material	19-27
Cable Ties - Special Purpose	28-67
Clips	68-72
Grip Ties	73-75
Cable Tie Tools	76-90
Mounts	91-107



## Standard Cable Ties T18 - T30 Series - Natural and Black

Material Data

Material	<b>Polyamide 6.6 (PA66)</b>
Operating Temperature	<b>-40 °F to +185 °F (-40 °C to +85 °C) continuous</b>
Flammability	<b>UL94 V2</b>



File# E64139

File# E64139

Product Selection

Article No.	Part No.	Type	US Gov. Designation	Min. Tensile Strength		Length (L)		Max. Ø Bundle	Width (W)	Color	Pkg. Qty.		
				lbs.	(N)	in.	(mm)	in.	(mm)			in.	(mm)
<b>T18S</b>													
111-02805	<b>T18S9C2</b>	T18S	-	18 lbs	(80)	3.27"	(83)	.63"	(16)	.09"	(2.3)	Natural	100
111-02809	<b>T18S9M4</b>	T18S	-	18 lbs	(80)	3.27"	(83)	.63"	(16)	.09"	(2.3)		1000
111-02810	<b>T18S0C2</b>	T18S	-	18 lbs	(80)	3.27"	(83)	.63"	(16)	.09"	(2.3)	Black	100
111-02811	<b>T18S0M4</b>	T18S	-	18 lbs	(80)	3.27"	(83)	.63"	(16)	.09"	(2.3)		1000
<b>T18R</b>													
112-01819	<b>T18R9C2</b>	T18R	MS3367-4-9	18 lbs	(80)	4"	(100)	.87"	(22)	.10"	(2.5)	Natural	100
111-01872	<b>T18R9M4</b>	T18R	MS3367-4-9	18 lbs	(80)	4"	(100)	.87"	(22)	.10"	(2.5)		1000
111-00405	<b>T18R0C2</b>	T18R	*	18 lbs	(80)	4"	(100)	.87"	(22)	.10"	(2.5)	Black	100
111-01841	<b>T18R0M4</b>	T18R	*	18 lbs	(80)	4"	(100)	.87"	(22)	.10"	(2.5)		1000
<b>T18I</b>													
111-02311	<b>T18I9C2</b>	T18I	-	18 lbs	(80)	5.51"	(140)	1.38"	(35)	.10"	(2.5)	Natural	100
111-02322	<b>T18I9M4</b>	T18I	-	18 lbs	(80)	5.51"	(140)	1.38"	(35)	.10"	(2.5)		1000
111-02308	<b>T18I0C2</b>	T18I	-	18 lbs	(80)	5.51"	(140)	1.38"	(35)	.10"	(2.5)	Black	100
111-02315	<b>T18I0M4</b>	T18I	-	18 lbs	(80)	5.51"	(140)	1.38"	(35)	.10"	(2.5)		1000
<b>T18L</b>													
111-02189	<b>T18L9C2</b>	T18L	-	18 lbs	(80)	8.0"	(205)	2.17"	(55)	.10"	(2.5)	Natural	100
111-02026	<b>T18L9M4</b>	T18L	-	18 lbs	(80)	8.0"	(205)	2.17"	(55)	.10"	(2.5)		1000
111-00401	<b>T18L0C2</b>	T18L	-	18 lbs	(80)	8.0"	(205)	2.17"	(55)	.10"	(2.5)	Black	100
111-02015	<b>T18L0M4</b>	T18L	-	18 lbs	(80)	8.0"	(205)	2.17"	(55)	.10"	(2.5)		1000
<b>T30R</b>													
112-03019	<b>T30R9C2</b>	T30R	MS3367-5-9	30 lbs	(135)	5.9"	(150)	1.38"	(35)	.14"	(3.5)	Natural	100
111-03047	<b>T30R9M4</b>	T30R	MS3367-5-9	30 lbs	(135)	5.9"	(150)	1.38"	(35)	.14"	(3.5)		1000
111-00438	<b>T30R0C2</b>	T30R	*	30 lbs	(135)	5.9"	(150)	1.38"	(35)	.14"	(3.5)	Black	100
111-03034	<b>T30R0M4</b>	T30R	*	30 lbs	(135)	5.9"	(150)	1.38"	(35)	.14"	(3.5)		1000
<b>T30L</b>													
111-03325	<b>T30L9C2</b>	T30L	-	30 lbs	(135)	7.48"	(190)	1.97"	(50)	.14"	(3.5)	Natural	100
111-03327	<b>T30L9M4</b>	T30L	-	30 lbs	(135)	7.48"	(190)	1.97"	(50)	.14"	(3.5)		1000
111-03313	<b>T30L0C2</b>	T30L	-	30 lbs	(135)	7.48"	(190)	1.97"	(50)	.14"	(3.5)	Black	100
111-03315	<b>T30L0M4</b>	T30L	-	30 lbs	(135)	7.48"	(190)	1.97"	(50)	.14"	(3.5)		1000
<b>T30LL</b>													
111-03515	<b>T30LL9C2</b>	T30LL	-	30 lbs	(135)	11.42"	(290)	3.15"	(80)	.14"	(3.5)	Natural	100
111-03517	<b>T30LL9M4</b>	T30LL	-	30 lbs	(135)	11.42"	(290)	3.15"	(80)	.14"	(3.5)		1000
111-03501	<b>T30LL0C2</b>	T30LL	-	30 lbs	(135)	11.42"	(290)	3.15"	(80)	.14"	(3.5)	Black	100
111-03511	<b>T30LL0M4</b>	T30LL	-	30 lbs	(135)	11.42"	(290)	3.15"	(80)	.14"	(3.5)		1000
<b>T30XL</b>													
111-02900	<b>T30XL9C2</b>	T30XL	-	30 lbs	(135)	14.37"	(365)	4.13"	(105)	.14"	(3.5)	Natural	100
111-02907	<b>T30XL9M4</b>	T30XL	-	30 lbs	(135)	14.37"	(365)	4.13"	(105)	.14"	(3.5)		1000
111-02901	<b>T30XL0C2</b>	T30XL	-	30 lbs	(135)	14.37"	(365)	4.13"	(105)	.14"	(3.5)	Black	100
111-02903	<b>T30XL0M4</b>	T30XL	-	30 lbs	(135)	14.37"	(365)	4.13"	(105)	.14"	(3.5)		1000

Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. MK9 and MK9P cannot be used with T18S cable ties.

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

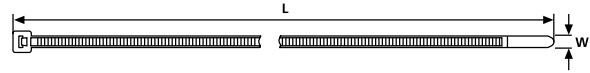
\* Military black available. Contact HellermannTyton for more information.



## Standard Cable Ties

### T40 - T50 Series - Natural and Black

Material Data	
Material	<b>Polyamide 6.6 (PA66)</b>
Operating Temperature	<b>-40 °F to +185 °F (-40 °C to +85 °C) continuous</b>
Flammability	<b>UL94 V2</b>



File# E64139

File# E64139

#### Product Selection

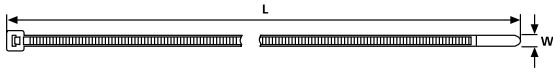
Article No.	Part No.	Type	US Gov. Designation	Min. Tensile Strength		Length (L)		Max. Ø Bundle		Width (W)		Color	Pkg. Qty.
				lbs.	(N)	in.	(mm)	in.	(mm)	in.	(mm)		
<b>T40R</b>													
112-04019	<b>T40R9C2</b>	T40R(U)	–	40 lbs	(178)	8.27"	(210)	2.16"	(55)	.16"	(4.0)	Natural	100
111-04131	<b>T40R9M4</b>	T40R(U)	–	40 lbs	(178)	8.27"	(210)	2.16"	(55)	.16"	(4.0)		1000
112-04060	<b>T40ROC2</b>	T40R(U)	–	40 lbs	(178)	8.27"	(210)	2.16"	(55)	.16"	(4.0)	Black	100
111-04122	<b>T40ROM4</b>	T40R(U)	–	40 lbs	(178)	8.27"	(210)	2.16"	(55)	.16"	(4.0)		1000
<b>T40I</b>													
111-04609	<b>T40I9C2</b>	T40I	–	40 lbs	(178)	11.42"	(290)	3.15"	(80)	.16"	(4.0)	Natural	100
111-04612	<b>T40I9M4</b>	T40I	–	40 lbs	(178)	11.42"	(290)	3.15"	(80)	.16"	(4.0)		1000
111-04600	<b>T40IOC2</b>	T40I	–	40 lbs	(178)	11.42"	(290)	3.15"	(80)	.16"	(4.0)	Black	100
111-04604	<b>T40IOM4</b>	T40I	–	40 lbs	(178)	11.42"	(290)	3.15"	(80)	.16"	(4.0)		1000
<b>T40L</b>													
111-04300	<b>T40L9C2</b>	T40L	–	40 lbs	(178)	14.4"	(365)	4.13"	(105)	.16"	(4.0)	Natural	100
111-04311	<b>T40L9M4</b>	T40L	–	40 lbs	(178)	14.4"	(365)	4.13"	(105)	.16"	(4.0)		1000
111-04301	<b>T40LOC2</b>	T40L	–	40 lbs	(178)	14.4"	(365)	4.13"	(105)	.16"	(4.0)	Black	100
111-04305	<b>T40LOM4</b>	T40L	–	40 lbs	(178)	14.4"	(365)	4.13"	(105)	.16"	(4.0)		1000
<b>T50S</b>													
111-05811	<b>T50S9C2</b>	T50S	–	50 lbs	(225)	5.9"	(150)	1.38"	(35)	.18"	(4.6)	Natural	100
111-05813	<b>T50S9M4</b>	T50S	–	50 lbs	(225)	5.9"	(150)	1.38"	(35)	.18"	(4.6)		1000
111-05806	<b>T50S0C2</b>	T50S	–	50 lbs	(225)	5.9"	(150)	1.38"	(35)	.18"	(4.6)	Black	100
111-05808	<b>T50S0M4</b>	T50S	–	50 lbs	(225)	5.9"	(150)	1.38"	(35)	.18"	(4.6)		1000
<b>T50R</b>													
112-05019	<b>T50R9C2</b>	T50R	MS3367-1-9	50 lbs	(225)	7.9"	(200)	1.97"	(50)	.18"	(4.6)	Natural	100
111-04862	<b>T50R9M4</b>	T50R	MS3367-1-9	50 lbs	(225)	7.9"	(200)	1.97"	(50)	.18"	(4.6)		1000
111-04878	<b>T50ROC2</b>	T50R	*	50 lbs	(225)	7.9"	(200)	1.97"	(50)	.18"	(4.6)	Black	100
111-04846	<b>T50ROM4</b>	T50R	*	50 lbs	(225)	7.9"	(200)	1.97"	(50)	.18"	(4.6)		1000
<b>T50I</b>													
112-05219	<b>T50I9C2</b>	T50I	MS3367-7-9	50 lbs	(225)	11.8"	(300)	3.35"	(85)	.18"	(4.6)	Natural	100
111-05230	<b>T50I9M4</b>	T50I	MS3367-7-9	50 lbs	(225)	11.8"	(300)	3.35"	(85)	.18"	(4.6)		1000
111-00444	<b>T50IOC2</b>	T50I	*	50 lbs	(225)	11.8"	(300)	3.35"	(85)	.18"	(4.6)	Black	100
111-05216	<b>T50IOM4</b>	T50I	*	50 lbs	(225)	11.8"	(300)	3.35"	(85)	.18"	(4.6)		1000
<b>T50L</b>													
112-05419	<b>T50L9C2</b>	T50L	MS3367-2-9	50 lbs	(225)	15.35"	(390)	4.33"	(110)	.18"	(4.6)	Natural	100
111-05449	<b>T50L9M4</b>	T50L	MS3367-2-9	50 lbs	(225)	15.35"	(390)	4.33"	(110)	.18"	(4.6)		1000
111-00445	<b>T50LOC2</b>	T50L	*	50 lbs	(225)	15.35"	(390)	4.33"	(110)	.18"	(4.6)	Black	100
111-00504	<b>T50LOM4</b>	T50L	*	50 lbs	(225)	15.35"	(390)	4.33"	(110)	.18"	(4.6)		1000

Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes.

Use **Part No.** for ordering and **Type** for specification purposes.

\* Military black available. Contact HellermannTyton for more information.

## Standard Cable Ties T18R and T30R Series - Colors



Material Data	
Material	Polyamide 6.6 (PA66)
Operating Temperature	-40 °F to +185 °F (-40 °C to +85 °C) continuous
Flammability	UL94 V2



File# E64139

File# E64139

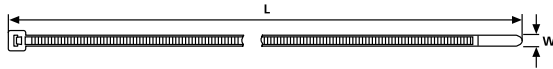
Product Selection												
Article No.	Part No.	Type	Min. Tensile Strength		Length (L)		Max. Ø Bundle		Width (W)		Color	Pkg. Qty.
			lbs.	(N)	in.	(mm)	in.	(mm)	in.	(mm)		
<b>T18R</b>												
116-01811	<b>T18R1C2</b>	T18R	18 lbs	(80)	4"	(100)	.87"	(22)	.10"	(2.5)	Brown	100
111-01849	<b>T18R1M4</b>	T18R	18 lbs	(80)	4"	(100)	.87"	(22)	.10"	(2.5)		1000
111-01880	<b>T18R2C2</b>	T18R	18 lbs	(80)	4"	(100)	.87"	(22)	.10"	(2.5)	Red	100
111-01882	<b>T18R2M4</b>	T18R	18 lbs	(80)	4"	(100)	.87"	(22)	.10"	(2.5)		1000
116-01813	<b>T18R3C2</b>	T18R	18 lbs	(80)	4"	(100)	.87"	(22)	.10"	(2.5)	Orange	100
111-01877	<b>T18R3M4</b>	T18R	18 lbs	(80)	4"	(100)	.87"	(22)	.10"	(2.5)		1000
111-01896	<b>T18R4C2</b>	T18R	18 lbs	(80)	4"	(100)	.87"	(22)	.10"	(2.5)	Yellow	100
111-01898	<b>T18R4M4</b>	T18R	18 lbs	(80)	4"	(100)	.87"	(22)	.10"	(2.5)		1000
111-01853	<b>T18R5C2</b>	T18R	18 lbs	(80)	4"	(100)	.87"	(22)	.10"	(2.5)	Green	100
111-01855	<b>T18R5M4</b>	T18R	18 lbs	(80)	4"	(100)	.87"	(22)	.10"	(2.5)		1000
111-01842	<b>T18R6C2</b>	T18R	18 lbs	(80)	4"	(100)	.87"	(22)	.10"	(2.5)	Blue	100
111-01845	<b>T18R6M4</b>	T18R	18 lbs	(80)	4"	(100)	.87"	(22)	.10"	(2.5)		1000
116-01817	<b>T18R7C2</b>	T18R	18 lbs	(80)	4"	(100)	.87"	(22)	.10"	(2.5)	Purple	100
111-01888	<b>T18R7M4</b>	T18R	18 lbs	(80)	4"	(100)	.87"	(22)	.10"	(2.5)		1000
111-01857	<b>T18R8C2</b>	T18R	18 lbs	(80)	4"	(100)	.87"	(22)	.10"	(2.5)	Gray	100
111-01859	<b>T18R8M4</b>	T18R	18 lbs	(80)	4"	(100)	.87"	(22)	.10"	(2.5)		1000
116-01819	<b>T18R10C2</b>	T18R	18 lbs	(80)	4"	(100)	.87"	(22)	.10"	(2.5)	White	100
111-01892	<b>T18R10M4</b>	T18R	18 lbs	(80)	4"	(100)	.87"	(22)	.10"	(2.5)		1000
<b>T30R</b>												
116-03011	<b>T30R1C2</b>	T30R	30 lbs	(135)	5.9"	(150)	1.38"	(35)	.14"	(3.5)	Brown	100
111-03038	<b>T30R1M4</b>	T30R	30 lbs	(135)	5.9"	(150)	1.38"	(35)	.14"	(3.5)		1000
116-03012	<b>T30R2C2</b>	T30R	30 lbs	(135)	5.9"	(150)	1.38"	(35)	.14"	(3.5)	Red	100
111-03056	<b>T30R2M4</b>	T30R	30 lbs	(135)	5.9"	(150)	1.38"	(35)	.14"	(3.5)		1000
116-03013	<b>T30R3C2</b>	T30R	30 lbs	(135)	5.9"	(150)	1.38"	(35)	.14"	(3.5)	Orange	100
111-03052	<b>T30R3M4</b>	T30R	30 lbs	(135)	5.9"	(150)	1.38"	(35)	.14"	(3.5)		1000
116-03014	<b>T30R4C2</b>	T30R	30 lbs	(135)	5.9"	(150)	1.38"	(35)	.14"	(3.5)	Yellow	100
111-03065	<b>T30R4M4</b>	T30R	30 lbs	(135)	5.9"	(150)	1.38"	(35)	.14"	(3.5)		1000
116-03015	<b>T30R5C2</b>	T30R	30 lbs	(135)	5.9"	(150)	1.38"	(35)	.14"	(3.5)	Green	100
111-03041	<b>T30R5M4</b>	T30R	30 lbs	(135)	5.9"	(150)	1.38"	(35)	.14"	(3.5)		1000
116-03016	<b>T30R6C2</b>	T30R	30 lbs	(135)	5.9"	(150)	1.38"	(35)	.14"	(3.5)	Blue	100
111-03036	<b>T30R6M4</b>	T30R	30 lbs	(135)	5.9"	(150)	1.38"	(35)	.14"	(3.5)		1000
116-03017	<b>T30R7C2</b>	T30R	30 lbs	(135)	5.9"	(150)	1.38"	(35)	.14"	(3.5)	Purple	100
111-03062	<b>T30R7M4</b>	T30R	30 lbs	(135)	5.9"	(150)	1.38"	(35)	.14"	(3.5)		1000
116-03018	<b>T30R8C2</b>	T30R	30 lbs	(135)	5.9"	(150)	1.38"	(35)	.14"	(3.5)	Gray	100
111-03061	<b>T30R8M4</b>	T30R	30 lbs	(135)	5.9"	(150)	1.38"	(35)	.14"	(3.5)		1000
116-03019	<b>116-03019</b>	T30R	30 lbs	(135)	5.9"	(150)	1.38"	(35)	.14"	(3.5)	White	100
116-03064	<b>T30R10M4</b>	T30R	30 lbs	(135)	5.9"	(150)	1.38"	(35)	.14"	(3.5)		1000

Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. MK9 and MK9P cannot be used with T18S cable ties.

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

## Standard Cable Ties

### T50R and T50L Series - Colors



Material Data	
Material	<b>Polyamide 6.6 (PA66)</b>
Operating Temperature	<b>-40 °F to +185 °F (-40 °C to +85 °C) continuous</b>
Flammability	<b>UL94 V2</b>



File# E64139



File# E64139

#### Product Selection

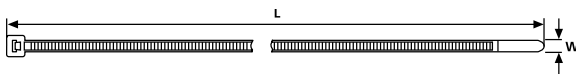
Article No.	Part No.	Type	Min. Tensile Strength		Length (L)		Max. Ø Bundle		Width (W)		Color	Pkg. Qty.
			lbs.	(N)	in.	(mm)	in.	(mm)	in.	(mm)		
<b>T50R</b>												
116-05011	<b>T50R1C2</b>	T50R	50 lbs	(225)	7.9"	(200)	1.97"	(50)	.18"	(4.6)	Brown	100
111-04852	<b>T50R1M4</b>	T50R	50 lbs	(225)	7.9"	(200)	1.97"	(50)	.18"	(4.6)		1000
116-05012	<b>T50R2C2</b>	T50R	50 lbs	(225)	7.9"	(200)	1.97"	(50)	.18"	(4.6)	Red	100
111-04868	<b>T50R2M4</b>	T50R	50 lbs	(225)	7.9"	(200)	1.97"	(50)	.18"	(4.6)		1000
116-05013	<b>T50R3C2</b>	T50R	50 lbs	(225)	7.9"	(200)	1.97"	(50)	.18"	(4.6)	Orange	100
111-04865	<b>T50R3M4</b>	T50R	50 lbs	(225)	7.9"	(200)	1.97"	(50)	.18"	(4.6)		1000
116-05014	<b>T50R4C2</b>	T50R	50 lbs	(225)	7.9"	(200)	1.97"	(50)	.18"	(4.6)	Yellow	100
111-04892	<b>T50R4M4</b>	T50R	50 lbs	(225)	7.9"	(200)	1.97"	(50)	.18"	(4.6)		1000
116-05015	<b>T50R5C2</b>	T50R	50 lbs	(225)	7.9"	(200)	1.97"	(50)	.18"	(4.6)	Green	100
111-04854	<b>T50R5M4</b>	T50R	50 lbs	(225)	7.9"	(200)	1.97"	(50)	.18"	(4.6)		1000
116-05016	<b>T50R6C2</b>	T50R	50 lbs	(225)	7.9"	(200)	1.97"	(50)	.18"	(4.6)	Blue	100
111-04849	<b>T50R6M4</b>	T50R	50 lbs	(225)	7.9"	(200)	1.97"	(50)	.18"	(4.6)		1000
116-05017	<b>T50R7C2</b>	T50R	50 lbs	(225)	7.9"	(200)	1.97"	(50)	.18"	(4.6)	Purple	100
111-04877	<b>T50R7M4</b>	T50R	50 lbs	(225)	7.9"	(200)	1.97"	(50)	.18"	(4.6)		1000
111-04870	<b>T50R8C2</b>	T50R	50 lbs	(225)	7.9"	(202)	1.97"	(50)	.18"	(4.6)	Gray	100
111-04872	<b>T50R8M4</b>	T50R	50 lbs	(225)	7.9"	(200)	1.97"	(50)	.18"	(4.6)		1000
116-05019	<b>T50R10C2</b>	T50R	50 lbs	(225)	7.9"	(200)	1.97"	(50)	.18"	(4.6)	White	100
111-04879	<b>T50R10M4</b>	T50R	50 lbs	(225)	7.9"	(200)	1.97"	(50)	.18"	(4.6)		1000
<b>T50L</b>												
111-05443	<b>T50L1C2</b>	T50L	50 lbs	(225)	15.35"	(390)	4.33"	(110)	.18"	(4.6)	Brown	100
111-05444	<b>T50L1M4</b>	T50L	50 lbs	(225)	15.35"	(390)	4.33"	(110)	.18"	(4.6)		1000
111-05457	<b>T50L2C2</b>	T50L	50 lbs	(225)	15.35"	(390)	4.33"	(110)	.18"	(4.6)	Red	100
111-05458	<b>T50L2M4</b>	T50L	50 lbs	(225)	15.35"	(390)	4.33"	(110)	.18"	(4.6)		1000
111-05451	<b>T50L3C2</b>	T50L	50 lbs	(225)	15.35"	(390)	4.33"	(110)	.18"	(4.6)	Orange	100
111-05454	<b>T50L3M4</b>	T50L	50 lbs	(225)	15.35"	(390)	4.33"	(110)	.18"	(4.6)		1000
111-05467	<b>T50L4C2</b>	T50L	50 lbs	(225)	15.35"	(390)	4.33"	(110)	.18"	(4.6)	Yellow	100
111-05468	<b>T50L4M4</b>	T50L	50 lbs	(225)	15.35"	(390)	4.33"	(110)	.18"	(4.6)		1000
111-05445	<b>T50L5C2</b>	T50L	50 lbs	(225)	15.35"	(390)	4.33"	(110)	.18"	(4.6)	Green	100
111-00502	<b>T50L5M4</b>	T50L	50 lbs	(225)	15.35"	(390)	4.33"	(110)	.18"	(4.6)		1000
111-05431	<b>T50L6C2</b>	T50L	50 lbs	(225)	15.35"	(390)	4.33"	(110)	.18"	(4.6)	Blue	100
111-05434	<b>T50L6M4</b>	T50L	50 lbs	(225)	15.35"	(390)	4.33"	(110)	.18"	(4.6)		1000
111-05464	<b>T50L7C2</b>	T50L	50 lbs	(225)	15.35"	(390)	4.33"	(110)	.18"	(4.6)	Purple	100
111-00503	<b>T50L7M4</b>	T50L	50 lbs	(225)	15.35"	(390)	4.33"	(110)	.18"	(4.6)		1000
111-05461	<b>T50L8C2</b>	T50L	50 lbs	(225)	15.35"	(390)	4.33"	(110)	.18"	(4.6)	Gray	100
111-05462	<b>T50L8M4</b>	T50L	50 lbs	(225)	15.35"	(390)	4.33"	(110)	.18"	(4.6)		1000
111-05466	<b>T50L10C2</b>	T50L	50 lbs	(225)	15.35"	(390)	4.33"	(110)	.18"	(4.6)	White	100
111-05465	<b>T50L10M4</b>	T50L	50 lbs	(225)	15.35"	(390)	4.33"	(110)	.18"	(4.6)		1000

Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. MK9 and MK9P cannot be used with T18S cable ties.

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.



### Heavy Duty Cable Ties



Material Data	
Material	<b>Polyamide 6.6 (PA66)</b>
Operating Temperature	<b>-40 °F to +185 °F (-40 °C to +85 °C) continuous</b>
Flammability	<b>UL94 V2</b>



File# E64139

File# E64139

### T120 Series

Product Selection													
Article No.	Part No.	Type	US Gov. Designation	Min. Tensile Strength		Length (L)		Max. Ø Bundle	Width (W)	Color	Pkg. Qty.		
				lbs.	(N)	in.	(mm)	in.	(mm)			in.	(mm)
<b>T120S</b>													
111-12819	<b>T120S9K2</b>	T120S	-	120 lbs	(535)	8.85"	(225)	2.17"	(55)	.30"	(7.6)	Natural	50
111-12813	<b>T120S9H4</b>	T120S	-	120 lbs	(535)	8.85"	(225)	2.17"	(55)	.30"	(7.6)	Natural	500
111-12803	<b>T120S0K2</b>	T120S	-	120 lbs	(535)	8.85"	(225)	2.17"	(55)	.30"	(7.6)	Black	50
111-12808	<b>T120S0H4</b>	T120S	-	120 lbs	(535)	8.85"	(225)	2.17"	(55)	.30"	(7.6)	Black	500
<b>T120I</b>													
111-12211	<b>T120I9K2</b>	T120I	-	120 lbs	(535)	11.81"	(300)	3.15"	(80)	.30"	(7.6)	Natural	50
111-12213	<b>T120I9H4</b>	T120I	-	120 lbs	(535)	11.81"	(300)	3.15"	(80)	.30"	(7.6)	Natural	500
111-12201	<b>T120I0K2</b>	T120I	-	120 lbs	(535)	11.81"	(300)	3.15"	(80)	.30"	(7.6)	Black	50
111-12206	<b>T120I0H4</b>	T120I	-	120 lbs	(535)	11.81"	(300)	3.15"	(80)	.30"	(7.6)	Black	500
<b>T120R</b>													
112-12019	<b>T120R9K2</b>	T120R	MS3367-3-9	120 lbs	(535)	15.24"	(387)	4.13"	(105)	.30"	(7.6)	Natural	50
111-12036	<b>T120R9H4</b>	T120R	MS3367-3-9	120 lbs	(535)	15.24"	(387)	4.13"	(105)	.30"	(7.6)	Natural	500
112-12060	<b>T120R0K2</b>	T120R	*	120 lbs	(535)	15.24"	(387)	4.13"	(105)	.30"	(7.6)	Black	50
111-12013	<b>T120R0H4</b>	T120R	*	120 lbs	(535)	15.24"	(387)	4.13"	(105)	.30"	(7.6)	Black	500
<b>T120L</b>													
111-12419	<b>T120L9K2</b>	T120L	MS3367-6-9	120 lbs	(535)	30.0"	(760)	8.85"	(225)	.30"	(7.6)	Natural	50
111-12405	<b>T120L0K2</b>	T120L	*	120 lbs	(535)	30.0"	(760)	8.85"	(225)	.30"	(7.6)	Black	50

Installation tools - MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes. \*Military black available. Contact HellermannTyton for more information.

### T150 Series

Product Selection													
Article No.	Part No.	Type	US Gov. Designation	Min. Tensile Strength		Length (L)		Max. Ø Bundle	Width (W)	Color	Pkg. Qty.		
				lbs.	(N)	in.	(mm)	in.	(mm)			in.	(mm)
<b>T150R</b>													
111-15203	<b>T150R9X2</b>	T150R(U)	-	175 lbs	(780)	15.35"	(390)	4.13"	(105)	.35"	(8.8)	Natural	25
111-15200	<b>T150R0X2</b>	T150R(U)	-	175 lbs	(780)	15.35"	(390)	4.13"	(105)	.35"	(8.8)	Black	25
<b>T150M</b>													
111-15619	<b>T150M9X2</b>	T150M	-	175 lbs	(780)	21.00"	(530)	5.91"	(150)	.35"	(8.9)	Natural	25
111-00124	<b>T150M0X2</b>	T150M	-	175 lbs	(780)	21.00"	(530)	5.91"	(150)	.35"	(8.9)	Black	25
<b>T150L</b>													
111-15419	<b>T150L9X2</b>	T150L	-	175 lbs	(780)	32.28"	(820)	9.65"	(245)	.35"	(8.9)	Natural	25
111-15405	<b>T150L0X2</b>	T150L	-	175 lbs	(780)	32.28"	(820)	9.65"	(245)	.35"	(8.9)	Black	25
<b>T150LL</b>													
111-15719	<b>T150LL9X2</b>	T150LL	-	175 lbs	(780)	36.42"	(925)	10.83"	(275)	.35"	(8.9)	Natural	25
111-15700	<b>T150LL0X2</b>	T150LL	-	175 lbs	(780)	36.42"	(925)	10.83"	(275)	.35"	(8.9)	Black	25
<b>T150XL</b>													
111-15519	<b>T150XL9X2</b>	T150XL	-	175 lbs	(780)	43.11"	(1095)	13.00"	(330)	.35"	(8.9)	Natural	25
111-15500	<b>T150XL0X2</b>	T150XL	-	175 lbs	(780)	43.11"	(1095)	13.00"	(330)	.35"	(8.9)	Black	25
<b>T150XLL</b>													
111-15304	<b>T150XLL9X2</b>	T150XLL	-	175 lbs	(780)	52.17"	(1325)	15.95"	(405)	.35"	(8.9)	Natural	25
111-15300	<b>T150XLL0X2</b>	T150XLL	-	175 lbs	(780)	52.17"	(1325)	15.95"	(405)	.35"	(8.9)	Black	25

Installation tools - MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.



File# E64139

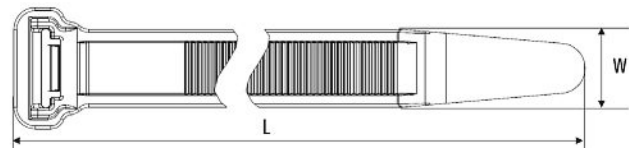
### Wide Strap Heavy Duty Cable Ties

The wide strap cable tie minimizes pinching on soft bundles and features a low profile head to provide compact bundling. A thinner strap provides increased flexibility for improved ergonomics

- Designed to minimize pinching of soft hoses and convoluted tubing
- Low profile head
- Clamping rails on the bottom of head to increase grip on round bundles
- Large bundle diameter range: .375" - 4.125" (9.5mm - 104.7mm)
- Flexible strap with bent tip for quick insertion into mounts



Material Data		RoHS
Material	<b>Polyamide 6.6 impact modified, Heat Stabilized, UV Resistant (PA66HIRHS)</b>	
Operating Temperature	<b>-40 °F to +230 °F (-40 °C to +110 °C) continuous</b>	
Flammability	<b>UL94 HB</b>	



Product Selection			Min. Tensile Strength	Length (L)	Max. Ø Bundle	Width (W)	Color	Pkg. Qty.
Article No.	Part No.	Type						
111-12300	<b>111-12300</b>	WSS	120 lbs (534)	9.1" (231.14)	2.25" (57.15)	.5" (12.7)	Black	300
111-12301	<b>111-12301</b>	WSI	120 lbs (534)	12.1" (307.34)	3.25" (82.55)	.5" (12.7)	Black	300
111-12302	<b>111-12302</b>	WSR	120 lbs (534)	15.1" (383.54)	4.125" (104.78)	.5" (12.7)	Black	300

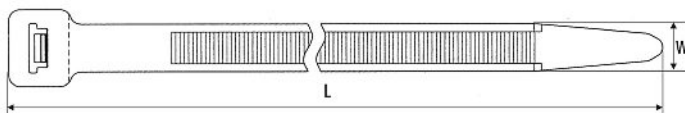
Installation tools - MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### T255 Series Heavy Duty Cable Ties

HellermannTyton's T255 series heavy duty cable ties are ideal for bundles requiring a strong cable tie that may also require a higher temperature rating than the T250 series. These ties have a tensile strength of 250 lbs.



Material Data		RoHS
Material	<b>Polyamide 6.6 impact modified, Heat Stabilized, UV Resistant (PA66HIRHS)</b>	
Operating Temperature	<b>-40 °F to +230 °F (-40 °C to +110 °C) continuous</b>	
Flammability	<b>UL94 HB</b>	



**HELLERMANN TYTON**  
File# E64139

Product Selection			Min. Tensile Strength	Length (L)	Max. Ø Bundle	Width (W)	Color	Pkg. Qty.
Article No.	Part No.	Type						
111-25500	<b>T255S0HIRX2</b>	T255S	250 lbs (1115)	8.86" (225)	2.16" (55)	.49" (12.5)	Black	25
111-25400	<b>T255R0HIRX2</b>	T255R	250 lbs (1115)	20.28" (520)	5.71" (145)	.49" (12.5)	Black	25
111-25300	<b>T255M0HIRX2</b>	T255M	250 lbs (1115)	22.05" (565)	6.30" (160)	.49" (12.5)	Black	25

Installation tools - MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

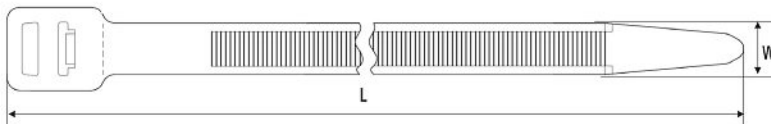
## Heavy Duty Cable Ties T250 Series

These cable ties offer a high minimum tensile strength and have a buckle feature which allows the end of the cable tie to be tucked away if necessary. The buckle also snaps into HellermannTyton lashing tie mounts (LTM).



T250 heavy duty cable tie and lashing tie mount application

Material Data	
Material	<b>Polyamide 6.6 (PA66)</b>
Operating Temperature	<b>-40 °F to +185 °F (-40 °C to +85 °C) continuous</b>
Flammability	<b>UL94 V2</b>



**UL** US  
File# E64139

Product Selection		Type	Min. Tensile Strength lbs. (N)	Length (L) in. (mm)	Max. Ø Bundle in. (mm)	Width (W)		Color	Pkg. Qty.
Article No.	Part No.					in.	(mm)		
<b>T250S</b>									
111-24702	<b>T250S9X2</b>	T250S	250 lbs (1115)	9.05" (230)	2.17" (55)	.49" (12.5)	Natural	25	
111-24700	<b>T250S0X2</b>	T250S	250 lbs (1115)	9.05" (230)	2.17" (55)	.49" (12.5)	Black	25	
<b>T250R</b>									
111-24803	<b>T250R9X2</b>	T250R	250 lbs (1115)	20.47" (520)	5.71" (145)	.49" (12.5)	Natural	25	
111-24801	<b>T250R0X2</b>	T250R	250 lbs (1115)	20.47" (520)	5.71" (145)	.49" (12.5)	Black	25	
<b>T250M</b>									
111-25002	<b>T250M9X2</b>	T250M	250 lbs (1115)	22.24" (565)	5.90" (150)	.49" (12.5)	Natural	25	
111-25001	<b>T250M0X2</b>	T250M	250 lbs (1115)	22.24" (565)	5.90" (150)	.49" (12.5)	Black	25	
<b>T250I</b>									
111-25219	<b>T250I9X2</b>	T250I	250 lbs (1115)	28.54" (725)	8.00" (203)	.49" (12.5)	Natural	25	
111-00507	<b>T250I0X2</b>	T250I	250 lbs (1115)	28.54" (725)	8.00" (203)	.49" (12.5)	Black	25	
<b>T250L</b>									
111-00436	<b>T250L9X2</b>	T250L	250 lbs (1115)	34.65" (880)	10.00" (254)	.49" (12.5)	Natural	25	
111-24601	<b>T250L0X2</b>	T250L	250 lbs (1115)	34.65" (880)	10.00" (254)	.49" (12.5)	Black	25	
<b>T250XL</b>									
111-00466	<b>T250XL9X2</b>	T250XL	250 lbs (1115)	40.55" (1030)	12.00" (305)	.49" (12.5)	Natural	25	
111-25200	<b>T250XL0X2</b>	T250XL	250 lbs (1115)	40.55" (1030)	12.00" (305)	.49" (12.5)	Black	25	

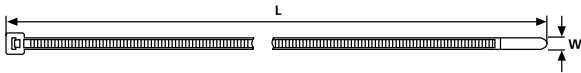
Installation tools - MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.



## T18 - T120 Series - Heat Stabilized

HellermannTyton's heat stabilized cable ties provide excellent resistance when exposed to high heat.

Material Data	
Material	<b>Polyamide 6.6 heat stabilized (PA66HS)</b>
Operating Temperature	<b>-40 °F to +257 °F (-40 °C to +125 °C) continuous</b>
Flammability	<b>UL94 V2</b>



File# E64139



File# E64139

Product Selection		Type	Min. Tensile Strength		Length (L)		Max. Ø Bundle		Width (W)		Color	Pkg. Qty.
Article No.	Part No.		lbs.	(N)	in.	(mm)	in.	(mm)	in.	(mm)		
<b>T18S</b>												
111-02815	<b>T18S0HSM4</b>	T18S	18 lbs	(80)	3.27"	(83)	.63"	(16)	.09"	(2.3)	Black	1000
<b>T18R</b>												
111-01905	<b>T18R0HSC2</b>	T18R	18 lbs	(80)	4"	(100)	.87"	(22)	.10"	(2.5)	Black	100
111-00476	<b>T18R0HSM4</b>	T18R	18 lbs	(80)	4"	(100)	.87"	(22)	.10"	(2.5)	Black	1000
<b>T18I</b>												
111-02305	<b>T18I0HSM4</b>	T18I	18 lbs	(80)	5.5"	(140)	1.38"	(35)	.10"	(2.5)	Black	1000
<b>T18L</b>												
111-00403	<b>T18L0HSC2</b>	T18L	18 lbs	(80)	8.0"	(205)	2.17"	(55)	.10"	(2.5)	Black	100
111-00404	<b>T18L0HSM4</b>	T18L	18 lbs	(80)	8.0"	(205)	2.17"	(55)	.10"	(2.5)	Black	1000
<b>T30R</b>												
111-03067	<b>T30R0HSC2</b>	T30R	30 lbs	(135)	5.9"	(150)	1.38"	(35)	.14"	(3.5)	Black	100
111-03068	<b>T30R0HSM4</b>	T30R	30 lbs	(135)	5.9"	(150)	1.38"	(35)	.14"	(3.5)	Black	1000
<b>T50R</b>												
111-04900	<b>T50R0HSC2</b>	T50R	50 lbs	(225)	7.9"	(200)	1.97"	(50)	.18"	(4.6)	Black	100
111-04901	<b>T50R0HSM4</b>	T50R	50 lbs	(225)	7.9"	(200)	1.97"	(50)	.18"	(4.6)	Black	1000
<b>T50I</b>												
111-05248	<b>T50I0HSC2</b>	T50I	50 lbs	(225)	11.8"	(300)	3.35"	(85)	.18"	(4.6)	Black	100
111-05251	<b>T50I0HSM4</b>	T50I	50 lbs	(225)	11.8"	(300)	3.35"	(85)	.18"	(4.6)	Black	1000
<b>T50L</b>												
111-05470	<b>T50L0HSC2</b>	T50L	50 lbs	(225)	15.35"	(390)	4.33"	(110)	.18"	(4.6)	Black	100
111-05471	<b>T50L0HSM4</b>	T50L	50 lbs	(225)	15.35"	(390)	4.33"	(110)	.18"	(4.6)	Black	1000
<b>T120R</b>												
111-12061	<b>T120R0HSC2</b>	T120R	120 lbs	(535)	15.24"	(387)	4.13"	(105)	.30"	(7.6)	Black	50
111-12058	<b>T120R0HSH4</b>	T120R	120 lbs	(535)	15.24"	(387)	4.13"	(105)	.30"	(7.6)	Black	500

Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. MK9 and MK9P cannot be used with T18S cable ties.

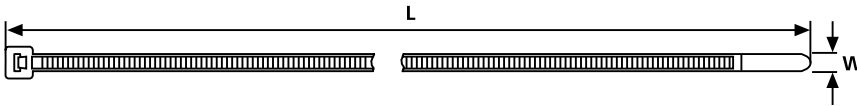
Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### PA46 Ties

HellermannTyton's high temperature cable ties provide excellent resistance in operating temperatures up to 275°F (135°C), while still maintaining tensile strength properties.



Material Data	
Material	<b>Polyamide 4.6 (PA46)</b>
Operating Temperature	<b>-40 °F to +275 °F (-40 °C to +135 °C) continuous</b>
Flammability	<b>UL94 V2</b>



Product Selection		Type	Min. Tensile Strength	Length (L)	Max Ø Bundle	Width (W)	Color	Pkg. Qty.
Article No.	Part No.		lbs. (N)	in. (mm)	in. (mm)	in. (mm)		
111-01836	<b>T18R1STNLM5</b>	T18R1STNLM5	18 lbs. (80)	4" (100)	.87" (22)	.10" (2.5)	Brown	100
111-01269	<b>T30R1STNLM4</b>	T30R1STNLM4	30 lbs. (135)	5.9" (150)	1.38" (35)	.14" (3.5)	Brown	100
111-04839	<b>T50R1STNLM5</b>	T50R1STNLM5	50 lbs. (225)	7.9" (200)	1.97" (50)	.18" (4.6)	Brown	100
111-05423	<b>T50L1STNLM4</b>	T50L1STNLM4	50 lbs. (225)	15.3" (390)	4.33" (110)	.18" (4.6)	Brown	100

Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. MK9 and MK9P cannot be used with T18S cable ties. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

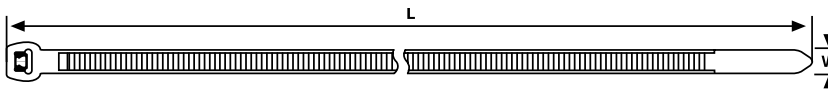
### PEEK Tie For High Temperature Applications

HellermannTyton's high performance PEEK material withstands temperatures up to +464°F (+240°C) and is highly resistant to chemicals. The cable tie is designed with a contoured head making it ideal for space restricted areas. The outside serrations minimize any damage to the cable insulation. HellermannTyton's fir tree mount provides a secure grip in a mounting hole and protect against dirt and other impurities. The mount can slide along the strap of the tie for proper orientation. The fir tree mounts are designed to provide a low insertion force and high extraction force. HellermannTyton's cable tie anchor mounts are designed with a 4-way entry point which allows the mount to be placed parallel or perpendicular to the wire bundle.

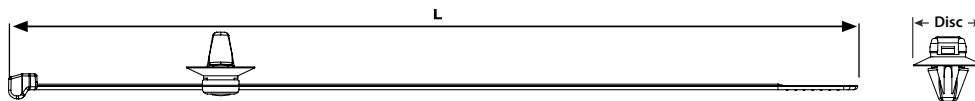


The contoured head takes up less space, provides a low insertion force, and offers high strength.

Material Data		
Material	Polyetheretherketone (PEEK)	
Operating Temperature	-67 °F to +464 °F (-55 °C to +240 °C) continuous	
Flammability	UL94 V0	



Product Selection											
Article No.	Part No.	Type	Min. Tensile Strength	Max Ø Bundle	Length (L)	Width (W)	Mounting Hole Ø	Panel Thickness	Disc	Color	Pkg. Qty.
			lbs. (N)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)		
Cable Ties											
118-00032	<b>118-00032</b>	PT2A	52 lbs. (230)	1.38" (35)	5.7" (145)	.13" (3.4)	-	-	-	Beige	100
111-01235	<b>111-01235</b>	PT220	85 lbs. (380)	2.2" (56)	8.6" (220)	.18" (4.6)	-	-	-	Beige	100



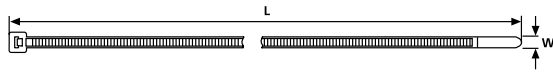
Product Selection											
Article No.	Part No.	Type	Min. Tensile Strength	Max Ø Bundle	Length (L)	Width (W)	Mounting Hole Ø	Panel Thickness	Disc	Color	Pkg. Qty.
			lbs. (N)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)		
156-00455	<b>156-00455</b>	T5ORO SP1SFT65	50 lbs. (225)	1.77" (45)	7.9" (200)	.18" (4.6)	.25" - .26" (6.3 - 6.7)	.028" - .051" (.7 - 1.3)	.63" (16)	Gray Beige	100
156-00456	<b>156-00456</b>	T5ORO SP2SFT65	50 lbs. (225)	1.77" (45)	7.9" (200)	.18" (4.6)	.25" - .26" (6.3 - 6.7)	.028" - .051" (.7 - 1.3)	.63" (16)	Gray Beige	100



Product Selection									
Article No.	Part No.	Type	Cable Tie Series	Mounting	Length (L)	Width (W)	Height (H)	Color	Pkg. Qty.
					in. (mm)	in. (mm)	in. (mm)		
Mounts									
151-00757	<b>151-00757</b>	CTAM1	T18 - T50	#10 Screw	.81" (20.5)	.40" (10.2)	.22" (5.5)	Beige	100
151-00758	<b>151-00758</b>	CTAM2	T18 - T50	#10 Screw	.81" (20.5)	.40" (10.2)	.22" (5.5)	Beige	100

### UV Stabilized Cable Ties

Used in the solar industry and other applications, HellermannTyton offers cable ties made of UV stabilized PA66UV material. This provides additional protection against UV radiation for long-term outdoor use and is available in various styles, tensile strengths and bundle diameters.



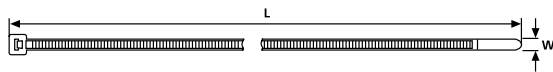
Material Data	
Material	<b>Polyamide 6.6 – 2% Carbon UV Stabilized (OUV)</b>
Operating Temperature	<b>-40 °F to +185 °F (-40 °C to +85 °C) continuous</b>
Flammability	<b>UL94 V2</b>

Product Selection								
Article No.	Part No.	Type	Min. Tensile Strength	Length	Max Bundle	Width	Color	Pkg. Qty
			lbs. (N)	in. (mm)	in. (mm)	in. (mm)		
111-03075	T30R0UVC2	T30R	30 (135)	5.9 (150)	1.38 (35)	.14 (3.5)	Black	100
111-04912	T50R0UVC2	T50R	50 (225)	7.9 (200)	1.97 (50)	.18 (4.6)	Black	100
111-05477	T50L0UVC2	T50L	50 (225)	15.35 (390)	4.33 (110)	.18 (4.6)	Black	100
111-00400	T120R0UVC2	T120R	120 (535)	15.24 (387)	4.13 (105)	.30 (7.6)	Black	100

Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. MK9 and MK9P cannot be used with T18S cable ties. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### Heat/UV Stabilized Nylon 6.6 Cable Ties

Manufactured from a specially-formulated impact-resistant, heat and UV stabilized PA6.6 material, these cable ties offer increased flexibility, impact strength, heat and UV resistance to endure moisture fluctuations. These cable ties feature inside serrations providing a positive hold onto wire and cable bundles. The head design guarantees high tensile strength, as well as a low insertion force. The bent tail allows for quick and simple installation by hand.



Material Data	
Material	<b>Polyamide 6.6 – High Impact Modified, Heat and UV Stabilized (PA66HIRHSUV)</b>
Operating Temperature	<b>-40 °F to +230 °F (-40 °C to +110 °C) continuous</b>
Flammability	<b>UL94 HB</b>

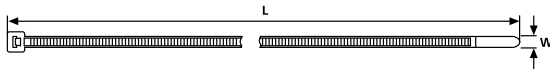
Product Selection								
Article No.	Part No.	Type	Min. Tensile Strength	Length	Max Bundle	Width	Color	Pkg. Qty
			lbs. (N)	in. (mm)	in. (mm)	in. (mm)		
111-03066	T30R0HIRM4	T30R	30 (135)	6.0" (150)	1.4" (35)	0.14" (3.6)	Black	1000
111-01566	T50R0HIRM4	T50R	50 (225)	8.0" (202)	2.0" (50)	0.18" (4.6)	Black	1000
111-01128	111-01128	T50L	50 (225)	15.0" (390)	4.3" (110)	0.19" (4.7)	Black	1000

Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. MK9 and MK9P cannot be used with T18S cable ties. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

## PA11 Ties

These inside serrated cable ties are manufactured from Polyamide 11 which provides excellent UV, chemical and moisture resistance, allowing a longer life span in outdoor use. This material is recommended for applications exposed to metal oxides. The tie strap has smooth edges which prevent bundle damage.

Material Data	
Material	<b>Polyamide 11 (PA11)</b>
Operating Temperature	<b>-40 °F to +203 °F (-40 °C to +95 °C) continuous</b>
Flammability	<b>UL94 HB</b>



Product Selection								
Article No.	Part No.	Type	Min. Tensile Strength	Length	Max Bundle	Width	Color	Pkg. Qty
			lbs. (N)	in. (mm)	in. (mm)	in. (mm)		
111-01264	111-01264	GL200	45 lbs (200)	8.0" (203)	2.0" (50)	.18" (4.7)	Black	100
111-01265	111-01265	GL250	56 lbs (250)	10.0" (252)	2.6" (65)	.19" (4.8)	Black	100
111-01266	111-01266	GL300	56 lbs (250)	12.01" (301)	3.1" (80)	.19" (4.8)	Black	100

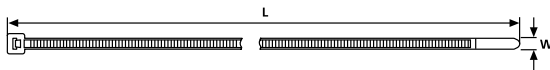
Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P.

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

## PA12 Ties

These inside serrated cable ties are manufactured from Polyamide 12 which provides excellent UV, chemical and moisture resistance, allowing a longer life span in outdoor use. Polyamide 12 material absorbs slightly less moisture than Polyamide 11, yet is equally resistant to metal oxides. The bent tail allows for quick and simple installation through the head of the tie. The tie strap has smooth edges which prevent bundle damage.

Material Data	
Material	<b>Polyamide 12 (PA12)</b>
Operating Temperature	<b>-40 °F to +203 °F (-40 °C to +95 °C) continuous</b>
Flammability	<b>UL94 V2</b>



Product Selection								
Article No.	Part No.	Type	Min. Tensile Strength	Length	Max Bundle	Width	Color	Pkg. Qty
			lbs. (N)	in. (mm)	in. (mm)	in. (mm)		
111-01560	111-01560	T50R	45 (200)	6.0" (150)	1.4" (35)	0.14" (3.6)	Black	100
111-01562	111-01562	T50L(US)	45 (200)	15.0" (390)	4.3" (110)	0.19" (4.8)	Black	100
111-01563	111-01563	T50XL(US)	45 (200)	18.0" (467)	5.3" (134)	0.19" (4.8)	Black	100

Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P.

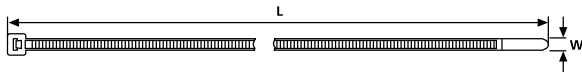
Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.



### T18 - T50 - Flame Retardant

HellermannTyton's flame retardant cable ties meet the UL 94V0 flammability requirements.

Material Data	
Material	<b>Polyamide 6.6 V0 (PA66V0)</b>
Operating Temperature	<b>-40 °F to +185 °F (-40 °C to +85 °C) continuous</b>
Flammability	<b>UL94 V0</b>



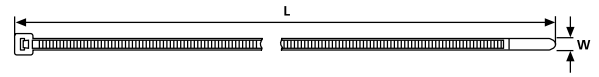
Product Selection												
Article No.	Part No.	Type	Min. Tensile Strength		Length (L)		Max. Ø Bundle		Width (W)		Color	Pkg. Qty.
			lbs.	(N)	in.	(mm)	in.	(mm)	in.	(mm)		
<b>T18R</b>												
111-01834	<b>T18R9VOC2</b>	T18R	18 lbs	(80)	4"	(100)	.87"	(22)	.10"	(2.5)	White	100
111-01835	<b>T18R9VOM4</b>	T18R	18 lbs	(80)	4"	(100)	.87"	(22)	.10"	(2.5)	White	1000
111-01833	<b>T18R0VOC2</b>	T18R	18 lbs	(80)	4"	(100)	.87"	(22)	.10"	(2.5)	Black	100
<b>T18I</b>												
111-02304	<b>T18I9VOM4</b>	T18I	18 lbs	(80)	5.5"	(144)	1.38"	(35)	.10"	(2.5)	White	1000
<b>T18L</b>												
111-02045	<b>T18L9VOC2</b>	T18L	18 lbs	(80)	7.95"	(202)	2.17"	(55)	.10"	(2.5)	White	100
111-02046	<b>T18L9VOM4</b>	T18L	18 lbs	(80)	7.95"	(202)	2.17"	(55)	.10"	(2.5)	White	1000
111-02044	<b>T18L0VOC2</b>	T18L	18 lbs	(80)	7.95"	(202)	2.17"	(55)	.10"	(2.5)	Black	100
<b>T30R</b>												
111-03073	<b>T30R9VOC2</b>	T30R	30 lbs	(135)	5.83"	(148)	1.38"	(35)	.14"	(3.6)	White	100
111-03074	<b>T30R9VOM4</b>	T30R	30 lbs	(135)	5.83"	(148)	1.38"	(35)	.14"	(3.6)	White	1000
111-03072	<b>T30R0VOC2</b>	T30R	30 lbs	(135)	5.83"	(148)	1.38"	(35)	.14"	(3.6)	Black	100
<b>T50R</b>												
111-04909	<b>T50R9VOC2</b>	T50R	50 lbs	(225)	7.95"	(202)	1.97"	(50)	.18"	(4.6)	White	100
111-04911	<b>T50R9VOM4</b>	T50R	50 lbs	(225)	7.95"	(202)	1.97"	(50)	.18"	(4.6)	White	1000
111-04887	<b>T50R0VOC2</b>	T50R	50 lbs	(225)	7.95"	(202)	1.97"	(50)	.18"	(4.6)	Black	100
111-04908	<b>T50R0VOM4</b>	T50R	50 lbs	(225)	7.95"	(202)	1.97"	(50)	.18"	(4.6)	Black	1000
<b>T50I</b>												
111-05254	<b>T50I9VOC2</b>	T50I	50 lbs	(225)	11.82"	(300)	3.35"	(85)	.18"	(4.6)	White	100
111-05255	<b>T50I9VOM4</b>	T50I	50 lbs	(225)	11.82"	(300)	3.35"	(85)	.18"	(4.6)	White	1000
111-05258	<b>T50I0VOC2</b>	T50I	50 lbs	(225)	11.82"	(300)	3.35"	(85)	.18"	(4.6)	Black	100
<b>T50L</b>												
111-05438	<b>T50L9VOC2</b>	T50L	50 lbs	(225)	15.35"	(390)	4.33"	(110)	.19"	(4.7)	White	100
111-05476	<b>T50L9VOM4</b>	T50L	50 lbs	(225)	15.35"	(390)	4.33"	(110)	.19"	(4.7)	White	1000
111-05475	<b>T50L0VOC2</b>	T50L	50 lbs	(225)	15.35"	(390)	4.33"	(110)	.19"	(4.7)	Black	100

Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

## T18 - T120 - Polypropylene

HellermannTyton's polypropylene cable ties offer added resistance to most chemicals.

Material Data	
Material	<b>Polypropylene (PP)</b>
Operating Temperature	<b>-40 °F to +239 °F (-40 °C to +115 °C) continuous</b>
Flammability	<b>UL94 HB</b>



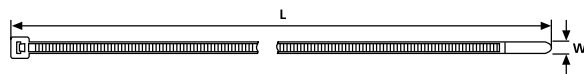
Product Selection			Min. Tensile Strength	Length (L)	Max. Ø Bundle	Width (W)	Color	Pkg. Qty.
Article No.	Part No.	Type						
<b>T18R</b>								
111-01921	<b>T18R9PPC2</b>	T18R	11 lbs (49)	4" (100)	.75" (19)	.10" (2.5)	Natural	100
111-01922	<b>T18R9PPM4</b>	T18R	11 lbs (49)	4" (100)	.75" (19)	.10" (2.5)	Natural	1000
111-01917	<b>T18R0PPC2</b>	T18R	11 lbs (49)	4" (100)	.75" (19)	.10" (2.5)	Black	100
111-01918	<b>T18R0PPM4</b>	T18R	11 lbs (49)	4" (100)	.75" (19)	.10" (2.5)	Black	1000
<b>T30R</b>								
111-03017	<b>T30R9PPC2</b>	T30R	20 lbs (89)	5.83" (148)	1.26" (32)	.14" (3.6)	Natural	100
<b>T50R</b>								
111-04931	<b>T50R9PPC2</b>	T50R	30 lbs (133)	8.0" (203.8)	1.75" (44.5)	.19" (4.7)	Natural	100
111-04928	<b>T50R0PPC2</b>	T50R	30 lbs (133)	8.0" (203.8)	1.75" (44.5)	.19" (4.7)	Black	100
111-04929	<b>T50R0PPM4</b>	T50R	30 lbs (133)	8.0" (203.8)	1.75" (44.5)	.19" (4.7)	Black	1000
<b>T50I</b>								
111-05262	<b>T50I9PPM4</b>	T50I	30 lbs (133)	11.8" (300)	3.35" (85)	.18" (4.6)	Natural	1000
<b>T120R</b>								
111-12067	<b>T120R0PPK2</b>	T120R	60 lbs (267)	15.35" (390)	4.13" (105)	.30" (7.6)	Black	50
111-12066	<b>T120R0PPH4</b>	T120R	60 lbs (267)	15.35" (390)	4.13" (105)	.30" (7.6)	Black	500

Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

## ETFE Cable Ties

ETFE ties provide excellent protection against radiation, ultraviolet light, and a wide range of chemicals. They are also rated for low outgassing applications. HellermannTyton's ETFE ties come in a standard color of blue for easy identification.

Material Data	
Material	<b>Ethylentetrafluorethylene (ETFE)</b>
Operating Temperature	<b>-112 °F to +338°F (-80 °C to +170 °C) continuous</b>
Flammability	<b>UL94 V0</b>



Product Selection			Min. Tensile Strength	Length (L)	Max. Ø Bundle	Width (W)	Color	Pkg. Qty.
Article No.	Part No.	Type						
111-00659	<b>111-00659</b>	T18R	18 lbs (80)	4" (100)	.87" (22)	.10" (2.5)	Blue	100
111-00698	<b>111-00698</b>	T30R	30 lbs (133)	5.9" (150)	1.42" (36)	.14" (3.5)	Blue	100
111-00732	<b>111-00732</b>	T50R	50 lbs (222)	8" (200)	1.97" (50)	.18" (4.6)	Blue	100
111-00718	<b>111-00718</b>	T50L	50 lbs (222)	15" (380)	4.13" (105)	.18" (4.6)	Blue	100
111-01125	<b>111-01125</b>	T120R	120 lbs (535)	15" (380)	4.13" (105)	.30" (7.6)	Blue	50

Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P.

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

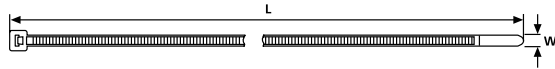
### Cable Ties for Plenum Applications

HellermannTyton halar and U.L. Listed cable ties meet NEC regulations and can be used in applications where low smoke and low flame are a concern in air handling spaces.



### Halar Cable Ties

The raw material used to manufacture HellermannTyton halar cable ties is UL 94V0 rated. The halar ties come in a distinct color of red for easy identification.



Material Data	
Material	PA66HL
Operating Temperature	-104 °F to +300 °F (-76 °C to +150 °C) continuous
Flammability	UL94 V0

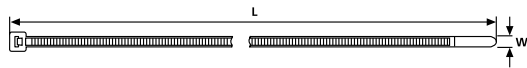


#### Product Selection

Article No.	Part No.	Type	Min. Tensile Strength		Length (L)		Max. Ø Bundle		Width (W)		Color	Pkg. Qty.
			lbs. (N)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)				
111-01900	T18R2HALC2	T18R	14 lbs (80)	4" (100)	.87" (22)	.10" (2.45)	Red	100				
111-01902	T18R2HALM4	T18R	14 lbs (80)	4" (100)	.87" (22)	.10" (2.45)	Red	1000				
111-04895	T50R2HALC2	T50R	40 lbs (177.9)	8.0" (203.2)	1.75" (44.45)	.176" (4.5)	Red	100				
111-04897	T50R2HALM4	T50R	40 lbs (177.9)	8.0" (203.2)	1.75" (44.45)	.176" (4.5)	Red	1000				
111-01332	111-01332	T120R	80 lbs (355.9)	15.5" (394.4)	4.0" (101.6)	.31" (7.8)	Red	50				

Note: Halar ties are also available in natural color. Contact HellermannTyton for availability. Halar is a registered trademark of Solvay S.A. Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### UL Rated Cable Ties



Material Data	
Material	Polyamide 6.6 (PA66)
Operating Temperature	-40 °F to +185 °F (-40 °C to +85 °C) continuous
Flammability	UL94 V2



File# E64139 File# E64139

#### Product Selection

Article No.	Part No.	Type	Min. Tensile Strength		Length (L)		Max. Ø Bundle		Width (W)		Color	Pkg. Qty.
			lbs. (N)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)				
111-00508	T18R9C2UL	T18R	18 lbs (80)	4" (100)	.86" (22)	.10" (2.5)	Natural	100				
111-00509	T18R9M4UL	T18R	18 lbs (80)	4" (100)	.86" (22)	.10" (2.5)	Natural	1000				
111-00510	T18R2C2UL	T18R	18 lbs (80)	4" (100)	.86" (22)	.10" (2.5)	Red	100				
111-00511	T18R2M4UL	T18R	18 lbs (80)	4" (100)	.86" (22)	.10" (2.5)	Red	1000				
111-00512	T50R9C2UL	T50R	50 lbs (225)	7.9" (200)	1.97" (50)	.18" (4.6)	Natural	100				
111-00513	T50R9M4UL	T50R	50 lbs (225)	7.9" (200)	1.97" (50)	.18" (4.6)	Natural	1000				
111-00514	T50R2C2UL	T50R	50 lbs (225)	7.9" (200)	1.97" (50)	.18" (4.6)	Red	100				
111-00515	T50R2M4UL	T50R	50 lbs (225)	7.9" (200)	1.97" (50)	.18" (4.6)	Red	1000				
111-00516	T50I9C2UL	T50I	50 lbs (225)	11.8" (300)	3.35" (85)	.18" (4.6)	Natural	100				
111-00517	T50I9M4UL	T50I	50 lbs (225)	11.8" (300)	3.35" (85)	.18" (4.6)	Natural	1000				
111-00518	T50I2C2UL	T50I	50 lbs (225)	11.8" (300)	3.35" (85)	.18" (4.6)	Red	100				
111-00519	T50I2M4UL	T50I	50 lbs (225)	11.8" (300)	3.35" (85)	.18" (4.6)	Red	1000				
111-00520	T50L9C2UL	T50L	50 lbs (225)	15.35" (390)	4.33" (110)	.18" (4.6)	Natural	100				
111-00521	T50L9M4UL	T50L	50 lbs (225)	15.35" (390)	4.33" (110)	.18" (4.6)	Natural	1000				
111-00522	T50L2C2UL	T50L	50 lbs (225)	15.35" (390)	4.33" (110)	.18" (4.6)	Red	100				
111-00523	T50L2M4UL	T50L	50 lbs (225)	15.35" (390)	4.33" (110)	.18" (4.6)	Red	1000				

Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

## Metal Content Tie

HellermannTyton's Metal Content Tie is designed for the food and beverage processing industries to meet the safety standards set by Hazard Analysis and Critical Control Points (HACCP) to minimize the risk of contamination. The Metal Content Tie is a nylon based tie with metal content dispersed throughout the head and strap, allowing the tie to be easily identifiable by metal detectors and X-ray inspections. It is ideally suited for the management of cables and tubing in processing and packaging areas. The plastic tie can be found by metal detectors and identified in food and other products that have accidentally been contaminated either through human error or loose, cut-off sections.

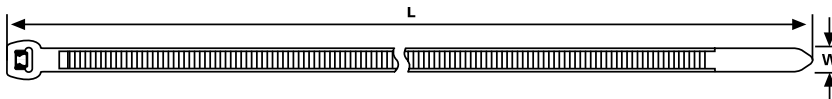
### Product Features

- Metal content dispersed throughout the head and strap ensures identification by metal detectors and X-ray machines.
- Industry standard blue color assists with visual detection and greatly reduces the risk of contamination.
- Three different sizes and two tensile strengths.



### Material Data

Material	<b>Polyamide 6.6 with metal particles (PA66MP)</b>
Operating Temperature	<b>-40 °F to +185 °F (-40 °C to +85 °C) continuous</b>



Product Selection		Type	Min. Tensile Strength		Length (L)		Width (W)		Color	Pkg. Qty.
Article No.	Part No.		lbs.	(N)	in.	(mm)	in.	(mm)		
111-00829	<b>111-00829</b>	MCT30R	30 lbs.	(135)	5.91"	(150)	.14"	(3.5)	Blue	100
111-00830	<b>111-00830</b>	MCT50R	50 lbs.	(225)	7.87"	(200)	.18"	(4.6)	Blue	100
111-00831	<b>111-00831</b>	MCT50L	50 lbs.	(225)	15.35"	(390)	.18"	(4.6)	Blue	100

Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

## Stainless Steel Cable Ties

HellermannTyton's stainless steel ties are designed to secure hoses, cables, poles, pipes, and more when harsh environmental conditions may adversely affect the bundling application. Used where corrosion, vibration, weathering, radiation, and temperature extremes are a concern, HellermannTyton's stainless steel ties can be used in virtually any indoor, outdoor, and underground application.

### MK9SST Stainless Steel Cable Tie Installation Tool

Product Selection			Description	Cable Tie Series	Pkg. Qty.
Article No.	Part No.	Type			
110-95000	MK9SST	MK9SST	Adapted for use with stainless steel ties, the MK9 Stainless Steel tool retains the same design features as the MK9 series. The MK9SST accommodates all HellermannTyton stainless steel ties. Comes standard with padded foam grips for comfort and control and a hook for hanging on a belt or tether.	All MBT Series for both 304 and 316 materials	1

#### 304 Material

Grade 304 material is commonly used for stainless steel bundling applications and suits most general purpose requirements. It features the ability to withstand most environmental conditions, particularly in applications where vibration, general weathering, radiation and temperature extremes are a concern.

- Self locking, ball bearing mechanism for quick and easy installation, either by hand or by tensioning tool
- Fully enclosed head does not allow dirt or grit to interfere with locking mechanism
- High tensile strength option for added strength and safety on heavy duty applications



HellermannTyton's MK9SST tool is durable and lightweight, offering superior stainless steel cable tie installation.

Material Data	
Material	Stainless Steel Type SS304 (SS304)
Operating Temperature	-112 °F to +1000 °F (-80 °C to +538 °C)



Product Selection			Min. Tensile Strength	Length (L)	Max. Ø Bundle	Width (W)	Pkg. Qty.
Article No.	Part No.	Type					
<b>200 lb. Stainless Steel Ties</b>			lbs. (N)	in. (mm)	in. (mm)	in. (mm)	
111-93058	MBT5S-S	MBT5SS	200 lbs (900)	5.0" (127)	1" (25)	.18" (4.6)	100
111-93088	MBT8S-S	MBT8SS	200 lbs (900)	7.9" (201)	2" (50)	.18" (4.6)	100
111-93148	MBT14S-S	MBT14SS	200 lbs (900)	14.3" (362)	4" (102)	.18" (4.6)	100
111-93208	MBT20S-S	MBT20SS	200 lbs (900)	20.5" (521)	6" (152)	.18" (4.6)	100
111-93278	MBT27S-S	MBT27SS	200 lbs (900)	26.8" (681)	8" (203)	.18" (4.6)	100
111-93338	MBT33S-S	MBT33SS	200 lbs (900)	33" (838)	10" (254)	.18" (4.6)	100
<b>450 lb. Stainless Steel Ties</b>							
111-94088	MBT8H-S	MBT8HS	450 lbs (2000)	7.9" (201)	2" (50)	.31" (7.9)	50
111-94148	MBT14H-S	MBT14HS	450 lbs (2000)	14.3" (362)	4" (102)	.31" (7.9)	50
111-94208	MBT20H-S	MBT20HS	450 lbs (2000)	20.5" (521)	6" (152)	.31" (7.9)	50
111-94278	MBT27H-S	MBT27HS	450 lbs (2000)	26.8" (681)	8" (203)	.31" (7.9)	50
111-94338	MBT33H-S	MBT33HS	450 lbs (2000)	33" (838)	10" (254)	.31" (7.9)	50

Installation tools for the above cable ties - MK9SST. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes. Stainless steel ties and materials should be tested thoroughly under end use conditions to determine suitability for the application.

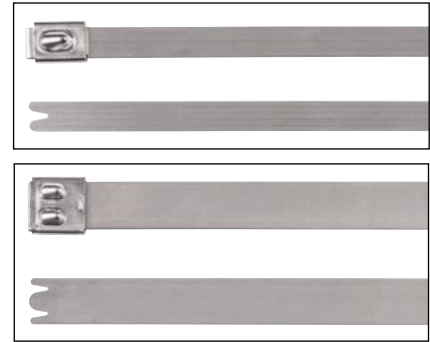


## Stainless Steel Cable Ties *continued*

### 316 Material

Grade 316 material is highly resistant to corrosion and widely used in marine environments where chemicals, salts, acids, and temperature extremes may affect the bundling application. MBT stainless steel ties in 316 steel material are also available with a polyester protective coating. This coating creates a barrier and protectant from chemical reactions of dissimilar metals.

- Self locking, ball bearing mechanism for quick and easy installation, either by hand or by tensioning tool
- Fully enclosed head does not allow dirt or grit to interfere with locking mechanism
- High tensile strength option available for added strength and safety on heavy duty applications



Stainless Steel Cable Ties

Material Data	
Material	Stainless Steel Type SS316 (SS316)
Operating Temperature	-112 °F to +1000 °F (-80 °C to +538 °C)



Product Selection			Min. Tensile Strength	Length (L)	Max. Ø Bundle	Width (W)	Pkg. Qty.
Article No.	Part No.	Type	lbs. (N)	in. (mm)	in. (mm)	in. (mm)	
<b>200 lb. Stainless Steel Ties</b>							
111-93059	<b>MBT5S</b>	MBT5S	200 lbs (900)	5.0" (127)	1.0" (25.4)	.18" (4.6)	100
111-93089	<b>MBT8S</b>	MBT8S	200 lbs (900)	7.9" (201)	2.0" (50)	.18" (4.6)	100
111-93149	<b>MBT14S</b>	MBT14S	200 lbs (900)	14.3" (362)	4.0" (102)	.18" (4.6)	100
111-93209	<b>MBT20S</b>	MBT20S	200 lbs (900)	20.5" (521)	6.0" (152)	.18" (4.6)	100
111-93279	<b>MBT27S</b>	MBT27S	200 lbs (900)	26.8" (681)	8.0" (203)	.18" (4.6)	100
111-93339	<b>MBT33S</b>	MBT33S	200 lbs (900)	33.0" (838)	10.0" (254)	.18" (4.6)	100
<b>450 lb. Stainless Steel Ties</b>							
111-94089	<b>MBT8H</b>	MBT8H	450 lbs (2000)	7.9" (201)	2.0" (50.8)	.31" (7.9)	50
111-94149	<b>MBT14H</b>	MBT14H	450 lbs (2000)	14.3" (362)	4.0" (102)	.31" (7.9)	50
111-94209	<b>MBT20H</b>	MBT20H	450 lbs (2000)	20.5" (521)	6.0" (152)	.31" (7.9)	50
111-94279	<b>MBT27H</b>	MBT27H	450 lbs (2000)	26.8" (681)	8.0" (203)	.31" (7.9)	50
111-94339	<b>MBT33H</b>	MBT33H	450 lbs (2000)	33.0" (838)	10.0" (254)	.31" (7.9)	50
<b>607 lb. Stainless Steel Ties</b>							
111-95148	<b>MBT14XHS</b>	MBT14XHS	607 lbs (2700)	14.3" (362)	4.0" (102)	.5" (12.3)	50
111-95208	<b>MBT20XHS</b>	MBT20XHS	607 lbs (2700)	20.5" (521)	6.0" (152)	.5" (12.3)	50
111-95278	<b>MBT27XHS</b>	MBT27XHS	607 lbs (2700)	26.8" (681)	8.0" (203)	.5" (12.3)	50
111-95338	<b>MBT33XHS</b>	MBT33XHS	607 lbs (2700)	33.0" (838)	10.0" (254)	.5" (12.3)	50
111-95149	<b>MBT14XH</b>	MBT14XH	607 lbs (2700)	14.3" (362)	4.0" (102)	.5" (12.3)	50
111-95209	<b>MBT20XH</b>	MBT20XH	607 lbs (2700)	20.5" (521)	6.0" (152)	.5" (12.3)	50
111-95279	<b>MBT27XH</b>	MBT27XH	607 lbs (2700)	26.8" (681)	8.0" (203)	.5" (12.3)	50
111-95339	<b>MBT33XH</b>	MBT33XH	607 lbs (2700)	33.0" (838)	10.0" (254)	.5" (12.3)	50
<b>922 lb. Stainless Steel Ties</b>							
111-01301	<b>MBT14UH</b>	MBT14UH	922 lbs (4100)	14.3" (362)	4.0" (102)	.6" (16.0)	50
111-01302	<b>MBT20UH</b>	MBT20UH	922 lbs (4100)	20.5" (521)	6.0" (152)	.6" (16.0)	50
111-01303	<b>MBT27UH</b>	MBT27UH	922 lbs (4100)	26.8" (681)	8.0" (203)	.6" (16.0)	50
111-01304	<b>MBT33UH</b>	MBT33UH	922 lbs (4100)	33.0" (838)	10.0" (254)	.6" (16.0)	50
111-01305	<b>MBT43UH</b>	MBT43UH	922 lbs (4100)	43.0" (1092)	13.0" (330)	.6" (16.0)	25
111-01306	<b>MBT49UH</b>	MBT49UH	922 lbs (4100)	49.0" (1245)	15.0" (380)	.6" (16.0)	25

Installation tools for the above cable ties - MK9SST. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes. Stainless steel ties and materials should be tested thoroughly under end use conditions to determine suitability for the application.

### Outside Serrated Cable Ties

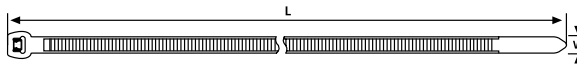
The outside serrated cable ties are for specific applications where thin walled or soft insulation is used (such as in aircraft, trains, etc.), and for applications that are very sensitive to the amount of force applied to the cable.



Outside serrated cable ties are also available in natural. Contact HellermannTyton for more information.

Material Data

Material	Polyamide 6.6 heat stabilized (PA66HS)
Operating Temperature	-40 °F to +221 °F (-40 °C to +105 °C) continuous
Flammability	UL94 V2



Product Selection

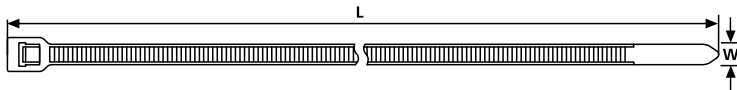
Article No.	Part No.	Type	Min. Tensile Strength		Length (L)		Max. Ø Bundle		Width (W)		Color	Pkg. Qty.
			lbs.	(N)	in.	(mm)	in.	(mm)	in.	(mm)		
118-04700	<b>118-04700</b>	T18ROS	18 lbs	(80)	3.94"	(100)	.79"	(20)	.10"	(2.5)	Black	100
118-04800	<b>118-04800</b>	T30ROS	30 lbs	(135)	5.71"	(145)	1.34"	(35)	.13"	(3.4)	Black	100
118-04900	<b>118-04900</b>	T30LOS	30 lbs	(135)	7.87"	(200)	2.0"	(50)	.13"	(3.4)	Black	100
118-00110	<b>118-00110</b>	T50SOS	50 lbs	(225)	6.0"	(150)	1.36"	(35)	.18"	(4.6)	Black	1000
118-00111	<b>118-00111</b>	T50ROS	50 lbs	(225)	8"	(200)	1.95"	(50)	.18"	(4.6)	Black	1000
118-05900	<b>118-05900</b>	T50LOS	50 lbs	(225)	15"	(384)	4.29"	(110)	.18"	(4.6)	Black	100

Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

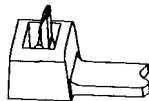
## Releasable Ties

The extended pawl allows for simple and quick release of the ties. Perfect for prototype construction and service requiring the addition of wires on existing harnesses.

Material Data	
Material	<b>Polyamide 6.6 (PA66)</b>
Operating Temperature	<b>-40 °F to +185 °F (-40 °C to +85 °C) continuous</b>
Flammability	<b>UL94 V2</b>



RT40R



RT50S and RT50LL



File# E64139

Product Selection			Min. Tensile Strength	Length (L)	Max. Ø Bundle	Width (W)	Color	Pkg. Qty.
Article No.	Part No.	Type						
<b>RT40R</b>								
115-06219	<b>RT40R9C2</b>	RT40R	40 lbs (178)	8.46" (215)	2.0" (51)	.16" (4.0)	Natural	100
115-06204	<b>RT40R9M4</b>	RT40R	40 lbs (178)	8.46" (215)	2.0" (51)	.16" (4.0)		1000
115-06200	<b>RT40R0C2</b>	RT40R	40 lbs (178)	8.46" (215)	2.0" (51)	.16" (4.0)	Black	100
115-06202	<b>RT40R0M4</b>	RT40R	40 lbs (178)	8.46" (215)	2.0" (51)	.16" (4.0)		1000
<b>RT50S</b>								
115-06319	<b>RT50S9C2</b>	RT50S	50 lbs (225)	6.5" (165)	1.38" (35)	.18" (4.6)	Natural	100
115-06304	<b>RT50S9M4</b>	RT50S	50 lbs (225)	6.5" (165)	1.38" (35)	.18" (4.6)		1000
115-06300	<b>RT50S0C2</b>	RT50S	50 lbs (225)	6.5" (165)	1.38" (35)	.18" (4.6)	Black	100
115-00035	<b>RT50S0M4</b>	RT50S	50 lbs (225)	6.5" (165)	1.38" (35)	.18" (4.6)		1000
<b>RT50LL</b>								
115-06102	<b>RT50LL9C2</b>	RT50LL	50 lbs (225)	15" (380)	3.98" (101)	.18" (4.6)	Natural	100
115-06104	<b>RT50LL9M4</b>	RT50LL	50 lbs (225)	15" (380)	3.98" (101)	.18" (4.6)		1000
115-00039	<b>RT50LL0C2</b>	RT50LL	50 lbs (225)	15" (380)	3.98" (101)	.18" (4.6)	Black	100
115-06101	<b>RT50LL0M4</b>	RT50LL	50 lbs (225)	15" (380)	3.98" (101)	.18" (4.6)		1000

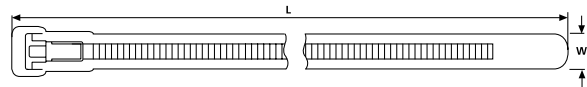
Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### REL Releasable Ties

for use in applications where there is the need to repeatedly open and close the tie.



Material Data	
Material	<b>Polyamide 6.6 (PA66)</b>
Operating Temperature	<b>-40 °F to +185 °F (-40 °C to +85 °C) continuous</b>
Flammability	<b>UL94 V2</b>



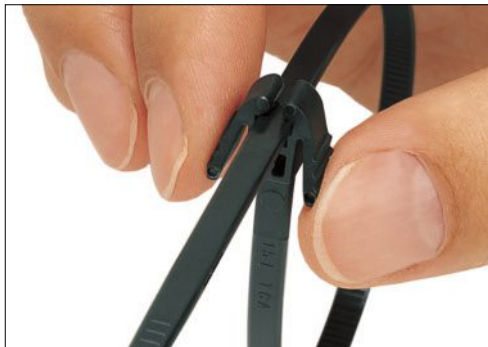
#### Product Selection

Article No.	Part No.	Type	Min. Tensile Strength		Length (L)		Max. Ø Bundle		Width (W)		Color	Pkg. Qty.
			lbs.	(N)	in.	(mm)	in.	(mm)	in.	(mm)		
<b>REL50R</b>												
115-00503	<b>REL50R9C2</b>	REL50R	50 lbs	(225)	5.5"	(140)	1.38"	(35)	.29" (7.4)		Natural	100
115-00505	<b>REL50R9L4</b>	REL50R	50 lbs	(225)	5.5"	(140)	1.38"	(35)	.29" (7.4)			200
115-00500	<b>REL50R0C2</b>	REL50R	50 lbs	(225)	5.5"	(140)	1.38"	(35)	.29" (7.4)		Black	100
115-00502	<b>REL50R0L4</b>	REL50R	50 lbs	(225)	5.5"	(140)	1.38"	(35)	.29" (7.4)			200
<b>REL50L</b>												
115-00605	<b>REL50L9C2</b>	REL50L	50 lbs	(225)	9.84"	(250)	2.76"	(70)	.29" (7.4)		Natural	100
115-00607	<b>REL50L9L4</b>	REL50L	50 lbs	(225)	9.84"	(250)	2.76"	(70)	.29" (7.4)			200
115-00600	<b>REL50L0C2</b>	REL50L	50 lbs	(225)	9.84"	(250)	2.76"	(70)	.29" (7.4)		Black	100
115-00602	<b>REL50L0L4</b>	REL50L	50 lbs	(225)	9.84"	(250)	2.76"	(70)	.29" (7.4)			200

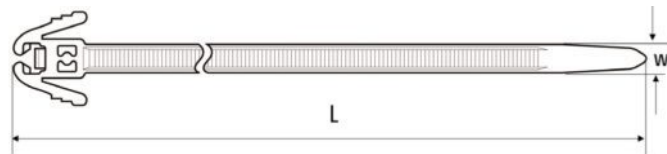
Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### Pinch Releasable Ties

Patented pinch release mechanism for easy handling allows tie to be released using one hand.



Material Data	
Material	<b>Polyamide 6.6 (PA66)</b>
Operating Temperature	<b>-40 °F to +185 °F (-40 °C to +85 °C) continuous</b>
Flammability	<b>UL94 V2</b>



#### Product Selection

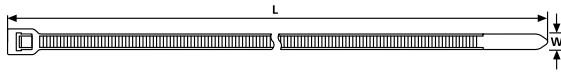
Article No.	Part No.	Type	Min. Tensile Strength		Length (L)		Max. Ø Bundle		Width (W)		Color	Pkg. Qty.
			lbs.	(N)	in.	(mm)	in.	(mm)	in.	(mm)		
115-40200	<b>REZ200.NB3P</b>	REZ200	30 lbs	(135)	7.88"	(200)	1.97"	(50)	.19" (4.7)		Black	100
115-40300	<b>REZ300.NB3P</b>	REZ300	30 lbs	(135)	12.00"	(305)	3.15"	(80)	.19" (4.7)		Black	100

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

## Heavy Duty Releasable Cable Ties

The RT150 and RT250 heavy duty releasable cable ties feature an extended pawl which allows for simple and quick release of the ties.

### RT150 Heavy Duty Releasable Cable Ties



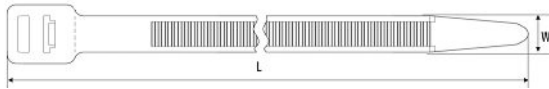
Material Data	
Material	<b>Polyamide 6.6 (PA66)</b>
Operating Temperature	<b>-40 °F to +185 °F (-40 °C to +85 °C) continuous</b>
Flammability	<b>UL94 V2</b>



Product Selection			Min. Tensile Strength	Length (L)	Max. Ø Bundle	Width (W)	Color	Pkg. Qty.
Article No.	Part No.	Type						
115-00036	<b>RT150REPOX2</b>	RT150REP	175 lbs (780)	15.35" (390)	4" (105)	.346" (8.8)	Black	25
115-00037	<b>RT150MEPOX2</b>	RT150MEP	175 lbs (780)	21.06" (535)	5.90" (150)	.346" (8.8)	Black	25
115-00038	<b>RT150LEPOX2</b>	RT150LEP	175 lbs (780)	32.28" (820)	9.65" (245)	.346" (8.8)	Black	25

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### RT250 Heavy Duty Releasable Cable Ties



Material Data	
Material	<b>Polyamide 6.6 (PA66)</b>
Operating Temperature	<b>-40 °F to +185 °F (-40 °C to +85 °C) continuous</b>
Flammability	<b>UL94 V2</b>



Product Selection			Min. Tensile Strength	Length (L)	Max. Ø Bundle	Width (W)	Color	Pkg. Qty.
Article No.	Part No.	Type						
<b>RT250S</b>								
131-75819	<b>RT250S9X2</b>	RT250S	250 lbs (1115)	9.05" (230)	2.17" (55)	.49" (12.5)	Natural	25
115-41800	<b>RT250S0X2</b>	RT250S	250 lbs (1115)	9.05" (230)	2.17" (55)	.49" (12.5)	Black	25
<b>RT250R</b>								
131-75019	<b>RT250R9X2</b>	RT250R	250 lbs (1115)	20.47" (520)	5.71" (145)	.49" (12.5)	Natural	25
115-41300	<b>RT250R0X2</b>	RT250R	250 lbs (1115)	20.47" (520)	5.71" (145)	.49" (12.5)	Black	25
<b>RT250M</b>								
131-75619	<b>RT250M9X2</b>	RT250M	250 lbs (1115)	22.24" (565)	5.90" (150)	.49" (12.5)	Natural	25
131-75610	<b>RT250M0X2</b>	RT250M	250 lbs (1115)	22.24" (565)	5.90" (150)	.49" (12.5)	Black	25
<b>RT250I</b>								
131-75219	<b>RT250I9X2</b>	RT250I	250 lbs (1115)	28.54" (725)	8.00" (203)	.49" (12.5)	Natural	25
115-41401	<b>RT250I0X2</b>	RT250I	250 lbs (1115)	28.54" (725)	8.00" (203)	.49" (12.5)	Black	25
<b>RT250L</b>								
131-75419	<b>RT250L9X2</b>	RT250L	250 lbs (1115)	34.65" (880)	10.00" (254)	.49" (12.5)	Natural	25
115-41500	<b>RT250L0X2</b>	RT250L	250 lbs (1115)	34.65" (880)	10.00" (254)	.49" (12.5)	Black	25
<b>RT250XL</b>								
131-75519	<b>RT250XL9X2</b>	RT250XL	250 lbs (1115)	40" (1016.0)	12" (304.8)	.49" (12.5)	Natural	25
131-75510	<b>RT250XL0X2</b>	RT250XL	250 lbs (1115)	40" (1016.0)	12" (304.8)	.49" (12.5)	Black	25

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.



File# E64139



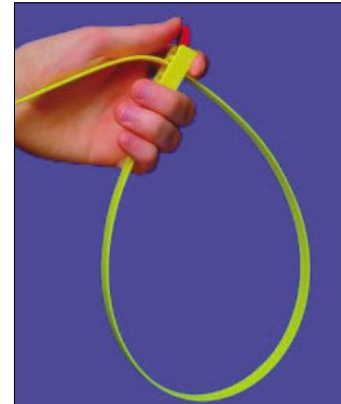
## Speedy Tie

An entirely new design in cable management, the Speedy Tie is a fully re-usable, easily releasable lashing tie. The Speedy Tie's unique design allows it to be released with one hand.

- Just one click to tie and untie
- Fully re-usable
- Once applied, the tail can be neatly tucked away for added safety
- Highly visible yellow color — also available in black, impact modified material
- Versatile design allows use for multiple applications

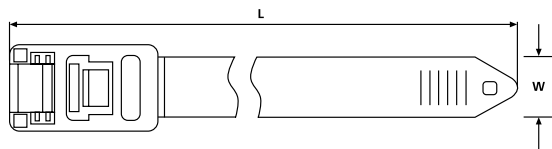
The Speedy Tie is a versatile tool for countless applications, including:

- In plant transfer of products
- Temporary and secure bundling
- Packaging



Speedy Tie - Quick and easy.

Material Data	
Material	<b>Polyamide 6.6 (PA66)</b>
Color	<b>Yellow , Red</b>
Operating Temperature	<b>-40 °F to +185 °F (-40 °C to +85 °C) continuous</b>
Flammability	<b>UL94 V2</b>



### Packaging Configurations

#### Distributor Packs

- Printed bag with a hang hole
- 60 SpeedyTies - 12 bags of 5

#### OEM Packs

- Plain bag (no hang hole)
- Standard box
- 300 SpeedyTies - 12 bags of 25

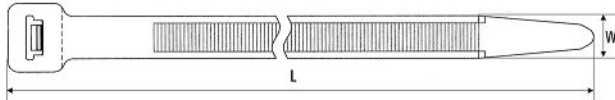
Product Selection				Min. Tensile Strength	Length (L)	Max. Ø Bundle	Width (W)	Pkg. Qty.	Carton Qty.
Article No.	Part No.	Type	Description						
115-00001	<b>RTT750HR.NX900</b>	RTT750HR	Distributor Pack - order in carton qty. only	200 lbs (888)	29.52" (750)	8.27" (210)	.51" (13)	5	60
115-00000	<b>RTT750HR.NX1P</b>	RTT750HR	OEM Pack - order in carton qty. only	200 lbs (888)	29.52" (750)	8.27" (210)	.51" (13)	25	300

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

## RT255 Heavy Duty Releasable Ties

Material Data	
Material	<b>Polyamide 6.6 impact modified, Heat Stabilized, UV Resistant (PA66HIRHS)</b>
Operating Temperature	<b>-40 °F to +230 °F (-40 °C to +110 °C)</b> <b>continuous</b>
Flammability	<b>UL94 HB</b>

RoHS



Product Selection			Min. Tensile Strength	Length (L)	Max. Ø Bundle	Width (W)	Color	Pkg. Qty.
Article No.	Part No.	Type						
115-01200	<b>RT255S0HIRX2</b>	RT255S	250 lbs (1112)	8.86" (225)	2.16" (55)	.49" (12.5)	Black	25
115-01300	<b>RT255R0HIRX2</b>	RT255R	250 lbs (1112)	20.28" (515)	5.71" (145)	.49" (12.5)	Black	25
115-01400	<b>RT255M0HIRX2</b>	RT255M	250 lbs (1112)	22.05" (560)	6.30" (160)	.49" (12.5)	Black	25

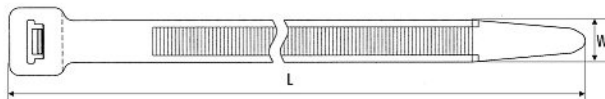
Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

## SR255 Heavy Duty Sub-Releasable Ties

The SR255 series releasable heavy duty cable tie offers a release that is lower than the head of the cable tie, facilitating easy installation with the use of a HellermannTyton cable tie tool.

Material Data	
Material	<b>Polyamide 6.6 impact modified, Heat Stabilized, UV Resistant (PA66HIRHS)</b>
Operating Temperature	<b>-40 °F to +230 °F (-40 °C to +110 °C)</b> <b>continuous</b>
Flammability	<b>UL94 HB</b>

RoHS

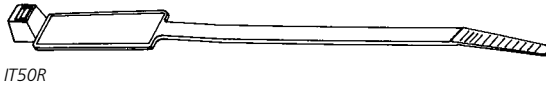
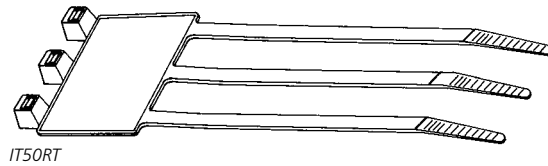
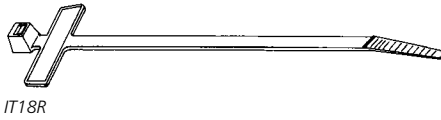


Product Selection			Min. Tensile Strength	Length (L)	Max. Ø Bundle	Width (W)	Color	Pkg. Qty.
Article No.	Part No.	Type						
115-42002	<b>SR255S0HIHSUVX2</b>	SR255S	250 lbs (1112)	8.86" (225)	2.16" (50)	.49" (12.5)	Black	25
115-42101	<b>SR255X0HIHSUVX2</b>	SR255X	250 lbs (1112)	14" (372)	3.94" (100)	.49" (12.5)	Black	25

Installation tools - MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### Identification Ties

Tie and identify bundles of cable in one operation. Large flat area for imprinting or writing the required information. Hot stamping available, which is subject to minimums and lead times.



Material Data	
Material	<b>Polyamide 6.6 (PA66)</b>
Operating Temperature	<b>-40 °F to +185 °F (-40 °C to +85 °C) continuous</b>
Flammability	<b>UL94 V2</b>



**UL** US  
File# E64139

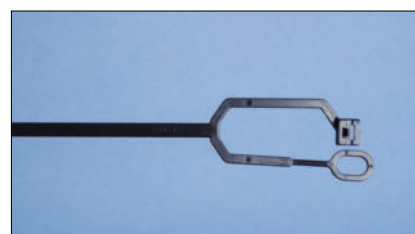
Product Selection

Article No.	Part No.	Type	US Gov. Designation	Min. Tensile Strength		Length (L)		Max. Ø Bundle		Width (W)		Color	Pkg. Qty.
				lbs.	(N)	in.	(mm)	in.	(mm)	in.	(mm)		
<b>IT18R</b> Marking Pad Size: .98" x .32" (25 x 8)													
111-81819	<b>IT18R9C2</b>	IT18R	MS3368-5-9E	18 lbs	(80)	3.94"	(100)	.75"	(22.0)	.09"	(2.3)	Natural	100
111-81808	<b>IT18R9L4</b>	IT18R	MS3368-5-9E	18 lbs	(80)	3.94"	(100)	.75"	(22.0)	.09"	(2.3)	Natural	200
111-81801	<b>IT18R0C2</b>	IT18R	*	18 lbs	(80)	3.94"	(100)	.75"	(22.0)	.09"	(2.3)	Black	100
111-81803	<b>IT18R0L4</b>	IT18R	*	18 lbs	(80)	3.94"	(100)	.75"	(22.0)	.09"	(2.3)	Black	200
<b>IT18FL</b> Marking Pad Size: .81" x .35" (20.5 x 9)													
111-81919	<b>IT18FL9C2</b>	IT18FL	-	18 lbs	(80)	4.33"	(110)	.75"	(19.0)	.10"	(2.5)	Natural	100
111-81907	<b>IT18FL9L4</b>	IT18FL	-	18 lbs	(80)	4.33"	(110)	.75"	(19.0)	.10"	(2.5)	Natural	200
111-81910	<b>IT18FL0C2</b>	IT18FL	-	18 lbs	(80)	4.33"	(110)	.75"	(19.0)	.10"	(2.5)	Black	100
111-81903	<b>IT18FL0L4</b>	IT18FL	-	18 lbs	(80)	4.33"	(110)	.75"	(19.0)	.10"	(2.5)	Black	200
<b>IT50R</b> Marking Pad Size: 1.10" x .51" (28 x 12.9)													
111-85019	<b>IT50R9C2</b>	IT50R	MS3368-1-9A	50 lbs	(225)	7.99"	(203)	1.75"	(44.5)	.18"	(4.6)	Natural	100
111-85020	<b>IT50R9M4</b>	IT50R	MS3368-1-9A	50 lbs	(225)	7.99"	(203)	1.75"	(44.5)	.18"	(4.6)	Natural	1000
111-85011	<b>IT50R0C2</b>	IT50R	*	50 lbs	(225)	7.99"	(203)	1.75"	(44.5)	.18"	(4.6)	Black	100
111-85013	<b>IT50R0M4</b>	IT50R	*	50 lbs	(225)	7.99"	(203)	1.75"	(44.5)	.18"	(4.6)	Black	1000
<b>IT50RD</b> Marking Pad Size: 1.14" x 1.04" (29 x 26.3)													
111-85219	<b>IT50RD9K2</b>	IT50RD	MS3368-3-9C	50 lbs	(225)	8.07"	(205)	1.73"	(44.0)	.19"	(4.7)	Natural	50
111-85201	<b>IT50RD0K2</b>	IT50RD	*	50 lbs	(225)	8.07"	(205)	1.73"	(44.0)	.19"	(4.7)	Black	50
<b>IT50RT</b> Marking Pad Size: 1.81" x 1.04" (46 x 26.3)													
111-85119	<b>IT50RT9K2</b>	IT50RT	MS3368-4-9D	50 lbs	(225)	8.07"	(205)	1.73"	(44.0)	.19"	(4.7)	Natural	50
111-85100	<b>IT50RT0K2</b>	IT50RT	*	50 lbs	(225)	8.07"	(205)	1.73"	(44.0)	.19"	(4.7)	Black	50
<b>IT50L</b> Marking Pad Size: .5" x 2.20" (12.8 x 56)													
111-85319	<b>IT50L9C2</b>	IT50L	MS3368-2-9A	50 lbs	(225)	15.35"	(390)	3.94"	(100)	.19"	(4.7)	Natural	100
111-85306	<b>IT50L9M4</b>	IT50L	MS3368-2-9A	50 lbs	(225)	15.35"	(390)	3.94"	(100)	.19"	(4.7)	Natural	1000

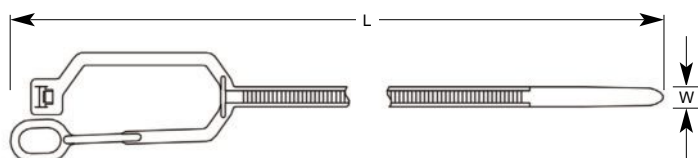
Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes. \* Military black available. Contact HellermannTyton for more information.

### Branch Cable Tie

The branch tie is ideal for wire harness applications where wires “branch” away from the main assembly. The branch tie reduces wire harness assembly time by eliminating the need to use electrical tape. After the tie is placed on the main assembly, the strap is inserted through the oval opening and then through the cable tie head. Once applied, the branch tie holds the branch in its proper position on the wire harness.



Material Data	
Material	<b>Polyamide 6.6 (PA66)</b>
Operating Temperature	<b>-40 °F to +185 °F (-40 °C to +85 °C) continuous</b>
Flammability	<b>UL94 V2</b>



Product Selection														
Article No.	Part No.	Type	Main Bundle Ø		Branch Bundle Ø		Min. Tensile Strength		Length (L)		Width (W)		Color	Pkg. Qty.
			in.	(mm)	in.	(mm)	lbs.	(N)	in.	(mm)	in.	(mm)		
115-00042	<b>115-00042</b>	YT200	.63”	– 1.57” (16 - 40)	.59”	– 1.18” (15 - 30)	33 lbs	(147)	7.87”	(200)	.18”	(4.7)	Black	100

Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### Kabelrap Bundling System

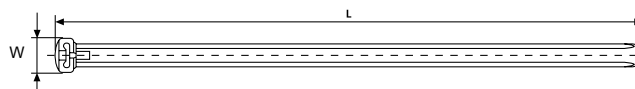
The patented Kabelrap bundling system offers a very high bundling strength and is particularly resistant to saltwater, oils, greases, and hydraulic fluids. Special hand tool required for installation.



Required Tool - 121-00680

Kabelrap Application

Material Data	
Material	<b>Polyamide 6.6 UV-resistant (PA66UV)</b>
Operating Temperature	<b>-40 °F to +185 °F (-40 °C to +85 °C) continuous</b>
Flammability	<b>UL94 V2</b>



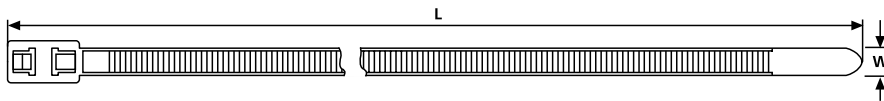
Product Selection												
Article No.	Part No.	Type	Min. Tensile Strength		Length (L)		Max. Ø Bundle		Width (W)		Color	Pkg. Qty.
			lbs.	(N)	in.	(mm)	in.	(mm)	in.	(mm)		
121-63560	<b>121-63560</b>	KR6/35	110 lbs	(490)	14”	(356)	3.75”	(93)	.25”	(6)	Black	50
121-82160	<b>121-82160</b>	KR8/21	175 lbs	(785)	8.25”	(210)	1.75”	(47)	.31”	(8)	Black	50
121-83360	<b>121-83360</b>	KR8/33	175 lbs	(785)	13.25”	(337)	3.37”	(86)	.31”	(8)	Black	50

Required Installation Tool - 121-00680. Black is the standard color. Natural is available based upon minimums, custom terms and lead times. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### Double Head Ties

Double head ties create two loops that separate two bundles. They also can be used to secure a bundle to an existing fixing point.

Material Data	
Material	<b>Polyamide 6.6 (PA66)</b>
Operating Temperature	<b>-40 °F to +185 °F (-40 °C to +85 °C)</b>
Flammability	<b>UL94 V2</b>



Product Selection		Type	Min. Tensile Strength		Length (L)		Width (W)		Color	Pkg. Qty.
Article No.	Part No.		lbs.	(N)	in.	(mm)	in.	(mm)		
<b>T50SDH</b>										
117-00016	<b>117-00016</b>	T50SDH	50 lbs	(225)	6.26"	(159)	.19"	(4.7)	Natural	100
117-00017	<b>117-00017</b>	T50SDH	50 lbs	(225)	6.26"	(159)	.19"	(4.7)		1000
117-00018	<b>117-00018</b>	T50SDH	50 lbs	(225)	6.26"	(159)	.19"	(4.7)	Black	100
117-00019	<b>117-00019</b>	T50SDH	50 lbs	(225)	6.26"	(159)	.19"	(4.7)		1000
<b>T50RDH</b>										
117-05006	<b>T50RDH9C2</b>	T50RDH	50 lbs	(225)	8.25"	(210)	.19"	(4.7)	Natural	100
117-05008	<b>T50RDH9M4</b>	T50RDH	50 lbs	(225)	8.25"	(210)	.19"	(4.7)		1000
117-05004	<b>T50RDH0C2</b>	T50RDH	50 lbs	(225)	8.25"	(210)	.19"	(4.7)	Black	100
117-05005	<b>T50RDH0M4</b>	T50RDH	50 lbs	(225)	8.25"	(210)	.19"	(4.7)		1000
<b>T50IDH</b>										
117-05302	<b>T50IDH9C2</b>	T50IDH	50 lbs	(225)	12"	(305)	.19"	(4.7)	Natural	100
117-05303	<b>T50IDH9M4</b>	T50IDH	50 lbs	(225)	12"	(305)	.19"	(4.7)		1000
117-05362	<b>T50IDH0C2</b>	T50IDH	50 lbs	(225)	12"	(305)	.19"	(4.7)	Black	100
117-05300	<b>T50IDH0M4</b>	T50IDH	50 lbs	(225)	12"	(305)	.19"	(4.7)		1000
<b>T50LDH</b>										
117-05402	<b>T50LDH9C2</b>	T50LDH	50 lbs	(225)	15.5"	(395)	.19"	(4.7)	Natural	100
117-05461	<b>T50LDH9M4</b>	T50LDH	50 lbs	(225)	15.5"	(395)	.19"	(4.7)		1000
117-05400	<b>T50LDH0C2</b>	T50LDH	50 lbs	(225)	15.5"	(395)	.19"	(4.7)	Black	100
117-05401	<b>T50LDH0M4</b>	T50LDH	50 lbs	(225)	15.5"	(395)	.19"	(4.7)		1000
<b>T120RDH</b>										
117-05501	<b>T120RDH0K2</b>	T120RDH	120 lbs	(535)	15.7"	(398)	.29"	(7.6)	Black	50
117-05500	<b>T120RDH0H4</b>	T120RDH	120 lbs	(535)	15.7"	(398)	.29"	(7.6)		500

Maximum bundle diameter is variable due to double loops. Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.



## Clamp Ties

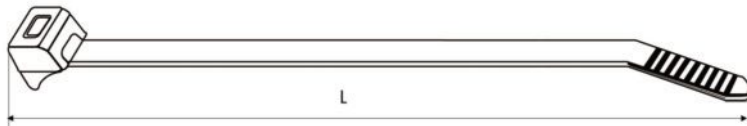
The clamp tie has triangular shaped tabs extending beneath the head, allowing for optimal surface contact and complete circumferential compression to 360 degrees. The clamps are recommended for soft rubber hose applications including fuel, water, and air vacuum lines.



Material Data	
Color	Natural
Material	Polyamide 6.6 (PA66)
Operating Temperature	-40 °F to +185 °F (-40 °C to +85 °C) continuous
Flammability	UL94 V2



Material Data	
Color	Black
Material	Polyamide 6.6 heat stabilized (PA66HS)
Operating Temperature	-40 °F to +221 °F (-40 °C to +105 °C) continuous
Flammability	UL94 V2



**UL** US  
File# E64139

### Product Selection

Article No.	Part No.	Type	Min. Tensile Strength		Length (L)		Max. Ø Bundle		Width (W)		Color	Pkg. Qty.
			lbs.	(N)	in.	(mm)	in.	(mm)	in.	(mm)		
<b>CTT20R</b>												
112-51919	<b>CTT20R9C2</b>	CTT20R	20 lbs	(90)	4"	(100)	.50"	(13)	.10"	(2.5)	Natural	100
112-51904	<b>CTT20R9M4</b>	CTT20R	20 lbs	(90)	4"	(100)	.50"	(13)	.10"	(2.5)		1000
112-51905	<b>CTT20R0HSC2</b>	CTT20R	20 lbs	(90)	4"	(100)	.50"	(13)	.10"	(2.5)	Black	100
112-51960	<b>CTT20R0HSM4</b>	CTT20R	20 lbs	(90)	4"	(100)	.50"	(13)	.10"	(2.5)		1000
<b>CTT60R</b>												
112-52104	<b>CTT60R9C2</b>	CTT60R	60 lbs	(265)	8"	(205)	1.77"	(45)	.19"	(4.7)	Natural	100
112-52106	<b>CTT60R9M4</b>	CTT60R	60 lbs	(265)	8"	(205)	1.77"	(45)	.19"	(4.7)		1000
112-52112	<b>CTT60R0HSC2</b>	CTT60R	60 lbs	(265)	8"	(205)	1.77"	(45)	.19"	(4.7)	Black	100
112-52114	<b>CTT60R0HSM4</b>	CTT60R	60 lbs	(265)	8"	(205)	1.77"	(45)	.19"	(4.7)		1000

Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### Dual Clamp Ties

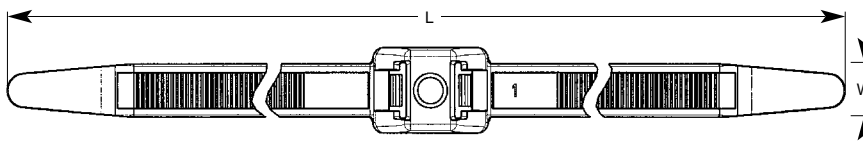
HellermannTyton's dual clamp ties are designed to provide parallel separation between hoses, wires, cables and tubing, protecting them from abrasion. These ties have an optional mounting hole for securing bundles along the chassis of trucks, trailers, and heavy duty equipment. The unique, one-piece design features the dual head centered on the strap.

Available in two lengths, the dual clamp ties accommodate bundles ranging from .25 inches to 2.3 inches. The flexible wide straps minimize pinching of hoses and convoluted tubing. The straps are also releasable.



U.S. Patent Number 5,966,781

Material Data	
Material	<b>Polyamide 6.6 impact modified, Heat Stabilized, UV Resistant (PA66HIRHS)</b>
Operating Temperature	<b>-40 °F to +230 °F (-40 °C to +110 °C)</b>
Flammability	<b>UL94 HB</b>



Product Selection		Type	Stud Ø	Min. Tensile Strength	Length (L)	Max. Ø Bundle (each side)	Width (W)	Color	Pkg. Qty.
Article No.	Part No.		in. (mm)	lbs. (N)	in. (mm)	in. (mm)	in. (mm)		
115-30900	<b>DCT90HIRK2</b>	DCT9	.25" (6.35)	150 lbs (670)	13.0" (331)	1.3" (33.02)	.50" (12.7)	Black	50
115-00034	<b>DCT90HIRC2</b>	DCT9	.25" (6.35)	150 lbs (670)	13.0" (331)	1.3" (33.02)	.50" (12.7)	Black	100
115-31100	<b>DCT110HIRK2</b>	DCT11	.25" (6.35)	150 lbs (670)	19.2" (489)	2.3" (58.42)	.50" (12.7)	Black	50
115-00033	<b>DCT110HIRC2</b>	DCT11	.25" (6.35)	150 lbs (670)	19.2" (489)	2.3" (58.42)	.50" (12.7)	Black	100

Installation tools - MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### Standoff Mounting Dual Clamp Ties

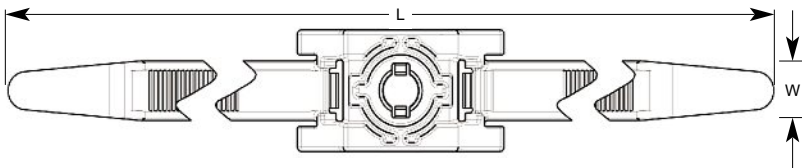
HellermannTyton's standoff dual clamp tie offers the same features as the standard dual clamp tie with a standoff mount that secures the bundle away from the side of the frame rail, protecting the bundles from bolts and other protrusions.

#### Features

- Wide strap minimizes pinching of soft hoses & convoluted tubing
- Clamping rails increase circumferential grip on varying bundle diameters
- Locking stud mount pawls allow for easy hand insertion
- Nut or weld nesting counterbore provides flush mounting at the base
- Socket counterbore for fastening a nut provides added retention



Material Data	
Material	<b>Polyamide 6.6 impact modified, Heat Stabilized, UV Resistant (PA66HIRHS)</b>
Operating Temperature	<b>-40 °F to +230 °F (-40 °C to +110 °C) continuous</b>
Flammability	<b>UL94 HB</b>



#### Product Selection

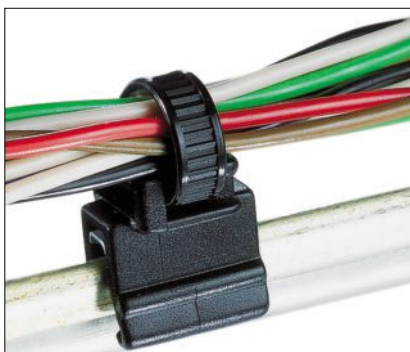
Article No.	Part No.	Type	Stud Ø		Min. Tensile Strength		Length (L)		Max. Ø Bundle (each side)		Width (W)	Color	Pkg. Qty.	
			in.	(mm)	lbs.	(N)	in.	(mm)	in.	(mm)				in.
117-00012	<b>117-00012</b>	SDCTR312	.31"	(7.94)	100 lbs	(445)	20.1"	(511)	2.3"	(58.42)	.50"	(12.7)	Black	150
157-00060	<b>157-00060</b>	SDCTL312	.31"	(7.94)	100 lbs	(445)	26.1"	(663)	3.4"	(86.36)	.50"	(12.7)	Black	150

Installation tools - MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

## Cable Ties and Edge Clips

HellermannTyton's edge clips are designed specifically to route bundles by securing them to the edge of a plastic or metal sheet without the need for a mounting hole. The clip is easy to secure and the extraction force is high due to the integrated metal clamp that holds the edge clip in place. Edge clips are available in three configurations: a two piece clip and tie assembly, a one piece clip and tie combination, and a edge clip and tape bar combination. When noted (\*), cable ties are outside serrated which can reduce bundle chafing.

### Two Pieces Edge Clip and Cable Tie Assemblies



T50ROSEC4A - the cable bundle runs parallel with the edge.

Material Data- Cable Tie		RoHS
Material	<b>Polyamide 6.6 heat stabilized (PA66HS)</b>	
Color	<b>Black</b>	
Operating Temperature	<b>-40 °F to +221 °F (-40 °C to +105 °C) continuous</b>	
Flammability	<b>UL94 V2</b>	
Material Data - Edge Clip		RoHS
Material	<b>Polyamide 6.6 impact modified, heat stabilized, UV resistant (PA66HIRHS)</b>	
Color	<b>Black</b>	
Operating Temperature	<b>-40 °F to +230 °F (-40 °C to +110 °C) continuous</b>	
Flammability	<b>UL94 HB</b>	

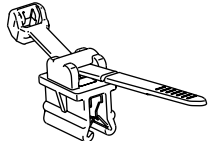
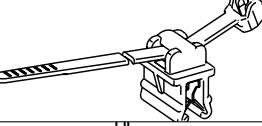

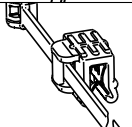
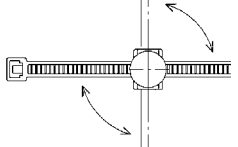
Product Selection								
Article No.	Part No.	Type	Min. Tensile Strength		Length (L) in. (mm)	Max. Ø Bundle in. (mm)	Pkg. Qty.	Drawing
			lbs.	(N)				
<b>Panel Thickness, — .039" .117" (1-3mm)</b>								
150-76090	<b>150-76090</b>	T30REC4A	30 lbs	(135)	5.9" (150)	1.3" (33)	500	
156-00858	<b>156-00858</b>	T50SOSEC4A	50 lbs	(225)	5.9" (150)	1.2" (31)	500	
156-00539	<b>156-00539</b>	T50REC4A	50 lbs	(225)	8" (202)	1.8" (45)	500	
156-00860	<b>156-00860</b>	T50ROSEC4A	50 lbs	(225)	7.9" (200)	1.8" (45)	500	
156-00856	<b>156-00856</b>	T30REC4B	50 lbs	(135)	5.9" (150)	1.3" (33)	500	
156-00859	<b>156-00859</b>	T50SOSEC4B	50 lbs	(225)	6.5" (165)	1.2" (31)	500	
156-00861	<b>156-00861</b>	T50ROSEC4B	50 lbs	(225)	8" (202)	1.8" (45)	500	
156-00538	<b>156-00538</b>	T50REC4B	50 lbs	(225)	7.9" (200)	1.8" (45)	500	
156-00865	<b>156-00865</b>	T50SOSEC5A	50 lbs	(225)	5.9" (150)	1.2" (31)	500	
156-00864	<b>156-00864</b>	T50ROSEC5A	50 lbs	(225)	7.9" (200)	1.8" (45)	500	
156-01007	<b>156-01007</b>	T50RDHEC5A	50 lbs	(225)	8.3" (210)	1.8" (45)	500	
156-00541	<b>156-00541</b>	T50REC5A	50 lbs	(225)	7.9" (200)	1.8" (45)	500	
156-00863	<b>156-00863</b>	T50SOSEC5B	50 lbs	(225)	5.9" (150)	1.2" (31)	500	
156-00540	<b>156-00540</b>	T50REC5B	50 lbs	(225)	8" (202)	1.8" (45)	500	
156-00862	<b>156-00862</b>	T50ROSEC5B	50 lbs	(225)	7.9" (200)	1.8" (45)	500	

Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. \* outside serrated cable tie Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

Two Piece Edge Clip and Cable Tie Assemblies *continued*

Material Data- Cable Tie		RoHS
Material	<b>Polyamide 6.6 heat stabilized (PA66HS)</b>	
Color	<b>Black</b>	
Operating Temperature	<b>-40 °F to +221 °F (-40 °C to +105 °C) continuous</b>	
Flammability	<b>UL94 V2</b>	

Material Data - Edge Clip		RoHS
Material	<b>Polyamide 6.6 impact modified, heat stabilized, UV resistant (PA66HIRHS)</b>	
Color	<b>Black</b>	
Operating Temperature	<b>-40 °F to +230 °F (-40 °C to +110 °C) continuous</b>	
Flammability	<b>UL94 HB</b>	

Product Selection			Min. Tensile Strength	Length (L)	Max. Ø Bundle	Pkg. Qty.	Drawing
Article No.	Part No.	Type					
Panel Thickness, — .039" - .117" (1-3mm)							
155-37104	<b>155-37104</b>	T18REC9	18 lbs (80)	3.9" (100)	.75" (19)	500	
156-00866	<b>156-00866</b>	T50SOSEC9	50 lbs (225)	5.9" (150)	1.2" (31)	500	
156-00867	<b>156-00867</b>	T50ROSEC9	50 lbs (225)	7.9" (200)	1.8" (45)	500	
156-00868	<b>156-00868</b>	T18REC10	18 lbs (80)	3.9" (100)	.79" (20)	500	
156-00871	<b>156-00871</b>	T50ROSEC10	50 lbs (225)	7.9" (200)	1.8" (45)	500	
156-00017	<b>156-00017</b>	T50SOSEC21	50 lbs (225)	5.9" (150)	1.3" (33)	500	
156-00874	<b>156-00874</b>	T50ROSEC21	50 lbs (225)	7.9" (200)	1.8" (45)	500	
156-00875	<b>156-00875</b>	T50SOSEC22	50 lbs (225)	5.9" (150)	1.3" (33)	500	
156-00876	<b>156-00876</b>	T50ROSEC22	50 lbs (225)	7.9" (200)	1.8" (45)	500	
156-01601	<b>156-01601</b>	CBTO-50R	50 lbs (225)	8" (202)	1.85" (47)	500	

Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P.

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### Two Piece Edge Clip and Cable Tie Assemblies *continued*

Product Selection										
Article No.	Part No.	Type	Min. Tensile Strength		Length (L)		Max. Ø Bundle	Pkg. Qty.	Drawing	
			lbs.	(N)	in.	(mm)	in.			(mm)
Panel Thickness — .117" - .234" (3-6 mm)										
156-04600	<b>156-04600</b>	T18ROSEC19	18 lbs	(80)	3.9"	(100)	.79"	(20)	500	
156-04601	<b>156-04601</b>	T50SOSEC19	50 lbs	(225)	5.9"	(150)	1.2"	(31)	500	
156-00872	<b>156-00872</b>	T50ROSEC19	50 lbs	(225)	7.9"	(200)	1.8"	(45)	500	
156-00016	<b>156-00016</b>	T50SOSEC20	50 lbs	(225)	5.9"	(150)	1.3"	(33)	500	
156-00873	<b>156-00873</b>	T50ROSEC20	50 lbs	(225)	7.9"	(200)	1.8"	(45)	500	
156-00877	<b>156-00877</b>	T50ROSEC23	50 lbs	(225)	7.9"	(200)	1.8"	(45)	500	
156-00878	<b>156-00878</b>	T50ROSEC24	50 lbs	(225)	7.9"	(200)	1.8"	(45)	500	

Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### One Piece Edge Clip and Cable Tie Combinations

The plastic area of the edge clips and the cable ties are molded together.

Material Data	
Material	Polyamide 6.6 heat stabilized (PA66HS)
Color	Black
Operating Temperature	-40 °F to +221 °F (-40 °C to +105 °C) continuous
Flammability	UL94 HB



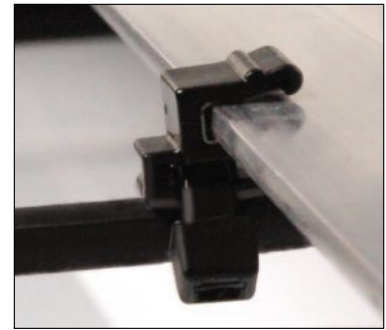
Product Selection										
Article No.	Part No.	Type	Min. Tensile Strength		Length (L)		Max. Ø Bundle	Pkg. Qty.	Drawing	
			lbs.	(N)	in.	(mm)	in.			(mm)
Panel Thickness — .039" - .117" (1-3 mm)										
126-00036	<b>126-00036</b>	T50SOSEC34E	40 lbs	(180)	6"	(155)	1.8"	(35)	500	
148-00200	<b>148-00200</b>	T50SOSECIZE	40 lbs	(180)	6"	(160)	1.2"	(35)	500	
126-00000	<b>126-00000</b>	T50SOSEC1ZE	40 lbs	(180)	8"	(160)	1.8"	(35)	500	

Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.



## Edge Clip and UV Stabilized Tie Assemblies

HellermannTyton's high-performance edge clip and UV stabilized cable tie assemblies are designed specifically to route cables by securing them to a metal or plastic frame rail edge, eliminating the need for mounting holes and mechanical fasteners. The clip is easy to secure and the extraction force is high due to the integrated metal clamp that holds the edge clip in place. The cable tie firmly grips the cable, preventing chafing of the cable and ensuring long-term reliability.



### Material Data - Mounts

Material	<b>Polyamide 6.6 – Impact Modified, Heat Stabilized, UV Stabilized (PA66HIRHSUV)</b>
Operating Temperature	<b>-40 °F to +230°F (-40 °C to +110 °C) continuous</b>
Flammability	<b>UL94 HB</b>



### Material Data - Ties

Material	<b>Polyamide 6.6 – 2% Carbon UV Stabilized (OUV)</b>
Operating Temperature	<b>-40 °F to +185°F (-40 °C to +85 °C) continuous</b>
Flammability	<b>UL94 V2</b>



### Product Selection

Article No.	Part No.	Type	Min. Tensile Strength	Length	Max Bundle	Color	Pkg. Qty	Drawing
			lbs. (N)	in. (mm)	in. (mm)			
<b>1-3 mm Edge Thickness</b>								
156-00635	156-00635	T50REC4A	50 (225)	7.9 (200)	1.8 (45)	Black	100	
156-00588	156-00588	T50REC4B	50 (225)	7.9 (200)	1.8 (45)	Black	100	
156-00589	156-00589	T50REC5A	50 (225)	7.9 (200)	1.8 (45)	Black	100	
156-00468	156-00468	T50REC5B	50 (225)	7.9 (200)	1.8 (45)	Black	100	
<b>3-6 mm Edge Thickness</b>								
156-00590	156-00590	T50REC19	50 (225)	7.9 (200)	1.8 (45)	Black	100	
156-00591	156-00591	T50REC20	50 (225)	7.9 (200)	1.8 (45)	Black	100	
156-00592	156-00592	T50REC23	50 (225)	7.9 (200)	1.8 (45)	Black	100	
156-00593	156-00593	T50REC24	50 (225)	7.9 (200)	1.8 (45)	Black	100	

Use **Part No.** for ordering and **Type** for specification purposes.

### Edge Clip and Tape Clip Combination

These clips can be secured to cables with cable ties or tape.

Material Data - Cable Tie and Tape Clip Combination



Material	<b>Polyamide 6.6 impact modified, heat stabilized, UV resistant (PA66HIRHS)</b>
Color	<b>Black</b>
Operating Temperature	<b>-40 °F to +230 °F (-40 °C to +110 °C) continuous</b>
Flammability	<b>UL94 HB</b>

Product Selection

Article No.	Part No.	Type	Length (L)		Width (W)		Pkg. Qty.	Drawing
			in.	(mm)	in.	(mm)		
<b>Panel Thickness — .039" - .117" (1-3 mm)</b>								
151-03404	<b>151-03404</b>	EC14	1.57"	(40.0)	.39"	(10.0)	500	
151-03401	<b>151-03401</b>	EC15	1.57"	(40.0)	.39"	(10.0)	500	
151-03402	<b>151-03402</b>	EC16	1.57"	(40.0)	.39"	(10.0)	500	
151-03403	<b>151-03403</b>	EC17	1.57"	(40.0)	.39"	(10.0)	500	

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

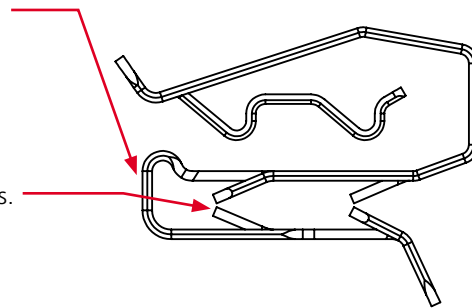
## Metal Edge Clip

HellermannTyton's metal edge clip manages wire and cable on solar panel frames and other channels. Developed for applications where plastic fasteners are not the preferred method, this corrosion-resistant 304 stainless steel clip has smooth, rounded edges that will not abrade wire or cable. The Metal Edge Clip has a larger thumb surface allowing for an effortless insertion by hand and eliminating the need for tools. This clip also features a dual-sided teeth design that makes for an easier insertion and a higher extraction force that tolerates extreme environments and provides assurance that cables are secure on the PV panel or other frame. The clip has a double-compression retention tab to handle either one or two cables. The Metal Edge Clip is easily removed with a flathead screwdriver.



### Product Features & Benefits:

- Larger thumb surface for simple installation.
- Coined edges that prevent the clip from chafing and damaging PV cables.
- Dual-sided teeth offer optimal retention in extreme conditions.
- Configuration fits frames from 1 to 3 mm in thickness.
- Engineered profile accommodates either single or multiple cables.



Material Data	
Material	Stainless Steel Type SS304 (SS304)
Operating Temperature	-112 °F to +1000 °F (-80 °C to +538 °C)



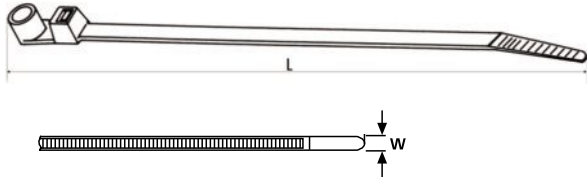
### Product Selection

Article No.	Part No.	Type	Panel Thickness Min. in. (mm)	Panel Thickness Max. in. (mm)	Cable Dia. Min. in. (mm)	Cable Dia. Max. in. (mm)	Length in. (mm)	Width in. (mm)	Color	Bag Qty.	Carton Qty.	Sample Pack No.
151-00982	151-00982	MSC2	.04" (1)	.12" (3)	.20" (5)	.30" (7.6)	.95" (24)	.50" (13)	n/a	100	5000	SPLMSC2

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

Screw Mount Ties

Material Data	
Material	Polyamide 6.6 (PA66)
Operating Temperature	-40 °F to +185 °F (-40 °C to +85 °C) continuous
Flammability	UL94 V2



Product Selection

Article No.	Part No.	Type	Mounting	Min. Tensile Strength lbs. (N)	Length (L) in. (mm)	Max. Ø Bundle in. (mm)	Width (W) in. (mm)	Color	Pkg. Qty.
<b>T18MR</b>									
113-00026	T18MR9C2	T18MR	# 4 screw	18 lbs (80)	4.33" (110)	.79" (20)	.10" (2.5)	Natural	100
113-00028	T18MR9M4	T18MR		18 lbs (80)	4.33" (110)	.79" (20)	.10" (2.5)	Natural	1000
113-00022	T18MR0C2	T18MR		18 lbs (80)	4.33" (110)	.79" (20)	.10" (2.5)	Black	100
113-00024	T18MR0M4	T18MR		18 lbs (80)	4.33" (110)	.79" (20)	.10" (2.5)	Black	1000
<b>T30MR</b>									
113-03019	T30MR9C2	T30MR	# 8 screw	30 lbs (135)	6.30" (160)	1.26" (32)	.14" (3.5)	Natural	100
113-00036	T30MR9M4	T30MR		30 lbs (135)	6.30" (160)	1.26" (32)	.14" (3.5)	Natural	1000
113-03010	T30MR0C2	T30MR		30 lbs (135)	6.30" (160)	1.26" (32)	.14" (3.5)	Black	100
113-03011	T30MR0M4	T30MR		30 lbs (135)	6.30" (160)	1.26" (32)	.14" (3.5)	Black	1000
<b>T50MR</b>									
113-05004	T50MR9C2	T50MR	# 10 screw	50 lbs (225)	8.46" (215)	1.77" (45)	.18" (4.6)	Natural	100
113-05007	T50MR9M4	T50MR		50 lbs (225)	8.46" (215)	1.77" (45)	.18" (4.6)	Natural	1000
113-05000	T50MR0C2	T50MR		50 lbs (225)	8.46" (215)	1.77" (45)	.18" (4.6)	Black	100
113-05002	T50MR0M4	T50MR		50 lbs (225)	8.46" (215)	1.77" (45)	.18" (4.6)	Black	1000
<b>T50MI</b>									
113-00032	T50MI9C2	T50MI	# 10 screw	50 lbs (225)	12.40" (315)	3.35" (85)	.19" (4.7)	Natural	100
113-00033	T50MI9M4	T50MI		50 lbs (225)	12.40" (315)	3.35" (85)	.19" (4.7)	Natural	1000
113-00038	T50MI0C2	T50MI		50 lbs (225)	12.40" (315)	3.35" (85)	.19" (4.7)	Black	100
113-00031	T50MI0M4	T50MI		50 lbs (225)	12.40" (315)	3.35" (85)	.19" (4.7)	Black	1000
<b>T50ML</b>									
113-05419	T50ML9C2	T50ML	# 10 screw	50 lbs (225)	15.35" (390)	4.00" (100)	.18" (4.6)	Natural	100
113-05403	T50ML9M4	T50ML		50 lbs (225)	15.35" (390)	4.00" (100)	.18" (4.6)	Natural	1000
113-00007	T50ML0C2	T50ML		50 lbs (225)	15.35" (390)	4.00" (100)	.18" (4.6)	Black	100
113-00035	T50ML0M4	T50ML		50 lbs (225)	15.35" (390)	4.00" (100)	.18" (4.6)	Black	1000
<b>T120MR</b>									
113-12029	T120MR9K2	T120MR	# 1/4" screw	120 lbs (535)	15.55" (395)	4.02" (102)	.30" (7.6)	Natural	50
113-00018	T120MR9H4	T120MR		120 lbs (535)	15.55" (395)	4.02" (102)	.30" (7.6)	Natural	500
113-12020	T120MR0K2	T120MR		120 lbs (535)	15.55" (395)	4.02" (102)	.30" (7.6)	Black	50
113-00011	T120MR0H4	T120MR		120 lbs (535)	15.55" (395)	4.02" (102)	.30" (7.6)	Black	500

Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### Fir Tree Mount and Cable Tie Assemblies

HellermannTyton's fir tree mounts provide a secure grip in a mounting hole and protect against dirt and other impurities. The mount can slide along the strap of the tie for proper orientation. The fir tree mounts are designed to provide a low insertion force and high extraction force. These mounts are sold as an assembly with the cable tie.



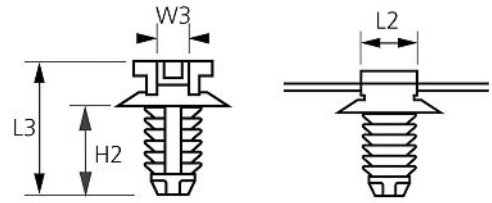
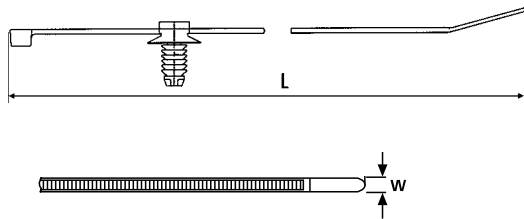
Material Data - All Cable Ties/ FT4, FT7, FT8 and FT10 Mounts

Material	<b>Polyamide 6.6 heat stabilized (PA66HS)</b>
Operating Temperature	<b>-40 °F to +221 °F (-40 °C to +105 °C)</b>
Color	<b>Black</b>
Flammability	<b>UL94 V2</b>



Material Data - FT5, FT6 and FT6LG Mounts

Material	<b>Polyamide 6.6 impact modified, heat stabilized, UV resistant (PA66HIRHS)</b>
Operating Temperature	<b>-40 °F to +230 °F (-40 °C to +110 °C)</b>
Color	<b>Black</b>
Flammability	<b>UL94 HB</b>

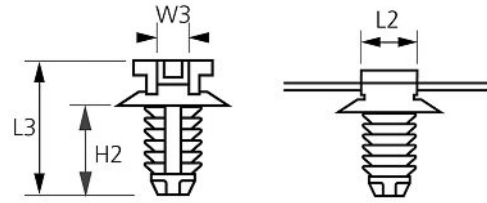
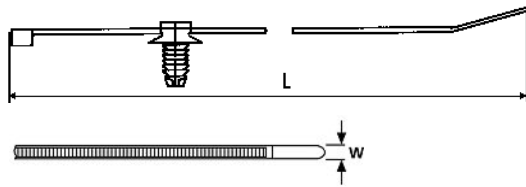


Product Selection

Article No.	Part No.	Type	Min. Tensile Strength lbs. (N)	Max. Ø Bundle in. (mm)	Cable Tie		Mount					Pkg. Qty.
					Length (L) in. (mm)	Width (W) in. (mm)	Disc Ø in. (mm)	Length (L2) in. (mm)	Length (L3) in. (mm)	Width (W3) in. (mm)	Height (H2) in. (mm)	
<b>FT4 - Mounting Hole Ø: .13" - .16" (3.3 - 4.0mm) - Panel Thickness: .04" - .118" (1.0 - 3.0mm)</b>												
156-00953	<b>156-00953</b>	T30RFT4	30 lbs (135)	1.38" (35)	5.8" (148)	.14" (3.6)	.51" (13.0)	.33" (8.5)	.46" (11.8)	.20" (5.0)	.22" (5.6)	500
<b>FT5 - Mounting Hole Ø: .177" - .197" (4.5-5.0mm) - Panel Thickness: .028" - .193" (0.7 - 3.0mm)</b>												
150-55850	<b>150-55850</b>	T30RFT5	30 lbs (135)	1.38" (35)	5.8" (148)	.14" (3.6)	.63" (16.0)	.46" (11.6)	.52" (13.2)	.20" (5)	.27" (6.9)	500
156-00025	<b>156-00025</b>	T50RFT5	50 lbs (225)	1.75" (44.5)	8" (203.2)	.18" (4.6)	.63" (16.0)	.46" (11.6)	.52" (13.2)	.20" (5)	.27" (6.9)	500
<b>FT6 - Mounting Hole Ø: .252" - .28" (6.4-7.1mm) - Panel Thickness: .028" - .193" (0.75 - 3.0mm)</b>												
150-77940	<b>150-77940</b>	T30RFT6	30 lbs (135)	1.38" (35)	5.8" (148)	.14" (3.6)	.63" (16.0)	.46" (11.6)	.54" (13.8)	.20" (5)	.295" (7.5)	500
156-00156	<b>156-00156</b>	T50SFT6	50 lbs (225)	1.38" (35)	6.3" (160)	.18" (4.6)	.63" (16.0)	.46" (11.6)	.54" (13.8)	.20" (5)	.295" (7.5)	500
156-00157	<b>156-00157</b>	T50RFT6	50 lbs (225)	1.75" (44.5)	8" (203.2)	.18" (4.6)	.63" (16.0)	.46" (11.6)	.54" (13.8)	.20" (5)	.295" (7.5)	500
156-00066	<b>156-00066</b>	T50LFT6	50 lbs (225)	4.33" (110)	15" (380)	.18" (4.7)	.63" (16)	.46" (11.6)	.54" (13.8)	.20" (5)	.295" (7.5)	500

Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

**Fir Tree Mount and Cable Tie Assemblies *continued***



Product Selection												
Article No.	Part No.	Type	Min. Tensile Strength lbs. (N)	Max. Ø Bundle in. (mm)	Cable Tie		Mount					Pkg. Qty.
					Length (L) in. (mm)	Width (W) in. (mm)	Disc Ø in. (mm)	Length (L2) in. (mm)	Length (L3) in. (mm)	Width (W3) in. (mm)	Height (H2) in. (mm)	
<b>FT6LG - Mounting Hole Ø: .256" - .276" (6.4-7.1mm) - Panel Thickness: .03" - .24" (0.75 - 6.0mm)</b>												
150-31090	<b>150-31090</b>	T30RFT6LG	30 lbs (135)	1.38" (35)	5.8" (148)	.14" (3.6)	.63" (16)	.46" (11.6)	.69" (17.5)	.19" (5)	.44" (11.1)	500
150-31093	<b>150-31093</b>	T50SFT6LG	50 lbs (225)	1.38" (35)	6.3" (160)	.18" (4.6)	.63" (16)	.46" (11.6)	.69" (17.5)	.19" (5)	.44" (11.1)	500
150-31091	<b>150-31091</b>	T50RFT6LG	50 lbs (225)	1.75" (44)	8" (203.2)	.18" (4.6)	.63" (16)	.46" (11.6)	.69" (17.5)	.19" (5)	.44" (11.1)	500
156-00054	<b>156-00054</b>	T50IFT6LG	50 lbs (225)	3.35" (85)	11.8" (300)	.18" (4.6)	.63" (16)	.46" (11.6)	.69" (17.5)	.19" (5)	.44" (11.1)	500
<b>FT7 - Mounting Hole Ø: .256" - .276" (6.5-7.0mm) - Panel Thickness: .031" - .276" (0.8 - 7.0mm)</b>												
156-00057	<b>156-00057</b>	T30RFT7	30 lbs (135)	1.38" (35)	5.8" (148)	.14" (3.6)	.63" (16)	.46" (11.6)	.75" (19)	.20" (5)	.5" (12.7)	500
156-00056	<b>156-00056</b>	T50SFT7	50 lbs (225)	1.38" (35)	6.3" (160)	.18" (4.6)	.63" (16)	.46" (11.6)	.75" (19)	.20" (5)	.5" (12.7)	500
111-85871	<b>111-85871</b>	T50RFT7	50 lbs (225)	1.75" (44)	8" (203.2)	.18" (4.6)	.63" (16)	.46" (11.6)	.75" (19)	.20" (5)	.5" (12.7)	500
111-05350	<b>111-05350</b>	T50IFT7	50 lbs (225)	3.35" (85)	11.8" (300)	.18" (4.6)	.63" (16)	.46" (11.6)	.75" (19)	.20" (5)	.5" (12.7)	500
156-00055	<b>156-00055</b>	T50LFT7	50 lbs (225)	4.33" (110)	15" (380)	.18" (4.7)	.63" (16)	.46" (11.6)	.75" (19)	.20" (5)	.5" (12.7)	500
<b>FT8 - Mounting Hole Ø: .3" - .31" (7.7-8.0mm) - Panel Thickness: .03" - .31" (0.8 - 8.0mm)</b>												
156-00375	<b>156-00375</b>	T30RFT8	30 lbs (135)	1.38" (35)	5.8" (148)	.14" (3.6)	.63" (16)	.47" (12.0)	.7" (17.8)	.35" (9)	.45" (11.5)	500
156-00376	<b>156-00376</b>	T50RFT8	50 lbs (225)	1.75" (44)	8" (203.2)	.18" (4.6)	.63" (16)	.47" (12.0)	.7" (17.8)	.35" (9)	.45" (11.5)	500
156-00377	<b>156-00377</b>	T50IFT8	50 lbs (225)	3.35" (81)	11.8" (300)	.18" (4.6)	.63" (16)	.47" (12.0)	.7" (17.8)	.35" (9)	.45" (11.5)	500
156-00378	<b>156-00378</b>	T50LFT8	50 lbs (225)	4.33" (110)	15" (380)	.18" (4.7)	.63" (16)	.47" (12.0)	.7" (17.8)	.35" (9)	.45" (11.5)	500
<b>FT10 - Mounting Hole Ø: .38" - .39" (9.7-10.0mm) - Panel Thickness: .031" - .236" (0.8 - 5.0mm)</b>												
156-00089	<b>156-00089</b>	T30RFT10	30 lbs (135)	1.38" (35)	5.8" (148)	.14" (3.6)	.71" (18)	.47" (12)	.75" (18.6)	.20" (5)	.48" (12.1)	500
156-00090	<b>156-00090</b>	T50SFT10	50 lbs (225)	1.38" (35)	6.3" (160)	.18" (4.6)	.71" (18)	.47" (12)	.75" (18.6)	.20" (5)	.48" (12.1)	500
156-00091	<b>156-00091</b>	T50RFT10	50 lbs (225)	1.75" (44)	8" (203.2)	.18" (4.6)	.71" (18)	.47" (12)	.75" (18.6)	.20" (5)	.48" (12.1)	500
156-00092	<b>156-00092</b>	T50IFT10	50 lbs (225)	3.35" (81)	11.8" (300)	.18" (4.6)	.71" (18.0)	.47" (12)	.75" (18.6)	.20" (5)	.48" (12.1)	500
156-00093	<b>156-00093</b>	T50LFT10	50 lbs (225)	4.33" (110)	15" (380)	.18" (4.7)	.71" (18)	.47" (12)	.75" (18.6)	.20" (5)	.48" (12.1)	500

Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

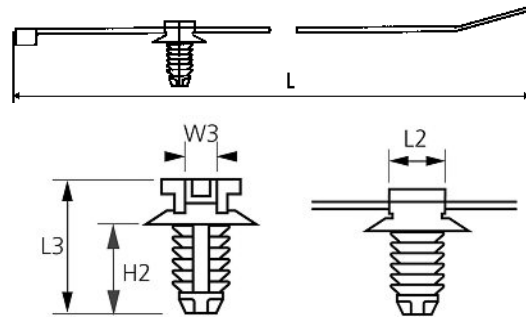


## High Temperature Fir Tree Mount and Cable Tie Assemblies

HellermannTyton's high temperature fir tree mounts and cable tie assemblies provide excellent resistance in operating temperatures up to 275°F (135°C), while still maintaining tensile and retention strength properties.



Material Data	
Material	Polyamide 4.6 (PA46)
Operating Temperature	-40 °F to +275 °F (-40 °C to +135 °C) continuous
Flammability	UL94 V2



Product Selection		Min. Tensile Strength lbs. (N)	Max. Ø Bundle in. (mm)	Cable Tie		Mount					Pkg. Qty.
Part No.	Type			Length (L)	Width (W)	Disc Ø	Length (L2)	Length (L3)	Width (W3)	Height (H2)	
				in. (mm)	in. (mm)						
<b>FT5 - Mounting Hole Ø : .177" - .197" (4.5 - 5.0mm) - Panel Thickness: .028" - .12" (0.7 - 3.0mm)</b>											
150-55948	T30RFT5	30 lbs (135)	1.34" (34)	5.9" (150)	.14" (3.6)	.63" (16)	.46" (11.6)	.52" (13.2)	.20" (5.0)	.27" (6.9)	500
<b>FT6 - Mounting Hole Ø : .25" - .28" (6.4 - 7.1mm) - Panel Thickness: .03" - .12" (0.75 - 3.0mm)</b>											
150-77938	T50RFT6	50 lbs (225)	1.8" (45)	7.87" (200)	.18" (4.6)	.63" (16)	.46" (11.6)	.54" (13.8)	.20" (5.0)	.3" (7.5)	500
156-00085	T50RO SFT6SD	50 lbs (225)	1.8" (45)	7.87" (200)	.18" (4.6)	.63" (16)	.46" (11.6)	.57" (14.5)	.21" (5.2)	.3" (7.5)	500
<b>FT6LG - Mounting Hole Ø : .25" - .28" (6.4 - 7.1mm) - Panel Thickness: .03" - .24" (0.75 - 6.0mm)</b>											
150-31098	T50RF T6LG	50 lbs (225)	1.8" (45)	7.87" (200)	.18" (4.6)	.63" (16)	.46" (11.6)	.69" (17.5)	.20" (5.0)	.44" (11.1)	500
<b>FT7HD - Mounting Hole Ø : .244" - .284" (6.2 - 7.2mm) - Panel Thickness: .03" - .276" (0.8 - 7.0mm)</b>											
156-00457	T50RF T7HD	50 lbs (225)	1.8" (45)	7.87" (200)	.18" (4.6)	.63" (16)	.46" (11.6)	.78" (19.3)	.232" (5.9)	.36" (12.4)	500
<b>FT8G - Mounting Hole Ø : .32" - .33" (8.0 - 8.5mm) - Panel Thickness: .06" - .16" (1.5 - 4.0mm)</b>											
156-00235	T50RF T8GSD	50 lbs (225)	1.8" (45)	7.87" (200)	.18" (4.6)	.63" (16)	.46" (11.6)	.68" (17.2)	.24" (6.0)	.18" (4.6)	500

Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

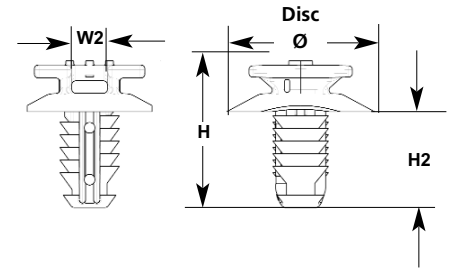
### Fir Tree Mount For Automatic Cable Tie Tool System

Engineered for use with HellermannTyton's automatic cable tie tool systems, this fir tree mount has an anti-rotational design and features a low insertion force and high extraction force. For more information on automatic tool systems, see page 88.

Material Data	
Material	<b>Polyamide 6.6 impact modified, heat stabilized, UV resistant (PA66HIRHS)</b>
Color	<b>Black</b>
Operating Temperature	<b>-40 °F to +230 °F (-40 °C to +110 °C) continuous</b>
Flammability	<b>UL94 HB</b>



Product Selection							
Article No.	Part No.	Type	Disc Ø in. (mm)	Width (W2) in. (mm)	Height (H) in. (mm)	Height (H2) in. (mm)	Pkg. Qty.
<b>FT7AT - Mounting Hole Ø: .24" - .28" (6.0 - 7.0mm) - Panel Thickness: .03" - .276" (0.8 - 7.0mm)</b>							
151-00492	<b>151-00492</b>	FT7AT	.73" (18.6)	.18" (4.5)	.72" (18.34)	.47" (11.9)	100

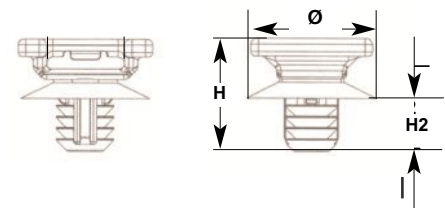
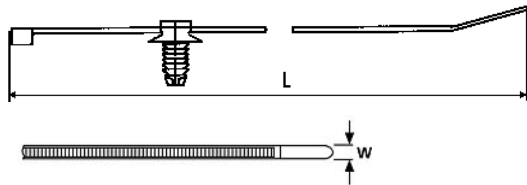


Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### Heavy Duty Fir Tree Mounts and Cable Tie Assemblies

The FT7HD, is a heavy duty alternative to HellermannTyton's standard FT7 mount and cable tie assembly. The H profile of the mount offers durability and the assembly is available with a 50 lb. cable tie in 8" and 11.8" lengths.

Material Data	
Material	<b>Polyamide 6.6 impact modified, heat stabilized, UV resistant (PA66HIRHS)</b>
Color	<b>Black</b>
Operating Temperature	<b>-40 °F to +230 °F (-40 °C to +110 °C) continuous</b>
Flammability	<b>UL94 HB</b>



Product Selection											
Article No.	Part No.	Type	Min. Tensile Strength lbs. (N)	Max. Ø Bundle in. (mm)	Cable Tie		Mount				Pkg. Qty.
					Length (L) in. (mm)	Width (W) in. (mm)	Disc Ø in. (mm)	Width (W2) in. (mm)	Height (H) in. (mm)	Height (H2) in. (mm)	
<b>FT7HD - Mounting Hole Ø: .24" - .28" (6.2 - 7.2mm) - Panel Thickness: .03" - .276" (0.8 - 7.0mm)</b>											
156-00329	<b>156-00329</b>	T50RFT7HD	50 lbs (225)	1.75" (44)	8" (203.2)	.18" (4.6)	.85" (21.6)	.232" (5.9)	.78" (19.8)	.36" (12.4)	500
156-00282	<b>156-00282</b>	T50LFT7HD	50 lbs (225)	3.35" (85)	11.8" (300)	.18" (4.6)					

Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

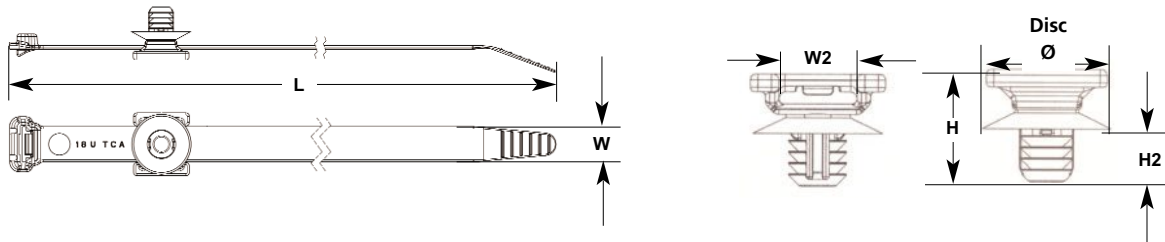
### Heavy Duty Fir Tree Mounts and Cable Tie Assemblies *continued*

Designed specifically for 120 - 250 lb. cable ties, the heavy duty fir tree mounts are optimized for up to 3 to 1 extraction versus insertion force. The "H" profile provides a broad surface contact to minimize the pinching of bundles and will easily hold bundles ranging from 3/8" to 3". Heavy duty fir tree mounts are equipped with a friction tab that will hold the tie in the mount, allowing them to be preassembled prior to installation. These mounts are sold as an assembly with the cable tie.

Material Data-Fir Tree Mount and WSS, WSI, WSR Cable Ties	
Material	<b>Polyamide 6.6 impact modified, heat stabilized, UV resistant (PA66HIRHS)</b>
Color	<b>Black</b>
Operating Temperature	<b>-40 °F to +230 °F (-40 °C to +110 °C) continuous</b>
Flammability	<b>UL94 HB</b>



Material Data - T120R Cable Tie	
Material	<b>Polyamide 6.6 heat stabilized (PA66HS)</b>
Color	<b>Black</b>
Operating Temperature	<b>-40 °F to +221 °F (-40 °C to +105 °C) continuous</b>
Flammability	<b>UL94 HB</b>



Product Selection

Article No.	Part No.	Type	Min. Tensile Strength lbs. (N)	Max. Ø Bundle in. (mm)	Cable Tie		Mount				Pkg. Qty.
					Length (L) in. (mm)	Width (W) in. (mm)	Disc Ø in. (mm)	Width (W2) in. (mm)	Height (H) in. (mm)	Height (H2) in. (mm)	
<b>FT9A - Mounting Hole Ø: .343" - .363" (8.75 - 9.25mm) - Panel Thickness: .04" - .26" (1.0 - 6.5mm)</b>											
156-00067	156-00067	T120RFT9A	120 lbs (534)	4" (101.6)	15.25" (387.4)	.30" (7.6)	.85" (21.6)	.51" (13)	.75" (19.1)	.36" (9)	100
156-00068	156-00068	WSSFT9A	120 lbs (534)	2.25" (57.1)	9" (228.6)	.50" (12.7)	.85" (21.6)	.51" (13)	.75" (19.1)	.36" (9)	100
156-00069	156-00069	WSIFT9A	120 lbs (534)	3.25" (82.5)	12" (304.8)	.50" (12.7)	.85" (21.6)	.51" (13)	.75" (19.1)	.36" (9)	100
156-00070	156-00070	WSRFT9A	120 lbs (534)	4.13" (104.8)	15" (381)	.50" (12.7)	.85" (21.6)	.51" (13)	.75" (19.1)	.36" (9)	100

Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

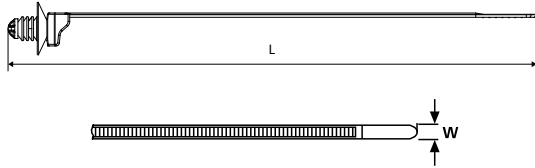
Product Selection

Article No.	Part No.	Type	Min. Tensile Strength lbs. (N)	Max. Ø Bundle in. (mm)	Cable Tie		Mount				Pkg. Qty.
					Length (L) in. (mm)	Width (W) in. (mm)	Disc Ø in. (mm)	Width (W2) in. (mm)	Height (H) in. (mm)	Height (H2) in. (mm)	
<b>FT9B - Mounting Hole Ø: .343" - .363" (8.75 - 9.25mm) - Panel Thickness: .04" - .62" (1.0 - 15.8 mm)</b>											
156-00071	156-00071	T120RFT9B	120 lbs (534)	4" (101.6)	15.25" (387.4)	.30" (7.6)	.85" (21.6)	.51" (13)	1.12" (28.4)	.73" (18.4)	100
156-00072	156-00072	WSSFT9B	120 lbs (534)	2.25" (57.1)	9" (228.6)	.50" (12.7)	.85" (21.6)	.51" (13)	1.12" (28.4)	.73" (18.4)	100
156-00074	156-00074	WSRFT9B	120 lbs (534)	4.13" (104.8)	15" (381)	.50" (12.7)	.85" (21.6)	.51" (13)	1.12" (28.4)	.73" (18.4)	100

Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### Cable Tie with Fir Tree Mount

This fir tree mount tie provides a low insertion force with a high extraction force. The outside serrations present a smooth surface to the cables preventing damage to the insulation. The unique head design allows the cable tie to firmly hold bundles as small as .06" diameter and the disc offers added water protection.



Material Data	
Material	<b>Polyamide 6.6 heat stabilized (PA66HS)</b>
Operating Temperature	<b>-40 °F to +257 °F (-40 °C to +125 °C) continuous</b>
Flammability	<b>UL94 V2</b>

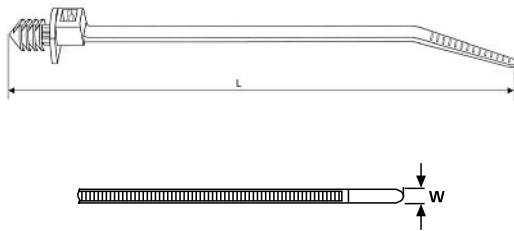


Product Selection										
Article No.	Part No.	Type	Min. Tensile Strength	Mounting Hole Ø	Panel Thickness	Length (L)	Max. Ø Bundle	Width (W)	Color	Pkg. Qty.
			lbs. (N)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)		
157-00108	<b>157-00108</b>	T50SOSFT6E2	40 lbs (180)	.248 - .275" (6.3 - 7.0)	.02 - .16" (.06 - 4.2)	6.3" (160)	1.4" (35)	.18" (4.6)	Black	1000
157-00097	<b>157-00097</b>	T50SOSFT6LG-E	40 lbs (180)	.248 - .275" (6.3 - 7.0)	.03 - .28" (.07 - 7.0)	6.5" (165)	1.4" (35)	.18" (4.6)	Black	1000
157-00140	<b>157-00140</b>	T50SOSFT6LG-E2	40 lbs (180)	.24 - .28" (6.1 - 7.0)	.02 - .32" (.6 - 8.2)	6.7" (170)	1.4" (35)	.18" (4.6)	Black	1000
157-00072	<b>157-00072</b>	T50SOSFT8E	40 lbs (180)	.31 - .33" (8.0 - 8.5)	.02 - .24" (.6 - 6.0)	6.4" (163)	1.4" (35)	.18" (4.6)	Black	1000

Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### Fir Tree Push Mount Ties

Fir tree design grips to the inside of a hole. They can be used on sheet metal, wood, and cast iron. Type T50RTM25E has a longer fir tree for larger panel thicknesses.



Material Data	
Material	<b>Polyamide 6.6 heat stabilized (PA66HS)</b>
Operating Temperature	<b>-40 °F to +221 °F (-40 °C to +105 °C) continuous</b>
Flammability	<b>UL94 V2</b>



Material Data	
Material	<b>Polyamide 6.6 impact modified, heat stabilized, UV resistant (PA66HIRHS)</b>
Operating Temperature	<b>-40 °F to +230 °F (-40 °C to +110 °C) continuous</b>
Flammability	<b>UL94 HB</b>

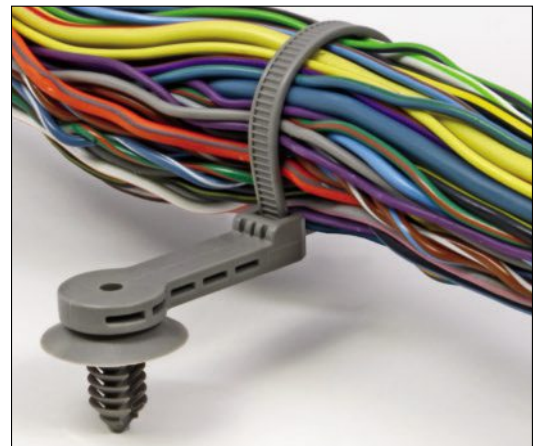
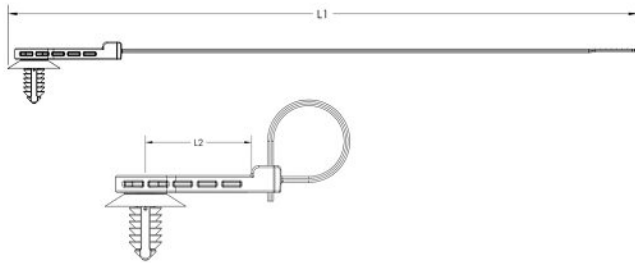


Product Selection										
Article No.	Part No.	Type	Min. Tensile Strength	Mounting Hole Ø	Panel Thickness	Length (L)	Max. Ø Bundle	Width (W)	Color	Pkg. Qty.
			lbs. (N)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)		
<b>Heat Stabilized Material</b>										
126-03501	<b>T50RTM250HSM4</b>	T50RTM25	50 lbs (225)	.25" - .26" (6.5 - 6.6)	.052" - .28" (1.32 - 7.0)	8.27" (210)	1.97" (50.0)	.19" (4.7)	Black	1000
<b>Impact Modified Heat Stabilized, UV Resistant Material</b>										
126-03504	<b>T50RTM25E8HM4</b>	T50RTM25E	50 lbs (225)	.25" - .26" (6.5 - 6.6)	.09" - .55" (2.3 - 13.94)	8.43" (214)	1.97" (50.0)	.19" (4.7)	Gray	1000

Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### Offset Fir Tree Cable Ties

The Offset Cable Ties route and position wire and cable bundles away from a mounting hole. The offset bar between the fir tree and cable tie strap provides a robust and cored-out design to eliminate any potential bending of the wire or cable assembly once installed. The combination of 12.5mm and 25.0mm offset distances and various fir tree sizes offer coverage for a majority of industry offset routing applications. The outside serrations of the tie strap present a smooth surface to the cables preventing any possible damage to soft or delicate bundles.



Material Data		RoHS
Material	<b>Polyamide 6.6 impact modified, heat stabilized, UV resistant (PA66HIRHS)</b>	
Operating Temperature	<b>-40 °F to +230 °F (-40 °C to +110 °C) continuous</b>	
Flammability	<b>UL94 HB</b>	

Product Selection									
Article No.	Part No.	Type	Min. Tensile Strength	Mounting Hole Ø	Length (L1)	Length (L2)	Max. Ø Bundle	Color	Pkg. Qty.
			lbs. (N)	in. (mm)	in. (mm)	in. (mm)	in. (mm)		
157-00118	<b>157-00118</b>	T50ROSFTM6SO12.5A	50 lbs (225)	6mm Threaded	8.5" (215.5)	0.5" (12.5)	1.97" (50)	Gray	500
157-00130	<b>157-00130</b>	T50ROSFT6SO12.5A	50 lbs (225)	0.24 - 0.28" (6.1-7.0)	8.5" (215.5)	0.5" (12.5)	1.97" (50)	Gray	500
157-00119	<b>157-00119</b>	T50ROSFT6SO25A	50 lbs (225)	0.24 - 0.28" (6.1-7.0)	9.0" (230.0)	1.0" (25.0)	1.97" (50)	Gray	500
157-00120	<b>157-00120</b>	T50ROSFT8SO25A	50 lbs (225)	0.30 - 0.33" (7.6-8.4)	9.0" (230.0)	1.0" (25.0)	1.97" (50)	Gray	500

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### Oval Fir Tree Cable Ties

These cable ties feature a fir tree mount that has an innovative four-sided 360° branch design that offers full interference for a wide range of oval hole applications. This industry-first design allows for one part to be used across multiple hole diameters, and delivers cost savings through part consolidation. The clamp rails along the inside of the cable tie strap increase the grip around bundles, lowering the potential for lateral cable bundle movement.



Material Data	
Material	<b>Polyamide 6.6 heat stabilized (PA66HS)</b>
Operating Temperature	<b>-40 °F to +221 °F (-40 °C to +105 °C) continuous</b>
Flammability	<b>UL94 V2</b>



Material Data	
Material	<b>Polyamide 6.6 impact modified, heat stabilized, UV resistant (PA66HIRHS)</b>
Operating Temperature	<b>-40 °F to +230 °F (-40 °C to +110 °C) continuous</b>
Flammability	<b>UL94 HB</b>



Material Data	
Material	<b>Polyamide 4.6 (PA46)</b>
Operating Temperature	<b>-40 °F to +275 °F (-40 °C to +135 °C) continuous</b>
Flammability	<b>UL94 V2</b>



Product Selection									
Article No.	Part No.	Type	Min.Tensile Strength	*Mounting Hole Ø	Length (L1)	Max. Bundle Ø	Material	Pkg. Qty.	
			lbs. (N)	in. (mm)	in. (mm)	in. (mm)			
157-00143	<b>157-00143</b>	T50SOSFTOVALU	50 lbs (225)	6.2x12.2mm	6.6" (168)	1.38" (35)	PA66HS	500	
157-00142	<b>157-00142</b>	T50ROSFTOVALU	50 lbs (225)	6.5x12.5mm	8.6" (219)	1.97" (50)	PA66HIRHS	500	
157-00157	<b>157-00157</b>	T50ROSFTOVALU	50 lbs (225)	6.5x13.0mm 7.0x12.0mm	8.6" (219)	1.97" (50)	PA46	500	

\*Each oval fir tree cable ties fit all four mounting hole diameters. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### Fir Tree Cable Tie for 6mm Threaded Holes

Ideal for use in applications where the ease of insertion and the difficulty of extraction is a primary concern, this fastening device provides for both a low insertion and high extraction force in 6mm threaded mounting holes. This cable tie with fir tree mount features a low-profile head that delivers compact bundling by securing the bundle near the threaded hole. The fir tree functions to spiral downward in a stairwell fashion to provide perfect alignment with the pitch of the threads in the hole. The clamp rails along the inside of the cable tie strap enhance the hold around bundles, lowering the potential for lateral cable bundle movement.



Material Data	
Material	<b>Polyamide 4.6 (PA46)</b>
Operating Temperature	<b>-40 °F to +275 °F (-40 °C to +135 °C) continuous</b>
Flammability	<b>UL94 V2</b>



Material Data	
Material	<b>Polyamide 6.6 impact modified, heat stabilized, UV resistant (PA66HIRHS)</b>
Operating Temperature	<b>-40 °F to +230 °F (-40 °C to +110 °C) continuous</b>
Flammability	<b>UL94 HB</b>



Product Selection									
Article No.	Part No.	Type	Min. Tensile Strength	Mounting Hole Ø	Length (L1)	Max. Bundle Ø	Material	Color	Pkg. Qty.
			lbs. (N)	in. (mm)	in. (mm)	in. (mm)			
157-00112	<b>157-00112</b>	T50ROSFTQM6	50 lbs (225)	6mm Threaded	8.6" (219)	1.97" (50)	PA66HIRHS	Black	500
157-00144	<b>157-00144</b>	T50ROSFTQM6	50 lbs (225)	6mm Threaded	8.6" (219)	1.97"(50)	PA46	Brown	500

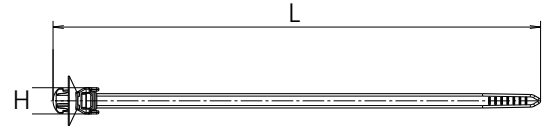
Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.



### Domed Low Profile Push Mount Ties

The low profile push mount design provides an overall shortened length which assists in limiting protrusion on the opposing side of application surfaces. The rounded tip of the mount allows for a smoother surface in case of contact with surrounding components or human touch during service. The dome provides a tight, rattle-free installation and the outside serrated strap has ribs designed for convoluted tubing. The dome also acts as a seal to keep out dust and liquid.

Material Data	
Material	Polyamide 6.6 heat stabilized (PA66HS)
Operating Temperature	-40 °F to +221 °F (-40 °C to +105 °C) continuous
Flammability	UL94 V2



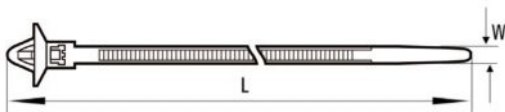
Product Selection		Type	Min. Tensile Strength	Mounting Hole Ø	Panel Thickness	Length (L)	Max. Ø Bundle	Width (W)	Color	Pkg. Qty.
Article No.	Part No.		lbs. (N)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)		
126-00099	126-00099	T50SOSKSFT5SE	40 (180)	.189-.205" (4.8-5.2)	.027 - .051" (.70 - 1.3)	6.2" (156)	1.38" (35.0)	.18" (4.6)	Black	1000
126-00075	126-00075	T50SOSKSFT5.4E	50 (225)	.205-.220" (5.2-5.6)	.027 - .051" (.70 - 1.3)	6.2" (156)	1.38" (35.0)	.18" (4.6)	Black	500
126-00081	126-00081	T50SOSKSFT65E	40 (180)	.248-.264" (6.3-6.7)	.027 - .051" (.70 - 1.3)	6.2" (156)	1.38" (35.0)	.18" (4.6)	Black	500
126-00086	126-00086	T50SOSSTFT6.5S2-E	50 (225)	.25-.26" (6.3-6.7)	.06 - .09" (1.7 - 2.3)	6.2" (156)	1.38" (35.0)	.18" (4.6)	Black	500

Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### Domed Push Mount Ties

The domed head tie provides a tight, rattle-free installation. The dome also acts as a seal to keep out dust and liquid.

Material Data	
Material	Polyamide 6.6 heat stabilized (PA66HS)
Operating Temperature	-40 °F to +221 °F (-40 °C to +105 °C) continuous
Flammability	UL94 V2



Product Selection		Type	Min. Tensile Strength	Mounting Hole Ø	Panel Thickness	Length (L)	Max. Ø Bundle	Width (W)	Color	Pkg. Qty.
Article No.	Part No.		lbs. (N)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)		
111-85350	111-85350	T50SD6	50lbs. (225)	.25 - .30" (6.3 - 7.5)	.023 - .047" (.06 - 1.2)	6.3" (160)	1.22" (31)	1.22" (5.1)	Black	500
126-00015	126-00015	T50SDOP	50lbs. (225)	.25 - .48" (6.2 - 12.2)	.028 - .079" (0.7 - .028)	6.3" (160)	1.18" (30)	1.97" (5.0)	Black	500
126-02300	126-02300	T50SSTS	50lbs. (225)	.24 - .255" (6.1 - 6.5)	.027 - .059" (0.7 - .15)	6.7" (170)	1.22" (31)	.18" (4.6)	Natural	1000
111-85850	111-85850	T50MD7	50lbs. (225)	.267 - .283" (6.8 - 7.2)	.05 - .08" (1.2 - 2.0)	8.9" (225)	2.3" (59)	.2" (5)	Black	100

Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### Push Mount Ties

One-piece, all plastic ties for quick, simple cable mounting.



Material Data	
Material	<b>Polyamide 6.6 (PA66)</b>
Operating Temperature	<b>-40 °F to +185 °F (-40 °C to +85 °C) continuous</b>
Flammability	<b>UL94 V2</b>



**UL** US  
File# E64139

Product Selection

Article No.	Part No.	Type	Min. Tensile Strength		Mounting Hole Ø	Panel Thickness	Length (L)	Max. Ø Bundle	Width (W)	Color	Pkg. Qty.
			lbs.	(N)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)		
<b>T30RSF</b>											
111-85603	<b>T30RSF9C2</b>	T30RSF(U)	30 lbs	(135)	.19" - .22" (4.76-5.59)	.04" - .09" (0.9-2.36)	6.34" (161)	1.25" (31.8)	.14" (3.6)	Natural	100
126-00704	<b>T30RSF9M4</b>	T30RSF(U)	30 lbs	(135)	.19" - .22" (4.76-5.59)	.04" - .09" (0.9-2.36)	6.34" (161)	1.25" (31.8)	.14" (3.6)	Natural	1000
126-00700	<b>T30RSF0C2</b>	T30RSF(U)	30 lbs	(135)	.19" - .22" (4.76-5.59)	.04" - .09" (0.9-2.36)	6.34" (161)	1.25" (31.8)	.14" (3.6)	Black	100
126-00702	<b>T30RSF0M4</b>	T30RSF(U)	30 lbs	(135)	.19" - .22" (4.76-5.59)	.04" - .09" (0.9-2.36)	6.34" (161)	1.25" (31.8)	.14" (3.6)	Black	1000
<b>T50SSF</b>											
126-00043	<b>126-00043</b>	T50SSF	50 lbs	(225)	.25" - .28" (6.4-7.1)	.04" - .14" (1.0-3.56)	6.26" (159)	1.38" (35)	.19" (4.7)	Natural	100
126-00044	<b>126-00044</b>	T50SSF	50 lbs	(225)	.25" - .28" (6.4-7.1)	.04" - .14" (1.0-3.56)	6.26" (159)	1.38" (35)	.19" (4.7)	Natural	1000
126-00045	<b>126-00045</b>	T50SSF	50 lbs	(225)	.25" - .28" (6.4-7.1)	.04" - .14" (1.0-3.56)	6.26" (159)	1.38" (35)	.19" (4.7)	Black	100
126-00046	<b>126-00046</b>	T50SSF	50 lbs	(225)	.25" - .28" (6.4-7.1)	.04" - .14" (1.0-3.56)	6.26" (159)	1.38" (35)	.19" (4.7)	Black	1000
<b>T50RSF</b>											
111-85789	<b>T50RSF9C2</b>	T50RSF(U)	50 lbs	(225)	.25" - .28" (6.4-7.1)	.04" - .14" (1.0-3.56)	8.27" (210)	1.73" (44)	.19" (4.7)	Natural	100
126-01011	<b>T50RSF9M4</b>	T50RSF(U)	50 lbs	(225)	.25" - .28" (6.4-7.1)	.04" - .14" (1.0-3.56)	8.27" (210)	1.73" (44)	.19" (4.7)	Natural	1000
126-01003	<b>T50RSF0C2</b>	T50RSF(U)	50 lbs	(225)	.25" - .28" (6.4-7.1)	.04" - .14" (1.0-3.56)	8.27" (210)	1.73" (44)	.19" (4.7)	Black	100
126-01004	<b>T50RSF0M4</b>	T50RSF(U)	50 lbs	(225)	.25" - .28" (6.4-7.1)	.04" - .14" (1.0-3.56)	8.27" (210)	1.73" (44)	.19" (4.7)	Black	1000

Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### Wing Push Mount Ties

Wing design helps stabilize the tie in high vibration applications. They can be used on sheet metal, wood, and cast iron.



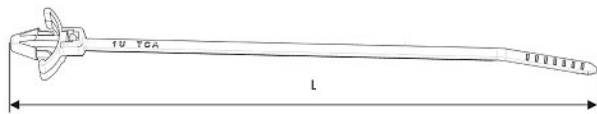
Material Data	
Material	<b>Polyamide 6.6 (PA66)</b>
Operating Temperature	<b>-40 °F to +185 °F (-40 °C to +85 °C) continuous</b>
Flammability	<b>UL94 V2</b>



Material Data	
Material	<b>Polyamide 6.6 impact modified, Heat Stabilized, UV Resistant (PA66HIRHS)</b>
Operating Temperature	<b>-40 °F to +230 °F (-40 °C to +110 °C) continuous</b>
Flammability	<b>UL94 HB</b>



Material Data	
Material	<b>Polyamide 6.6 heat stabilized (PA66HS)</b>
Operating Temperature	<b>-40 °F to +221 °F (-40 °C to +105 °C) continuous</b>
Flammability	<b>UL94 V2</b>



#### Product Selection

Article No.	Part No.	Type	Min. Tensile Strength	Mounting Hole Ø	Panel Thickness	Length (L)	Max. Ø Bundle	Width (W)	Color	Material	Pkg. Qty.
			lbs. (N)	in. (mm)	in. (mm)						
<b>T18RWPM</b>											
126-00041	<b>126-00041</b>	T18RWPM	18 lbs (80)	.19" - .22" (4.76-5.59)	.07" - .13" (1.85 - 3.18)	4.45" (113)	.87" (22)	.10" (2.5)	Natural	PA66	100
126-00603	<b>T18RWPM9M4</b>	T18RWPM	18 lbs (80)	.19" - .22" (4.76-5.59)	.07" - .13" (1.85 - 3.18)	4.45" (113)	.87" (22)	.10" (2.5)		PA66	1000
126-00042	<b>126-00042*</b>	T18RWPM	18 lbs (80)	.19" - .22" (4.76-5.59)	.07" - .13" (1.85 - 3.18)	4.45" (113)	.87" (22)	.10" (2.5)	Black	PA66HS	1000
<b>T50SSFm</b>											
126-00049	<b>126-00049</b>	T50SSFm	50 lbs (225)	.24" - .26" (6.0 - 6.6)	.03" - .12" (.7 - 3.0)	6.3" (160)	1.38" (35)	.18" (4.7)	Black	PA66HIRHS	500
126-00069	<b>126-00069</b>	T50SSFm	50 lbs (225)	.24" - .26" (6.0 - 6.6)	.03" - .12" (.7 - 3.0)	6.3" (160)	1.38" (35)	.18" (4.7)	Natural	PA66	500
<b>T50SL6</b>											
111-85469	<b>T50SL6.NN6P</b>	T50SL6	50 lbs (225)	.24" - .26" (6.1 - 6.5)	.03" - .10" (0.8 - 2.5)	6.50" (165)	1.34" (34)	.18" (4.6)	Natural	PA66	500
<b>T50SL7</b>											
111-85479	<b>T50SL7.NN6P</b>	T50SL7	50 lbs (225)	.27" - .28" (6.9 - 7.1)	.03" - .10" (0.8 - 2.5)	6.50" (165)	1.34" (34)	.18" (4.6)	Natural	PA66	500

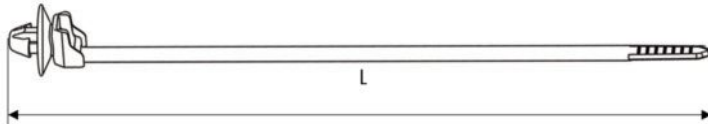
Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes. UL recognition applies to T18RWPM ties. \*UL listing applies to 126-00042.

### Arrowhead Mount Ties with Seal

The arrowhead design of these ties offers a positive, low insertion force and a high extraction force. These ties feature a foam rubber seal which provides additional protection against moisture, dirt and other impurities.



Material Data	
Material	<b>Polyamide 6.6 heat stabilized (PA66HS)</b>
Operating Temperature	<b>-40 °F to +221 °F (-40 °C to +105 °C) continuous</b>
Flammability	<b>UL94 V2</b>



Product Selection		Type	Min. Tensile Strength	Mounting Hole Ø	Panel Thickness	Length (L)	Max. Ø Bundle	Width (W)	Color	Pkg. Qty.
Article No.	Part No.		lbs. (N)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)		
126-03100	<b>126-03100</b>	T50SOSSFT6.5E-MD	50 lbs (225)	.25" - .26" (6.3-6.7)	.02" - .07" (0.6 - 1.8)	6.30" (160)	1.38" (35)	.18" (4.6)	Green	500
156-00264	<b>156-00264</b>	T50SOSSFT6.5E-MD	50 lbs (225)	.25" - .26" (6.3-6.7)	.02" - .07" (0.6 - 1.8)	6.30" (160)	1.38" (35)	.18" (4.6)	Black	500
126-00065*	<b>126-00065</b>	T50SOSSFT6.5E-MS-MD	50 lbs (225)	.25" - .27" (6.3-6.75)	.03" - .06" (0.7 - 1.6)	6.42" (163)	1.38" (35)	.18" (4.6)	Natural	500
156-00444	<b>156-00444</b>	T50ROSAH6MDU	50 lbs (225)	.24 - .25" (6.3 - 6.6)	.03" - .08" (0.7 - 2.1)	8.5" (216)	1.97" (50)	.20" (5.0)	Natural	500

Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.


\*Arrowhead includes a pointed mount feature to assist in puncturing through plastic sheeting and other protective films.

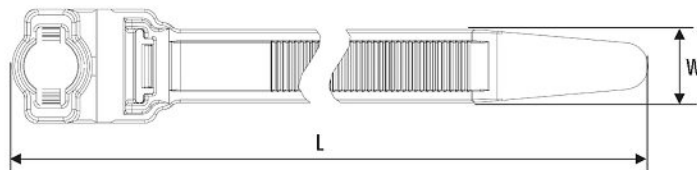
### Wide Strap Heavy Duty Stud Mount Cable Ties

The wide strap stud mount cable tie minimizes pinching on soft bundles and features a low profile head to provide compact bundling. A thinner strap provides increased flexibility for improved ergonomics. Available with a 1/4" and 3/8" stud mount, the wide strap tie utilizes a strong hinge between the stud mount and head to provide superior holding ability on a threaded stud.

- Wide strap to minimize pinching of soft hoses and convoluted tubing
- Clamping rails to increase grip on round bundles
- Wide variation of bundle diameters: .375" - 4.125" (9.5mm - 104.7mm)
- Flexible strap
- Flexible hinge
- Mount provides low insertion and high extraction forces



Material Data		
Material	<b>Polyamide 6.6 impact modified, Heat Stabilized, UV Resistant (PA66HIRHS)</b>	
Operating Temperature	<b>-40 °F to +230 °F (-40 °C to +110 °C) continuous</b>	
Flammability	<b>UL94 HB</b>	



Product Selection			Min. Tensile Strength	Length (L)	Max. Ø Bundle	Width (W)	Color	Pkg. Qty.
Article No.	Part No.	Type						
<b>1/4" (6.35 mm) Stud Mount</b>								
157-00400	<b>157-00400</b>	WSS250	120 lbs (534)	9.7" (246.38)	2.25" (57.15)	.5" (12.7)	Black	300
157-00401	<b>157-00401</b>	WSI250	120 lbs (534)	12.7" (322.58)	3.25" (82.55)	.5" (12.7)	Black	300
157-00402	<b>157-00402</b>	WSR250	120 lbs (534)	15.7" (398.78)	4.125" (104.78)	.5" (12.7)	Black	300
<b>8 mm Stud Mount</b>								
157-00034	<b>157-00034</b>	WSS8MM	120 lbs (534)	9.7" (246.38)	2.25" (57.15)	.5" (12.7)	Black	300
157-00035	<b>157-00035</b>	WSI8MM	120 lbs (534)	12.7" (322.58)	3.25" (82.55)	.5" (12.7)	Black	300
157-00036	<b>157-00036</b>	WSR8MM	120 lbs (534)	15.7" (398.78)	4.125" (104.78)	.5" (12.7)	Black	300
<b>3/8" (9.25 mm) Stud Mount</b>								
157-00403	<b>157-00403</b>	WSS380	120 lbs (534)	9.7" (246.38)	2.25" (57.15)	.5" (12.7)	Black	300
157-00404	<b>157-00404</b>	WSI380	120 lbs (534)	12.7" (322.58)	3.25" (82.55)	.5" (12.7)	Black	300
157-00405	<b>157-00405</b>	WSR380	120 lbs (534)	15.7" (398.78)	4.125" (104.78)	.5" (12.7)	Black	300

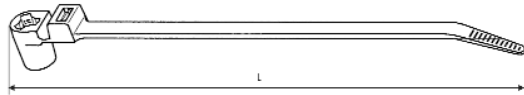
Installation tools - MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### Stud Mount Tie

The stud mount tie mounts and secures a cable bundle in one component. The stud mount tie is designed for use on a 1/4" - 20 UNC threaded stud or the exposed threads of a machine screw.



Material Data	
Material	<b>Polyamide 6.6 impact modified, heat stabilized (PA66HIRHS)</b>
Operating Temperature	<b>-40 °F to +230 °F (-40 °C to +110 °C) continuous</b>
Flammability	<b>UL94 HB</b>



Product Selection			Stud Ø	Min. Tensile Strength	Length (L)	Max. Ø Bundle	Width (W)	Color	Pkg. Qty.
Article No.	Part No.	Type							
157-01300	<b>T120RSM0HIRK2</b>	T120RSM	.25 " (6.25)	120 lbs (535)	15.94" (405)	3.98" (101)	.30" (7.6)	Black	50

Installation tools - MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### Standoff Stud Mount Ties

This tie is easily mounted on the top of the stud, and the additional height gained by this design gives the bundle added clearance from the panel.



Material Data	
Material	<b>Polyamide 6.6 heat stabilized (PA66HS)</b>
Operating Temperature	<b>-40 °F to +221 °F (-40 °C to +105 °C) continuous</b>
Flammability	<b>UL94 V2</b>



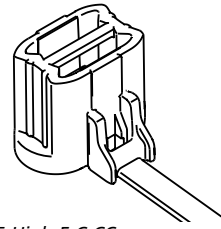
Product Selection			Stud Ø	Min. Tensile Strength	Length (L)	Max. Ø Bundle	Width (W)	Color	Pkg. Qty.
Article No.	Part No.	Type							
155-30602	<b>155-30602</b>	T50SSBS50TE	.20 " (5)	45 lbs (200)	6.30" (160)	1.38" (35)	.181" (4.6)	Black	500
157-00083	<b>157-00083</b>	T50SSBS60TE	.24 " (6)	45 lbs (200)	6.30" (160)	1.38" (35)	.181" (4.6)	Black	1000

Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

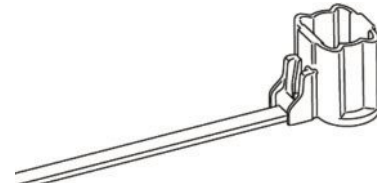


### Oval Shaped Variable Stud Mount Ties

The special oval shape provides for an approximate .20" (5.5mm) lateral adjustment, allowing for any misalignment of the stud or incorrect positioning of the tie on the cables. The "soft push" mount allows it to be installed onto a weld stud without the use of any tools.



T50SOSSB5-High-E-C-CC



T50SOSSB5-High-E-O-US

Material Data	
Material	<b>Polyamide 6.6 heat stabilized (PA66HS)</b>
Operating Temperature	<b>-40 °F to +221 °F (-40 °C to +105 °C) continuous</b>
Flammability	<b>UL94 V2</b>

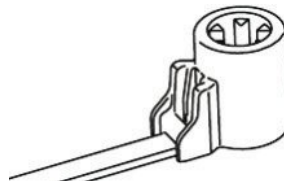


Product Selection		Type	Stud Ø		Min. Tensile Strength		Length (L)		Max. Ø Bundle		Width (W)		Color	Pkg. Qty.
Article No.	Part No.		in. (mm)	(5)/(6)	lbs. (N)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)			
157-00105	<b>157-00105</b>	T50SOSSB5-High-E-C-CC	.20"(.24")	(5)/(6)	50 lbs (225)	6.6" (167)	6.6" (167)	1.4" (35)	1.4" (35)	.20" (5.0)	.20" (5.0)	Black	1000	
157-00106	<b>157-00106</b>	T50SOSSB5-High-E-O-US	.20"(.24")	(5)/(6)	50 lbs (225)	6.6" (167)	6.6" (167)	1.4" (35)	1.4" (35)	.20" (5.0)	.20" (5.0)	Black	500	

Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### Stud Mount Ties with Outside Serrations

Providing an especially secure hold and the ability to mount the cables very close to the stud, this tie is outside serrated preventing damage to the insulation of the cable.



T50SOSSB5SE

Material Data	
Material	<b>Polyamide 6.6 heat stabilized (PA66HS)</b>
Operating Temperature	<b>-40 °F to +221 °F (-40 °C to +105 °C) continuous</b>
Flammability	<b>UL94 V2</b>



Product Selection		Type	Stud Ø		Min. Tensile Strength		Length (L)		Max. Ø Bundle		Width (W)		Color	Pkg. Qty.
Article No.	Part No.		in. (mm)	(5)	lbs. (N)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)			
155-12300	<b>155-12300</b>	T50SOSSB5SE	.20 "	(5)	50 lbs (225)	6.30" (160)	6.30" (160)	1.38" (35)	1.38" (35)	.18" (4.6)	.18" (4.6)	Black	500	

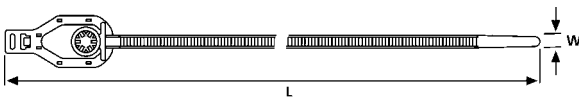
Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### Flexible Head Stud Mount Tie

Flexible head wraps around cable bundle for easy installation. Tie mounts onto #10-24" stud.



Material Data	
Material	<b>Polyamide 6.6 (PA66)</b>
Operating Temperature	<b>-40 °F to +185 °F (-40 °C to +85 °C) continuous</b>
Flammability	<b>UL94 V2</b>



Product Selection			Stud Ø	Min. Tensile Strength	Length (L)	Max. Ø Bundle	Width (W)	Color	Pkg. Qty.
Article No.	Part No.	Type							
111-07110	<b>T50RS5.NB3P</b>	T50RS5	#10-24"	50 lbs (225)	7.5" (190)	1.5" (40)	.18" (4.6)	Black	100

Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

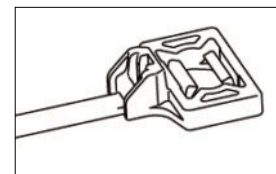
### Stud Mount Lateral Adjustment Tie

The special shape of this mount provides a .20" (5-6 mm) lateral adjustment to allow for any misalignment of the stud or incorrect positioning of the tie on the cables. The low profile of the mount allows for several ties to be installed one-on-top of the other (on the same stud) to accommodate different cable bundles.



T50SOSWSP5E, parallel installation using two stud mount lateral ties.

Material Data	
Material	<b>Polyamide 6.6 heat stabilized (PA66HS)</b>
Operating Temperature	<b>-40 °F to +221 °F (-40 °C to +105 °C) continuous</b>
Flammability	<b>UL94 V2</b>

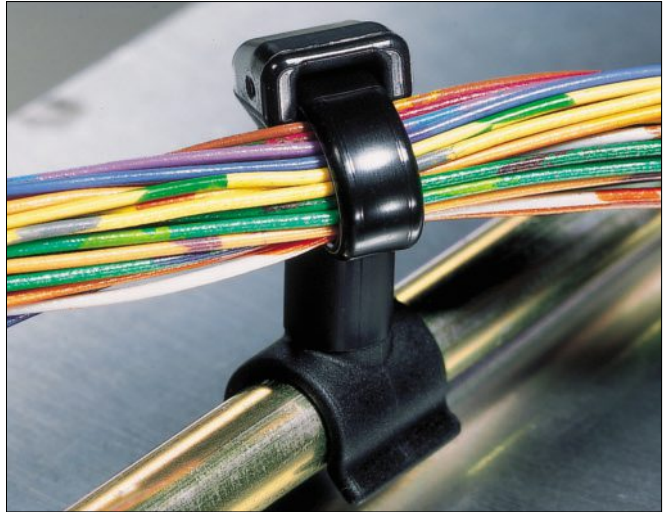


Product Selection			Stud Ø	Min. Tensile Strength	Length (L)	Max. Ø Bundle	Width (W)	Color	Pkg. Qty.
Article No.	Part No.	Type							
155-23601	<b>155-23601</b>	T50SOSWSP5E	.20" (5)	50 lbs (225)	6.35" (163)	1.4" (35)	.18" (4.6)	Black	500

Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

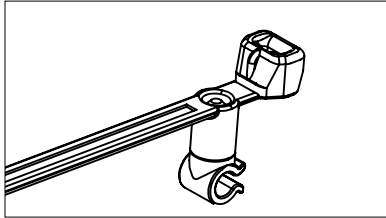
### Wire and Hose Swivel Clip Ties

These simple to use inside serrated ties provide the opportunity to attach an additional wire or hose to an existing harness. Offering a full 360 degrees of rotation, the wire/hose can be oriented in any direction in relation to the main harness. It is ideally suited for any application in which the wire or hose can move in relation to the mounting point.

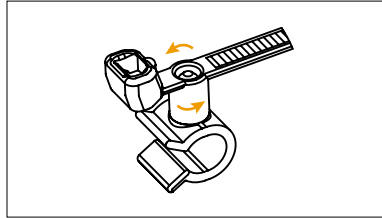


T50SVC rotates in any direction.

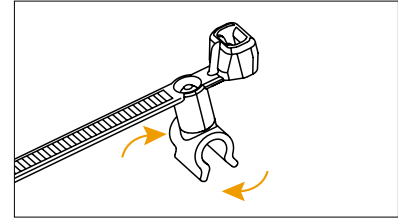
Material Data	
Material	<b>Polyamide 6.6 heat stabilized (PA66HS)</b>
Operating Temperature	<b>-40 °F to +221 °F (-40 °C to +105 °C) continuous</b>
Flammability	<b>UL94 V2</b>



T50SVC3.5



T50SVC6.5



T50SVC4/T50SVC5

Product Selection										
Article No.	Part No.	Type	Tensile Strength		Hose Clip Ø	Maximum Bundle Ø	Length (L)	Width (W)	Color	Pkg. Qty.
			lbs	(N)	in. (mm)	in. (mm)	in. (mm)	in. (mm)		
156-00791	<b>156-00791</b>	T50SVC3.5	50 lbs	(222)	.13 - .17 (3.4 - 3.6)	1.4 (35)	6.35 (163)	.18 (4.6)	Black	1000
156-00318	<b>156-00318</b>	T50SVC4	50 lbs	(225)	.15 - .17 (3.8 - 4.2)	1.4 (35)	6.1 (155)	.19 (4.7)	Black Natural	500
155-31202	<b>155-31202</b>	T50SVC5	50 lbs	(222)	.17 - .20 (4.5 - 5.2)	1.4 (35)	6.35 (163)	.18 (4.6)	Black	500
156-00155	<b>156-00155</b>	T50SVC6.5	50 lbs	(222)	.26 - .32 (6.5 - 8.0)	1.4 (35)	6.1 (155)	.19 (4.7)	Black	500

Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### Omega Clip Cable Ties

Omega Clip Cable Ties provide the opportunity to attach a wire or hose to an existing bundle. Offering a full range of orientations, the wire/hose can be oriented in any direction in relation to the main harness. The omega clip design is ideally suited for easing the application process on the production floor by allowing for an easy one-step snap fit of the harness assembly to the wire or hose.



Omega Clips secure cables to harnesses, hoses, or tubular frame rails.

Material Data - Cable Ties		RoHS
Material	<b>Polyamide 6.6 heat stabilized (PA66HS)</b>	
Operating Temperature	<b>-40 °F to +221 °F (-40 °C to +105 °C) continuous</b>	
Flammability	<b>UL94 V2</b>	

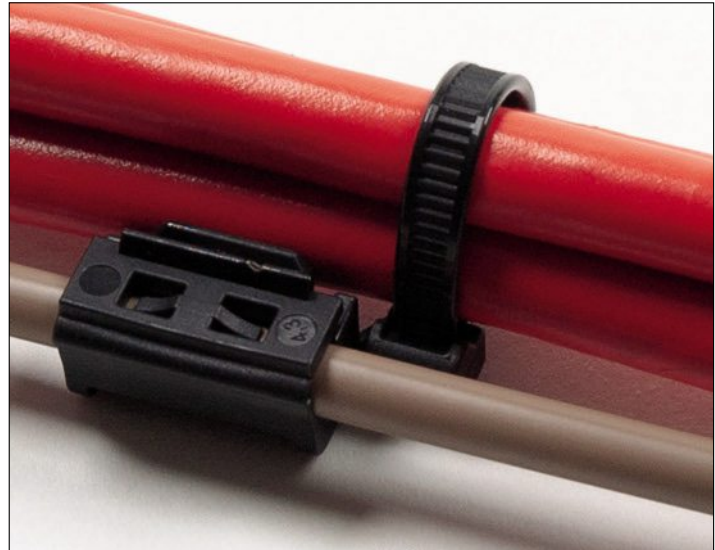
Material Data - Omega Clips		RoHS
Material	<b>Polyamide 6.6 impact modified, heat stabilized, UV resistant (PA66HIRHS)</b>	
Operating Temperature	<b>-40 °F to +230 °F (-40 °C to +110 °C) continuous</b>	
Flammability	<b>UL94 HB</b>	

Product Selection												
Article No.	Part No.	Type	Tensile Strength		Length (L)		Maximum Bundle Ø	Attaches to Diameter	Color	Pkg. Qty.	Drawing	
			lbs	(N)	in.	(mm)	in.	(mm)				in.
156-00036	<b>156-00036</b>	T50ROC1A	50	(225)	7.9	(200)	1.8	(45)	0.16 - 0.40 (4.0 - 10.0)	Black	500	
156-00306	<b>156-00306</b>	T50ROC1B	50	(225)	7.9	(200)	1.8	(45)	0.16 - 0.40 (4.0 - 10.0)	Black	500	
156-00134	<b>156-00134</b>	T50SVC OC10-14	50	(225)	6.0	(155)	1.4	(35)	.40 - .55 (10.0 - 14.0)	Black	500	
156-00135	<b>156-00135</b>	T50SVC OC15-18	50	(225)	6.0	(155)	1.4	(35)	.60 - .71 (15.0 - 18.0)	Black	500	
156-00136	<b>156-00136</b>	T50SVC OC19-24.5	50	(225)	6.0	(155)	1.4	(35)	.75-.96 (19.0 - 24.5)	Black	500	
156-00272	<b>156-00272</b>	T50SVC OC25-31	50	(225)	6.0	(155)	1.4	(35)	.98-1.22 (25.0 - 31.0)	Black	250	
156-00273	<b>156-00273</b>	T50SVC OC31-39	50	(225)	6.0	(155)	1.4	(35)	1.22 - 1.54 (31.0 - 39.0)	Black	250	
156-00137	<b>156-00137</b>	T50SVC OC39-45	50	(225)	6.0	(155)	1.4	(35)	1.54 - 1.77 (39.0 - 45.0)	Black	250	

Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

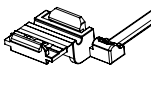
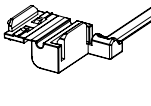
## Wire Clamping Cable Ties

Wire Clamping Ties were designed as an innovative solution to mounting wire or cable harness assemblies to wire suspension frames found in seating applications. The clamp easily secures to the wire frame for a tight fit and is available in four different wire frame sizes and two separate orientations to provide both perpendicular and parallel routing. The wire clamp design is ideally suited for easing the application process on the production floor by allowing for an easy snap fit of the harness assembly to the wire frame.



Material Data	
Material	<b>Polyamide 6.6 heat stabilized (PA66HS)</b>
Operating Temperature	<b>-40 °F to +221 °F (-40 °C to +105 °C) continuous</b>
Flammability	<b>UL94 V2</b>

RoHS

Product Selection										
Article No.	Part No.	Type	Tensile Strength		Length (L) in. (mm)	Maximum Bundle Ø in. (mm)	Attaches to Diameter in. (mm)	Color	Pkg. Qty.	Drawing
			lbs	(N)						
148-00089	<b>148-00089</b>	T50SOSWA1.8E	50	(225)	6 (150)	1.4 (35)	.07 (1.8)	Black	500	
148-00088	<b>148-00088</b>	T50SOSWA2.0E	50	(225)	6 (150)	1.4 (35)	.09 (2.18)	Black	500	
148-00095	<b>148-00095</b>	T50SOSWA3.4E	50	(225)	6 (150)	1.4 (35)	.13 (3.4)	Black	500	
148-00092	<b>148-00092</b>	T50SOSWA4.3E	50	(225)	6 (150)	1.4 (35)	.17 (4.3)	Black	500	
148-00090	<b>148-00090</b>	T50SOSWB1.8E	50	(225)	6 (150)	1.4 (35)	.07 (1.8)	Black	500	
148-00093	<b>148-00093</b>	T50SOSWB2.0E	50	(225)	6 (150)	1.4 (35)	.09 (2.18)	Black	500	
148-00096	<b>148-00096</b>	T50SOSWB3.4E	50	(225)	6 (150)	1.4 (35)	.13 (3.4)	Black	500	
148-00091	<b>148-00091</b>	T50SOSWB4.3E	50	(225)	6 (150)	1.4 (35)	.17 (4.3)	Black	500	

Installation tools - EVO7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.



### Button Head Ties

Button Head ties provide a one-piece mounting solution for bundles, eliminating the need for additional mounts and fasteners. The strap contains serrations on both sides and has two opposing pawls recessed within the domed head, enabling the strap to be directed either way through the button head.

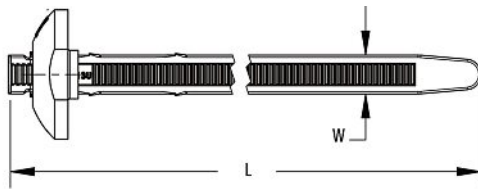
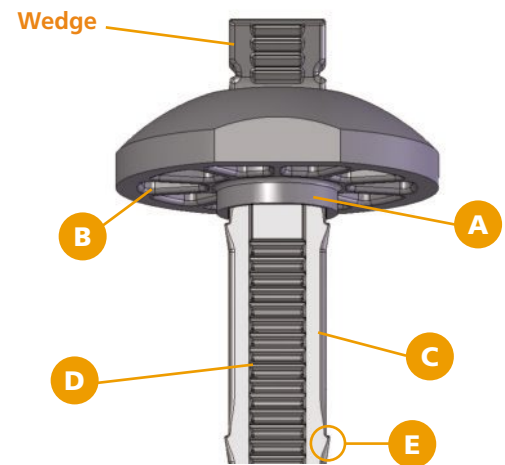


These key features of the Button Head Ties present ease of installation and high durability.

- A. Pilot Bushing – Protects the strap from abrasion on the mounting hold edge
- B. Ribs – Adds stability on the bottom of the head
- C. Strap – Enhances flexibility due to its edge radiuses
- D. Serrations and Wedge – Provides optimal strength when the strap serrations are seated in the head
- E. Lower Retainers – Holds HellermannTyton's MSBT120 saddle mounts in place during assembly (BT130 only)

Material Data- Button Head	
Material	<b>Polyamide 6.6 heat stabilized (PA66HS)</b>
Color	<b>Black</b>
Operating Temperature	<b>-40 °F to +221 °F (-40 °C to +105 °C) continuous</b>
Flammability	<b>UL94 V2</b>

Material Data - Strap	
Material	<b>Polyamide 6.6 impact modified, heat stabilized, UV resistant (PA66HIRHS)</b>
Color	<b>Black</b>
Operating Temperature	<b>-40 °F to +230 °F (-40 °C to +110 °C) continuous</b>
Flammability	<b>UL94 HB</b>



Note: In order to assure the strap is fully locked in its final secure position, the installer must make sure that the "wedge" located at the end of the strap is fully seated in the button and flush with the top of the button. The MK9 cable tie tool is recommended and end use testing is advised.



MK9 Tool - See page 77

Product Selection			Min. Tensile Strength	Length (L)	Max. Ø Bundle	Width (W)	Color	Pkg. Qty.
Article No.	Part No.	Type						
<b>BT105 Button Head Ties</b>								
132-00010	<b>132-00010</b>	BT105R	105 lbs (467)	9.63" (244.4)	2.62" (66.7)	.22" (5.6)	Black	50
132-00011	<b>132-00011</b>	BT105L	105 lbs (467)	15" (381.5)	4.33" (110)	.22" (5.6)	Black	50
<b>BT105 Button Head Ties with Pilot Bushings</b>								
132-00006	<b>132-00006</b>	BT105RP	105 lbs (467)	9.63" (244.4)	2.62" (66.7)	.22" (5.6)	Black	50
132-00007	<b>132-00007</b>	BT105LP	105 lbs (467)	15" (381.5)	4.33" (110)	.22" (5.6)	Black	50
<b>BT130 Button Head Ties with Retainers and Pilot Bushings</b>								
132-00008	<b>132-00008</b>	BT130RDP	130 lbs (578)	10.51" (267.0)	2.87" (73)	.30" (7.6)	Black	50
132-00009	<b>132-00009</b>	BT130LDP	130 lbs (578)	15" (381.5)	4.33" (110)	.30" (7.6)	Black	50

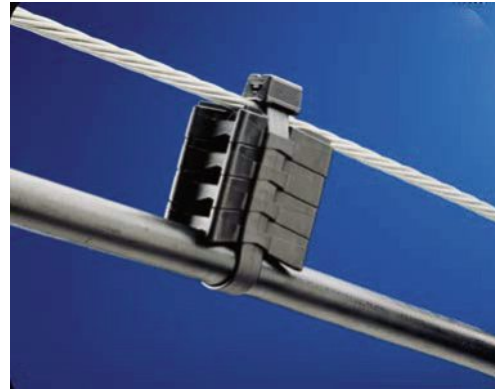
Installation tools - MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.



### Extended Length Ties (EL-TY)

HellermannTyton's El-Ty is a high strength strapping system used for supporting, securing, fastening, and spacing cables, as well as a variety of other applications requiring extra-long, extremely durable strapping.

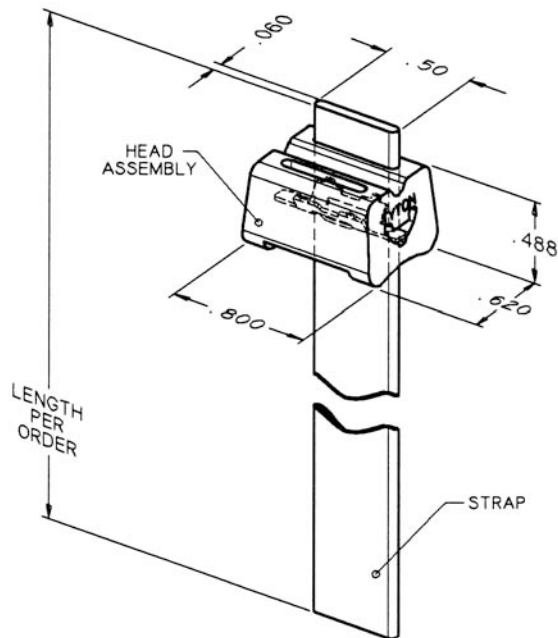
The El-Ty consists of a smooth strap and a separate, compact plastic head which encloses a stainless steel gripper. The stackable spacer accepts cable ties up to 1/2" wide for a versatile, easy to install spacing system.



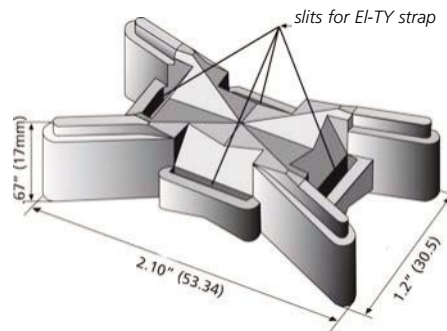
Material Data- Strap and Head	
Material	<b>Polyacetal (POM)</b>
Color	<b>Black</b>
Operating Temperature	<b>-40 °F to +185 °F (-40 °C to +85 °C)</b>
Flammability	<b>UL94 HB</b>



Material Data- Spacer	
Material	<b>Polypropylene, UV-resistant (PP)</b>
Color	<b>Black</b>
Operating Temperature	<b>-40 °F to +239 °F (-40 °C to +115 °C) continuous</b>
Flammability	<b>UL94 HB</b>



El-Ty Strap and Locking Head



El-Ty Spacer

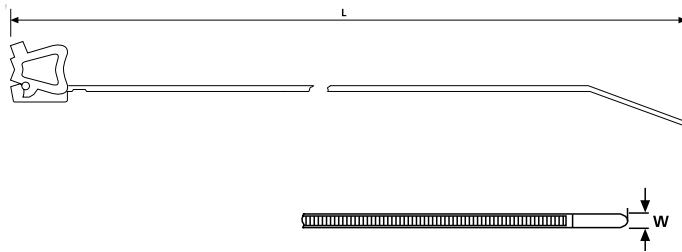
#### Product Selection

Article No.	Part No.	Type	Description	Color	Pkg. Qty.
111-30000	<b>TELS-1</b>	TELS1	1 - 50 ft reel of strap and 30 heads	Black	1
111-31000	<b>TELS-H</b>	TELSH	Double entry and locking heads	Black	25
111-32108	<b>TELS-13</b>	TELS-13	10 - 13.5" straps and 10 double locking heads	Black	1
111-32110	<b>TELS-27</b>	TELS-27	10 - 27" straps and 10 double locking heads	Black	1
111-32111	<b>TELS-5K</b>	TELS-5K	5 - 50 ft. reels and 150 heads	Black	1
111-32107	<b>TELS-10K</b>	TELS-10K	10 - 50 ft. reels and 300 heads	Black	1
111-32000	<b>TELS-SPK2</b>	TELS-SPK2	EL-TY Spacer	Black	50
111-32106	<b>TELS-SPOOL</b>	TELS-SPOOL	50 ft. reel of strap	Black	1

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### Aerial Support Spacer Ties

Aerial support spacer ties are two piece ties designed for standard spacing applications. The strap is molded from special high impact polyamide 6/6. The support spacer and head are made from a high density outdoor black polypropylene. Both materials offer resistance to sunlight, saltwater, and harsh chemical environments.



Material Data- Strap		RoHS
Material	<b>Polyamide 6.6 high impact modified (PA66HIR)</b>	
Color	<b>Black</b>	
Operating Temperature	<b>-40 °F to +230 °F (-40 °C to +110 °C) continuous</b>	
Flammability	<b>UL94 HB</b>	

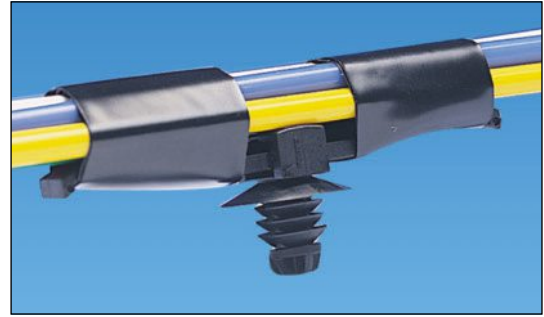
Material Data-Spacer/Head		RoHS
Material	<b>Polypropylene, UV-resistant (PP)</b>	
Color	<b>Black</b>	
Operating Temperature	<b>-40 °F to +239 °F (-40 °C to +115 °C) continuous</b>	
Flammability	<b>UL94 HB</b>	

Product Selection			Min. Tensile Strength		Length (L)		Max. Ø Bundle		Width (W)		Color	Pkg. Qty.
Article No.	Part No.	Type	lbs.	(N)	in.	(mm)	in.	(mm)	in.	(mm)		
111-98501	<b>TAS100RWS</b>	TAS100RWS	100 lbs	(445)	8.25"	(209.6)	1.75"	(44.5)	.50"	(12.7)	Black	100
111-98500	<b>TAS100MWS</b>	TAS100MWS	100 lbs	(445)	10.7"	(272.3)	2.75"	(70)	.50"	(12.7)	Black	100
148-00022	<b>TAS100LWS</b>	TAS100LWS	100 lbs	(445)	16"	(420)	4.5"	(115)	.50"	(12.7)	Black	100

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes. Installation tools - MK9, MK9HT, MK9P.

## Bundling Clips

Bundling clips are designed to provide simple and easy methods for securing cable bundles, hoses or pipes. They are fastened onto the tape bar using bundle or cable ties. The different fixing orientations allow tape clips to be used with a wide range of panel thicknesses and hole diameters. Standard bundling clips are available as well as standoff and stud mount versions.



Material Data	
Material	<b>Polyamide 6.6 impact modified, heat stabilized, UV resistant (PA66HIRHS)</b>
Operating Temperature	<b>-40 °F to +230 °F (-40 °C to +110 °C) continuous</b>
Flammability	<b>UL94 HB</b>



Material Data	
Material	<b>Polyamide 6.6 heat stabilized (PA66HS)</b>
Operating Temperature	<b>-40 °F to +221 °F (-40 °C to +105 °C) continuous</b>
Flammability	<b>UL94 V2</b>



## Standard Bundling Clips

Standard bundling clips secure the bundle directly above the mounting hole.















Product Selection										
Article No.	Part No.	Type	Tape Bar Length (L)	Panel Thickness Minimum	Panel Thickness Maximum	Mounting Hole Ø	Material	Color	Pkg. Qty.	Drawing
			in. (mm)	in. (mm)	in. (mm)	in. (mm)				
151-00663	<b>151-00663</b>	TC6FT6	1.55" (39.3)	.03" (.07)	.22" (5.7)	.24 - .27" (6.2 - 6.8)	PA66HIRHS	Black	2000	
151-00651	<b>151-00651</b>	TC6FT6LG	1.55" (39.3)	.03" (.07)	.71" (18)	.24 - .27" (6.2 - 6.8)	PA66HIRHS	Natural	2000	
155-30802	<b>155-30802</b>	TC2FT6LG	2.17" (55)	.02" (0.6)	.2" (5.1)	.25 - .28" (6.5 - 7.0)	PA66HIRHS	Black	500	
150-95500	<b>150-95500</b>	TC5FT6S	1.46" (37)	.03" (0.75)	.06" (1.5)	.26 - .28" (6.5 - 7.0)	PA66HIRHS	Black	1000	
151-02901	<b>151-02901</b>	CHA2	2.13" (54)	.03" (0.8)	.08" (2)	.26 - .28" (6.5 - 7.0)	PA66	Black	500	
151-00605	<b>151-00605</b>	TCOP6 2x122	2.17" (55)	.02" (.6)	.24" (6)	.24 x .48" (6.2 x 12.2)	PA66HIRHS	Black	5000	
151-00029	<b>151-00029</b>	TCOP7 0x120	2.17" (55)	.02" (.6)	.24" (6)	.28 x .47" (7.0 x 12)	PA66HIRHS	Black	5000	
155-11601	<b>155-11601</b>	CLIP	2.17" (55)	.06" (1.5)	.12" (3.0)	.25 - .28" (6.3 - 7.0)	PA66HIRHS	Black	500	
150-08110	<b>150-08110</b>	CHA1	2.13" (54)	.02" (.05)	.05" (1.2)	.25 - .28" (6.3 - 7.0)	PA66	Black	500	
151-00790	<b>151-00790</b>	BCOW FT6M	1.46" (37)	.02" (.6)	.14" (3.5)	.26 - .28" (6.5 - 7.0)	PA66HIRHS	Black	2000	
102-69068	<b>102-69068</b>	ATSBC2 KSFT6,5	1.5" (39)	.06" (1.7)	.09" (2.3)	.25 - .27" (6.3 - 6.7)	PA66HIRHS	Black	500	
102-69067	<b>102-69067</b>	ATSBC2 KSFT6,5	1.5" (39)	.03" (.7)	.05" (1.3)	.25 - .27" (6.3 - 6.7)	PA66HIRHS	Black	500	
151-01109	<b>151-01109</b>	BC90AH2	1.0" (25)	.04" (1.0)	.06" (1.5)	.24 - .27" (6.2 - 6.8)	PA66HIRHS	Black	5000	
151-01125	<b>151-01125</b>	SOC13FT6LGL	1.7" (43)	.02" (0.6)	.22" (5.7)	.24 - .27" (6.1 - 6.9)	PA66HIRHS	Gray	6000	
151-01126	<b>151-01126</b>	SOC13FT6LGR	1.7" (43)	.02" (0.6)	.22" (5.7)	.24 - .27" (6.1 - 6.9)	PA66HIRHS	Black	6000	

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

## Bundling Clips *continued*

### Standoff Bundling Clips





Standoff bundling clips secure the bundle away from the mounting hole.

Product Selection											
Article No.	Part No.	Type	Tape Bar Length (L)	Panel Thickness Minimum	Panel Thickness Maximum	Distance Hole to Bundle	Mounting Hole Ø	Material	Color	Pkg. Qty.	Drawing
			in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)				
151-00623	<b>151-00623</b>	SOCH FT6	2.2" (56)	.03" (0.7)	.22" (5.7)	1.2" (31)	.25 - .27" (6.3 - 6.9)	PA66HIRHS	Black	1500	
151-00629	<b>151-00629</b>	SOCH FT6	2.2" (56)	.03" (0.7)	.22" (5.7)	1.2" (31)	.25 - .27" (6.3 - 6.9)	PA66HIRHS	Black	1500	
151-00650	<b>151-00650</b>	SOC8 FT6	2.4" (61)	.03" (0.7)	.22" (5.7)	.88" (22.4)	.24 - .27" (6.2 - 6.8)	PA66HIRHS	Natural	1500	
155-30902	<b>155-30902</b>	SOC4 M.FT6	2.2" (55)	.03" (0.7)	0.2" (5.1)	.79" (20)	.26 - .28" (6.5 - 7.0)	PA66HIRHS	Black	500	
151-00074	<b>151-00074</b>	SOC4 M.FT6	2.2" (55)	.03" (0.7)	0.2" (5.1)	.51" (13)	.26 - .28" (6.5 - 7.0)	PA66HIRHS	Black	500	
150-09201	<b>150-09201</b>	COW2 ODP7	1.7" (42)	.03" (0.8)	.18" (4.5)	.79" (20)	.25 - .28" (6.3 - 7.0)	PA66	Brown	500	
151-00080	<b>151-00080</b>	COW3 ODP7	1.7" (42)	.03" (0.8)	.18" (4.5)	1.2" (30)	.25 - .28" (6.3 - 7.0)	PA66HS	Black	500	
151-00665	<b>151-00665</b>	SOC8 FT6LG	1.6" (40)	.03" (0.7)	.23" (5.75)	.276" (7)	.26 - .28" (6.5 - 7.0)	PA66HIRHS	Black	1000	
155-01600	<b>155-01600</b>	STAND-OFF CLIP	1.6" (40)	.02" (0.4)	.06" (1.6)	.98" (25)	.26 - .27" (6.5 - 6.8)	PA66HIRHS	Black	500	
150-45397	<b>150-45397</b>	STAND-OFF CLIP	1.6" (40)	.02" (0.4)	.06" (1.6)	1.2" (31)	.26 - .27" (6.5 - 6.8)	PA66HIRHS	Black	500	
151-02600	<b>151-02600</b>	CH20D7	2.0" (50)	.03" (0.8)	.06" (1.6)	.79" (20)	.28" (7.0)	PA66	Black	100	
151-00903	<b>151-00903</b>	SOC10 FT6LG	2.3" (58)	.02" (.6)	.24" (6.7)	.58" (14.5)	.24 - .27" (6.1 - 6.9)	PA66HIRHS	Natural	3000	
151-00932	<b>151-00932</b>	SOC11 FTOVAL	2" (50)	.02" (.06)	.27" (6.8)	.79" (20)	.26 x .49" (6.5 x 12.5)	PA66HIRHS	Natural	3000	
151-00282	<b>151-00282</b>	SOC1 0405	2.2" (55)	.03" (0.7)	.14" (3.5)	.79" (20)	.25 - .26" (6.3 - 6.7)	PA66HIRHS	Black	500	

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### Stud Mount Bundling Clips

Stud mount bundling clips are easily inserted onto welded studs to secure the bundle.

Product Selection											
Article No.	Part No.	Type	Length (L)	Recommended Weld Stud Size	Distance Weld Stud to Bundle	Material	Color	Pkg. Qty.	Drawing		
			in. (mm)	in. (mm)	in. (mm)						
151-00664	<b>151-00664</b>	BCOS5	2.3" (59)	.2" (5)	–	PA66HIRHS	Black	500			
151-00281	<b>151-00281</b>	BCOS6	2.3" (59)	.24" (6)	–	PA66HIRHS	Black	500			
151-26101	<b>151-26101</b>	TCSB5C-SD	2.2" (55)	.2" (5)	.49" (12.5)	PA66HS	Black	500			
151-00017	<b>151-00017</b>	Tape Bar	2.2" (55)	.2" (5)	.90" (22.8)	PA66HIRHS	Black	500			
151-00016	<b>151-00016</b>	BC30	2.2" (55)	.2" (5)	1.9" (30)	PA66HIRHS	Black	500			

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

## Connector Clips

Connector Clips are initially installed onto the appropriate mating connector found on a wire or cable harness assembly. The connector is then secured to the attachment surface using the connector clip mount. The attachment surface can be a hole, edge, stud, or even another harness assembly depending on the connector clip mount being used.



Material Data		RoHS
Material	<b>Polyamide 6.6 heat stabilized (PA66HS)</b>	
Operating Temperature	<b>-40 °F to +221 °F (-40 °C to +105 °C) continuous</b>	
Flammability	<b>UL94 V2</b>	

Material Data		RoHS
Material	<b>Polyamide 6.6 impact modified, heat stabilized, UV resistant (PA66HIRHS)</b>	
Operating Temperature	<b>-40 °F to +230 °F (-40 °C to +110 °C) continuous</b>	
Flammability	<b>UL94 HB</b>	

Product Selection									
Article No.	Part No.	Type	Panel Thickness Minimum	Panel Thickness Maximum	Mounting Hole Ø	Material	Color	Pkg. Qty.	Drawing
			in. (mm)	in. (mm)	in. (mm)				
151-00785	<b>151-00785</b>	CCFT6LG	.03" (.07)	.16" (4.0)	.24 - .26" (6.0 - 6.7)	PA66HIRHS	Black	5000	
151-00786	<b>151-00786</b>	CCFT6XLG	.03" (.07)	.43" (11.0)	.24 - .26" (6.0 - 6.7)	PA66HIRHS	Black	5000	
151-00775	<b>151-00775</b>	CCSFT6.5	.07" (1.7)	.09" (2.3)	.24 - .26" (6.0 - 6.7)	PA66HIRHS	Black	5000	
155-32602	<b>155-32602</b>	FT6LG.M.ST. AUFN.II	.03" (.075)	.20" (5.0)	.26 - .28" (6.5 - 7.0)	PA66HIRHS	Black	500	
151-00677	<b>151-00677</b>	CC08	.03" (0.7)	.23" (5.75)	.25 - .27" (6.25 - 6.75)	PA66HIRHS	Natural	5000	
151-00925	<b>151-00925</b>	CCOVAL	.02" (0.6)	.24" (6.0)	.24 x .48" (6.2 x 12.2)	PA66HIRHS	Black	5000	
151-01108	<b>151-01108</b>	CCOVAL2	.02" (0.6)	.24" (6.0)	(6.2x12.2) (6.5x12.5) (6.5x13.0) (7.0x12.0)	PA66HIRHS	Black	5000	

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

Connector Clips *continued*

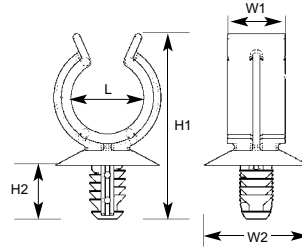
Product Selection									
Article No.	Part No.	Type	Panel Thickness Minimum	Panel Thickness Maximum	Mounting Hole Ø	Material	Color	Pkg. Qty.	Drawing
			in. (mm)	in. (mm)	in. (mm)				
155-30702	<b>155-30702</b>	FT6LG.YAZ. CONNECT-TS	.03" (.07)	.20" (5.1)	.25 - .28" (6.3 - 7.0)	PA66HIRHS	Black	500	
151-01136	<b>151-01136</b>	CC12	.02" (0.6)	.25" (6.5)	.31 x .59" (8.0x15.0)	PA66HIRHS	Black	5000	
151-00765	<b>151-00765</b>	CC09	.02" (0.6)	.25" (6.35)	.35 x .67" (9.0 x 17.0)	PA66HIRHS	Black	1000	
151-00704	<b>151-00704</b>	YCCFT82x185	.06" (1.5)	.18" (4.5)	.322 x .728" (8.5 x 18.5)	PA66HIRHS	Black	1000	
151-00675	<b>151-00675</b>	YCCKSFT6.5	.03" (.07)	.05" (1.3)	.25 - .26" (6.3 - 6.7)	PA66HIRHS	Black	500	
151-00792	<b>151-00792</b>	YCCKSFT 6.5-PT1.7-2.3	.07" (1.7)	.09" (2.3)	.25 - .26" (6.3 - 6.7)	PA66HIRHS	Black	500	
151-00835	<b>151-00835</b>	YCCKSFT62x122 PT0.7-1.3	.03" (.07)	.05" (1.3)	.24 x .48" (6.2 x 12.2)	PA66HS	Black	10000	
151-00836	<b>151-00836</b>	YCCKSFT62x122 PT1.7-2.3	.07" (1.7)	.09" (2.3)	.24 x .48" (6.2 x 12.2)	PA66HS	Black	10000	
151-00833	<b>151-00833</b>	YCCKSFT62x122 PT0.7-1.3 90	.03" (.07)	.05" (1.3)	.24 x .48" (6.2 x 12.2)	PA66HS	Black	10000	
151-00834	<b>151-00834</b>	YCCKSFT62x12 2PT1.7-2.3 90	.07" (1.7)	.09" (2.3)	.24 x .48" (6.2 x 12.2)	PA66HS	Black	10000	
151-00513	<b>151-00513</b>	YCCSFT 62122	.02" (.06)	.04" (1.0)	.24 x .48" (6.2 x 12.2)	PA66HIRHS	Black	500	
155-31102	<b>155-31102</b>	YAZ-CONN- TAPE-CLIP	-	-	-	PA66HS	Black	500	
156-00507	<b>156-00507</b>	T50RYCCA	-	-	-	PA66HS PA66HIRHS	Black	100	
156-00521	<b>156-00521</b>	T50RYCCB	-	-	-	PA66HS PA66HIRHS	Black	100	
155-36002	<b>155-36002</b>	STECKERHALTER SITZ	.02" (0.6)	.12" (3.0)	.26 - .28" (6.7 - 7.0)	PA66HIRHS	Black	1000	
155-03800	<b>155-03800</b>	FT6 LG-AMP	.03" (.07)	.24" (6.0)	.26 x .28" (6.7 - 7.0)	PA66HIRHS	Black	500	
151-00429	<b>151-00429</b>	EC42	.06" (1.5)	.16" (4.0)	-	PA66HIRHS	Black	500	
151-00430	<b>151-00430</b>	EC43	.06" (1.5)	.16" (4.0)	-	PA66HIRHS	Black	500	
151-01113	<b>151-01113</b>	EC46	.04" (1.0)	.12" (3.0)	-	PA66HIRHS	Black	10000	



### Fir Tree Mount Tube Clip

Designed to offer a durable single-hole mounting, this tube clip allows the installer to insert the fir tree with minimal force while providing a secure hold.

Material Data	
Material	<b>Polyamide 6.6 impact modified (PA66HIR)</b>
Color	<b>Black</b>
Operating Temperature	<b>-40 °F to +110 °F (-40 °C to +230 °C) continuous</b>
Flammability	<b>UL94 HB</b>



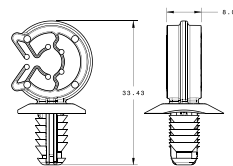
Product Selection											
Article No.	Part No.	Type	Dimensions in. (mm)					Mounting Hole Ø	Panel Thickness	Color	Pkg. Qty.
			H1	H2	W1	W2	L				
151-14303	PC15FT7	PC15FT7	1.07" (27.1)	.44" (11.1)	.47" (12)	.85" (21.6)	.62" (15.7)	.25" (6.5)	.12" (3.055)	Black	100

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### C Clip with Fir Tree Mount

The SC6.6 is designed for quick installation of cables to frames or rails. The unique fir tree design allows for easy insertion of the clip into a pre-drilled hole. Once installed, the cable can be quickly snapped in place for a secure fit. The SC6.6 is made of our durable impact modified, heat/UV stabilized PA6/6 material.

Material Data	
Material	<b>Polyamide 6.6 high impact modified, heat and UV stabilized (PA66HIRHSUV)</b>
Operating Temperature	<b>-40 °F to +230 °F (-40 °C to +110 °C) continuous</b>
Flammability	<b>UL94 HB</b>



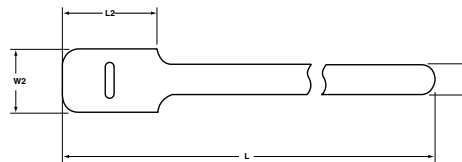
Product Selection									
Article No.	Part No.	Type	Panel Thickness Minimum	Panel Thickness Maximum	Bundle Ø Maximum	Mounting Hole Ø	Material	Color	Pkg. Qty.
			in. (mm)	in. (mm)	in. (mm)	in. (mm)			
151-00927	151-00927	SC6.6	.25" (6.35)	.03" (.70)	.30" (7.6)	.26" (6.6)	PA66HIRHSUV	Black	100

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### Grip Tie Straps

The Grip Tie is a low profile, one piece fastening device. Constructed of polyethylene hook and nylon loop and laminated back to back, the Grip Tie features quick release for repetitive access to cable and wire. It can be opened and closed numerous times without failure. The Grip Tie is reusable, adjustable, releasable, and easy to install.

Available in rolls and straps in 6", 8", 11" and 15" sizes. Grip Ties are available in a variety of colors and are versatile enough for applications ranging from network installations to bundling power cords. Grip Ties are also customizable with your company name (minimum quantities apply).

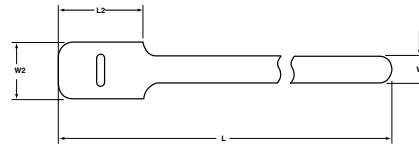


Product Selection

Article No.	Part No.	Type	Min. Tensile Strength	Length (L)	Max. Ø Bundle	Width (W)	Width (W2)	Length (L2)	Color	Pkg. Qty.
			lbs. (N)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)		
<b>6" Grip Ties</b>										
854-44316	GT.375X60C2	GT.375X6	40 lbs (177.93)	6" (152.4)	1" (25.4)	.375" (9.525)	.75" (19.05)	1.5" (38.1)	Black	100
854-44339	GT.50X60P2	GT.50X6	40 lbs (177.93)	6" (152.4)	1" (25.4)	.5" (12.7)	1" (25.4)	1.5" (38.1)		10
854-44336	GT.50X60C2	GT.50X6	40 lbs (177.93)	6" (152.4)	1" (25.4)	.5" (12.7)	1" (25.4)	1.5" (38.1)		100
854-44342	GT.50X62P2	GT.50X6	40 lbs (177.93)	6" (152.4)	1" (25.4)	.5" (12.7)	1" (25.4)	1.5" (38.1)	Red	10
854-44341	GT.50X62C2	GT.50X6	40 lbs (177.93)	6" (152.4)	1" (25.4)	.5" (12.7)	1" (25.4)	1.5" (38.1)		100
854-44344	GT.50X63P2	GT.50X6	40 lbs (177.93)	6" (152.4)	1" (25.4)	.5" (12.7)	1" (25.4)	1.5" (38.1)	Orange	10
854-44343	GT.50X63C2	GT.50X6	40 lbs (177.93)	6" (152.4)	1" (25.4)	.5" (12.7)	1" (25.4)	1.5" (38.1)		100
854-44346	GT.50X64P2	GT.50X6	40 lbs (177.93)	6" (152.4)	1" (25.4)	.5" (12.7)	1" (25.4)	1.5" (38.1)	Yellow	10
854-44345	GT.50X64C2	GT.50x6	40 lbs (177.93)	6" (152.4)	1" (25.4)	.5" (12.7)	1" (25.4)	1.5" (38.1)		100
854-44348	GT.50X65P2	GT.50x6	40 lbs (177.93)	6" (152.4)	1" (25.4)	.5" (12.7)	1" (25.4)	1.5" (38.1)	Green	10
854-44347	GT.50X65C2	GT.50X6	40 lbs (177.93)	6" (152.4)	1" (25.4)	.5" (12.7)	1" (25.4)	1.5" (38.1)		100
854-44350	GT.50X66P2	GT.50X6	40 lbs (177.93)	6" (152.4)	1" (25.4)	.5" (12.7)	1" (25.4)	1.5" (38.1)	Blue	10
854-44349	GT.50X66C2	GT.50X6	40 lbs (177.93)	6" (152.4)	1" (25.4)	.5" (12.7)	1" (25.4)	1.5" (38.1)		100
<b>8" Grip Ties</b>										
854-44355	GT.50X80P2	GT.50x8	40 lbs (177.93)	8" (203.2)	1.75" (44.45)	.5" (12.7)	1" (25.4)	1.5" (38.1)	Black	10
854-44353	GT.50X80C2	GT.50x8	40 lbs (177.93)	8" (203.2)	1.75" (44.45)	.5" (12.7)	1" (25.4)	1.5" (38.1)		100
854-44358	GT.50X82P2	GT.50X8	40 lbs (177.93)	8" (203.2)	1.75" (44.45)	.5" (12.7)	1" (25.4)	1.5" (38.1)	Red	10
854-44357	GT.50X82C2	GT.50X8	40 lbs (177.93)	8" (203.2)	1.75" (44.45)	.5" (12.7)	1" (25.4)	1.5" (38.1)		100
854-44360	GT.50X83P2	GT.50X8	40 lbs (177.93)	8" (203.2)	1.75" (44.45)	.5" (12.7)	1" (25.4)	1.5" (38.1)	Orange	10
854-44359	GT.50X83C2	GT.50X8	40 lbs (177.93)	8" (203.2)	1.75" (44.45)	.5" (12.7)	1" (25.4)	1.5" (38.1)		100
854-44362	GT.50X84P2	GT.50X8	40 lbs (177.93)	8" (203.2)	1.75" (44.45)	.5" (12.7)	1" (25.4)	1.5" (38.1)	Yellow	10
854-44361	GT.50X84C2	GT.50X8	40 lbs (177.93)	8" (203.2)	1.75" (44.45)	.5" (12.7)	1" (25.4)	1.5" (38.1)		100
854-44364	GT.50X85P2	GT.50X8	40 lbs (177.93)	8" (203.2)	1.75" (44.45)	.5" (12.7)	1" (25.4)	1.5" (38.1)	Green	10
854-44363	GT.50X85C2	GT.50X8	40 lbs (177.93)	8" (203.2)	1.75" (44.45)	.5" (12.7)	1" (25.4)	1.5" (38.1)		100
854-44366	GT.50X86P2	GT.50X8	40 lbs (177.93)	8" (203.2)	1.75" (44.45)	.5" (12.7)	1" (25.4)	1.5" (38.1)	Blue	10
854-44365	GT.50X86C2	GT.50X8	40 lbs (177.93)	8" (203.2)	1.75" (44.45)	.5" (12.7)	1" (25.4)	1.5" (38.1)		100

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

Grip Tie Straps *continued*



Product Selection			Min. Tensile Strength	Length (L)	Max. Ø Bundle	Width (W)	Width (W2)	Length (L2)	Color	Pkg. Qty.
Article No.	Part No.	Type								
<b>11" Grip Ties</b>										
854-44320	<b>GT.50X110P2</b>	GT.50X11	40 lbs (177.93)	11" (279.4)	2.63" (66.802)	.5" (12.7)	1" (25.4)	1.5" (38.1)	Black	10
854-44317	<b>GT.50X110C2</b>	GT.50X11	40 lbs (177.93)	11" (279.4)	2.63" (66.802)	.5" (12.7)	1" (25.4)	1.5" (38.1)		100
854-44323	<b>GT.50X112P2</b>	GT.50X11	40 lbs (177.93)	11" (279.4)	2.63" (66.802)	.5" (12.7)	1" (25.4)	1.5" (38.1)	Red	10
854-44322	<b>GT.50X112C2</b>	GT.50X11	40 lbs (177.93)	11" (279.4)	2.63" (66.802)	.5" (12.7)	1" (25.4)	1.5" (38.1)		100
854-44325	<b>GT.50X113P2</b>	GT.50X11	40 lbs (177.93)	11" (279.4)	2.63" (66.802)	.5" (12.7)	1" (25.4)	1.5" (38.1)	Orange	10
854-44324	<b>GT.50X113C2</b>	GT.50X11	40 lbs (177.93)	11" (279.4)	2.63" (66.802)	.5" (12.7)	1" (25.4)	1.5" (38.1)		100
854-44327	<b>GT.50X114P2</b>	GT.50X11	40 lbs (177.93)	11" (279.4)	2.63" (66.802)	.5" (12.7)	1" (25.4)	1.5" (38.1)	Yellow	10
854-44326	<b>GT.50X114C2</b>	GT.50X11	40 lbs (177.93)	11" (279.4)	2.63" (66.802)	.5" (12.7)	1" (25.4)	1.5" (38.1)		100
854-44329	<b>GT.50X115P2</b>	GT.50X11	40 lbs (177.93)	11" (279.4)	2.63" (66.802)	.5" (12.7)	1" (25.4)	1.5" (38.1)	Green	10
854-44328	<b>GT.50X115C2</b>	GT.50X11	40 lbs (177.93)	11" (279.4)	2.63" (66.802)	.5" (12.7)	1" (25.4)	1.5" (38.1)		100
854-44331	<b>GT.50X116P2</b>	GT.50X11	40 lbs (177.93)	11" (279.4)	2.63" (66.802)	.5" (12.7)	1" (25.4)	1.5" (38.1)	Blue	10
854-44330	<b>GT.50X116C2</b>	GT.50X11	40 lbs (177.93)	11" (279.4)	2.63" (66.802)	.5" (12.7)	1" (25.4)	1.5" (38.1)		100
<b>15" Grip Ties</b>										
854-44371	<b>GT.75X150P2</b>	GT.75X15	50 lbs (222.41)	15" (381)	3.88" (98.552)	.75" (19.05)	1.5" (38.1)	2.5" (63.5)	Black	10
854-44369	<b>GT.75X150C2</b>	GT.75X15	50 lbs (222.41)	15" (381)	3.88" (98.552)	.75" (19.05)	1.5" (38.1)	2.5" (63.5)		100
854-44374	<b>GT.75X152P2</b>	GT.75X15	50 lbs (222.41)	15" (381)	3.88" (98.552)	.75" (19.05)	1.5" (38.1)	2.5" (63.5)	Red	10
854-44373	<b>GT.75X152C2</b>	GT.75X15	50 lbs (222.41)	15" (381)	3.88" (98.552)	.75" (19.05)	1.5" (38.1)	2.5" (63.5)		100
854-44376	<b>GT.75X153P2</b>	GT.75X15	50 lbs (222.41)	15" (381)	3.88" (98.552)	.75" (19.05)	1.5" (38.1)	2.5" (63.5)	Orange	10
854-44375	<b>GT.75X153C2</b>	GT.75X15	50 lbs (222.41)	15" (381)	3.88" (98.552)	.75" (19.05)	1.5" (38.1)	2.5" (63.5)		100
854-44377	<b>GT.75X154P2</b>	GT.75X15	50 lbs (222.41)	15" (381)	3.88" (98.552)	.75" (19.05)	1.5" (38.1)	2.5" (63.5)	Yellow	10
854-44378	<b>GT.75X154C2</b>	GT.75X15	50 lbs (222.41)	15" (381)	3.88" (98.552)	.75" (19.05)	1.5" (38.1)	2.5" (63.5)		100
854-44380	<b>GT.75X155P2</b>	GT.75X15	50 lbs (222.41)	15" (381)	3.88" (98.552)	.75" (19.05)	1.5" (38.1)	2.5" (63.5)	Green	10
854-44379	<b>GT.75X155C2</b>	GT.75X15	50 lbs (222.41)	15" (381)	3.88" (98.552)	.75" (19.05)	1.5" (38.1)	2.5" (63.5)		100
854-44382	<b>GT.75X156P2</b>	GT.75X15	50 lbs (222.41)	15" (381)	3.88" (98.552)	.75" (19.05)	1.5" (38.1)	2.5" (63.5)	Blue	10
854-44381	<b>GT.75X156C2</b>	GT.75X15	50 lbs (222.41)	15" (381)	3.88" (98.552)	.75" (19.05)	1.5" (38.1)	2.5" (63.5)		100

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

Grip Tie Rolls

For custom-cut lengths, HellermannTyton offers the hook and loop strap on a five yard and 25 yard roll. Ideal for job site applications, desired lengths can be cut on the spot.

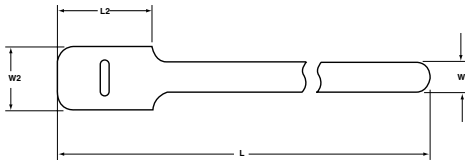


Product Selection			Width (W)		Color	Pkg. Qty.
Article No.	Part No.	Type	in.	(mm)		
854-44384	<b>GT.75X1800</b>	GT.75X180	.75"	(19.05)	Black	180" (5 yds.)
854-44388	<b>GT.75X1802</b>	GT.75X180	.75"	(19.05)	Red	180" (5 yds.)
854-44389	<b>GT.75X1803</b>	GT.75X180	.75"	(19.05)	Orange	180" (5 yds.)
854-44390	<b>GT.75X1804</b>	GT.75X180	.75"	(19.05)	Yellow	180" (5 yds.)
854-44391	<b>GT.75X1805</b>	GT.75X180	.75"	(19.05)	Green	180" (5 yds.)
854-44392	<b>GT.75X1806</b>	GT.75X180	.75"	(19.05)	Blue	180" (5 yds.)
854-44395	<b>GT.75X6000</b>	GT.75X600	.75"	(19.05)	Black	600" (16.6 yds.)
854-44396	<b>GT.75X9000</b>	GT.75X900	.75"	(19.05)	Black	900" (25 yds.)
854-44397	<b>GT.75X9004</b>	GT.75X900	.75"	(19.05)	Yellow	900" (25 yds.)

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### Write-on Grip Ties

In situations where instant identification is needed, HellermannTyton provides Grip Ties with a white write-on area. This smudge-free surface is ideal for fast and easy identification with a ballpoint pen or felt-tip marker. The write-on area is approximately 3/8"(H) x 1-1/4"(W). It is positioned in the center of the black 6", 8" and 11" straps, as well as spaced every 12" on the Grip Tie rolls.

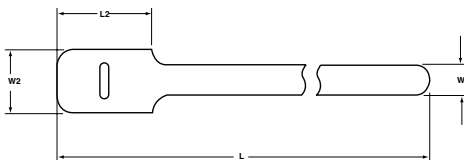


Product Selection																
Article No.	Part No.	Type	Min. Tensile Strength		Length (L)		Max. Ø Bundle		Width (W)		Width (W2)		Length (L2)	Color	Pkg. Qty.	
			lbs. (N)		in. (mm)		in. (mm)		in. (mm)		in. (mm)					
854-44340	GT.50X60P2W	GT.50X6W	40 lbs	(177.93)	6"	(152.4)	1"	(25.4)	.5"	(12.7)	1"	(25.4)	1.5"	(38.1)	Black	10
854-44338	GT.50X60C2W	GT.50X6W	40 lbs	(177.93)	6"	(152.4)	1"	(25.4)	.5"	(12.7)	1"	(25.4)	1.5"	(38.1)	Black	100
854-44356	GT.50X80P2W	GT.50X8W	40 lbs	(177.93)	8"	(203.2)	1.75"	(44.45)	.5"	(12.7)	1"	(25.4)	1.5"	(38.1)	Black	10
854-44354	GT.50X80C2W	GT.50X8W	40 lbs	(177.93)	8"	(203.2)	1.75"	(44.45)	.5"	(12.7)	1"	(25.4)	1.5"	(38.1)	Black	100
854-44321	GT.50X110P2W	GT.50X11W	40 lbs	(177.93)	11"	(279.4)	2.63"	(66.8)	.5"	(12.7)	1"	(25.4)	1.5"	(38.1)	Black	10
854-44319	GT.50X110C2W	GT.50X11W	40 lbs	(177.93)	11"	(279.4)	2.63"	(66.8)	.5"	(12.7)	1"	(25.4)	1.5"	(38.1)	Black	10
854-44386	GT.75X1800W	GT.75X180W	-	-	180"	(5 Yds.)	-	-	.75"	(19.05)	-	-	-	-	Black	180"

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### Grip Ties for Plenum Applications

HellermannTyton offers UL94V-2 flame rated Grip Ties for use in air handling spaces. These Grip Ties are UL Listed in accordance with the National Electrical Code regulations. They are available in three lengths as well as a 180" roll.



Product Selection																
Article No.	Part No.	Type	Min. Tensile Strength		Length (L)		Max. Ø Bundle		Width (W)		Width (W2)		Length (L2)	Color	Pkg. Qty.	
			lbs. (N)		in. (mm)		in. (mm)		in. (mm)		in. (mm)					
854-44352	GT.50X6MP2V2	GT.50X6	40 lbs	(177.93)	6"	(152.4)	1"	(25.4)	.5"	(12.7)	1"	(25.4)	1.5"	(38.1)	Maroon	10
854-44368	GT.50X8MP2V2	GT.50X8	40 lbs	(177.93)	8"	(203.2)	1.91"	(48.5)	.5"	(12.7)	1"	(25.4)	1.5"	(38.1)	Maroon	10
854-44334	GT.50X12MP2V2	GT.50X12	40 lbs	(177.93)	12"	(304.8)	3.18"	(80.7)	.5"	(12.7)	1"	(25.4)	1.5"	(38.1)	Maroon	10
854-44394	GT.75X180MV2	GT.75X180	-	-	-	-	-	-	.75"	(19.05)	-	-	-	-	Maroon	180"

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

## EVO7™ Tool

At the heart of the EVO 7 lies revolutionary, patent-pending Tension/Lock/Cut (TLC) technology that dramatically changes how cable ties are cut. The key is TLC's ability to lock each tie in place at the desired tension prior to cutting. Because the tension is fixed at the trigger when squeezing begins, only a minimum of hand force and a shorter range of motion is required to cut through each tie.

### A. Easy Blade Replacement

One-way blade installation makes on-site blade replacement a snap.

### B. Long Narrow Nose

Allows you to cut cable ties in the tightest of spaces quickly and easily.

### C. Trigger

Made from soft-grip, non-slip material, the contoured full-length trigger incorporates individual finger grips to accommodate multiple hand sizes.

### D. Integrated Hanger Hook

Allows easy storage and accessibility.

### E. Contoured Ergonomically-Engineered Handle

Crafted from soft-grip, non-slip material, the grip features an integrated air cushion that conforms to your hand for maximum comfort.

### F. Tension Knob

Rotate the knob to any of 33 precise pre-set tension settings.

### G. Thumb Lock

To unlock the tension knob, slide the non-slip thumb lock forward, adjust to desired tension setting and release the thumb lock to lock in place.

### H. Impact-Resistant Housing

Made from durable, light-weight composite, the EVO 7 weighs 9.7 oz. (.275 kg), resists chemical contamination and is built to stand up to the toughest industrial environments.



Product Selection

Article No.	Part No.	Type	Description	Cable Tie Series	Pkg. Qty.
110-70083	<b>110-70083</b>	EVO7	Standard hand span 3.5" (90mm).	All 18-80 lb. Series Ties	1
110-70084	<b>110-70084</b>	EVO7SP	Short hand span 3.1" (80mm).	All 18-80 lb. Series Ties	1
110-70106	<b>110-70106</b>	BLADEKT	Blade replacement kit for EVO7 and EVO7SP. Contains (1) Blade & (1) Nose piece screw.		1
110-70091	<b>110-70091</b>	T8SD	T8 Star Driver for removal/insertion of tension lock out screw.		1
110-70089	<b>110-70089</b>	CALTOOL	Calibration tool to be used for removal of cap at back of tension knob and for calibrating tool on site.		1
110-99000	<b>110-99000</b>	UC200	UC200 Tension Gauge for tensile read outs when calibrating tools on site.		1

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification.

### MARK 9 Tools

Specifically-developed for maximum ergonomic and performance values, the Mark 9 series tools combine reduced hand effort and durable components to ensure efficient cable tie assembly and a longer life cycle. The Mark 9 tools can be used with nearly every HellermannTyton cable tie. Able to accommodate ties up to .53" in width, the Mark 9 tools can be used with HellermannTyton's T18\* series cable ties as well as our heavy duty ties which include the T250 series and EL-TY. HellermannTyton offers a high-tension version of the Mark 9 (MK9HT) that has the same design features as the standard counterparts but with higher cut-off tension capabilities. The Mark 9 high tension tools offer a 5/8" stroke.



MK9



MK9HT



MK9SST

Product Selection

Article No.	Part No.	Type	Description	Mil. Spec.	Cable Tie Series	Pkg. Qty.
110-09500	<b>MK9</b>	MK9	Durable and lightweight, the Mark 9 tool is user friendly and adjustable, with top-of-the-line design features. Accommodates heavy duty cable ties.	MS90387-1	T18* thru T250 Series CTT20 thru CTT175 Series EL-TY Series Wide Strap Series	1
110-09000	<b>MK9HT</b>	MK9HT	The Mark 9 High Tension tool has the same design features as the MK9, but offers an increased tension range.		T18* thru T250 Series CTT20 thru CTT175 Series EL-TY Series Wide Strap Series	1
110-09800	<b>MK9RE</b>	MK9RE	The MK9 Rounded Edge tool has the same design features as the MK9 although it has a special nose piece that leaves a 2mm round tail.		T18* thru T250 Series CTT20 thru CTT175 Series EL-TY Series Wide Strap Series	1
110-09600	<b>MK9REF</b>	MK9REF	The Mark 9 Reduced Effort tool has a reduced effort trigger mechanism for operators with small hands. It has a shorter pawl stroke.		T18* thru T250 Series CTT20 thru CTT175 Series EL-TY Series Wide Strap Series	1
110-95000	<b>MK9SST</b>	MK9SST	Adapted for use with stainless steel ties, the MK9 Stainless Steel tool retains the same design features as the MK9 series.		All MBT Series for both 304 and 316 materials	1
110-00220	<b>MK9BLADEKIT</b>	MK9BLADEKIT	Service kit for the MK9 tool includes replacement blade, screw for nose piece, and instructional card.			1
110-00221	<b>MK9-221</b>	MK9-221	Replacement blade for MK9 series.			1
110-05114	<b>MK9SS-114</b>	MK9SS-114	Replacement blade for MK9SST series tools.			1

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification. \*Does not include T18S Series ties .08" wide.



## Other Mechanical Cable Tie Tools

HellermannTyton offers an assortment of mechanical tools which can be used with any HellermannTyton cable tie. When using these tools, the cable tie is hand applied and then manually tensioned and cut-off without the use of an extraneous power source.



Product Selection					
Article No.	Part No.	Type	Description	Cable Tie Series	Pkg. Qty.
110-07000	<b>MK7HT</b>	MK7HT	Durable and lightweight, the Mark 7 High Tension tool is user friendly and adjustable; with top-of-the-line design features and offers an increased tension range.	T30 thru T50 Series CTT20 thru CTT60 Series	1
110-20003	<b>TWT1</b>	MK20	The TWT1 is a lightweight and economical twist tool for standard cable ties. Offers speed and efficiency. Fits into a pocket. (Color Orange).	T18 thru T50 Series CTT20 thru CTT60 Series	1
110-21060	<b>TWT2</b>	MK21	The TWT2 is a lightweight and economical twist tool for heavy duty cable ties. Offers speed and efficiency. Fits into a pocket. (Color Blue).	T120 thru T150 Series CTT175 Series	1
110-11150	<b>T150</b>	T150	The T150 Tool is a heavy duty installer controlled tool for use in the field. Pliers' action provides mechanical advantage. Padded foam grip handles provide comfort and control.	T150 Series CTT175 Series	1
111-11250	<b>T250</b>	T250	The T250 has the same design features as the T150 Tool, but can tension and cutoff a wider tie.	T150 thru T250 Series CTT175 Series	1

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification.

## Power Assisted Cable Tie Tools

HellermannTyton's Mark 7 and Mark 9 power assisted (MK7P & MK9P) tools utilize pneumatic power to tension and cut-off HellermannTyton cable ties. The MK7P and MK9P tools feature an ergonomic design while offering time/labor savings and ease of use benefits derived from pneumatic power. These tools feature a non-slip, comfortable grip, soft touch trigger, and one touch tensioning/cut-off capability. HellermannTyton's pneumatic cable tie tools are lightweight, high performance, and suited for extended use.

### Product Features

#### - Ergonomic

The ergonomic design of the pneumatic cable tie tools incorporates a comfortable grip, low weight, and easy trigger depression to reduce installer effort and strain while installing cable ties.

#### - Operation

MK7P & MK9P speed assembly. Just one pulse of the soft touch trigger assembly actuates an immediate tension and cut-off of the cable tie.

- Cable tie waste is ejected to the side after the cable tie is applied, ensuring smooth operation of the tool.
- Uses dry or lubricated air.
- Operates between 90 PSI and 105 PSI maximum.
- Supplied with a 6 inch lead which comes with a male quick connect fitting with a female coupler for 1/8" flow.

#### - Design

HellermannTyton's pneumatic tools are manufactured with tough, chromium steel components and high impact, glass reinforced nylon housings for maximum durability.

#### - Tensioning

An easy to read indicator verifies tension settings. The tools feature an easy dial-in tension adjustment, along with a lock-out capability. The tension adjustment on the MK7P and the MK9P is designed with an operator friendly, positive "click" design for easy use. The tension can readily be locked out to allow the tension adjustment to remain at a constant setting that can only be changed by approved personnel. The fine adjust tension knob has a unique lever feature used to reduce adjustment torque.



MK9P

## Mark 7 Pneumatic

The Mark 7 Pneumatic (MK7P) is built to perform in demanding production and manufacturing environments. Heavy duty precision parts ensure repeatability in the tensioning process. The MK7P fits comfortably in the operator's hand, reducing hand, arm and wrist fatigue. Due to its ergonomic features, HellermannTyton's MK7P makes it easier for the installer to consistently apply cable ties while maintaining correct tension and flush cut-off. Safety is enhanced, as the MK7P can eliminate sharp edges of a cut-off cable tie.



MK7P

Material Data	
Power Supply	Dry or Lubricated Air
Cycle Time	4 strokes per second
Weight	16oz
Pawl Travel Stroke	1.0" (2.54 cm)
Tension Force	125 to 180 N, adjustable

Product Selection					
Article No.	Part No.	Type	Description	Cable Tie Series	Pkg. Qty.
110-07101	<b>MK7P</b>	MK7P	Includes Mark 7 Pneumatic tool and quick connect fittings. Ergonomic tool uses pneumatic power and accomplishes rapid tension and cut-off with one trigger depression.	T18 thru T50 Series CTT20 thru CTT60 Series	1
110-07111	<b>MK7P-342</b>	Replacement Blade	MK7P Replacement Blade		1

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes. Minimum order quantity for MK7P-342 is 5.

### MK9 Pneumatic

The Mark 9 Pneumatic (MK9P) is constructed with heavy-duty parts to ensure that it performs optimally in demanding environments. It is ideally designed to apply heavy-duty ties (T50-T250), clamp and button head ties.

Like the MK7P, HellermannTyton's MK9P incorporates the next level of ergonomic improvement with its low weight, comfortable grip and easy trigger depression. Very durable, the pneumatic MK9P features adjustable, easy to read tension settings. Lock-out features are standard.

The MK9P is available with lower air attachment (standard) or can be ordered with an upper air attachment.



MK9PUA (Upper Air)



MK9P

Material Data	
Power Supply	Dry or Lubricated Air
Cycle Time	2 strokes per second
Weight	32oz
Pawl Travel Stroke	1.25" (3.175 cm)
Tension Force	125 to 310 N, adjustable

Product Selection					
Article No.	Part No.	Type	Description	Cable Tie Series	Pkg. Qty.
110-09101	MK9P	MK9P	Includes Mark 9 Pneumatic tool and quick connect fittings. Ergonomic tool uses pneumatic power and accomplishes rapid tension and cut-off with one trigger depression.	T50 thru T250 Series CTT20 thru CTT175 Series EL-TY Series Button Head Ties	1
110-09112	MK9PUA	MK9P	Includes Mark 9 Pneumatic tool and quick connect fittings with upper air option for top air connection. Includes a hanger for an optional overhead tool balancer (not included). Ergonomic tool uses pneumatic power and accomplishes rapid tension and cut-off with one trigger depression.	T50 thru T250 Series CTT20 thru CTT175 Series EL-TY Series Button Head Ties	1
110-09111	MK9P-109	MK9P-109	MK9P Replacement Blade		1**

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

\*\*Minimum order quantity of MK9P-109 is 5.

### Common Accessories for MK7P and MK9P

HellermannTyton offers a portable kit that incorporates carbon dioxide (CO<sub>2</sub>) as the primary air source. This unique feature will allow for greater flexibility, mobility and the elimination of air line to the tool.

Product Selection					
Article No.	Part No.	Type	Description	Pkg. Qty.	
110-09005	MKPCOHOSE	MKPCOHOSE	Regulator and hose that attaches to HPA tanks to supply portable air for all pneumatic series tools.	1	

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

## Automatic Cable Tie Systems

HellermannTyton's automatic cable tie tool systems are compact, fast, reliable, and versatile accommodating a variety of wiring harness, and bundling and securing requirements. These tool systems are designed to provide significant labor and cost savings through process improvements, lower installed costs and greater consistency, quality and ergonomic benefits.

### Product Features

#### - Fast

Cable ties are installed quickly with one easy trigger depression, increasing productivity while decreasing labor costs.

#### - Reliable

HellermannTyton's automatic cable tie systems have been tested to perform extremely consistently without interruption to work flow.

#### - Ergonomic

The ergonomic design of the automatic cable tie tool systems feature a comfortable grip, low weight, and easy trigger depression to reduce installer effort and strain while installing cable ties.

#### - Easy to Use

Equipped with a self-diagnostic LED information panel, the automatic cable tie systems easily guide the user through the cycles of cable tie installations.

#### - Automation

The automatic cable tie systems can be implemented into fully automated applications to further increase productivity and decrease labor costs.

#### - Flexible Manufacturing/Versatility

HellermannTyton's automatic cable tie tool systems support principles of flexible manufacturing requirements and environments. The systems can be used in handheld, bench mount and overhead assembly configurations. The versatile overhead assembly option provides the ultimate integration to the customer's manufacturing area. HellermannTyton's automatic tools are powered by a standard 110 AC 24V (AT2000) and 110 AC 27 V (AT2060) electrical outlet that converts to a low DC voltage to the tool. All power systems offer the installer the mobility needed to tackle different harnessing requirements.

#### - Uniform Fastening Quality

HellermannTyton's automatic cable tie systems feature adjustable tension control to deliver consistent levels of cable tie fastening.

#### - Range

HellermannTyton offers the widest range of automatic cable tie tool systems which cover cable tie tensile strengths of 18, 30, and 50 pounds with bundle diameters between 1/16" to over 3".



AT53080



An LED panel shows the status of the tool.

#### Product Selection

Article No.	Part No.	Max. Ø Bundle
120-00000	AT2000	.75" (20 mm)
103-00000	AT2060	1.25" (31 mm)
102-00000	ATS10200000	3.14" (80 mm)

**AT2000**

The HellermannTyton Autotool 2000 completely installs cable ties on bundles up to 3/4" in diameter. This automatic cable tie tool is highly reliable and offers ergonomic benefits including low weight, easy trigger depression, a comfortable hand grip and correct balance - all which reduce operator strain. The AT2000 possesses an LED panel which makes it easier to maintain and operate the tool.

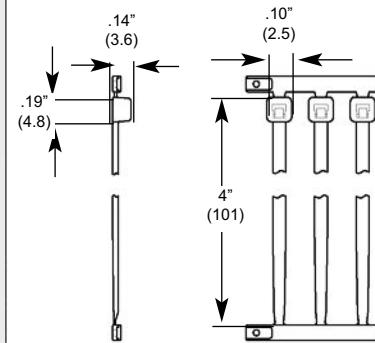


AT2000 Technical Specifications

Power Supply	<b>Electrical, with Power Pack or Battery Pack</b>
Cycle Time	<b>0.8 s</b>
Weight	<b>2.6lbs</b>
Installation	<b>Handheld, bench mount or overhead</b>
Tension Force	<b>Adjustable</b>

AT2000 Cable Tie Specifications

<b>Operating Temperature</b>	
Natural Polyamide 6.6	<b>-40 °F to +185 °F (-40 °C to +85 °C) continuous</b>
Heat stabilized, black Polyamide 6.6	<b>-40 °F to +221 °F (-40 °C to +105 °C) continuous</b>
Natural, Stanyl Polyamide 4.6	<b>-40 °F to +275 °F (-40 °C to +135 °C) continuous</b>
Reel Diameter	<b>17.7 " (450)</b>
Reel Width	<b>5.20 " (132)</b>



AT2000 Cable Ties



Product Selection

Article No.	Part No.	Type	Description	Min. Tensile Strength	Max. Ø Bundle	Pkg. Qty.
				lbs. (N)	in. (mm)	
120-00000	<b>AT2000</b>	Autotool 2000	Includes AT2000 tool, power supply, power cord, tool cord, and manual			1
120-00060	<b>120-00060</b>	Control Box	Control Box for linking AT2000 to automation			1

**Natural Cable Ties**

120-05001	<b>T18RA50</b>	T18RA50-N66-NA	Cable ties on bandolier for use with the AT2000	18 lbs (80)	.75" (20)	20,000 per carton includes: 50 per bandolier 500 per package
120-05004	<b>T18RA5000</b>	T18RA5000-N66-NA	Cable ties on reel for use with the AT2000	18 lbs (80)	.75" (20)	10,000 per carton includes: 5,000 per reel 2 reels per carton

**Black, Heat Stabilized Cable Ties**

120-05003	<b>T18RA50HSW</b>	T18RA50-HSW-BK	Cable ties on bandolier for use with the AT2000	18 lbs (80)	.75" (20)	20,000 per carton includes: 50 per bandolier 500 per package
120-05007	<b>T18RA5000HSW</b>	T18RA5000-HSW-BK	Cable ties on reel for use with the AT2000	18 lbs (80)	.75" (20)	10,000 per carton includes: 5,000 per reel 2 reels per carton

**Natural, Stanyl Cable Ties**

120-05015	<b>T18RA5000HR</b>	T18RA5000HR-N46	Cable ties on reel for use with the AT2000	18 lbs (80)	.75" (20)	10,000 per carton includes: 5,000 per reel 2 reels per carton
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V/O rated ties can be made available for the AT2000. Various tie colors available upon request (Contact HellermannTyton for lead time). Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes. For information on AT2000's Bench Mount System and Overhead Suspension Assembly see page 85 and 86. For information on Wire Retainers for Harness Boards and AT2000's battery pack see page 87.



### AT2060

HellermannTyton's AT2060 automatically installs cable ties for bundles up to 1-1/4". The many ergonomic benefits include easy trigger depression and low weight that reduces operator effort and strain. Operation and maintenance of the tool are enhanced by the self-diagnostic LED panel located on the AT2060.

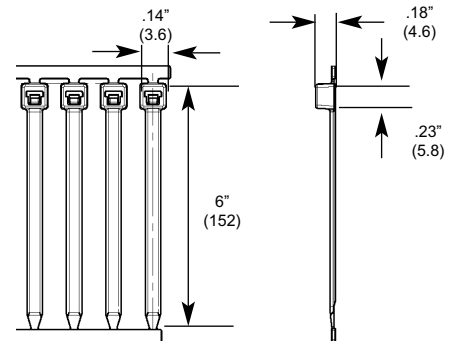


AT2060 Technical Specifications

Power Supply	<b>Electrical</b>
Cycle Time	<b>1.2 seconds</b>
Weight	<b>3.9lbs</b>
Pawl Travel	<b>1.25" (3.175 cm)</b>
Stroke	
Tension Force	<b>Adjustable</b>

AT2060 Cable Tie Specifications

<b>Operating Temperature</b>	
Natural Polyamide 6.6	<b>-40 °F to +185 °F (-40 °C to +85 °C)</b>
Heat stabilized, black, Polyamide 6.6	<b>-40 °F to +221 °F (-40 °C to +105 °C)</b>
Reel Diameter	<b>17.7 " (450)</b>
Reel Width	<b>7.197 " (182.8)</b>
Reel Weight	<b>7 lbs</b>



Product Selection

Article No.	Part No.	Type	Description	Min. Tensile Strength	Max. Ø Bundle	Pkg. Qty.
				lbs. (N)	in. (mm)	
103-00000	<b>AT2060</b>	AT2060	Includes AT2060 tool, power supply, power cord, tool cord, and maintenance and operation manual.			1

**Natural Cable Ties**

103-00002	<b>T30RA30</b>	T30RA	Cable ties on a bandolier for use with the AT2060 tool	30 lbs (133.44)	1.25" (31)	6,000 per carton includes: 30 per bandolier 600 per bag
103-00001	<b>T30RA3000</b>	T30RA3000	Cable ties on a reel for use with the AT2060 tool	30 lbs (133.44)	1.25" (31)	6,000 per carton includes: 3,000 per reel 2 reels per carton

**Black, Heat Stabilized Cable Ties**

103-00003	<b>T30RA300HS</b>	T30RA	Cable ties on a bandolier for use with the AT2060 tool	30 lbs (133.44)	1.25" (31)	6,000 per carton includes: 30 per bandolier 600 per bag
103-00004	<b>T30RA30000HS</b>	T30RA	Cable ties on a reel for use with the AT2060 tool	30 lbs (133.44)	1.25" (31)	6,000 per carton includes: 3,000 per reel 2 reels per carton

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes. V/O rated ties and 4/6 ties for high temperatures can be made available for the AT2060. Various colors available upon request (Contact HellermannTyton for lead time).

**For information on AT2060's Bench Mount System and Overhead Suspension Assembly see page 85 and 86.**  
**For information on Wire Retainers for Harness Boards see page 87.**

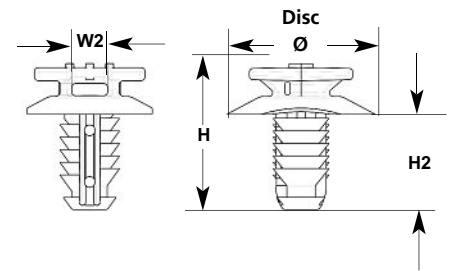
## AT2000 and AT2060

### Fir Tree Mount For Automatic Cable Tie Tool System

This fir tree mount is designed for use with HellermannTyton Automatic Cable Tie Tool Systems. For more information on this system, contact HellermannTyton.

Material Data		RoHS
Material	Polyamide 6.6 high impact modified, Heat Stabilized, UV Resistant (PA66HIRHS)	
Operating Temperature	-40 °F to +230 °F (-40 °C to +110 °C) <b>continuous</b>	
Flammability	<b>UL94 HB</b>	

Product Selection							
Article No.	Part No.	Type	Disc Ø in. (mm)	Width (W2) in. (mm)	Height (H) in. (mm)	Height (H2) in. (mm)	Pkg. Qty.
<b>FT7AT - Mounting Hole Ø: .24" - .8" (6.2 - 7.2mm) - Panel Thickness: .03" - .276" (0.8 - 7.0mm)</b>							
151-00492	<b>151-00492</b>	FT7AT	.73" (18.6)	.18" (4.5)	.72" (18.34)	.47" (11.9)	100



Installation tools - MK7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### AT2000 & AT2060 Bench Mount System

HellermannTyton offers a portable bench mount system which works with the AT2000 and AT2060 tool systems. It is extremely easy to set up and use. Within seconds, the AT2000 or the AT2060 can be converted from a handheld tool to a bench mount system. With the touch of the foot pedal, the cable tie is applied.



Product Selection				
Article No.	Part No.	Type	Description	Pkg. Qty.
120-00040	<b>AT2BENCHMOUNT</b>	Bench Mount Kit	Includes foot pedal, tie reel stand and tool mounting stand	1

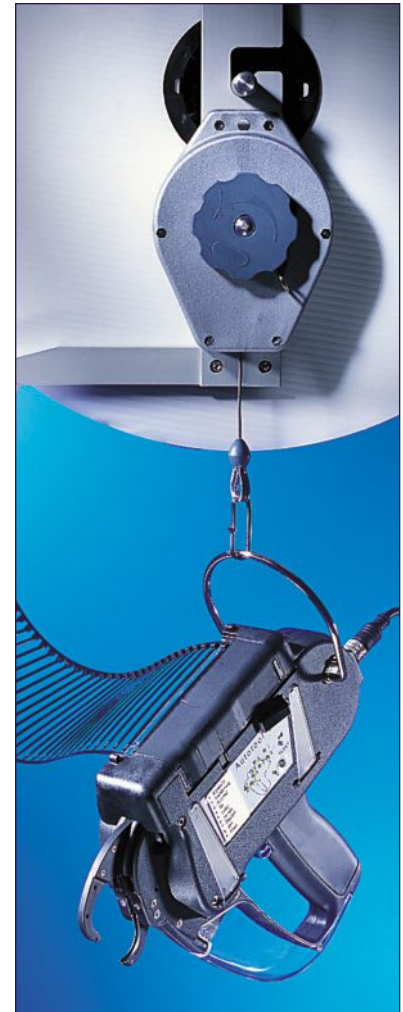
Use **Part No.** for ordering and **Type** for specification purposes.

## AT2000 and AT2060 Overhead Suspension Assembly

HellermannTyton's overhead suspension assembly system holds the AT2000 or AT2060, reel of cable ties, and power source. The overhead assembly is available in several configurations in a variety of mounting options and is easily integrated into various manufacturing environments. The modular design allows for easy additions or modifications of the system design.

The overhead assembly system provides additional ergonomic advantages to the AT2000 and AT2060. The system features overhead hanging, a trolley slide which allows for mobility within the frame, and an adjustable counter balance. These features allow for low operator strain and easy use. Since the assembly integrates the automatic cable tie systems and reel of ties, continuous feed is achieved. Reloading of cable ties is greatly reduced, further optimizing efficiencies.

For more information on the system, contact HellermannTyton.



### AT2000 Battery Pack

HellermannTyton's battery pack powers the AT2000 and is worn by the operator, allowing for complete mobility.

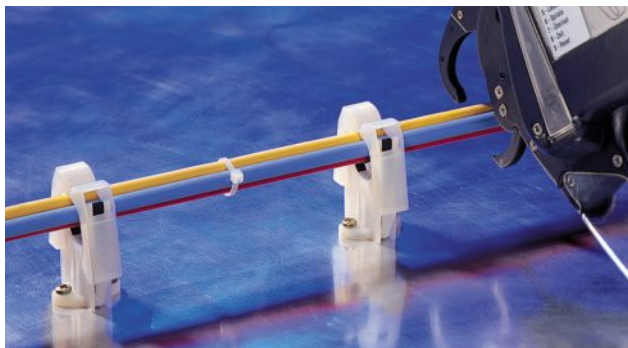


Product Selection				
Article No.	Part No.	Type	Description	Pkg. Qty.
120-00031	<b>120-00031</b>	Battery Pack	Battery with belt clip and connector cord	1
120-00021	<b>120-00021</b>	Battery Charger	Charging unit for battery	1

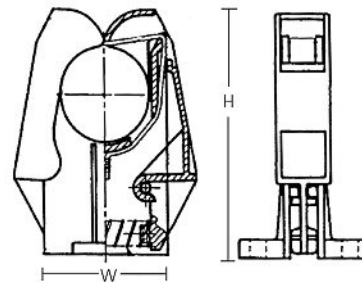
Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### Wire Retainer for Harness Boards

Designed for use in harness board assemblies, these wire retainers stand-off wire and cable bundles for easier cable tie application. Wires are individually inserted, and bundles are preformed, making harnessing easier.



Wire Retainer for Harness Boards



Product Selection					Height (H)	Width (W)	Max. Ø Bundle	Pkg. Qty.
Article No.	Part No.	Type	Description	in. (mm)	in. (mm)	in. (mm)		
120-00080	<b>HH-20</b>	HH20	Harness Board Assembly	2.12" (54)	1.22" (31)	.83" (20)	25	

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

## AutoTool System 3080 For bundles up to 3.14"

HellermannTyton's ATS3080 automatically installs cable ties for bundles up to 3.14" in diameter with one trigger depression. This innovative system utilizes strap and closures (ordered separately) to achieve a waste free system. The ATS3080 uses only the required strap length required for the diameter. The strap is outside serrated so that it will not damage sensitive wire and cable bundles.

This well balanced tool has ergonomic benefits that include low weight and a comfortable hand grip which reduces operator strain and injury while installing cable ties. The ATS3080 possesses a LED panel that provides critical operational feedback that makes it easier to maintain and operate the tool.

The ATS3080 has three jaw diameters available: 1.18" (30mm), 1.96" (50mm), and 3.14" (80mm). The jaws are easily interchanged and further tool adjustment between the three jaw diameters is unnecessary.



### ATS3080 Technical Specifications

Power Supply	<b>Electrical</b>
Cycle Time	<b>approx. 1.3 sec. (50 mm jaw)</b>
Weight	<b>3.2lbs</b>
Installation	<b>Mobile, bench mount or overhead</b>
Tension Force	<b>Adjustable</b>



Closures and strap for ATS3080



### ATS3080 Cable Tie Specifications

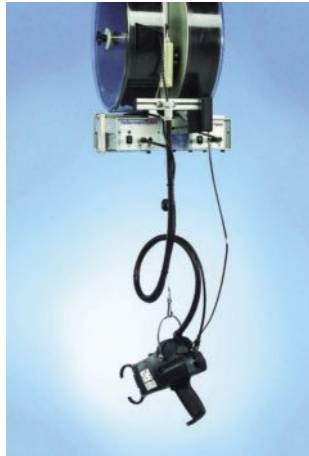
Material	<b>Polyamide 6.6 high impact modified, heat and UV stabilized (PA66HIRHSUV)</b>
Operating Temperature	<b>-40 °C to +95 °C continuous, (+105 °C for 5000 h)</b>
Flammability	<b>UL94 HB</b>
<b>Strap Reel Dimensions</b>	
Reel Diameter	<b>15.25" (387 mm)</b>
Reel Width	<b>3.5" (88.9 mm)</b>
Reel Weight	<b>6lbs (2.72 kg)</b>
<b>Closure Reel Dimensions</b>	
Reel Diameter	<b>15.25" (387 mm)</b>
Reel Width	<b>3.5" (88.9 mm)</b>
Reel Weight	<b>3.5lbs (1.58 kg)</b>







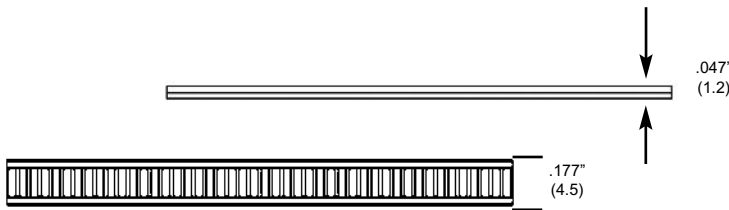
AT53080 with mobile trolley unit



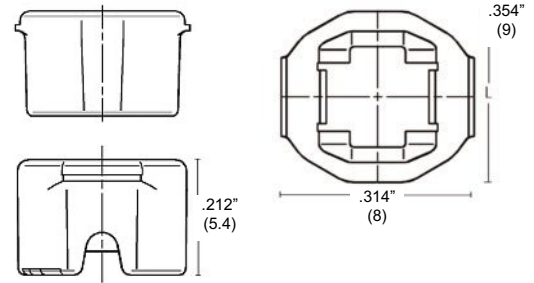
AT53080 with overhead



AT53080 with bench mount



Strap AT53080



Closures AT53080

Product Selection					
Article No.	Part No.	Type	Description	Min Tensile Unlocking Strength (lbs)	Pkg. Qty. ft. (m)
102-00000	<b>AT510200000</b>	AT53080	Includes AT53080 tool, power cord, tool cord, and maintenance and operation manual. Does not include power supply.		1
102-00010	<b>AT510200010</b>	Power Pack AT53080	Power Supply Unit for AT53080 Input: 230/115 VAC, 50-60 Hz Output: 48 VDC, max. 50W		1
<b>Natural Strap and Closures</b>					
102-66109	<b>AT510266109</b>	Strap Natural AT53080	AT53080 Strap	50 lbs	1640 ft. (500)
102-66209	<b>AT510266209</b>	Closures Natural AT53080	AT53080 Closure	50 lbs	5000 pcs
<b>Black Strap and Closures</b>					
102-66110	<b>AT510266110</b>	Strap Black AT53080	AT53080 Strap	50 lbs	1640 ft. (500)
102-66210	<b>AT510266210</b>	Closures Black AT53080	AT53080 Closures	50 lbs	5000 pcs
102-00040	<b>AT510200040</b>	Bench Mount Kit	Bench Mount Kit for AT5 3080 Integrated pneumatic system that coordinates tool and reels. Foot pedal application, other actuation options available		1
102-00050	<b>AT510200050</b>	Overhead Suspender	Overhead Suspender AT5 3080		1
102-00030	<b>AT5TROLLEY</b>	Trolley AT5 3080	Trolley		1

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.



## Quick Tool

HellermannTyton's Quick Tool is an automatic bench mount system suited for high volume cable tie applications. This air powered tool accommodates a reel of 5,000 ties and, like HellermannTyton's other automated systems, can be integrated into further automation as well as fully incorporated into conveyor or assembly line applications.

### Product Features

- The system is a one piece, bench top unit which increases efficiency through quick and reliable fastening.
- It can be installed where a 110 VAC electrical outlet and pneumatic air source are available.
- Provides consistent fastening tension.
- Controls fastening tension.
- Ties are available in two styles: standard and heat stabilized.
- Custom colors for Quick Tool ties are also available. Contact HellermannTyton for more information.



QS101 Cable Tie Specifications

<b>Operating Temperature</b>	
Natural Polyamide 6.6	<b>-40 °F to +185 °F (-40 °C to +85 °C)</b>
Heat stabilized, black, Polyamide 6.6	<b>-40 °F to +221 °F (-40 °C to +105 °C)</b>
Reel Diameter	<b>18" (457 mm)</b>
Reel Width	<b>5.20" (132 mm)</b>
Reel Weight	<b>4.8 lbs (2.18 kg)</b>



QS101 Technical Specifications

Max. Ø Bundle	<b>0.630" (16.00 mm)</b>
Wattage	<b>70W</b>
Power Supply	<b>Electrical/Pneumatic Power</b>
Cycle Time	<b>1.2 Seconds</b>
Weight	<b>40 lbs.</b>
Installation	<b>Bench</b>
Tension Force	<b>Adjustable (9.92 lbs - 19.84 lbs)</b>

Product Selection

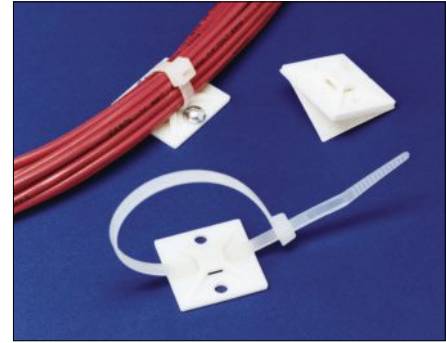
Article No.	Part No.	Type	Description	Min Tensile Unlocking Strength (lbs)	Max. Ø Bundle	Width (W)	Length (L)	Pkg. Qty.
					in. (mm)	in. (mm)	in. (mm)	
105-00000	<b>QS101</b>	QS101	Includes Quick Tool, power cord, maintenance and operation manual and foot pedal.					1
<b>Natural Cable Ties</b>								
105-00006	<b>QTTIE9</b>	QTTIE9	Cable ties on reel for use with the Quick Tool.	18	.63" (16)	.10" (2.5)	4.0" (101)	10,000 per carton: 5,000 per reel 2 reels per carton
<b>Black Heat Stabilized Cable Ties</b>								
105-00001	<b>QTTIEOHS</b>	QTTIEOHS	Cable ties on reel for use with the Quick Tool.	18	.63" (16)	.10" (2.5)	4.0" (101)	10,000 per carton: 5,000 per reel 2 reels per carton

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes. **Various colored cable ties available upon request. Contact HellermannTyton for more information and lead times.**

### Cable Tie Mounts

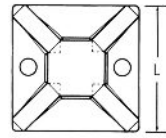
HellermannTyton's 4-way mounting bases are available in four sizes to accommodate T18 through T150 series cable ties. Insertion of ties can be made from all four sides. Each mount may be secured with two screws (four screws for the MB2.5 mount), with adhesive backing, or both, for ease of application and stability.

For applications where higher temperatures, certain chemicals, or UV radiation are a concern and an adhesive is the preferred method for securing, the acrylic adhesive 4-way mounting bases are recommended. The 2-way mounting bases may be secured with one screw, with adhesive backing, or both, and allow ties to be inserted from two sides.

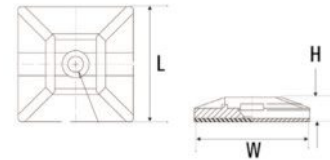


Adhesive mounts are supplied in pairs connected together on an adhesive liner.

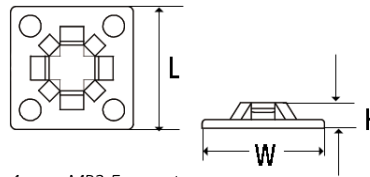
Material Data	
Material	<b>Polyamide 6.6 (PA66)</b>
Operating Temperature	<b>-40 °F to +185 °F (-40 °C to +85 °C) continuous</b>
Flammability	<b>UL94 V2 (excluding adhesive)</b>



4-way, MB3, MB4 and MB5 mounts



2-way mount



4-way, MB2.5 mount

### Cable Tie Mounting Bases - Screw Mount

**CAI**  
US  
File# E64139

Product Selection					Length (L)		Width (W)		Height (H)		Color	Pkg. Qty.
Article No.	Part No.	Type	Cable Tie Series	Mounting	in.	(mm)	in.	(mm)	in.	(mm)		
<b>2- Way Screw Mount</b>												
151-29104	<b>MB4SH10C2</b>	MB4SH	T18 - T50	# 6 Screw	1.115"	(28.32)	1.115"	(28.32)	.202"	(5.13)	White	100
151-00323	<b>MB4SH10H4</b>	MB4SH			1.115"	(28.32)	1.115"	(28.32)	.202"	(5.13)	White	500
151-29100	<b>MB4SH0C2</b>	MB4SH			1.115"	(28.32)	1.115"	(28.32)	.202"	(5.13)	Black	100
151-29101	<b>MB4SH0H4</b>	MB4SH			1.115"	(28.32)	1.115"	(28.32)	.202"	(5.13)	Black	500
<b>4- Way Screw Mount</b>												
151-28901	<b>MB2.510C2</b>	MB2.5	T18	# 3 Screw	.625"	(15.88)	.625"	(15.88)	.130"	(3.3)	White	100
151-28902	<b>MB2.510M4</b>	MB2.5			.625"	(15.88)	.625"	(15.88)	.130"	(3.3)	White	1000
151-00285	<b>MB2.50C2</b>	MB2.5			.625"	(15.88)	.625"	(15.88)	.130"	(3.3)	Black	100
151-00286	<b>MB2.50M4</b>	MB2.5			.625"	(15.88)	.625"	(15.88)	.130"	(3.3)	Black	1000
151-28302	<b>MB310C2</b>	MB3	T18, T30	#4 Screw	.75"	(19.0)	.75"	(19.0)	.15"	(3.8)	White	100
151-28305	<b>MB310M4</b>	MB3			.75"	(19.0)	.75"	(19.0)	.15"	(3.8)	White	1000
151-00136	<b>MB30C2</b>	MB3			.75"	(19.0)	.75"	(19.0)	.15"	(3.8)	Black	100
151-28301	<b>MB30M4</b>	MB3			.75"	(19.0)	.75"	(19.0)	.15"	(3.8)	Black	1000
151-28802	<b>MB410C2</b>	MB4	T18 - T50	#8 Screw	1.12"	(28.5)	1.12"	(28.5)	.19"	(4.8)	White	100
151-00319	<b>MB410H4</b>	MB4			1.12"	(28.5)	1.12"	(28.5)	.19"	(4.8)	White	500
151-00320	<b>MB40C2</b>	MB4			1.12"	(28.5)	1.12"	(28.5)	.19"	(4.8)	Black	100
151-28801	<b>MB40H4</b>	MB4			1.12"	(28.5)	1.12"	(28.5)	.19"	(4.8)	Black	500
151-00324	<b>MB510C2</b>	MB5	T18 - T150	#8 Screw	1.485"	(37.7)	1.485"	(37.7)	.245"	(6.2)	White	100
151-28504	<b>MB510F4</b>	MB5			1.485"	(37.7)	1.485"	(37.7)	.245"	(6.2)	White	250
151-28500	<b>MB50C2</b>	MB5			1.485"	(37.7)	1.485"	(37.7)	.245"	(6.2)	Black	100
151-28501	<b>MB50F4</b>	MB5			1.485"	(37.7)	1.485"	(37.7)	.245"	(6.2)	Black	250

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

## Cable Tie Mounting Bases - Rubber-Based Adhesive

Product Selection									
Article No.	Part No.	Type	Cable Tie Series	Mounting	Length (L)	Width (W)	Height (H)	Color	Pkg. Qty.
					in. (mm)	in. (mm)	in. (mm)		
<b>2- Way Mount with Rubber - Based Adhesive</b>									
151-29203	<b>MB4SHA10C2</b>	MB4SHA	T18 - T50	Adhesive	1.115" (28.32)	1.115" (28.32)	.232" (5.89)	White	100
151-29206	<b>MB4SHA10H4</b>	MB4SHA			1.115" (28.32)	1.115" (28.32)	.232" (5.89)	White	500
151-29200	<b>MB4SHA0C2</b>	MB4SHA			1.115" (28.32)	1.115" (28.32)	.232" (5.89)	Black	100
<b>4- Way Mount with Rubber - Based Adhesive</b>									
151-29002	<b>MB2.5A10C2</b>	MB2.5A	T18	Adhesive	.625" (15.88)	.625" (15.88)	.160" (4.1)	White	100
151-00298	<b>MB2.5A10M4</b>	MB2.5A			.625" (15.88)	.625" (15.88)	.160" (4.1)	White	1000
151-29000	<b>MB2.5A0C2</b>	MB2.5A			.625" (15.88)	.625" (15.88)	.160" (4.1)	Black	100
151-29001	<b>MB2.5A0M4</b>	MB2.5A			.625" (15.88)	.625" (15.88)	.160" (4.1)	Black	1000
151-28718	<b>MB3A10C2</b>	MB3A	T18, T30	Adhesive	.75" (19.0)	.75" (19.0)	.18" (4.6)	White	100
151-28721	<b>MB3A10M4</b>	MB3A			.75" (19.0)	.75" (19.0)	.18" (4.6)	White	1000
151-28710	<b>MB3A0C2</b>	MB3A			.75" (19.0)	.75" (19.0)	.18" (4.6)	Black	100
151-28713	<b>MB3A0M4</b>	MB3A			.75" (19.0)	.75" (19.0)	.18" (4.6)	Black	1000
151-28421	<b>MB4A10C2</b>	MB4A	T18 - T50	Adhesive	1.12" (28.0)	1.12" (28.0)	.22" (5.6)	White	100
151-00321	<b>MB4A10H4</b>	MB4A			1.12" (28.0)	1.12" (28.0)	.22" (5.6)	White	500
151-28403	<b>MB4A0C2</b>	MB4A			1.12" (28.0)	1.12" (28.0)	.22" (5.6)	Black	100
151-28406	<b>MB4A0H4</b>	MB4A			1.12" (28.0)	1.12" (28.0)	.22" (5.6)	Black	500
151-28529	<b>MB5A10C2</b>	MB5A	T18 - T150	Adhesive	1.485" (37.7)	1.485" (37.7)	.275" (6.9)	White	100
151-00427	<b>MB5A10F4</b>	MB5A			1.485" (37.7)	1.485" (37.7)	.275" (6.9)	White	250
151-28602	<b>MB5A0C2</b>	MB5A			1.485" (37.7)	1.485" (37.7)	.275" (6.9)	Black	100
151-28605	<b>MB5A0F4</b>	MB5A			1.485" (37.7)	1.485" (37.7)	.275" (6.9)	Black	250

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

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File# E64139

## Cable Tie Mounting Bases - Acrylic Adhesive

Product Selection									
Article No.	Part No.	Type	Cable Tie Series	Mounting	Length (L)	Width (W)	Height (H)	Color	Pkg. Qty.
					in. (mm)	in. (mm)	in. (mm)		
<b>4 - Way Screw Mount Acrylic Adhesive</b>									
151-00331	<b>MB3A10A2C2</b>	MB3A	T18, T30	Adhesive	.75" (19.0)	.75" (19.0)	.18" (4.6)	White	100
151-28717	<b>MB3A10A2H4</b>	MB3A			.75" (19.0)	.75" (19.0)	.18" (4.6)	White	500
151-28711	<b>MB3A0A2C2</b>	MB3A			.75" (19.0)	.75" (19.0)	.18" (4.6)	Black	100
151-28709	<b>MB3A0A2H4</b>	MB3A			.75" (19.0)	.75" (19.0)	.18" (4.6)	Black	500
151-28420	<b>MB4A10A2C2</b>	MB4A	T18 - T50	Adhesive	1.12" (28.5)	1.12" (28.5)	.23" (5.9)	White	100
151-00322	<b>MB4A10A2H4</b>	MB4A			1.12" (28.5)	1.12" (28.5)	.23" (5.9)	White	500
151-28402	<b>MB4A0A2C2</b>	MB4A			1.12" (28.5)	1.12" (28.5)	.23" (5.9)	Black	100
151-28405	<b>MB4A0A2H4</b>	MB4A			1.12" (28.5)	1.12" (28.5)	.23" (5.9)	Black	500
151-28607	<b>MB5A10A2C2</b>	MB5A	T18 - T150	Adhesive	1.485" (37.7)	1.485" (37.7)	.275" (6.9)	White	100
151-28610	<b>MB5A10A2F4</b>	MB5A			1.485" (37.7)	1.485" (37.7)	.275" (6.9)	White	250
151-28600	<b>MB5A0A2C2</b>	MB5A			1.485" (37.7)	1.485" (37.7)	.275" (6.9)	Black	100
151-28604	<b>MB5A0A2F4</b>	MB5A			1.485" (37.7)	1.485" (37.7)	.275" (6.9)	Black	250

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

## Cable Tie Mounting Bases - High Temperature/Heavy Bond Adhesive

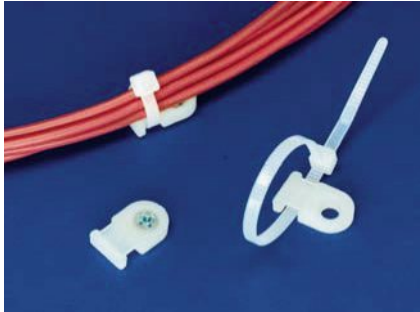
For extreme heavy duty applications, our high temperature/heavy bond adhesive mounts work well on difficult surfaces such as paint or plastics. The mounts are made of our high temp, impact modified PA66 material and use a specially formulated acrylic adhesive making the bond extremely durable.

Product Selection									
Article No.	Part No.	Type	Cable Tie Series	Mounting	Length (L)	Width (W)	Height (H)	Color	Pkg. Qty.
					in. (mm)	in. (mm)	in. (mm)		
151-00432	<b>151-00432</b>	MB3APT	T18, T30	Adhesive	.75" (19.0)	.75" (19.0)	.15" (3.8)	Black	100
151-00433	<b>151-00433</b>	MB4APT	T18 - T50		1.1" (28.0)	1.1" (28.0)	.19" (4.7)	Black	100

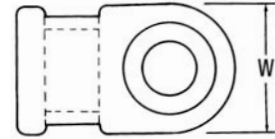
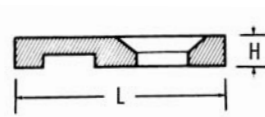
Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### Low Profile Cable Tie Mounts

Low profile mounts are intended for use in securing bundles where space is limited. Each mount is fastened with a single screw.



Material Data	
Material	<b>Polyamide 6.6 (PA66)</b>
Operating Temperature	<b>-40 °F to +185 °F (-40 °C to +85 °C) continuous</b>
Flammability	<b>UL94 V2</b>



#### Product Selection

Article No.	Part No.	Type	Cable Tie Series	Mounting	Length (L)	Width (W)	Height (H)	Color	Pkg. Qty.
					in. (mm)	in. (mm)	in. (mm)		
151-28119	<b>MB19C2</b>	MB1	T18	#2 Screw	.500" (12.70)	.312" (7.92)	.130" (3.30)	Natural	100
151-28101	<b>MB19M4</b>				.500" (12.70)	.312" (7.92)	.130" (3.30)	Natural	1000
151-00295	<b>MB10C2</b>				.500" (12.70)	.312" (7.92)	.130" (3.30)	Black	100
151-00296	<b>MB10M4</b>				.500" (12.70)	.312" (7.92)	.130" (3.30)	Black	1000
151-00227	<b>MB29C2</b>	MB2	T18 - T50	# 8 Screw	.807" (20.50)	.490" (12.45)	.130" (3.30)	Natural	100
151-00297	<b>MB29M4</b>				.807" (20.50)	.490" (12.45)	.130" (3.30)	Natural	1000
151-28210	<b>MB20C2</b>				.807" (20.50)	.490" (12.45)	.130" (3.30)	Black	100
151-28202	<b>MB20M4</b>				.807" (20.50)	.490" (12.45)	.130" (3.30)	Black	1000

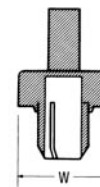
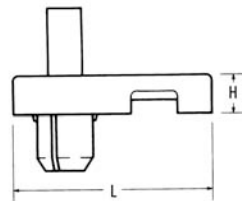
Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### Low Profile Rivet Mounts

The low profile rivet mount is designed to secure wiring bundles and fastens with the drive rivet through a predrilled hole. This mount is ideal for use in applications where space is limited.



Material Data	
Material	<b>Polyamide 6.6 (PA66)</b>
Operating Temperature	<b>-40 °F to +185 °F (-40 °C to +85 °C) continuous</b>
Flammability	<b>UL94 V2</b>



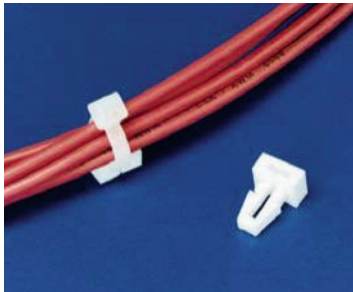
#### Product Selection

Article No.	Part No.	Type	Cable Tie Series	Mounting Hole Ø	Max. Panel Thickness	Length (L)	Width (W)	Height (H)	Color	Pkg. Qty.
				in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)		
151-27000	<b>LKCRF19C2</b>	LKCRF1	T18 -	.250" (6.35)	.134" (3.4)	.938" (23.82)	.470" (11.94)	.157" (3.99)	Natural	100
151-27009	<b>LKCRF19H4</b>	LKCRF1	T50	.250" (6.35)	.134" (3.4)	.938" (23.82)	.470" (11.91)	.157" (3.99)	Natural	500

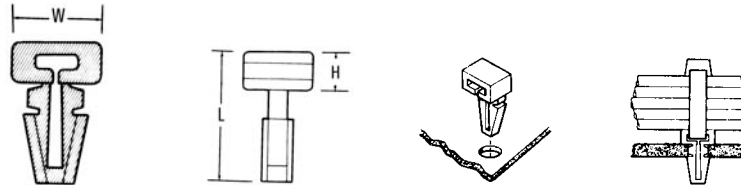
Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### Push Mounts

Intended for use in a predrilled hole, this push mount accepts T18 through T50 series cable ties. Once inserted through the hole, the mount locks into place.



Material Data		RoHS
Material	Polyamide 6.6 (PA66)	
Operating Temperature	-40 °F to +185 °F (-40 °C to +85 °C) continuous	
Flammability	UL94 V2	



**UL** US  
File# E64139

Product Selection

Article No.	Part No.	Type	Cable Tie Series	Mounting Hole Ø	Max. Panel Thickness	Length (L)	Width (W)	Height (H)	Color	Pkg. Qty.
				in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)		
151-40106	<b>TM1SF10C2</b>	TM1SF	T18 - T50	.25" (6.3)	.134" (3.4)	.616" (15.65)	.401" (10.19)	.181" (4.60)	White	100
151-00328	<b>TM1SF10M4</b>	TM1SF		.25" (6.3)	.134" (3.4)	.616" (15.65)	.401" (10.19)	.181" (4.60)	White	1000
151-40100	<b>TM1SF0C2</b>	TM1SF		.25" (6.3)	.134" (3.4)	.616" (15.65)	.401" (10.19)	.181" (4.60)	Black	100
151-40101	<b>TM1SF0M4</b>	TM1SF		.25" (6.3)	.134" (3.4)	.616" (15.65)	.401" (10.19)	.181" (4.60)	Black	1000

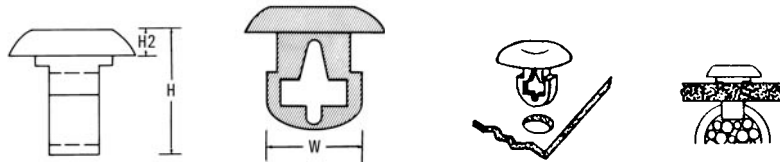
Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### Push Button Mounts

The push button mounts are used where the back of the panel is accessible.



Material Data		RoHS
Material	Polyamide 6.6 (PA66)	
Operating Temperature	-40 °F to +185 °F (-40 °C to +85 °C) continuous	
Flammability	UL94 V2	



**UL** US  
File# E64139

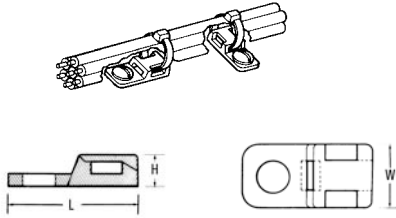
Product Selection

Article No.	Part No.	Type	Cable Tie Series	Mounting Hole Ø	Max. Panel Thickness	Width (W)	Height (H)	Height (H2)	Color	Pkg. Qty.
				in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)		
151-00230	<b>PBM10C2</b>	PBM	T18 - T50	.25" (6.4)	.122" (3.1)	.26" (6.60)	.40" (10.16)	.08" (2.03)	White	100
151-00231	<b>PBM10M4</b>	PBM		.25" (6.4)	.122" (3.1)	.26" (6.60)	.40" (10.16)	.08" (2.03)	White	1000
151-00228	<b>PBM0C2</b>	PBM		.25" (6.4)	.122" (3.1)	.26" (6.60)	.40" (10.16)	.08" (2.03)	Black	100
151-00229	<b>PBM0M4</b>	PBM		.25" (6.4)	.122" (3.1)	.26" (6.60)	.40" (10.16)	.08" (2.03)	Black	1000

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### Cable Tie Anchor Mounts (CTAM)

Cable ties may be inserted from any of the four sides of the CTAM. This feature allows the mount to be placed either parallel or perpendicular to the wires.



Material Data	
Material	<b>Polyamide 6.6 (PA66)</b>
Operating Temperature	<b>-40 °F to +185 °F (-40 °C to +85 °C) continuous</b>
Flammability	<b>UL94 V2</b>



**UL** US  
File# E64139

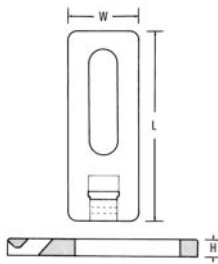
Product Selection

Article No.	Part No.	Type	Cable Tie Series	Mounting	Width (W)	Length (L)	Height (H)	Color	Pkg. Qty.
					in. (mm)	in. (mm)	in. (mm)		
151-31103	<b>CTAM110C2</b>	CTAM1	T18 - T50	#8 screw	.400" (10.16)	.800" (20.32)	.200" (5.08)	White	100
151-31106	<b>CTAM110M4</b>	CTAM1			.400" (10.16)	.800" (20.32)	.200" (5.08)	White	1000
151-31101	<b>CTAM10C2</b>	CTAM1			.400" (10.16)	.800" (20.32)	.200" (5.08)	Black	100
151-00287	<b>CTAM10M4</b>	CTAM1			.400" (10.16)	.800" (20.32)	.200" (5.08)	Black	1000
151-31203	<b>CTAM210C2</b>	CTAM2		#10 screw	.400" (10.16)	.800" (20.32)	.200" (5.08)	White	100
151-31205	<b>CTAM210M4</b>	CTAM2			.400" (10.16)	.800" (20.32)	.200" (5.08)	White	1000
151-31201	<b>CTAM20C2</b>	CTAM2			.400" (10.16)	.800" (20.32)	.200" (5.08)	Black	100
151-31202	<b>CTAM20M4</b>	CTAM2			.400" (10.16)	.800" (20.32)	.200" (5.08)	Black	1000

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### Cable Tie Anchor Plates (CTAP)

These plates have slotted mounting holes to provide for easier alignment of mount and bundles. Once aligned, they are fastened securely by tightening the applied screw. The CTAP2 allows an additional screw for maximum stability. Both plates are used perpendicularly to the wire bundle.



Material Data	
Material	<b>Polyamide 6.6 (PA66)</b>
Operating Temperature	<b>-40 °F to +185 °F (-40 °C to +85 °C) continuous</b>
Flammability	<b>UL94 V2</b>



**UL** US  
File# E64139

Product Selection

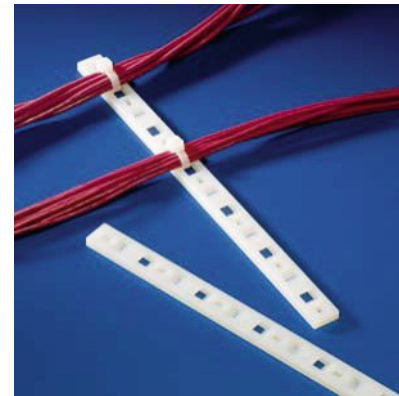
Article No.	Part No.	Type	Cable Tie Series	Mounting	Width (W)	Length (L)	Height (H)	Color	Pkg. Qty.
					in. (mm)	in. (mm)	in. (mm)		
151-30100	<b>CTAP110C2</b>	CTAP1	T18 - T50	#10 screw	.50" (12.7)	1.34" (34.04)	.15" (3.81)	White	100
151-00288	<b>CTAP110M4</b>	CTAP1			.50" (12.7)	1.34" (34.04)	.15" (3.81)	White	1000
151-00289	<b>CTAP10C2</b>	CTAP1			.50" (12.7)	1.34" (34.04)	.15" (3.81)	Black	100
151-00290	<b>CTAP10M4</b>	CTAP1			.50" (12.7)	1.34" (34.04)	.15" (3.81)	Black	1000
151-30200	<b>CTAP210C2</b>	CTAP2			.50" (12.7)	2.13" (54.1)	.14" (3.5)	White	100
151-00308	<b>CTAP210H4</b>	CTAP2			.50" (12.7)	2.13" (54.1)	.14" (3.5)	White	500
151-00291	<b>CTAP20C2</b>	CTAP2			.50" (12.7)	2.13" (54.1)	.14" (3.5)	Black	100
151-00292	<b>CTAP20M4</b>	CTAP2			.50" (12.7)	2.13" (54.1)	.14" (3.5)	Black	500

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

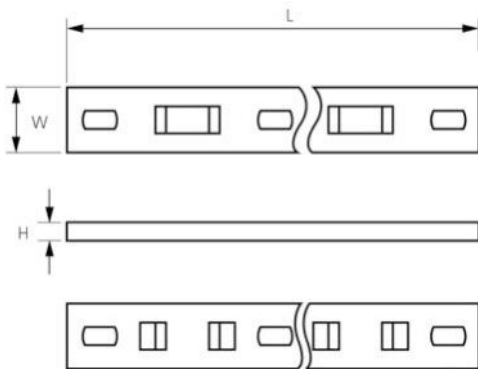


### Cable Tie Mounting Plates

Allowing multiple cables to be run in parallel, these mounting plates are secured with two screws. The cables are attached to the mounting plate by using a cable tie through any combination of the available slots.



Material Data	
Material	<b>Polyamide 6.6 (PA66)</b>
Operating Temperature	<b>-40 °F to +185 °F (-40 °C to +85 °C) continuous</b>
Color	<b>Natural</b>
Flammability	<b>UL94 V2</b>

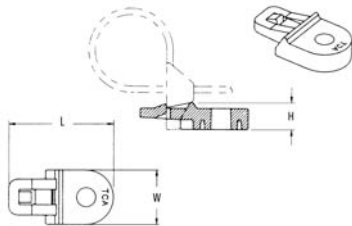


Product Selection			Cable Tie Series	Mounting	Width (W)		Length (L)		Height (H)		Pkg. Qty.
Article No.	Part No.	Type			in.	(mm)	in.	(mm)	in.	(mm)	
154-00000	<b>MP1M3.NN3P</b>	MP1M3	T18 - T50	# 6 (M3) screw	.50"	(12.7)	1.75"	(44.4)	.125"	(3.2)	100
154-00100	<b>MP1M5.NN3P</b>	MP1M5		#10 (M5) screw	.50"	(12.7)	1.75"	(44.4)	.125"	(3.2)	100
151-24219	<b>MP2M3.NN3P</b>	MP2M3		# 6 (M3) screw	.50"	(12.7)	3.00"	(76.2)	.125"	(3.2)	100
154-00300	<b>MP2M5.NN3P</b>	MP2M5		#10 (M5) screw	.50"	(12.7)	3.00"	(76.2)	.125"	(3.2)	100
151-24319	<b>MP3M3.NN3P</b>	MP3M3		# 6 (M3) screw	.50"	(12.7)	4.25"	(108.0)	.125"	(3.2)	100
154-00500	<b>MP3M5.NN3P</b>	MP3M5		#10 (M5) screw	.50"	(12.7)	4.25"	(108.0)	.125"	(3.2)	100
151-24419	<b>MP4M3.NN3P</b>	MP4M3		# 6 (M3) screw	.50"	(12.7)	5.50"	(139.8)	.125"	(3.2)	100
154-00700	<b>MP4M5.NN3P</b>	MP4M5		#10 (M5) screw	.50"	(12.7)	5.50"	(139.8)	.125"	(3.2)	100
151-24519	<b>MP5M3.NN3P</b>	MP5M3		# 6 (M3) screw	.50"	(12.7)	6.75"	(171.6)	.125"	(3.2)	100
154-00900	<b>MP5M5.NN3P</b>	MP5M5		#10 (M5) screw	.50"	(12.7)	6.75"	(171.6)	.125"	(3.2)	100
154-00018	<b>MSMP5/69C2</b>	MSMP5/6	T18 - T120	# 6 (M3) screw	.618"	(15.7)	8.08"	(205.3)	.21"	(5.33)	100
154-01200	<b>MSMP5/109C2</b>	MSMP5/10		#10 (M5) screw	.618"	(15.7)	8.08"	(205.3)	.21"	(5.33)	100
154-01302	<b>MSMP6/69C2</b>	MSMP6/6		# 6 (M3) screw	.618"	(15.7)	9.58"	(243.3)	.21"	(5.33)	100
154-01300	<b>MSMP6/109C2</b>	MSMP6/10		#10 (M5) screw	.618"	(15.7)	9.58"	(243.3)	.21"	(5.33)	100

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### Lashing Tie Mounts

The lashing tie mount is designed to snap into the T250 lashing tie. The tie head is assembled perpendicular to the mount. The strap is parallel to the mount when inserted into the head. The lashing tie mount is recommended for indoor or outdoor wall mount cable applications.



Material Data		RoHS
Material	Polyamide 6.6 heat stabilized (PA66HS)	
Operating Temperature	-40 °F to +221°F (-40 °C to +105 °C) continuous	
Flammability	UL94 V2	

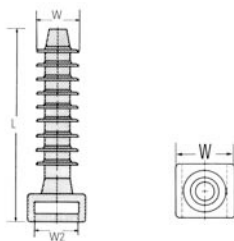
Product Selection

Article No.	Part No.	Type	Cable Tie Series	Mounting	Width (W)	Length (L)	Height (H)	Color	Pkg. Qty.
					in. (mm)	in. (mm)	in. (mm)		
151-00358	LTM2500C2	LTM250	T250	.25" screw	.733" (18.62)	1.46" (37.08)	.378" (9.60)	Black	100
151-00293	LTM2500H4	LTM250			.733" (18.62)	1.46" (37.08)	.378" (9.60)	Black	500

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### Masonry Mounts

Masonry mounts provide a permanent method of attaching wire and cable to masonry surfaces. HellermannTyton's masonry mounts simply tap into predrilled holes and can be used for indoor and outdoor applications.



Material Data		RoHS
Material	Polyamide 6.6 (PA66)	
Operating Temperature	-40 °F to +185 °F (-40 °C to +85 °C) continuous	
Flammability	UL94 V2	

Product Selection

Article No.	Part No.	Type	Cable Tie Series	Mounting Hole Ø	Min. Depth	Length (L)	Width (W)	Width (W2)	Width (W3)	Color	Pkg. Qty.
				in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)		
151-29800	MMB00C2	MMB0	T18 - T50	.188" (4.7)	1.0" (25.4)	1.185" (30.1)	.355" (9.02)	.218" (5.54)	.236" (5.99)	Black	100
151-00325	MMB00M4	MMB0		.188" (4.7)		1.185" (30.1)	.355" (9.02)	.218" (5.54)	.236" (5.99)	Black	1000
151-00116	MMB.50C2	MMB.5		.25" (6.25)		1.244" (31.60)	.375" (9.53)	.220" (5.59)	.308" (7.82)	Black	100
151-30001	MMB.50M4	MMB.5		.25" (6.25)	1.244" (31.60)	.375" (9.53)	.220" (5.59)	.308" (7.82)	Black	1000	
151-00326	MMB10C2	MMB1		.312" (8.0)	1.5" (38.10)	1.71" (43.49)	.508" (12.9)	.374" (9.50)	.362" (9.19)	Black	100
151-00327	MMB10H4	MMB1		.312" (8.0)		1.71" (43.49)	.508" (12.9)	.374" (9.50)	.362" (9.19)	Black	500

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

## Heavy Duty Mounts

The heavy duty mount, when used with a cable tie, eliminates the need to carry multiple sizes of fixed bundle diameter clamps, which reduces inventory and purchasing costs while simplifying the assembly process.

The heavy duty mount and cable tie combination makes it easy to service bundles in the field. Simply remove the cable tie, leave the mount in place, and replace the cable tie.

The heavy duty mounts are designed for use with HellermannTyton's heavy duty T250, T255, and wide strap cable ties to harness wires and hoses; however, they accept all standard cable ties up to .5" wide.



U.S. Patent Number 5,820,083

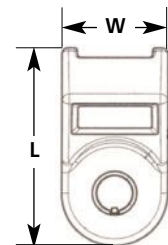
Material Data	
Material	<b>Polyamide 6.6 impact modified, Heat Stabilized, UV Resistant (PA66HIRHS)</b>
Operating Temperature	<b>-40 °F to +230 °F (-40 °C to +110 °C) continuous</b>
Flammability	<b>UL94 HB</b>



## Standard Torque Mounts

These mounts contain a small tab inside the mounting hole to temporarily engage the threads, which allows assemblers to pre-install the mount on a stud before securing with a washer and a nut.

Product Selection		Type	Mounting	Max Torque	Max Ø for Washer/Socket	Length (L)	Width (W)	Color	Pkg. Qty.
Article No.	Part No.		in. (mm)	lb. - in.	in. (mm)	in. (mm)	in. (mm)		
151-00134	<b>HDM190HIRC2</b>	HDM19	.1875 (4.8)	115 lb. - in.	.73" (18.5)	1.43" (36.32)	.76" (19.3)	Black	100
151-00436	<b>HDM190HIRH4</b>	HDM19	.1875 (4.8)	115 lb. - in.	.73" (18.5)	1.43" (36.32)	.76" (19.3)	Black	500
151-00437	<b>HDM250HIRC2</b>	HDM25	.25" (6.4)	115 lb. - in.	.73" (18.5)	1.43" (36.32)	.76" (19.3)	Black	100
151-00438	<b>HDM250HIRH4</b>	HDM25	.25" (6.4)	115 lb. - in.	.73" (18.5)	1.43" (36.32)	.76" (19.3)	Black	500
151-00439	<b>HDM3120HIRC2</b>	HDM312	.3125" (8)	115 lb. - in.	.73" (18.5)	1.43" (36.32)	.76" (19.3)	Black	100
151-00440	<b>HDM3120HIRH4</b>	HDM312	.3125" (8)	115 lb. - in.	.73" (18.5)	1.43" (36.32)	.76" (19.3)	Black	500

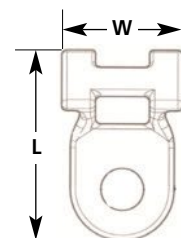


Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

## Medium Torque Mounts

The arched "H" profile of the saddle surface allows for a broad surface contact with the bundle, minimizing pinching and crushing of the bundles, and adjusts to a wide variety of bundle diameters.

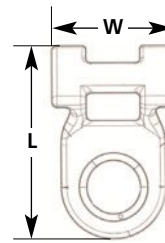
Product Selection		Type	Mounting	Max Torque	Max Ø for Washer/Socket	Length (L)	Width (W)	Color	Pkg. Qty.
Article No.	Part No.		in. (mm)	lb. - ft.	in. (mm)	in. (mm)	in. (mm)		
151-00441	<b>HDM321HIHSUVC2</b>	HDM321	.3125" (8)	40 lb. - ft.	.90" (23)	1.8" (46)	.96" (24)	Black	100
151-07100	<b>HDM321HIHSUVH4</b>	HDM321	.3125" (8)	40 lb. - ft.	.90" (23)	1.8" (46)	.96" (24)	Black	500
151-00442	<b>HDM401HIHSUVC2</b>	HDM401	.375" (9.5)	40 lb. - ft.	.90" (23)	1.8" (46)	.96" (24)	Black	100
151-07300	<b>HDM401HIHSUVH4</b>	HDM401	.375" (9.5)	40 lb. - ft.	.90" (23)	1.8" (46)	.96" (24)	Black	500
151-00443	<b>HDM501HIHSUVC2</b>	HDM501	.5" (12.7)	40 lb. - ft.	.90" (23)	1.8" (46)	.96" (24)	Black	100
151-07500	<b>HDM501HIHSUVH4</b>	HDM501	.5" (12.7)	40 lb. - ft.	.90" (23)	1.8" (46)	.96" (24)	Black	500



Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### High Torque Mounts

The high torque mount is designed for use with power-assisted impact wrenches and is molded with a metal bushing to withstand the forces required to tighten grade 8 bolts. The arched "H" profile of the saddle surface allows for a broad surface contact with the bundle, minimizing pinching and crushing of bundles, and it adjusts to a wide variety of bundle diameters.

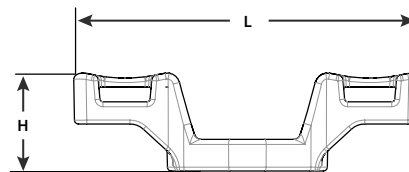
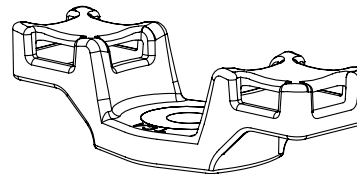


Product Selection									
Article No.	Part No.	Type	Mounting	Max Torque	Max Ø for Washer/Socket	Length (L)	Width (W)	Color	Pkg. Qty.
			in. (mm)	lb. - ft.	in. (mm)	in. (mm)	in. (mm)		
151-00444	<b>HDM320BHIHSUVC2</b>	HDM320	.3125" (8)	114 lb. - ft.	.9" (23)	1.85" (47)	.99" (25)	Black	100
151-07000	<b>HDM320BHIHSUVH4</b>	HDM320	.3125" (8)	114 lb. - ft.	.9" (23)	1.85" (47)	.99" (25)	Black	500
151-00445	<b>HDM400BHISHUVC2</b>	HDM400	.375" (9.5)	114 lb. - ft.	1.26" (32)	1.85" (47)	.99" (25)	Black	100
151-07200	<b>HDM400BHIHSUVH4</b>	HDM400	.375" (9.5)	114 lb. - ft.	1.26" (32)	1.85" (47)	.99" (25)	Black	500
151-00446	<b>HDM500BHIHSUVC2</b>	HDM500	.5" (12.7)	114 lb. - ft.	1.26" (32)	1.85" (47)	.99" (25)	Black	100
151-07400	<b>HDM500BHIHSUVH4</b>	HDM500	.5" (12.7)	114 lb. - ft.	1.26" (32)	1.85" (47)	.99" (25)	Black	500

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### High Torque Double Mount

This mount is designed for use with power-assisted impact wrenches and is molded with a metal bushing to withstand the forces required to tighten grade 8 bolts. The high torque double mount secures the bundle directly over the mounting fastener. The arched saddle surface allows for a broad surface contact with the bundle, minimizing pinching and crushing of the bundles, and accommodates a wide variety of bundle diameters.



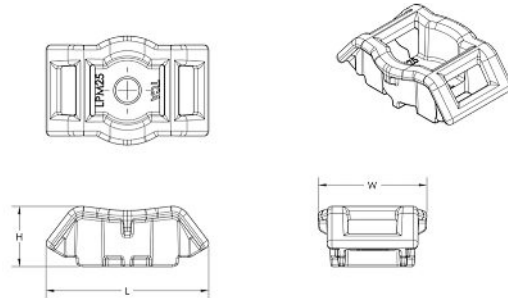
Product Selection									
Article No.	Part No.	Type	Mounting	Max Torque	Max Ø for Washer/Socket	Length (L)	Height (H)	Color	Pkg. Qty.
			in. (mm)	lb. - ft.	in. (mm)	in. (mm)	in. (mm)		
151-00756	<b>151-00756</b>	HDM375	.375" (9.5)	114 lb. - ft.	1.27" (32.5)	3.43" (87)	.99" (25.2)	Black	100

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### Low Profile Mount

The Low Profile Mount is used in conjunction with a cable tie to attach a bundle to a flat surface, making it ideal for applications where space is limited for positioning a bundle. This device is secured to the mounting surface with a .25" mechanical fastener and features a counter bore for easy access with a socket. HellermannTyton cable ties, up to .5" wide, are used to fasten bundles to the Low Profile Mount. Single bundles can be positioned on top of the mount, or two bundles can be separated using the two side saddles.

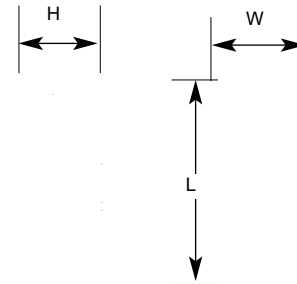
Material Data	
Material	<b>Polyamide 6.6 – Impact Modified, Heat and UV Stabilized (PA66HIRHSUV)</b> <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">RoHS</span>
Operating Temperature	<b>-40 °F to +221°F (-40 °C to +105 °C) continuous</b>
Flammability	<b>UL94 HB</b>



Product Selection		Bolt Hole Diameter	Max Torque	Length (L)	Width in (mm)	Height in (mm)	Cable Tie Series	Color	Pkg. Qty.
Article No.	Part No.			in. (mm)	in. (mm)	in. (mm)			
151-01122	<b>LPM25</b>	.262" (6.65)	11.3 Nm (100 in/lb)	1.78" (45.1)	1.18" (30.0)	.66" (16.7)	T50 - T250	Black	500

### Mounting Cradle

The mounting cradle holds cables and harnesses secure yet clear of the panel surface. This cradle is for use with HellermannTyton cable ties.



Material Data	
Material	<b>Polyamide 6.6 (PA66)</b> <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">RoHS</span>
Operating Temperature	<b>-40 °F to +185 °F (-40 °C to +85 °C) continuous</b>
Flammability	<b>UL94 V2 (excluding adhesive)</b>

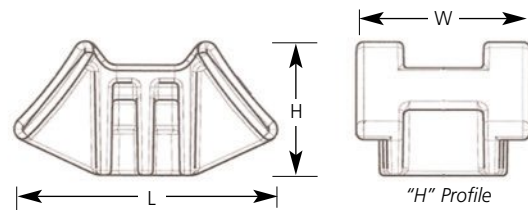
Product Selection		Type	Cable Tie Series	Length (L)	Width (W)	Height (H)	Mounting Hole Ø	Color	Pkg. Qty.
Article No.	Part No.			in. (mm)	in. (mm)	in. (mm)	in. (mm)		
<b>151-27010</b>	<b>151-27010</b>	<b>LKC</b>	T50 - T250	.98" (76.2)	.67" (17)	.53" (13.5)	.21" (8)	Black	100
<b>151-27019</b>	<b>151-27019</b>	<b>LKC</b>	T50 - T250	1.6" (40)	.75" (19)	.66" (16.8)	.21" (8)	Natural	100
<b>151-27219</b>	<b>151-27219</b>	<b>LKCSF1</b>	T50 - T250	1.6" (40)	.75" (19)	.66" (16.8)	.23" (6)	Natural	100
<b>151-27202</b>	<b>151-27202</b>	<b>LKCSF1</b>	T50 - T250	1.6" (40)	.75" (19)	.66" (16.8)	.23" (6)	Black	100

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

## Two Way Saddle Mounts

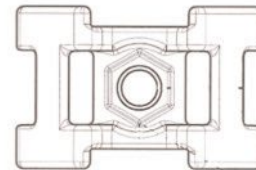
This saddle mount is installed between two bundles (such as wires, cables, hoses, tubing, conduit, etc.) to separate them and prevent chafing and wear. Fastened to a frame rail or mounting bracket, the "H" profile on the saddle mount provides a tight circumferential loop on large and small bundles. Cable ties, which secure the bundles, are used with the mount. The two way saddle mount accommodates cable ties up to 1/2" wide.

Material Data	
Material	<b>Polyamide 6.6 impact modified, Heat Stabilized, UV Resistant (PA66HIRHS)</b>
Operating Temperature	<b>-40 °F to +230 °F (-40 °C to +110 °C) continuous</b>
Flammability	<b>UL94 HB</b>



### S2HM25

The hexagonal retention feature captures a bolt or nut requiring tool access from back side only.

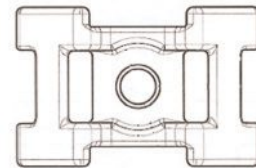


Product Selection										
Article No.	Part No.	Type	Cable Tie Series	Max Bundle Ø (each side)	Stud Ø	Length (L)	Width (W)	Height (H)	Color	Pkg. Qty.
				in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)		
151-29403	S2HM250HIRHSH1	S2HM25	T50 - T250	3.5" (89)	.25" (6.35)	1.76" (44.8)	1.17" (29.7)	.90" (22.9)	Black	500

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### S2CM25

A socket counterbore allows securing with a socket wrench from the top side for use with a weld stud or bolt.



Product Selection										
Article No.	Part No.	Type	Cable Tie Series	Max Bundle Ø (each side)	Stud Ø	Length (L)	Width (W)	Height (H)	Color	Pkg. Qty.
				in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)		
151-29400	S2CM258HIRHSH1	S2CM25	T50 - T250	3.5" (89)	.25" (6.35)	1.76" (44.8)	1.17" (29.7)	.90" (22.9)	Gray	500

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

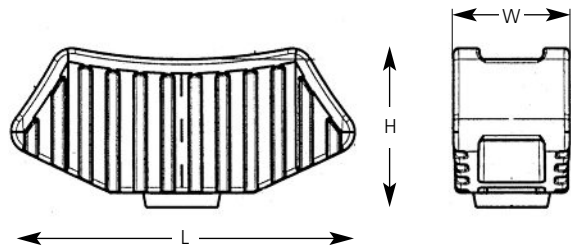


### Saddle Mount for the Button Head Tie

Designed to be used with HellermannTyton's button head ties, the saddle mount stands off bundles from frame rails, providing clearance from bolts and other protrusions for protection against abrasion. This mount also allows the flow-through of salt, dirt and other impurities from the road, preventing unwanted build-up on hoses and harnesses. The tie is snapped into the mount which allows the strap and tie assembly to be pre-installed on the frame rail or panel. The mount can secure three separate bundles, providing parallel spacing between the frame rail and adjacent bundles. The saddle mount is manufactured with a pilot bushing which prevents the cable tie from chafing against the burr edge of the mounting hole.



This product for use with the button head ties on p.65



Material Data	
Material	<b>Polyamide 6.6 impact modified, Heat Stabilized, UV Resistant (PA66HIRHS)</b>
Operating Temperature	<b>-40 °F to +230 °F (-40 °C to +110 °C) continuous</b>
Flammability	<b>UL94 HB</b>



Product Selection			Mounting Hole Ø	Panel Thickness	Standoff Height	Length (L)	Width (W)	Height (H)	Max Bundle Ø		Color	Pkg. Qty.
Article No.	Part No.	Type							Center in. (mm)	Sides in. (mm)		
151-29301	<b>MSBT1200HIRHSH1</b>	MSBT120	.440" - .820" (11.18 - 20.83)	.160" - .75" (4.06 - 19.05)	.875" (22.23)	1.90" (48.3)	.65" (16.5)	.81" (20.6)	6.0" (152.4)	1.0" (25.4) <small>(dependent upon size of center bundle)</small>	Black	500

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### H-Mount Series

HellermannTyton's new H-Mount product line offers a secure bundle mounting solution that utilizes existing frame bolts. H-Mounts fasten to three bolt sizes: 1/2", 5/8" and 3/4". The H-Mounts have three bundle mounting locations, each accommodating ties up to 1/2" wide.

#### Application

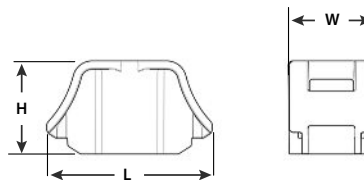
The preferred mount method is to use the specially designed drill bit to spin the H-Mount onto the bolt. The bit fits all 1/4" drills and has tapered sides to secure the H-Mount during installation.

#### Benefits

- The H-Mounts utilize existing frame bolts which reduce component costs and improve installation time.
- The H-Mounts have a top tie slot which allows the bundle to be positioned directly over the bolt, and two curved tie slots on the sides that minimize bundle abrasion and position the bundles adjacent to the bolt yet away from the frame.

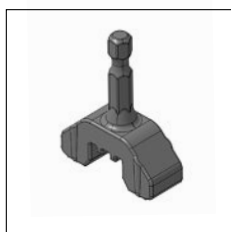


Material Data	
Material	<b>Polyamide 6.6 high impact modified, heat and UV stabilized (PA66HIRHSUV)</b>
Operating Temperature	<b>-40 °F to +230 °F (-40 °C to +110 °C) continuous</b>
Flammability	<b>UL94 HB</b>



Product Selection								
Article No.	Part No.	Type	Stud Bolt Size	Length (L)	Width (W)	Height (H)	Color	Pkg. Qty.
			in. (mm)	in. (mm)	in. (mm)	in. (mm)		
151-00812	<b>151-00812</b>	HM5	.5" (12.7)	1.97" (50.0)	1.02" (25.98)	1.1" (28.0)	Black	900
151-00813	<b>151-00813</b>	HM6	.625" (15.9)	1.97" (50.0)	1.02" (25.98)	1.1" (28.0)	Black	900
151-00814	<b>151-00814</b>	HM7	.75" (19.0)	1.97" (50.0)	1.02" (25.98)	1.1" (28.0)	Black	900

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.



904-00284

H Mount Drill Bit				
Article No.	Part No.	Type	Color	Pkg. Qty.
904-00284	<b>904-00284</b>	HBIT	Black	1



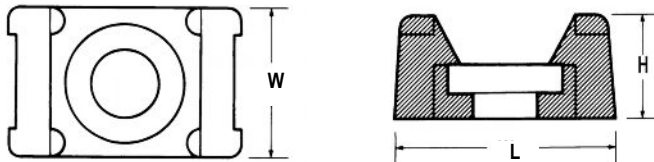
H Bit in the H Mount

### Cable Tie Mounts (CTM)

The CTM series is designed to provide stability to wire bundles. These mounts can accommodate miniature, intermediate, or standard cross-section cable ties. Each mount is secured with a single screw.



Material Data		RoHS
Material	Polyamide 6.6 (PA66)	
Operating Temperature	-40 °F to +185 °F (-40 °C to +85 °C) continuous	
Flammability	UL94 V2	



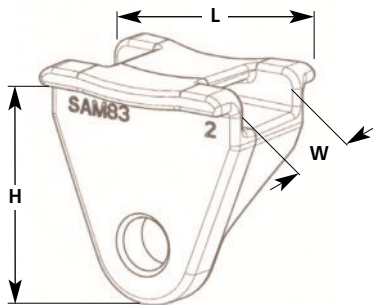
**UL** US  
File# E64139

Product Selection										
Article No.	Part No.	Type	Cable Tie Series	Mounting	Length (L)	Width (W)	Height (H)	Color	Pkg. Qty.	
					in. (mm)	in. (mm)	in. (mm)			
151-30303	CTM010C2	CTM0	T18 - T50	# 6 Screw	.578" (14.68)	.375" (9.52)	.266" (6.76)	White	100	
151-30305	CTM010M4				.578" (14.68)	.375" (9.52)	.266" (6.76)	White	1000	
151-30300	CTM00C2				.578" (14.68)	.375" (9.52)	.266" (6.76)	Black	100	
151-30301	CTM00M4				.578" (14.68)	.375" (9.52)	.266" (6.76)	Black	1000	
151-30404	CTM110C2	CTM1		T18 - T50	# 8 Screw	.579" (14.71)	.370" (9.40)	.266" (6.76)	White	100
151-30406	CTM110M4					.579" (14.71)	.370" (9.40)	.266" (6.76)	White	1000
151-30400	CTM10C2					.579" (14.71)	.370" (9.40)	.266" (6.76)	Black	100
151-30402	CTM10M4					.579" (14.71)	.370" (9.40)	.266" (6.76)	Black	1000
151-30504	CTM210C2	CTM2	T18 - T50		# 8 Screw	.857" (21.77)	.605" (15.37)	.372" (9.45)	White	100
151-30506	CTM210M4					.857" (21.77)	.605" (15.37)	.372" (9.45)	White	1000
151-30500	CTM20C2					.857" (21.77)	.605" (15.37)	.372" (9.45)	Black	100
151-30501	CTM20M4					.857" (21.77)	.605" (15.37)	.372" (9.45)	Black	1000
151-30605	CTM310C2	CTM3		T18 - T120	#10 Screw	.858" (21.79)	.609" (15.47)	.374" (9.50)	White	100
151-30607	CTM310M4					.858" (21.79)	.609" (15.47)	.374" (9.50)	White	1000
151-30600	CTM30C2					.858" (21.79)	.609" (15.47)	.374" (9.50)	Black	100
151-30603	CTM30M4					.858" (21.79)	.609" (15.47)	.374" (9.50)	Black	1000
151-30703	CTM410C2	CTM4	T18 - T120		.25" Screw	.864" (21.95)	.616" (15.65)	.372" (9.45)	White	100
151-30705	CTM410M4					.864" (21.95)	.616" (15.65)	.372" (9.45)	White	1000
151-30700	CTM40C2					.864" (21.95)	.616" (15.65)	.372" (9.45)	Black	100
151-30702	CTM40M4					.864" (21.95)	.616" (15.65)	.372" (9.45)	Black	1000

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### Axial Oval Mounts

HellermannTyton's axial oval mounts stand off bundles from frame rails and cross members to prevent them from rubbing and chafing. The axial oval mount accommodates cable ties up to .5" wide.



Material Data	
Material	<b>Polyamide 6.6 impact modified, Heat Stabilized, UV Resistant (PA66HIRHS)</b>
Operating Temperature	<b>-40 °F to +230 °F (-40 °C to +110 °C) continuous</b>
Flammability	<b>UL94 HB</b>



Product Selection										
Article No.	Part No.	Type	Cable Tie Series	Bolt Hole Ø	Offset Distance from Mounting Slot	Length (L)	Width (W)	Height (H)	Color	Pkg. Qty.
				in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)		
151-29600	SAM83HIRHSH1	SAM83	T50 - T250	5/16" (8)	.78" (19.8)	1.35" (34.3)	1.02" (25.9)	1.39" (35.3)	Gray	500
151-29701	SAOM820HIRHSH1	SAOM82	T50 - T250	5/16" (8)	.78" (19.8)	1.35" (34.3)	1.02" (25.9)	1.39" (35.3)	Black	500

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

## Dual Swivel Saddle Spacer

### DSWS4

These saddle spacers are installed between two bundles (such as wires, cables, hoses, tubing, conduit, etc.) to separate them and prevent chafing and wear. The mounts can be easily rotated by hand, allowing the bundles to be crossed and rotated at any angle. Cable ties, which secure the bundles, are used with the mounts. The dual swivel saddle spacers accommodate cable ties up to 1/2" wide.

The "H" profile of the saddles allows for broad surface contact with the bundle, minimizing pinching and crushing of the bundle, and it accepts a wide range of bundle diameters from .25 inches to 3 inches.

The DSWS4 Dual Swivel Saddle Spacer provides a .7 inch (17.8 millimeter) separation between bundles.

Friction tabs in the tie slots help hold the cable ties in place during assembly.

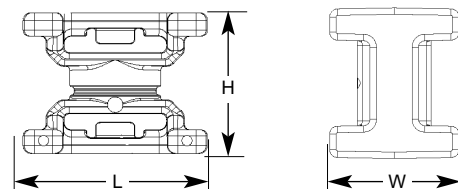
The DSWS4 is two-shot molded with polyacetal and polyamide 6.6 heat stabilized materials.



Material Data	
Material	<b>Polyacetal (POM)</b>
Operating Temperature	<b>-40 °F to +185 °F (-40 °C to +85 °C) continuous</b>
Flammability	<b>UL94 HB</b>



Material Data	
Material	<b>Polyamide 6.6 heat stabilized (PA66HS)</b>
Operating Temperature	<b>-40 °F to +221 °F (-40 °C to +105 °C) continuous</b>
Flammability	<b>UL94 V2</b>



### Product Selection

Article No.	Part No.	Type	Cable Tie Series	Bundle Ø	Minimum Extraction Strength	Length (L)	Width (W)	Height (H)	Color	Pkg. Qty.
				in. (mm)						
151-06500	<b>151-06500</b>	DSWS4	T50 - T250	.25" - 3" (6.35 - 76.2)	100 lb. (445)	.93" (23.6)	.8" (20.3)	.71" (18)	Black	2200
151-00644	<b>151-00644</b>	DSWS4	T50 - T250	.25" - 3" (6.35 - 76.2)	100 lb. (445)	.93" (23.6)	.8" (20.3)	.71" (18)	Black	50

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.



## Dual Swivel Saddle Spacer

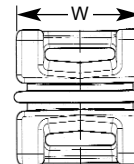
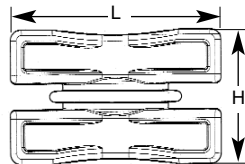
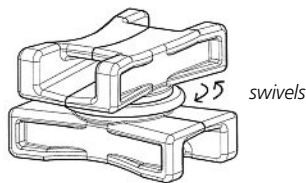
### DSWS5

These saddle spacers are installed between two bundles (such as wires, cables, hoses, tubing, conduit, etc.) to separate them and prevent chafing and wear. The spacers can be easily rotated by hand, allowing the bundles to be crossed and rotated at any angle. Cable ties, which secure the bundles, are used with the spacers.

The DSWS5 accepts bundle diameters ranging from .625 inches to 6 inches. The DSWS5 provides a .93 inch (23.6 millimeter) separation between bundles. The dual swivel saddle spacers accommodate cable ties up to 1/2" wide.



Material Data	
Material	<b>Polyamide 6.6 heat stabilized (PA66HS)</b>
Operating Temperature	<b>-40 °F to +221 °F (-40 °C to +105 °C) continuous</b>
Flammability	<b>UL94 V2</b>



Product Selection									
Article No.	Part No.	Type	Cable Tie Series	Bundle Ø	Length (L)	Width (W)	Height (H)	Color	Pkg. Qty.
				in. (mm)	in. (mm)	in. (mm)	in. (mm)		
151-06502	<b>DSWS50HSK2</b>	DSWS5	T50 - T250	.625" - 6" (15.8 - 152.4)	1.6" (40.6)	1" (25.4)	.93" (23.6)	Black	50
151-06501	<b>DSWS50HSH1</b>	DSWS5	T50 - T250	.625" - 6" (15.8 - 152.4)	1.6" (40.6)	1" (25.4)	.93" (23.6)	Black	500

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.



# ROUTING AND PROTECTION SOLUTIONS

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## Pro-Duct Wiring Duct

HellermannTyton's Pro-Duct wiring duct efficiently routes and protects wire and cable. Manufactured from high impact, rigid PVC, Pro-Duct includes solid, slotted and high density slotted styles. Pro-Duct comes in standard colors of white, gray and black in 6 foot lengths. Blue wiring duct is also available in a variety of standard sizes. Other colors are available. Contact HellermannTyton for minimum volume requirements.

### Pro-Duct Features

All styles of Pro-Duct wiring duct (solid, slotted and high density slotted) are designed with many installer preferred features:

- Cover is supplied with a film which protects against scratches and is writable for temporary identification during installation.
- Smooth edges protect installer and wires from abrasion.
- Cover is flush with the side of the duct for increased wire capacity. It also allows for tight, side-by-side placement.
- No cover slippage. The covers are provided with a non-slip lining. This ensures that the covers remain in place during vibration, yet they easily snap on and off, offering ready access to the wire run.
- Mounting holes are designed for installation versatility. Elongated mounting holes allow for changes in panel designs and installation flexibility.
- Mounting holes are standard. Contact HellermannTyton for duct without mounting holes.
- Enhanced wire capacity helps maximize space within panels.
- Interchangeable covers between solid, slotted, and high density slotted styles reduce inventory and increase versatility.
- Professional appearance increases panel's overall neatness.

*Pro-Duct is U.L. Recognized, CSA Certified, CE Compliant and carries a U.L. flame rating of 94V0.*

*Pro-Duct is lead-free and is made with flame retardant PVC.*



Lead Free



File # E64139



File # 49249



## Solid Wall Duct

Solid wall duct is designed for straight wire runs where break-outs are not required.

- Smooth edges
- Non-slip cover
- Professional appearance



## Slotted Wall Duct

Slotted wall duct features break-away fingers which provide additional access for wire leads.

Slotted wall duct is manufactured with two continuous score lines.

The first score line is at the base of the finger, allowing the finger to be bent and broken away when a greater opening is required. The second score line is lower allowing a section of the sidewall to be easily removed by cutting the sidewall down to the lower score line. Use HellermannTyton's TDNT notching tool and snap out the desired section. Both score lines provide smooth edges to ensure worker safety.

Strong fingers prevent unwanted breaking.

The fingers are easily deflected outward, allowing ready positioning of the wires within the slotted wall duct.

Restricted opening design in the finger of the duct helps keep wires in place.

Restriction also prevents unintended removal of wires and permits any individual wire to be traced without disconnection.



## High Density Slotted Duct

High density slotted wall duct comes with narrow fingers, equaling a 2-to-1 finger ratio compared to standard slotted wiring duct.

Narrow fingers reduce fanning of the wires to the terminal blocks.

Compact designs and components are more easily accommodated with the high density duct's 2-to-1 finger ratio.

High density duct also incorporates the double scored design, similar to the standard slotted wall duct.

With sizes 2" high and above, high density duct features a double restriction on each finger of the duct.

The double restriction helps retain wires in the bottom portion of the duct for easier installation.

Mounting holes are uniform in size to the solid and slotted wall duct but are offered every 2 inches to accommodate compact designs and installations.



## Adhesive Backing

Most sizes of Pro-Duct wiring duct are available with a pressure sensitive, rubber based adhesive backing. The adhesive backing can be utilized for temporary positioning. This is an optional feature and must be specified when ordering. For part number information, contact HellermannTyton or see notation at the end of each duct dimensional chart.

Please note: Adhesive duct orders are non-cancellable and non-returnable.

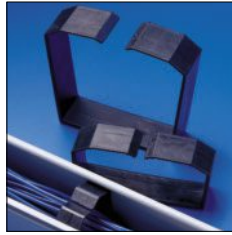
Duct Width	Rows of Tape	Tape Width
.50"	1	3/8"
.75"	1	1/2"
1.0"	1	3/4"
1.5"	1	1-1/8"
2.0"	2	3/4"
3.0"	2	3/4"
4.0"	2	3/4"

## Modular Packaging

Pro-Duct wiring duct is available in modular, easy to stock packaging. Each master carton contains 120 feet of duct divided into four inner cartons of 30 feet each. This better serves the inventory needs of users who require smaller quantities of several sizes. Due to weight restrictions, 3" x 5" and 4" x 5" sizes are only available in bulk packaging.

### Solid Style Wire Retainers

The solid wall wire retainer is inserted in the duct and snaps into place. The retainer can be used on any smooth, straight run of duct and can work with vertical and overhead applications. Solid wall wire retainers are manufactured from black PVC.



### Slotted Style Wire Retainers

The slotted wall wire retainer snaps in from the outside of the duct, allowing for fast and easy installation and removal. The retainer spans approximately 90% over the duct opening for effective wire management. Slotted wall wire retainers are manufactured from black nylon 6/6.

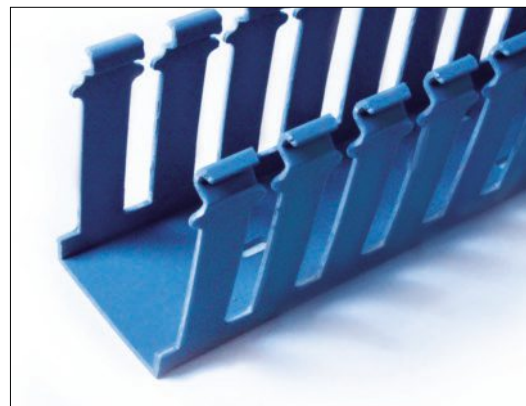


Product Selection					
Article No.	Part No.	Type	Description	Color	Pkg. Qty.
<b>Solid Style Wire Retainers</b>					
181-20201	SDWR2X20K2	SDWR2X20	Wire Retainer for 2" X 2" Solid Duct	Black	50
181-00158	SDWR4X20K2	SDWR4X20	Wire Retainer for 4" X 2" Solid Duct	Black	50
181-00441	SDWR4X40P2	SDWR4X40	Wire Retainer for 4" X 4" Solid Duct	Black	10
<b>Slotted Style Wire Retainers</b>					
181-20021	SLWR20C2	SLWR20	Wire Retainer for 2" Wide Slotted Duct	Black	100
181-30031	SLWR30C2	SLWR30	Wire Retainer for 3" Wide Slotted Duct	Black	100
181-40041	SLWR40C2	SLWR40	Wire Retainer for 4" Wide Slotted Duct	Black	100

Dimensions are approximate and subject to technical changes. Use Part No. for ordering and Type for specification purposes.

### Intrinsic Blue Wiring Duct

Designed for identification purposes, HellermannTyton offers intrinsic blue Pro-Duct wiring duct. Manufactured from the same PVC material as HellermannTyton's standard duct, the blue color indicates that the wiring contained in the duct runs to intrinsically safe components in the control panel. Control panels used in chemical plants, grain elevators or other environments where explosive gases may exist are examples of where intrinsic blue duct might be needed. For more information contact HellermannTyton.





## Panel Mounting Rivets and Tool

HellermannTyton panel rivets are one piece drive rivets that provide a fast, economical means of affixing wiring duct. The rivet is inserted into a 3/16" pre-punched hole and the pin is driven into the base, thereby expanding the rivet legs and locking the duct and sub-panel in place. The panel thickness (including the duct thickness) should be a maximum of 3/16". A panel rivet tool is also available for quick and easy installation of the drive rivets.



### Product Selection

Article No.	Part No.	Type	Description	Color	Pkg. Qty.
181-00139	PR1	PR1	Panel Rivet	Natural	1000
182-00001	PRT1	PRT1	Panel Rivet Tool	Yellow	1

Dimensions are approximate and subject to technical changes. Use Part No. for ordering and Type for specification purposes.

## Corner Strips

HellermannTyton corner strips are supplied in six foot lengths which can be cut to provide a rounded corner for two duct sections meeting at right angles. They are made from PVC material and can be used with any size HellermannTyton wiring duct.



## Straight Connectors

HellermannTyton's PVC straight connectors join straight duct runs to cover and protect wires. The connectors can be used with all sizes of duct. Supplied in six foot lengths, they can be cut to fit duct sidewall heights.



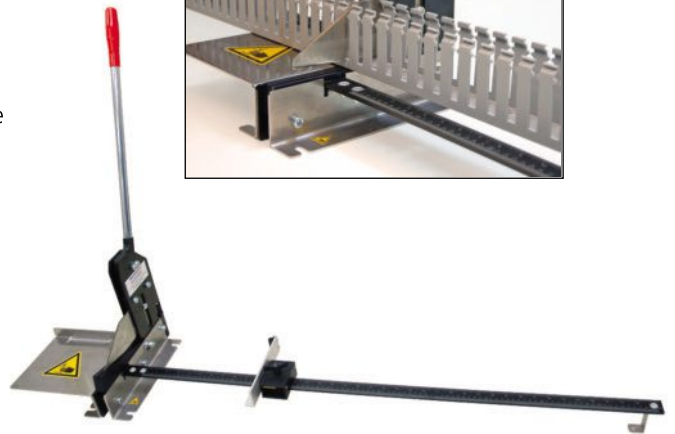
### Product Selection

Article No.	Part No.	Type	Description	Color	Pkg. Qty.
181-00001	CSG	CSG	Corner Strip - Gray	Gray	6
181-00002	CSW	CSW	Corner Strip - White	White	6
181-00003	SCG	SCG	Straight Connector - Gray	Gray	6
181-00004	SCW	SCW	Straight Connector - White	White	6

Dimensions are approximate and subject to technical changes. Use Part No. for ordering and Type for specification purposes.

### Bench Mounted Wiring Duct Cutting Tool

The HellermannTyton Bench Mounted Wiring Duct Cutting Tool is used to accurately measure and cut all of HellermannTyton’s slotted and high density slotted wiring duct, solid dividers and covers. The hand lever is ergonomically designed to reduce user fatigue. The measuring guide incorporates both imperial and metric values which eliminates the need for secondary measurement devices. The stop bar slides up and down the measuring guide, improving productivity on repetitive cuts. The long lasting, hardened blade produces burr free edges and improves productivity by eliminating the need for filing the edges after cutting. The integrated safety guide protects the operator from the blade during operation which preserves workplace safety.



Product Selection			
Article No.	Part No.	Description	Pkg. Qty.
904-00295	904-00295	Duct Cutter	1
904-00296	904-00296	Replacement Blade	1
904-00297	904-00297	Safety Guide	1

### Duct Notching Tool

HellermannTyton's Duct Notching Tool is designed for use with HellermannTyton's slotted wall and slotted high density Pro-Duct wiring duct. This hand held tool features plastic grips for easy handling and allows users to notch a duct sidewall section down to the very base for finger and sidewall removal.



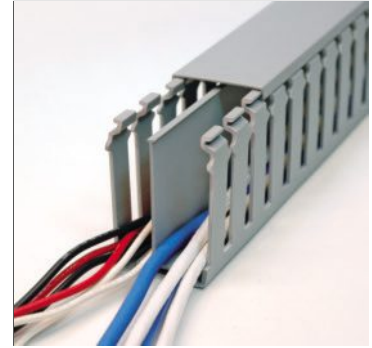
Product Selection				
Article No.	Part No.	Type	Description	Pkg. Qty.
182-00002	TDNT	TDNT	Notching Tool	1

Dimensions are approximate and subject to technical changes. Use Part No. for ordering and Type for specification purposes.



## Wiring Duct Solid Wall Dividers

HellermannTyton's Solid Wall Dividers can be securely mounted into all types of HellermannTyton wiring duct to separate high and low voltage reducing interference. The dividers simply snap or slide into the HellermannTyton specially designed mount, instantly creating multiple channels within a single duct size. The dividers have continuous score lines for smooth breakouts where needed. The top of the dividers has a double-sided lip which reduces the likelihood of wires falling out during installation. Dividers are available in gray and white colors. Contact HellermannTyton for additional colors.



### Product Selection

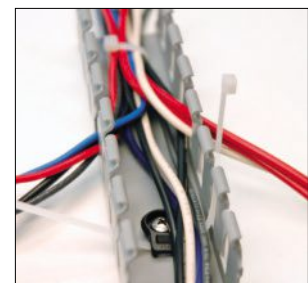
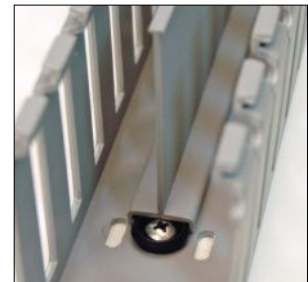
Article No.	Part No.	Type	Width	Height	Description	Color	Pkg. Qty
			in. (mm)	in. (mm)			ft. (6ft lengths)
181-00300	181-00300	DV1G4	.75 (19.1)	.9 (22.9)	Duct Divider for 1" High Duct	Gray	120
181-00301	181-00301	DV1.5G4	.75 (19.1)	1.4 (35.6)	Duct Divider for 1.5" High Duct	Gray	120
181-00302	181-00302	DV2G4	.75 (19.1)	1.85 (47.0)	Duct Divider for 2" High Duct	Gray	120
181-00303	181-00303	DV3G4	.77 (19.6)	2.85 (72.4)	Duct Divider for 3" High Duct	Gray	120
181-00304	181-00304	DV4G4	.77 (19.6)	3.85 (97.8)	Duct Divider for 4" High Duct	Gray	120
181-00305	181-00305	DV1W4	.75 (19.1)	.9 (22.9)	Duct Divider for 1" High Duct	White	120
181-00306	181-00306	DV1.5W4	.75 (19.1)	1.4 (35.6)	Duct Divider for 1.5" High Duct	White	120
181-00307	181-00307	DV2W4	.75 (19.1)	1.85 (47.0)	Duct Divider for 2" High Duct	White	120
181-00308	181-00308	DV3W4	.77 (19.6)	2.85 (72.4)	Duct Divider for 3" High Duct	White	120
181-00309	181-00309	DV4W4	.77 (19.6)	3.85 (97.8)	Duct Divider for 4" High Duct	White	120

## Universal Duct Mount

The HellermannTyton Universal Duct Mount is a multipurpose mount which secures duct dividers or secures wire bundles inside the duct with a cable tie. The mount can be installed with duct panel rivets or mechanical fasteners. The bottom of the mount has locator tabs that fit into the duct mounting holes preventing the mount from spinning during installation. The tabs also align the mount for easy divider installation. The top of the mount creates separation between wires and the fastener head which protects the wires from abrasion.

When used as a duct divider mount, the divider snaps or slides over the mount resulting in a quick, secure installation.

When used as a wire bundle mount, simply slide the cable tie through the four-way tie slot to secure the bundle. This method prevents the cables from falling outside the duct during installation and cover removal.



### Product Selection

Article No.	Part No.	Type	Color	Material	Pkg. Qty.
181-00684	181-00684	DVM	Black	PA66VO	100

### Covers

Covers for Pro-Duct wiring duct are sold separately and are interchangeable among the 3 styles of duct (solid, slotted and high density). The covers include a film which protects against scratches and is writable for temporary identification during installation. The film is easily removed when installation is complete. The inner sides of the covers have a non-slip lining, ensuring the cover will not slide down the duct.



Product Selection						
Article No.	Part No.	Type	Width		Color	Pkg. Qty
			in.	mm		ft. (6 ft. lengths)
<b>.5" wide covers</b>						
181-00443	181-00443	TC.5	.76	19.3	White	120
181-00442	181-00442	TC.5			Gray	120
181-90050	181-90050	TC.5			Black	120
<b>.75" wide covers</b>						
181-00447	181-00447	TC.75	1.01	25.65	White	120
181-00446	181-00446	TC.75			Gray	120
181-00445	181-00445	TC.75			Black	120
<b>1" wide covers</b>						
181-91008	181-91008	TC1	1.0	25.4	White	120
181-91004	181-91004	TC1			Gray	120
181-91000	181-91000	TC1			Black	120
<b>1.5" wide covers</b>						
181-91510	181-91510	TC1.5	1.5	38.1	White	120
181-91507	181-91507	TC1.5			Gray	120
181-91503	181-91503	TC1.5			Black	120
<b>2" wide covers</b>						
181-92011	181-92011	TC2	2.0	50.8	White	120
181-92005	181-92005	TC2			Gray	120
181-92001	181-92001	TC2			Black	120
<b>2.5" wide covers</b>						
181-00262	181-00262	TC2.5	2.5	63.5	White	120
181-00260	181-00260	TC2.5			Gray	120
181-00311	181-00311	TC2.5			Black	120
<b>3" wide covers</b>						
181-93011	181-93011	TC3	3.0	76.2	White	120
181-93008	181-93008	TC3			Gray	120
181-93003	181-93003	TC3			Black	120
<b>4" wide covers</b>						
181-94014	181-94014	TC4	4.0	101.6	White	120
181-94009	181-94009	TC4			Gray	120
181-94003	181-94003	TC4			Black	120
<b>6" wide covers</b>						
181-96002	181-96002	TC6	6.0	152.4	White	60
181-96000	181-96000	TC6			Gray	60
181-00448	181-00448	TC6			Black	60
<b>8" wide covers</b>						
181-00451	181-00451	TC8	8.0	203.2	White	60
181-00450	181-00450	TC8			Gray	60
181-00449	181-00449	TC8			Black	60

Dimensions are approximate and subject to technical changes. Use Part No. for ordering and Type for specification purposes.



Lead Free



File # E64139



File # 49249



### Cover Hinge

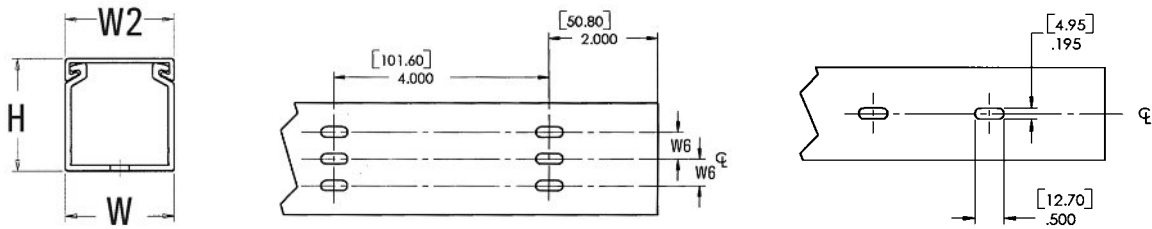
The hinge easily snaps onto the cover and the wiring duct (slotted wall duct only.) Once assembled, the hinge permits the cover to open like a door, providing easy access to the wires.



Product Selection				
Article No.	Part No.	Type	Description	Pkg. Qty.
854-09272	WMBH	WMBH	Wire Management Hinges	25

Use **Part No.** for ordering and **Type** for specification purposes.

Solid Wall Duct

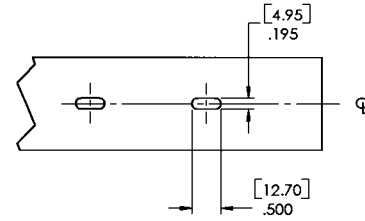
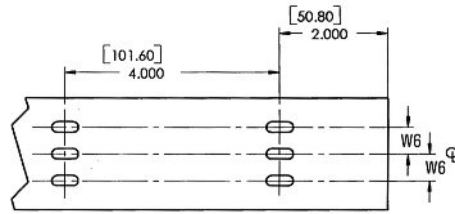
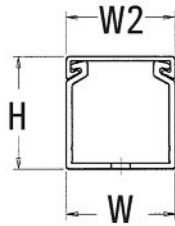


Product Selection

Article No.	Part No.	Type	Width (W)	Height (H)	Width (W2)	Width (W6)	Description	Color	Pkg. Qty
			in. (mm)	in. (mm)	in. (mm)	in. (mm)			ft. (6 ft. lengths)
<b>.5" x .5" (12.7 x 12.7) Nominal Duct Size</b>									
181-00453	181-00453	SD.5X.5	.5 (12.7)	.55 (14.0)	.76 (19.3)	One rows of holes ☒	Non-Adhesive	White	120
181-00525	181-00525	SDA.5X.5					Adhesive	White	120
181-00452	181-00452	SD.5X.5					Non-Adhesive	Gray	120
181-00524	181-00524	SDA.5X.5					Adhesive	Gray	120
181-05500	181-05500	SD.5X.5					Non-Adhesive	Black	120
181-00481	181-00481	SDA.5X.5					Adhesive	Black	120
<b>.5" x 1" (12.7 x 25.4) Nominal Duct Size</b>									
181-00143	181-00143	SD.5X1	.5 (12.7)	1.05 (26.7)	.76 (19.3)	One rows of holes ☒	Non-Adhesive	White	120
181-00528	181-00528	SDA.5X1					Adhesive	White	120
181-00145	181-00145	SD.5X1					Non-Adhesive	Gray	120
181-00526	181-00526	SDA.5X1					Adhesive	Gray	120
181-00144	181-00144	SD.5X1					Non-Adhesive	Black	120
181-00527	181-00527	SDA.5X1					Adhesive	Black	120
<b>.75" x .75" (19.1 x 19.1) Nominal Duct Size</b>									
181-00456	181-00456	SD.75X.75	.75 (19.1)	.8 (20.3)	1.01 (25.7)	One rows of holes ☒	Non-Adhesive	White	120
181-00142	181-00142	SDA.75X.75					Adhesive	White	120
181-00455	181-00455	SD.75X.75					Non-Adhesive	Gray	120
181-00140	181-00140	SDA.75X.75					Adhesive	Gray	120
181-00454	181-00454	SD.75X.75					Non-Adhesive	Black	120
181-00141	181-00141	SDA.75X.75					Adhesive	Black	120
<b>1" x 1" (25.4 x 25.4) Nominal Duct Size</b>									
181-11005	181-11005	SD1X1	1.0 (25.4)	1.05 (26.7)	1.0 (25.4)	One rows of holes ☒	Non-Adhesive	White	120
181-11008	181-11008	SDA1X1					Adhesive	White	120
181-11002	181-11002	SD1X1					Non-Adhesive	Gray	120
181-00493	181-00493	SDA1X1					Adhesive	Gray	120
181-11000	181-11000	SD1X1					Non-Adhesive	Black	120
181-00492	181-00492	SDA1X1					Adhesive	Black	120
<b>1" x 1.5" (25.4 x 38.1) Nominal Duct Size</b>									
181-11502	181-11502	SD1X1.5	1.02 (25.9)	1.56 (39.6)	1.0 (25.4)	One rows of holes ☒	Non-Adhesive	White	120
181-00491	181-00491	SDA1X1.5					Adhesive	White	120
181-11501	181-11501	SD1X1.5					Non-Adhesive	Gray	120
181-00490	181-00490	SDA1X1.5					Adhesive	Gray	120
181-00457	181-00457	SD1X1.5					Non-Adhesive	Black	120
181-00529	181-00529	SDA1X1.5					Adhesive	Black	120

Dimensions are approximate and subject to technical changes. Use Part No. for ordering and Type for specification purposes. Solid wall duct in larger sizes continued on the next page. Covers are listed on page 115.

Solid Wall Duct

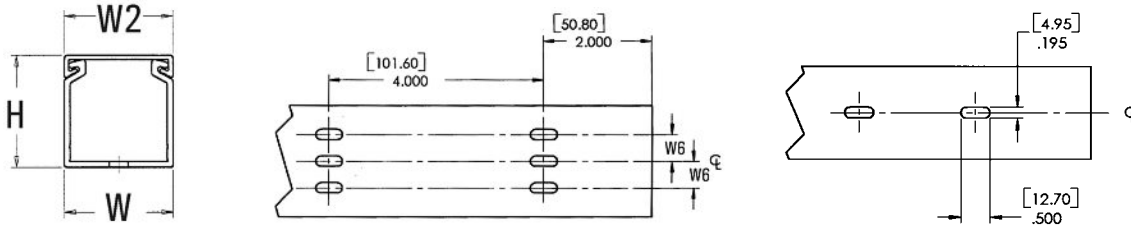


Product Selection

Article No.	Part No.	Type	Width (W)	Height (H)	Width (W2)	Width (W6)	Description	Color	Pkg. Qty
			in. (mm)	in. (mm)	in. (mm)	in. (mm)			ft. (6 ft. lengths)
<b>1" x 2" (25.4 x 50.8) Nominal Duct Size</b>									
181-12002	181-12002	SD1X2	1.03 (26.2)	2.06 (52.3)	1.0 (25.4)	One rows of holes ☑	Non-Adhesive	White	120
181-00495	181-00495	SDA1X2					Adhesive	White	120
181-12001	181-12001	SD1X2					Non-Adhesive	Gray	120
181-00494	181-00494	SDA1X2					Adhesive	Gray	120
181-00458	181-00458	SD1X2					Non-Adhesive	Black	120
181-00530	181-00530	SDA1X2					Adhesive	Black	120
<b>1" x 3" (25.4 x 76.2) Nominal Duct Size</b>									
181-13001	181-13001	SD1X3	1.02 (25.9)	3.06 (77.7)	1.0 (25.4)	One rows of holes ☑	Non-Adhesive	White	120
181-00496	181-00496	SDA1X3					Adhesive	White	120
181-00136	181-00136	SD1X3					Non-Adhesive	Gray	120
181-00671	181-00671	SDA1X3					Adhesive	Gray	120
181-00459	181-00459	SD1X3					Non-Adhesive	Black	120
181-00531	181-00531	SDA1X3					Adhesive	Black	120
<b>1" x 4" (25.4 x 101.6) Nominal Duct Size</b>									
181-14000	181-14000	SD1X4	1.0 (25.4)	4.06 (103.1)	1.0 (25.4)	One rows of holes ☑	Non-Adhesive	White	120
181-00497	181-00497	SDA1X4					Adhesive	White	120
181-00461	181-00461	SD1X4					Non-Adhesive	Gray	120
181-00533	181-00533	SDA1X4					Adhesive	Gray	120
181-00460	181-00460	SD1X4					Non-Adhesive	Black	120
181-00532	181-00532	SDA1X4					Adhesive	Black	120
<b>1.5" x 1" (38.1 x 25.4) Nominal Duct Size</b>									
181-15102	181-15102	SD1.5X1	1.5 (38.1)	1.05 (26.7)	1.5 (38.1)	One rows of holes ☑	Non-Adhesive	White	120
181-00486	181-00486	SDA1.5X1					Adhesive	White	120
181-15101	181-15101	SD1.5X1					Non-Adhesive	Gray	120
181-00025	181-00025	SDA1.5X1					Adhesive	Gray	120
181-15100	181-15100	SD1.5X1					Non-Adhesive	Black	120
181-00485	181-00485	SDA1.5X1					Adhesive	Black	120
<b>1.5" x 1.5" (38.1 x 38.1) Nominal Duct Size</b>									
181-15503	181-15503	SD1.5X1.5	1.52 (38.6)	1.56 (39.6)	1.5 (38.1)	One rows of holes ☑	Non-Adhesive	White	120
181-15504	181-15504	SDA1.5X1.5					Adhesive	White	120
181-15502	181-15502	SD1.5X1.5					Non-Adhesive	Gray	120
181-00483	181-00483	SDA1.5X1.5					Adhesive	Gray	120
181-15500	181-15500	SD1.5X1.5					Non-Adhesive	Black	120
181-00482	181-00482	SDA1.5X1.5					Adhesive	Black	120

Dimensions are approximate and subject to technical changes. Use Part No. for ordering and Type for specification purposes. Solid wall duct in larger sizes continued on the next page. Covers are listed on page 115.

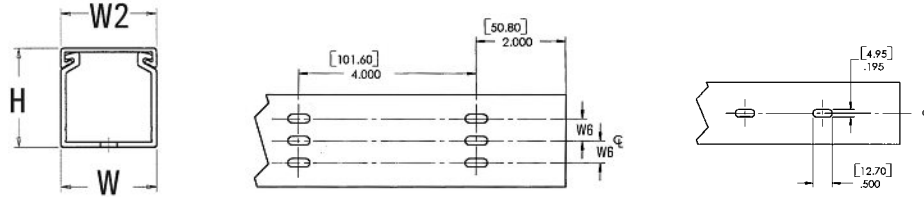
Solid Wall Duct



Product Selection			Width (W)	Height (H)	Width (W2)	Width (W6)	Description	Color	Pkg. Qty
Article No.	Part No.	Type	in. (mm)	in. (mm)	in. (mm)	in. (mm)			ft. (6 ft. lengths)
<b>1.5" x 2" (38.1 x 50.8) Nominal Duct Size</b>									
181-15202	181-15202	SD1.5X2	1.53 (38.9)	2.06 (52.3)	1.5 (38.1)	One rows of holes ☒	Non-Adhesive	White	120
181-00488	181-00488	SDA1.5X2					Adhesive	White	120
181-15201	181-15201	SD1.5X2					Non-Adhesive	Gray	120
181-00487	181-00487	SDA1.5X2					Adhesive	Gray	120
181-00462	181-00462	SD1.5X2					Non-Adhesive	Black	120
181-00534	181-00534	SDA1.5X2					Adhesive	Black	120
<b>1.5" x 3" (38.1 x 76.2) Nominal Duct Size</b>									
181-00464	181-00464	SD1.5X3	1.52 (38.6)	3.06 (77.7)	1.5 (38.1)	One rows of holes ☒	Non-Adhesive	White	120
181-00536	181-00536	SDA1.5X3					Adhesive	White	120
181-15300	181-15300	SD1.5X3					Non-Adhesive	Gray	120
181-00489	181-00489	SDA1.5X3					Adhesive	Gray	120
181-00463	181-00463	SD1.5X3					Non-Adhesive	Black	120
181-00535	181-00535	SDA1.5X3					Adhesive	Black	120
<b>1.5" x 4" (38.1 x 101.6) Nominal Duct Size</b>									
181-00467	181-00467	SD1.5X4	1.5 (38.1)	4.06 (103.1)	1.5 (38.1)	One rows of holes ☒	Non-Adhesive	White	120
181-00539	181-00539	SDA1.5X4					Adhesive	White	120
181-00574	181-00574	SD1.5X4					Non-Adhesive	Gray	120
181-00538	181-00538	SDA1.5X4					Adhesive	Gray	120
181-00465	181-00465	SD1.5X4					Non-Adhesive	Black	120
181-00537	181-00537	SDA1.5X4					Adhesive	Black	120
<b>2" x 1" (50.8 x 25.4) Nominal Duct Size</b>									
181-21003	181-21003	SD2X1	2.01 (51.1)	1.05 (26.7)	2.0 (50.8)	Three rows of holes .5 (12.7)	Non-Adhesive	White	120
181-00500	181-00500	SDA2X1					Adhesive	White	120
181-21001	181-21001	SD2X1					Non-Adhesive	Gray	120
181-00499	181-00499	SDA2X1					Adhesive	Gray	120
181-21000	181-21000	SD2X1					Non-Adhesive	Black	120
181-00498	181-00498	SDA2X1					Adhesive	Black	120
<b>2" x 2" (50.8 x 50.8) Nominal Duct Size</b>									
181-22013	181-22013	SD2X2	2.03 (51.6)	2.06 (52.3)	2.0 (50.8)	Three rows of holes .5 (12.7)	Non-Adhesive	White	120
181-22018	181-22018	SDA2X2					Adhesive	White	120
181-22008	181-22008	SD2X2					Non-Adhesive	Gray	120
181-22016	181-22016	SDA2X2					Adhesive	Gray	120
181-22005	181-22005	SD2X2					Non-Adhesive	Black	120
181-00501	181-00501	SDA2X2					Adhesive	Black	120

Dimensions are approximate and subject to technical changes. Use Part No. for ordering and Type for specification purposes. Solid wall duct in larger sizes continued on the next page. Covers are listed on page 115.

**Solid Wall Duct**

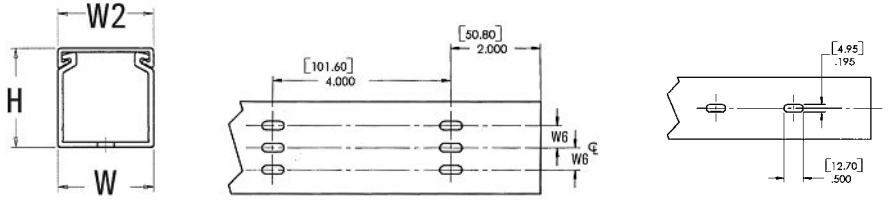


Product Selection		Type	Width (W)	Height (H)	Width (W2)	Width (W6)	Description	Color	Pkg. Qty
Article No.	Part No.		in. (mm)	in. (mm)	in. (mm)	in. (mm)			ft. (6 ft. lengths)
<b>2" x 3" (50.8 x 76.2) Nominal Duct Size</b>									
181-23002	181-23002	SD2X3	2.02 (51.3)	3.06 (77.7)	2.0 (50.8)	Three rows of holes .5 (12.7)	Non-Adhesive	White	120
181-00504	181-00504	SDA2X3					Adhesive	White	120
181-23001	181-23001	SD2X3					Non-Adhesive	Gray	120
181-00503	181-00503	SDA2X3					Adhesive	Gray	120
181-00468	181-00468	SD2X3					Non-Adhesive	Black	120
181-00540	181-00540	SDA2X3					Adhesive	Black	120
<b>2" x 4" (50.8 x 101.6) Nominal Duct Size</b>									
181-24002	181-24002	SD2X4	2.0 (50.8)	4.06 (103.1)	2.0 (50.8)	Three rows of holes .5 (12.7)	Non-Adhesive	White	120
181-00506	181-00506	SDA2X4					Adhesive	White	120
181-24000	181-24000	SD2X4					Non-Adhesive	Gray	120
181-00505	181-00505	SDA2X4					Adhesive	Gray	120
181-00469	181-00469	SD2X4					Non-Adhesive	Black	120
181-00541	181-00541	SDA2X4					Adhesive	Black	120
<b>2" x 5" (50.8 x 127) Nominal Duct Size</b>									
181-00248	181-00248	SD2X5	2.0 (50.8)	5.0 (127)	2.0 (50.8)	Three rows of holes .5 (12.7)	Non-Adhesive	White	120
181-00250	181-00250	SDA2X5					Adhesive	White	120
181-00244	181-00244	SD2X5					Non-Adhesive	Gray	120
181-00246	181-00246	SDA2X5					Adhesive	Gray	120
181-00312	181-00312	SD2X5					Non-Adhesive	Black	120
181-00313	181-00313	SDA2X5					Adhesive	Black	120
<b>2.5" x 3" (63.5 x 76.2) Nominal Duct Size</b>									
181-00224	181-00224	SD2.5X3	2.50 (63.5)	3.0 (76.2)	2.5 (63.5)	Three rows of holes .75 (19.05)	Non-Adhesive	White	120
181-00226	181-00226	SDA2.5X3					Adhesive	White	120
181-00220	181-00220	SD2.5X3					Non-Adhesive	Gray	120
181-00222	181-00222	SDA2.5X3					Adhesive	Gray	120
181-00314	181-00314	SD2.5X3					Non-Adhesive	Black	120
181-00315	181-00315	SDA2.5X3					Adhesive	Black	120

Dimensions are approximate and subject to technical changes. Use Part No. for ordering and Type for specification purposes. Solid wall duct in larger sizes continued on the next page. Covers are listed on page 115.



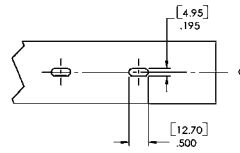
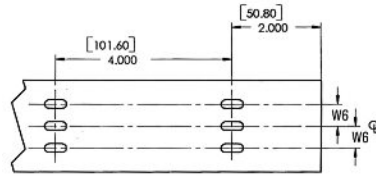
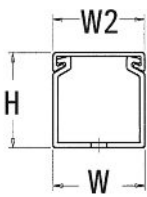
Solid Wall Duct



Product Selection									
Article No.	Part No.	Type	Width (W) in. (mm)	Height (H) in. (mm)	Width (W2) in. (mm)	Width (W6) in. (mm)	Description	Color	Pkg. Qty ft. (6 ft. lengths)
<b>3" x 1" (76.2 x 25.4) Nominal Duct Size</b>									
181-31002	181-31002	SD3X1	3.04 (77.2)	1.05 (26.7)	3.0 (76.2)	Three rows of holes 1.0 (25.4)	Non-Adhesive	White	120
181-00508	181-00508	SDA3X1					Adhesive	White	120
181-31001	181-31001	SD3X1					Non-Adhesive	Gray	120
181-00507	181-00507	SDA3X1					Adhesive	Gray	120
181-00470	181-00470	SD3X1					Non-Adhesive	Black	120
181-00672	181-00672	SDA3X1					Adhesive	Black	120
<b>3" x 2" (76.2 x 50.8) Nominal Duct Size</b>									
181-32003	181-32003	SD3X2	3.03 (77.0)	2.06 (52.5)	3.0 (76.2)	Three rows of holes 1.0 (25.4)	Non-Adhesive	White	120
181-00510	181-00510	SDA3X2					Adhesive	White	120
181-32002	181-32002	SD3X2					Non-Adhesive	Gray	120
181-00509	181-00509	SDA3X2					Adhesive	Gray	120
181-00471	181-00471	SD3X2					Non-Adhesive	Black	120
181-00542	181-00542	SDA3X2					Adhesive	Black	120
<b>3" x 3" (76.2 x 76.2) Nominal Duct Size</b>									
181-33006	181-33006	SD3X3	3.02 (76.7)	3.06 (77.7)	3.0 (76.2)	Three rows of holes 1.0 (25.4)	Non-Adhesive	White	120
181-00513	181-00513	SDA3X3					Adhesive	White	120
181-33004	181-33004	SD3X3					Non-Adhesive	Gray	120
181-00512	181-00512	SDA3X3					Adhesive	Gray	120
181-33000	181-33000	SD3X3					Non-Adhesive	Black	120
181-00511	181-00511	SDA3X3					Adhesive	Black	120
<b>3" x 4" (76.2 x 101.6) Nominal Duct Size</b>									
181-34001	181-34001	SD3X4	3.0 (76.2)	4.06 (103.1)	3.0 (76.2)	Three rows of holes 1.0 (25.4)	Non-Adhesive	White	120
181-00515	181-00515	SDA3X4					Adhesive	White	120
181-34000	181-34000	SD3X4					Non-Adhesive	Gray	120
181-00514	181-00514	SDA3X4					Adhesive	Gray	120
181-00472	181-00472	SD3X4					Non-Adhesive	Black	120
181-00147	181-00147	SDA3X4					Adhesive	Black	120

Dimensions are approximate and subject to technical changes. Use Part No. for ordering and Type for specification purposes. Solid wall duct in larger sizes continued on the next page. Covers are listed on page 115.

**Solid Wall Duct**



Lead Free File # E64139 File # 49249

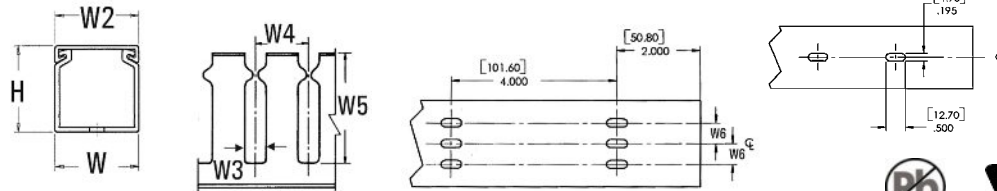
Product Selection

Article No.	Part No.	Type	Width (W)	Height (H)	Width (W2)	Width (W6)	Description	Color	Pkg. Qty
			in. (mm)	in. (mm)	in. (mm)	in. (mm)			ft. (6 ft. lengths)
<b>3" x 5" (76.2 x 127.0) Nominal Duct Size</b>									
181-00475	181-00475	SD3X5	3.0 (76.2)	5.06 (128.5)	3.0 (76.2)	Three rows of holes 1.0 (25.4)	Non-Adhesive	White	60
181-00544	181-00544	SDA3X5					Adhesive	White	60
181-00474	181-00474	SD3X5					Non-Adhesive	Gray	60
181-00148	181-00148	SDA3X5					Adhesive	Gray	60
181-00473	181-00473	SD3X5					Non-Adhesive	Black	60
181-00543	181-00543	SDA3X5					Adhesive	Black	60
<b>4" x 2" (101.6 x 50.8) Nominal Duct Size</b>									
181-42004	181-42004	SD4X2	4.03 (102.4)	2.06 (52.3)	4.0 (101.6)	Three rows of holes 1.5 (38.1)	Non-Adhesive	White	120
181-00517	181-00517	SDA4X2					Adhesive	White	120
181-42002	181-42002	SD4X2					Non-Adhesive	Gray	120
181-00516	181-00516	SDA4X2					Adhesive	Gray	120
181-00476	181-00476	SD4X2					Non-Adhesive	Black	120
181-00545	181-00545	SDA4X2					Adhesive	Black	120
<b>4" x 3" (101.6 x 76.2) Nominal Duct Size</b>									
181-43002	181-43002	SD4X3	4.03 (102.4)	3.06 (77.7)	4.0 (101.6)	Three rows of holes 1.5 (38.1)	Non-Adhesive	White	120
181-00519	181-00519	SDA4X3					Adhesive	White	120
181-43001	181-43001	SD4X3					Non-Adhesive	Gray	120
181-00518	181-00518	SDA4X3					Adhesive	Gray	120
181-00477	181-00477	SD4X3					Non-Adhesive	Black	120
181-00546	181-00546	SDA4X3					Adhesive	Black	120
<b>4" x 4" (101.6 x 101.6) Nominal Duct Size</b>									
181-44015	181-44015	SD4X4	4.00 (101.6)	4.06 (103.1)	4.0 (101.6)	Three rows of holes 1.5 (38.1)	Non-Adhesive	White	120
181-00521	181-00521	SDA4X4					Adhesive	White	120
181-44009	181-44009	SD4X4					Non-Adhesive	Gray	120
181-44018	181-44018	SDA4X4					Adhesive	Gray	120
181-44006	181-44006	SD4X4					Non-Adhesive	Black	120
181-00520	181-00520	SDA4X4					Adhesive	Black	120
<b>4" x 5" (101.6 x 127) Nominal Duct Size</b>									
181-45001	181-45001	SD4X5	4.0 (101.6)	5.06 (128.5)	4.0 (101.6)	Three rows of holes 1.5 (38.1)	Non-Adhesive	White	60
181-00523	181-00523	SDA4X5					Adhesive	White	60
181-45000	181-45000	SD4X5					Non-Adhesive	Gray	60
181-00522	181-00522	SDA4X5					Adhesive	Gray	60
181-00137	181-00137	SD4X5					Non-Adhesive	Black	60
181-00547	181-00547	SDA4X5					Adhesive	Black	60
<b>6" x 4" (152.4 x 101.6) Nominal Duct Size</b>									
181-64001	181-64001	SD6X4	6.0 (152.4)	4.07 (103.4)	6.0 (152.4)	No mounting holes	Non-Adhesive	White	60
181-64000	181-64000	SD6X4					Non-Adhesive	Gray	60
181-00479	181-00479	SD6X4					Non-Adhesive	Black	60
<b>8" x 4" (203.2x 101.6) Nominal Duct Size</b>									
181-84007	181-84007	SD8X4	8.0 (203.2)	4.09 (103.9)	8.0 (203.2)	No mounting holes	Non-Adhesive	White	30
181-84004	181-84004	SD8X4					Non-Adhesive	Gray	30
181-00480	181-00480	SD8X4					Non-Adhesive	Black	30

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For product information visit or [www.hellermann.tyton.com](http://www.hellermann.tyton.com) or call 800-537-1512

### Slotted Wall Duct

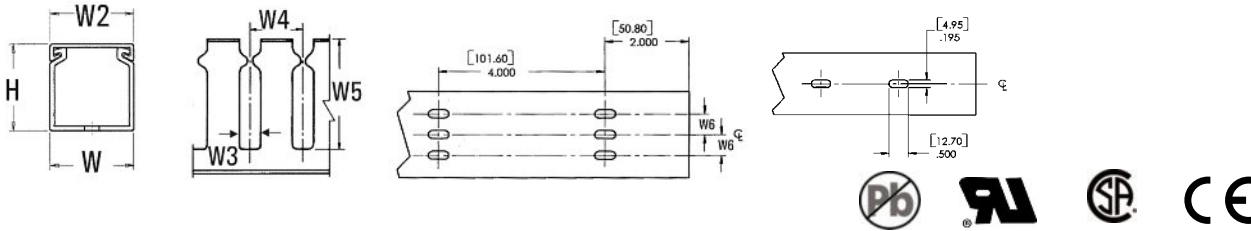


Product Selection

Article No.	Part No.	Type	Width (W)	Height (H)	Width (W2)	Width (W3)	Width (W4)	Width (W5)	Width (W6)	Description	Color	Pkg. Qty
			in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)			ft. (6 ft. lengths)
<b>1" x 1" (25.4 x 25.4) Nominal Duct Size</b>												
181-11015	181-11015	SL1x1	1.0 (25.4)	1.05 (26.7)	1.0 (25.4)	.4 (10.2)	1.0 (25.4)	.75 (19.05)	One row of holes on $\varnothing$	Non-Adhesive	White	120
181-11021	181-11021	SLA1X1								Adhesive	White	120
181-11013	181-11013	SL1x1								Non-Adhesive	Gray	120
181-11019	181-11019	SLA1X1								Adhesive	Gray	120
181-11009	181-11009	SL1x1								Non-Adhesive	Black	120
181-11016	181-11016	SLA1X1								Adhesive	Black	120
<b>1" x 1.5" (25.4 x 38.1) Nominal Duct Size</b>												
181-11507	181-11507	SL1X1.5	1.02 (25.91)	1.56 (26.1)	1.0 (25.4)	.4 (10.2)	1.0 (25.4)	1.19 (30.2)	One row of holes on $\varnothing$	Non-Adhesive	White	120
181-11511	181-11511	SLA1X1.5								Adhesive	White	120
181-11505	181-11505	SL1X1.5								Non-Adhesive	Gray	120
181-11509	181-11509	SLA1X1.5								Adhesive	Gray	120
181-00552	181-00552	SL1X1.5								Non-Adhesive	Black	120
181-00564	181-00564	SLA1X1.5								Adhesive	Black	120
<b>1" x 2" (25.4 x 50.8) Nominal Duct Size</b>												
181-12008	181-12008	SL1X2	1.03 (26.16)	2.06 (52.32)	1.0 (25.4)	.4 (10.2)	1.0 (25.4)	1.62 (41.1)	One row of holes on $\varnothing$	Non-Adhesive	White	120
181-12013	181-12013	SLA1X2								Adhesive	White	120
181-12005	181-12005	SL1X2								Non-Adhesive	Gray	120
181-12011	181-12011	SLA1X2								Adhesive	Gray	120
181-00024	181-00024	SL1X2								Non-Adhesive	Black	120
181-00565	181-00565	SLA1X2								Adhesive	Black	120
<b>1" x 3" (25.4 x 76.2) Nominal Duct Size</b>												
181-13008	181-13008	SL1X3	1.02 (25.91)	3.06 (77.72)	1.0 (25.4)	.4 (10.2)	1.0 (25.4)	2.6 (66.0)	One row of holes on $\varnothing$	Non-Adhesive	White	120
181-13012	181-13012	SLA1X3								Adhesive	White	120
181-13006	181-13006	SL1X3								Non-Adhesive	Gray	120
181-13010	181-13010	SLA1X3								Adhesive	Gray	120
181-13003	181-13003	SL1X3								Non-Adhesive	Black	120
181-00566	181-00566	SLA1X3								Adhesive	Black	120
<b>1" x 4" (25.4 x 101.6) Nominal Duct Size</b>												
181-14006	181-14006	SL1X4	1.0 (25.4)	4.06 (103.12)	1.0 (25.4)	.4 (10.2)	1.0 (25.4)	3.6 (91.4)	One row of holes on $\varnothing$	Non-Adhesive	White	120
181-00569	181-00569	SLA1X4								Adhesive	White	120
181-14003	181-14003	SL1X4								Non-Adhesive	Gray	120
181-00568	181-00568	SLA1X4								Adhesive	Gray	120
181-14001	181-14001	SL1X4								Non-Adhesive	Black	120
181-00567	181-00567	SLA1X4								Adhesive	Black	120
<b>1.5" x 1" (38.1 x 25.4) Nominal Duct Size</b>												
181-15107	181-15107	SL1.5X1	1.5 (38.1)	1.05 (26.67)	1.5 (38.1)	.4 (10.2)	1.0 (25.4)	.75 (19.1)	One row of holes on $\varnothing$	Non-Adhesive	White	120
181-00572	181-00572	SLA1.5X1								Adhesive	White	120
181-15105	181-15105	SL1.5X1								Non-Adhesive	Gray	120
181-00571	181-00571	SLA1.5X1								Adhesive	Gray	120
181-00548	181-00548	SL1.5X1								Non-Adhesive	Black	120
181-00570	181-00570	SLA1.5X1								Adhesive	Black	120

Dimensions are approximate and subject to technical changes. Use Part No. for ordering and Type for specification purposes. Slotted wall duct in larger sizes continued on the next page. Covers are listed on page 115.

Slotted Wall Duct

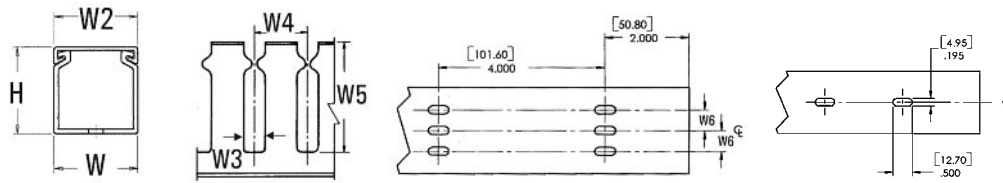


Product Selection

Article No.	Part No.	Type	Width (W)	Height (H)	Width (W2)	Width (W3)	Width (W4)	Width (W5)	Width (W6)	Description	Color	Pkg. Qty. ft. (6 ft. lengths)
			in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)			
<b>1.5" x 1.5" (38.1 x 38.1) Nominal Duct Size</b>												
181-15511	181-15511	SL1.5X1.5	1.52 (38.61)	1.56 (34.6)	1.5 (38.1)	.4 (10.16)	1.0 (25.4)	1.19 (30.2)	One row of holes on ☒	Non-Adhesive	White	120
181-15515	181-15515	SLA1.5X1.5								Adhesive	White	120
181-15509	181-15509	SL1.5X1.5								Non-Adhesive	Gray	120
181-15513	181-15513	SLA1.5X1.5								Adhesive	Gray	120
181-15505	181-15505	SL1.5X1.5								Non-Adhesive	Black	120
181-00027	181-00027	SLA1.5X1.5								Adhesive	Black	120
<b>1.5" x 2" (38.1 x 50.8) Nominal Duct Size</b>												
181-15209	181-15209	SL1.5X2	1.53 (38.86)	2.06 (52.32)	1.5 (38.1)	.4 (10.16)	1.0 (25.4)	1.62 (41.1)	One row of holes on ☒	Non-Adhesive	White	120
181-15213	181-15213	SLA1.5X2								Adhesive	White	120
181-15207	181-15207	SL1.5X2								Non-Adhesive	Gray	120
181-15211	181-15211	SLA1.5X2								Adhesive	Gray	120
181-15203	181-15203	SL1.5X2								Non-Adhesive	Black	120
181-00573	181-00573	SLA1.5X2								Adhesive	Black	120
<b>1.5" x 3" (38.1 x 76.2) Nominal Duct Size</b>												
181-15306	181-15306	SL1.5X3	1.52 (38.61)	3.06 (77.72)	1.5 (38.1)	.4 (10.16)	1.0 (25.4)	2.6 (66.0)	One row of holes on ☒	Non-Adhesive	White	120
181-15308	181-15308	SLA1.5X3								Adhesive	White	120
181-15304	181-15304	SL1.5X3								Non-Adhesive	Gray	120
181-15307	181-15307	SLA1.5X3								Adhesive	Gray	120
181-00550	181-00550	SL1.5X3								Non-Adhesive	Black	120
181-00575	181-00575	SLA1.5X3								Adhesive	Black	120
<b>1.5" x 4" (38.1 x 101.6) Nominal Duct Size</b>												
181-15406	181-15406	SL1.5X4	1.5 (38.1)	4.06 (103.12)	1.5 (38.1)	.4 (10.16)	1.0 (25.4)	3.6 (91.4)	One row of holes on ☒	Non-Adhesive	White	120
181-00578	181-00578	SLA1.5X4								Adhesive	White	120
181-15404	181-15404	SL1.5X4								Non-Adhesive	Gray	120
181-00577	181-00577	SLA1.5X4								Adhesive	Gray	120
181-15400	181-15400	SL1.5X4								Non-Adhesive	Black	120
181-00576	181-00576	SLA1.5X4								Adhesive	Black	120
<b>2" x 1" (50.8 x 25.4) Nominal Duct Size</b>												
181-21007	181-21007	SL2X1	2.01 (51.05)	1.05 (26.7)	2.0 (50.8)	.4 (10.16)	1.0 (25.4)	.75 (19.1)	Three rows of holes .5 (12.7)	Non-Adhesive	White	120
181-00580	181-00580	SLA2X1								Adhesive	White	120
181-21005	181-21005	SL2X1								Non-Adhesive	Gray	120
181-21009	181-21009	SLA2X1								Adhesive	Gray	120
181-00554	181-00554	SL2X1								Non-Adhesive	Black	120
181-00579	181-00579	SLA2X1								Adhesive	Black	120
<b>2" x 2" (50.8 x 50.8) Nominal Duct Size</b>												
181-22028	181-22028	SL2X2	2.03 (51.56)	2.0 (50.8)	2.0 (50.8)	.4 (10.16)	1.0 (25.4)	1.62 (41.1)	Three rows of holes .5 (12.7)	Non-Adhesive	White	120
181-22034	181-22034	SLA2X2								Adhesive	White	120
181-22024	181-22024	SL2x2								Non-Adhesive	Gray	120
181-22032	181-22032	SLA2X2								Adhesive	Gray	120
181-22020	181-22020	SL2x2								Non-Adhesive	Black	120
181-22030	181-22030	SLA2X2								Adhesive	Black	120

Dimensions are approximate and subject to technical changes. Use Part No. for ordering and Type for specification purposes. Slotted wall duct in larger sizes continued on the next page. Covers are listed on page 115.

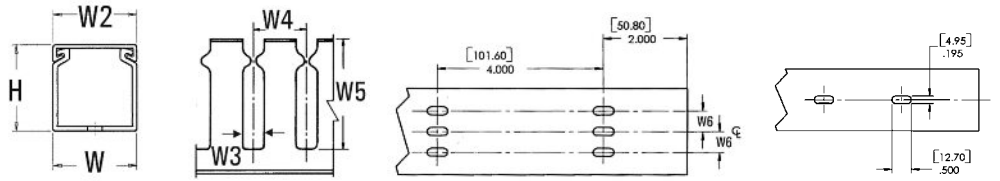
### Slotted Wall Duct



Product Selection			Width (W)	Height (H)	Width (W2)	Width (W3)	Width (W4)	Width (W5)	Width (W6)	Description	Color	Pkg. Qty
Article No.	Part No.	Type	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)			ft. (6 ft. lengths)
<b>2" x 3" (50.8 x 76.2) Nominal Duct Size</b>												
181-23009	181-23009	SL2X3	2.02 (51.3)	3.06 (77.7)	2.0 (50.8)	.4 (10.16)	1.0 (25.4)	2.6 (66.0)	Three rows of holes .5 (12.7)	Non-Adhesive	White	120
181-23012	181-23012	SLA2X3								Adhesive	White	120
181-23007	181-23007	SL2X3								Non-Adhesive	Gray	120
181-00582	181-00582	SLA2X3								Adhesive	Gray	120
181-23003	181-23003	SL2X3								Non-Adhesive	Black	120
181-00581	181-00581	SLA2X3								Adhesive	Black	120
<b>2" x 4" (50.8 x 101.6) Nominal Duct Size</b>												
181-24011	181-24011	SL2X4	2.0 (50.8)	4.06 (103.1)	2.0 (50.8)	.4 (10.16)	1.0 (25.4)	3.6 (91.4)	Three rows of holes .5 (12.7)	Non-Adhesive	White	120
181-24014	181-24014	SLA2X4								Adhesive	White	120
181-24008	181-24008	SL2X4								Non-Adhesive	Gray	120
181-24013	181-24013	SLA2X4								Adhesive	Gray	120
181-24003	181-24003	SL2X4								Non-Adhesive	Black	120
181-00583	181-00583	SLA2X4								Adhesive	Black	120
<b>2" x 5" (50.8 x 127) Nominal Duct Size</b>												
181-00240	181-00240	SL2X5	2.0 (50.8)	5.0 (127)	2.0 (50.8)	.40 (10.2)	1.0 (25.1)	4.6 (116.8)	Three rows of holes .5 (12.7)	Non-Adhesive	White	120
181-00242	181-00242	SLA2X5								Adhesive	White	120
181-00236	181-00236	SL2X5								Non-Adhesive	Gray	120
181-00238	181-00238	SLA2X5								Adhesive	Gray	120
181-00316	181-00316	SL2X5								Non-Adhesive	Black	120
181-00317	181-00317	SLA2X5								Adhesive	Black	120
<b>2.5" x 3" (63.5 x 76.2) Nominal Duct Size</b>												
181-00216	181-00216	SL2.5X3	2.5 (63.5)	3.0 (76.2)	2.5 (63.5)	.4 (10.2)	1.0 (25.1)	2.6 (66.0)	Three rows of holes .75 (19.05)	Non-Adhesive	White	120
181-00218	181-00218	SLA2.5X3								Adhesive	White	120
181-00212	181-00212	SL2.5X3								Non-Adhesive	Gray	120
181-00214	181-00214	SLA2.5X3								Adhesive	Gray	120
181-00318	181-00318	SL2.5X3								Non-Adhesive	Black	120
181-00319	181-00319	SLA2.5X3								Adhesive	Black	120

Dimensions are approximate and subject to technical changes. Use Part No. for ordering and Type for specification purposes. Slotted wall duct in larger sizes continued on the next page. Covers are listed on page 115.

Slotted Wall Duct

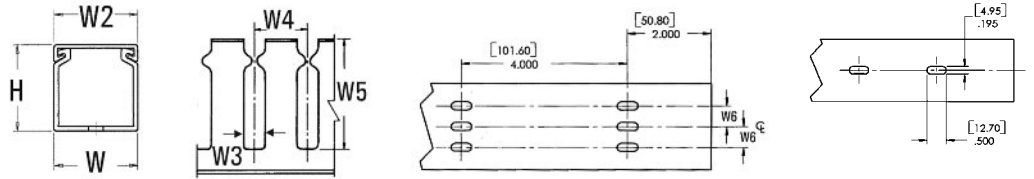


Article No.	Part No.	Type	Width (W) in. (mm)	Height (H) in. (mm)	Width (W2) in. (mm)	Width (W3) in. (mm)	Width (W4) in. (mm)	Width (W5) in. (mm)	Width (W6) in. (mm)	Description	Color	Pkg. Qty ft. (6 ft. lengths)
3" x 1" (76.2 X 25.4) Nominal Duct Size												
181-31007	181-31007	SL3X1	3.04 (77.22)	1.0 (25.4)	3.0 (76.2)	.4 (10.16)	1.0 (25.4)	.75 (19.1)	Three rows of holes 1.0 (25.4)	Non-Adhesive	White	120
181-00586	181-00586	SLA3X1								Adhesive	White	120
181-00558	181-00558	SL3X1								Non-Adhesive	Gray	120
181-00585	181-00585	SLA3X1								Adhesive	Gray	120
181-00557	181-00557	SL3X1								Non-Adhesive	Black	120
181-00584	181-00584	SLA3X1								Adhesive	Black	120
3" x 2" (76.2 x 50.8) Nominal Duct Size												
181-32009	181-32009	SL3X2	3.03 (76.96)	2.0 (50.8)	3.0 (76.2)	.4 (10.16)	1.0 (25.40)	1.62 (41.1)	Three rows of holes 1.0 (25.4)	Non-Adhesive	White	120
181-32015	181-32015	SLA3X2								Adhesive	White	120
181-32005	181-32005	SL3X2								Non-Adhesive	Gray	120
181-32012	181-32012	SLA3X2								Adhesive	Gray	120
181-32004	181-32004	SL3X2								Non-Adhesive	Black	120
181-00587	181-00587	SLA3X2								Adhesive	Black	120
3" x 3" (76.2 x 76.2) Nominal Duct Size												
181-33018	181-33018	SL3X3	3.02 (76.71)	3.0 (76.2)	3.0 (76.2)	.4 (10.2)	1.0 (25.1)	2.6 (66.0)	Three rows of holes 1.0 (25.4)	Non-Adhesive	White	120
181-33022	181-33022	SL3X3								Adhesive	White	120
181-33015	181-33015	SLA3X3								Non-Adhesive	Gray	120
181-33021	181-33021	SLA3X3								Adhesive	Gray	120
181-33009	181-33009	SL3X3								Non-Adhesive	Black	120
181-00159	181-00159	SL3X3								Adhesive	Black	120
3" x 4" (76.2 x 101.6) Nominal Duct Size												
181-34007	181-34007	SL3X4	3.0 (76.2)	4.0 (101.6)	3.0 (76.2)	0.4 (10.2)	1.0 (25.1)	3.6 (91.4)	Three rows of holes 1.0 (25.4)	Non-Adhesive	White	120
181-00590	181-00590	SL3X4								Adhesive	White	120
181-34004	181-34004	SLA3X4								Non-Adhesive	Gray	120
181-00589	181-00589	SLA3X4								Adhesive	Gray	120
181-34002	181-34002	SL3X4								Non-Adhesive	Black	120
181-00588	181-00588	SL3X4								Adhesive	Black	120

Dimensions are approximate and subject to technical changes. Use Part No. for ordering and Type for specification purposes. Slotted wall duct in larger sizes continued on the next page. Covers are listed on page 115.



### Slotted Wall Duct

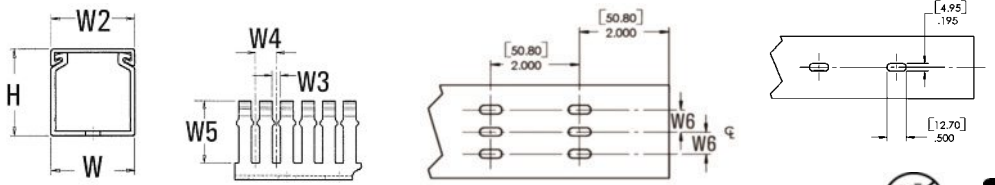


Product Selection

Article No.	Part No.	Type	Width (W)	Height (H)	Width (W2)	Width (W3)	Width (W4)	Width (W5)	Width (W6)	Description	Color	Pkg. Qty.
			in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)			ft. (6 ft. lengths)
<b>3" x 5" (76.2 x 127.0) Nominal Duct Size</b>												
181-00560	181-00560	SL3X5	3.0 (76.2)	5.0 (127.0)	3.0 (76.2)	.4 (10.16)	1.0 (25.4)	4.6 (116.8)	Three rows of holes 1.0 (25.4)	Non-Adhesive	White	60
181-00156	181-00156	SLA3X5								Adhesive	White	60
181-35005	181-35005	SL3X5								Non-Adhesive	Gray	60
181-00155	181-00155	SLA3X5								Adhesive	Gray	60
181-35002	181-35002	SL3X5								Non-Adhesive	Black	60
181-00157	181-00157	SLA3X5								Adhesive	Black	60
<b>4" x 2" (101.6 x 50.8) Nominal Duct Size</b>												
181-42010	181-42010	SL4X2	4.03 (102.36)	2.06 (52.3)	4.0 (101.6)	.4 (10.16)	1.0 (25.4)	1.62 (41.1)	Three rows of holes 1.5 (38.1)	Non-Adhesive	White	120
181-42014	181-42014	SLA4X2								Adhesive	White	120
181-42008	181-42008	SL4X2								Non-Adhesive	Gray	120
181-00592	181-00592	SLA4X2								Adhesive	Gray	120
181-42005	181-42005	SL4X2								Non-Adhesive	Black	120
181-00591	181-00591	SLA4X2								Adhesive	Black	120
<b>4" x 3" (101.6 x 76.2) Nominal Duct Size</b>												
181-43006	181-43006	SL4X3	4.03 (102.36)	3.0 (76.2)	4.0 (101.6)	.4 (10.16)	1.0 (25.4)	2.6 (66.0)	Three rows of holes 1.5 (38.1)	Non-Adhesive	White	120
181-00594	181-00594	SLA4X3								Adhesive	White	120
181-43004	181-43004	SL4X3								Non-Adhesive	Gray	120
181-43008	181-43008	SLA4X3								Adhesive	Gray	120
181-00562	181-00562	SL4X3								Non-Adhesive	Black	120
181-00593	181-00593	SLA4X3								Adhesive	Black	120
<b>4" x 4" (101.6 x 101.6) Nominal Duct Size</b>												
181-44031	181-44031	SL4X4	4.0 (101.6)	4.0 (101.6)	4.0 (101.6)	.4 (10.16)	1.0 (25.4)	3.6 (91.4)	Three rows of holes 1.5 (38.1)	Non-Adhesive	White	120
181-44035	181-44035	SLA4X4								Adhesive	White	120
181-44027	181-44027	SL4X4								Non-Adhesive	Gray	120
181-44033	181-44033	SLA4X4								Adhesive	Gray	120
181-44020	181-44020	SL4X4								Non-Adhesive	Black	120
181-00595	181-00595	SLA4X4								Adhesive	Black	120
<b>4" x 5" (101.6 x 127) Nominal Duct Size</b>												
181-45011	181-45011	SL4X5	4.0 (101.6)	5.06 (128.52)	4.0 (101.6)	.4 (10.16)	1.0 (25.4)	4.6 (116.8)	Three rows of holes 1.5 (38.1)	Non-Adhesive	White	60
181-45013	181-45013	SLA4X5								Adhesive	White	60
181-45010	181-45010	SL4X5								Non-Adhesive	Gray	60
181-00596	181-00596	SLA4X5								Adhesive	Gray	60
181-45002	181-45002	SL4X5								Non-Adhesive	Black	60
181-45012	181-45012	SLA4X5								Adhesive	Black	60

Dimensions are approximate and subject to technical changes. Use Part No. for ordering and Type for specification purposes. Covers are listed on page 115.

### High Density Slotted Duct



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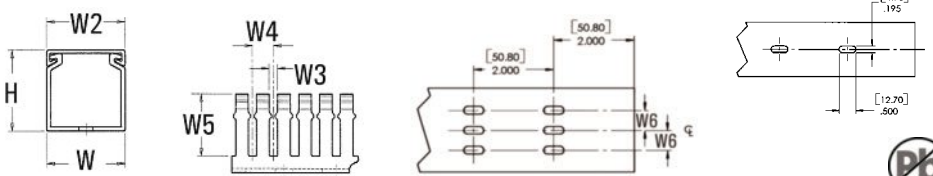
Product Selection

Article No.	Part No.	Type	Width (W)	Height (H)	Width (W2)	Width (W3)	Width (W4)	Width (W5)	Width (W6)	Description	Color	Pkg. Qty.
			in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)			ft. (6 ft. lengths)
<b>1" x 1" (25.4 x 25.4) Nominal Duct Size</b>												
184-11006	184-11006	SLHD1X1	1.0 (25.4)	1.05 (26.7)	1.0 (25.4)	.16 (4.1)	.4 (10.2)	.75 (19.1)	One row of holes on ☑	Non-Adhesive	White	120
181-00622	181-00622	SLHDA1X1								Adhesive	White	120
184-11004	184-11004	SLHD1X1								Non-Adhesive	Gray	120
181-00621	181-00621	SLHDA1X1								Adhesive	Gray	120
181-00597	181-00597	SLHD1X1								Non-Adhesive	Black	120
181-00637	181-00637	SLHDA1X1								Adhesive	Black	120
<b>1" x 1.5" (25.4 x 38.1) Nominal Duct Size</b>												
184-11012	184-11012	SLHD1X1.5	1.02 (25.9)	1.56 (39.6)	1.0 (25.4)	.16 (4.1)	.4 (10.2)	1.19 (30.2)	One row of holes on ☑	Non-Adhesive	White	120
184-11009	184-11009	SLHDA1X1.5								Adhesive	White	120
184-11010	184-11010	SLHD1X1.5								Non-Adhesive	Gray	120
184-11008	184-11008	SLHDA1X1.5								Adhesive	Gray	120
181-00598	181-00598	SLHD1X1.5								Non-Adhesive	Black	120
181-00623	181-00623	SLHDA1X1.5								Adhesive	Black	120
<b>1" x 2" (25.4 x 50.8) Nominal Duct Size</b>												
184-12007	184-12007	SLHD1X2	1.03 (26.2)	2.06 (52.3)	1.0 (25.4)	.16 (4.1)	.4 (10.2)	1.62 (41.1)	One row of holes on ☑	Non-Adhesive	White	120
184-12004	184-12004	SLHDA1X2								Adhesive	White	120
184-12005	184-12005	SLHD1X2								Non-Adhesive	Gray	120
184-12002	184-12002	SLHDA1X2								Adhesive	Gray	120
181-00599	181-00599	SLHD1X2								Non-Adhesive	Black	120
181-00624	181-00624	SLHDA1X2								Adhesive	Black	120
<b>1" x 3" (25.4 x 76.2) Nominal Duct Size</b>												
184-13007	184-13007	SLHD1X3	1.02 (25.9)	3.06 (77.7)	1.0 (25.4)	.16 (4.1)	.4 (10.2)	2.6 (66.0)	One row of holes on ☑	Non-Adhesive	White	120
184-13003	184-13003	SLHDA1X3								Adhesive	White	120
184-13005	184-13005	SLHD1X3								Non-Adhesive	Gray	120
181-00626	181-00626	SLHDA1X3								Adhesive	Gray	120
181-00600	181-00600	SLHD1X3								Non-Adhesive	Black	120
181-00625	181-00625	SLHDA1X3								Adhesive	Black	120
<b>1" x 4" (25.4 x 101.6) Nominal Duct Size</b>												
184-14004	184-14004	SLHD1X4	1.0 (25.4)	4.06 (103.1)	1.0 (25.4)	.16 (4.1)	.4 (10.2)	3.6 (91.4)	One row of holes on ☑	Non-Adhesive	White	120
181-00629	181-00629	SLHDA1X4								Adhesive	White	120
184-14002	184-14002	SLHD1X4								Non-Adhesive	Gray	120
181-00628	181-00628	SLHDA1X4								Adhesive	Gray	120
181-00601	181-00601	SLHD1X4								Non-Adhesive	Black	120
181-00627	181-00627	SLHDA1X4								Adhesive	Black	120
<b>1.5" x 1" (38.1 x 25.4) Nominal Duct Size</b>												
184-15102	184-15102	SLHD1.5X1	1.5 (38.1)	1.05 (26.7)	1.5 (38.1)	.16 (4.1)	.4 (10.2)	.75 (19.1)	One row of holes on ☑	Non-Adhesive	White	120
181-00632	181-00632	SLHDA1.5X1								Adhesive	White	120
184-15101	184-15101	SLHD1.5X1								Non-Adhesive	Gray	120
181-00631	181-00631	SLHDA1.5X1								Adhesive	Gray	120
181-00602	181-00602	SLHD1.5X1								Non-Adhesive	Black	120
181-00630	181-00630	SLHDA1.5X1								Adhesive	Black	120

Dimensions are approximate and subject to technical changes. Use Part No. for ordering and Type for specification purposes. High density slotted wall duct in larger sizes continued on the next page. Covers are listed on page 115.

For product information visit or [www.hellermann.tyton.com](http://www.hellermann.tyton.com) or call 800-537-1512

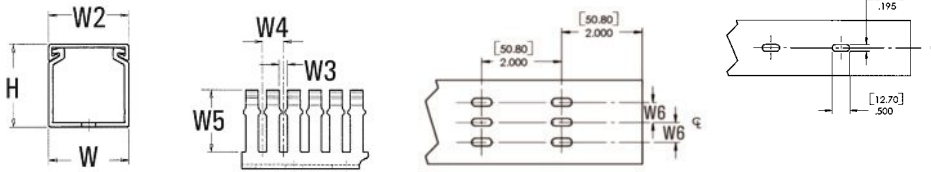
### High Density Slotted Duct



Product Selection			Width (W)	Height (H)	Width (W2)	Width (W3)	Width (W4)	Width (W5)	Width (W6)	Description	Color	Pkg. Qty. ft. (6 ft. lengths)
Article No.	Part No.	Type	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)			
1.5" x 1.5" (38.1 x 38.1) Nominal Duct Size												
184-15155	184-15155	SLHD1.5X1.5	1.52 (38.6)	1.56 (39.6)	1.5 (38.1)	.16 (4.1)	.4 (10.2)	1.19 (30.2)	One row of holes on €	Non-Adhesive	White	120
184-15153	184-15153	SLHDA1.5X1.5								Adhesive	White	120
184-15152	184-15152	SLHD1.5X1.5								Non-Adhesive	Gray	120
184-15151	184-15151	SLHDA1.5X1.5								Adhesive	Gray	120
181-00603	181-00603	SLHD1.5X1.5								Non-Adhesive	Black	120
181-00633	181-00633	SLHD1.5X1.5								Adhesive	Black	120
1.5" x 2" (38.1 x 50.8) Nominal Duct Size												
184-15206	184-15206	SLHD1.5X2	1.53 (38.9)	2.06 (52.3)	1.5 (38.1)	.16 (4.1)	.4 (10.2)	1.62 (41.1)	One row of holes on €	Non-Adhesive	White	120
184-15205	184-15205	SLHDA1.5X2								Adhesive	White	120
184-15202	184-15202	SLHD1.5X2								Non-Adhesive	Gray	120
184-15201	184-15201	SLHDA1.5X2								Adhesive	Gray	120
181-00604	181-00604	SLHD1.5X2								Non-Adhesive	Black	120
181-00634	181-00634	SLHDA1.5X2								Adhesive	Black	120
1.5" x 3" (38.1 x 76.2) Nominal Duct Size												
184-15304	184-15304	SLHD1.5X3	1.52 (38.6)	3.06 (77.7)	1.5 (38.1)	.16 (4.1)	.4 (10.2)	2.6 (66.0)	One row of holes on €	Non-Adhesive	White	120
184-15301	184-15301	SLHDA1.5X3								Adhesive	White	120
184-15302	184-15302	SLHD1.5X3								Non-Adhesive	Gray	120
181-00636	181-00636	SLHDA1.5X3								Adhesive	Gray	120
181-00605	181-00605	SLHD1.5X3								Non-Adhesive	Black	120
181-00635	181-00635	SLHDA1.5X3								Adhesive	Black	120
1.5" x 4" (38.1 x 101.6) Nominal Duct Size												
184-15403	184-15403	SLHD1.5X4	1.5 (38.1)	4.06 (103.1)	1.5 (38.1)	.16 (4.1)	.4 (10.2)	3.6 (91.4)	One row of holes on €	Non-Adhesive	White	120
181-00639	181-00639	SLHDA1.5X4								Adhesive	White	120
184-15401	184-15401	SLHD1.5X4								Non-Adhesive	Gray	120
181-00638	181-00638	SLHDA1.5X4								Adhesive	Gray	120
181-00606	181-00606	SLHD1.5X4								Non-Adhesive	Black	120
181-00620	181-00620	SLHDA1.5X4								Adhesive	Black	120
2" x 1" (50.8 x 25.4) Nominal Duct Size												
184-21003	184-21003	SLHD2X1	2.01 (51.1)	1.05 (26.7)	2.0 (50.8)	.16 (4.1)	.4 (10.2)	.75 (19.1)	Three rows of holes .5 (12.7)	Non-Adhesive	White	120
181-00642	181-00642	SLHDA2X1								Adhesive	White	120
184-21002	184-21002	SLHD2X1								Non-Adhesive	Gray	120
181-00641	181-00641	SLHDA2X1								Adhesive	Gray	120
181-00607	181-00607	SLHD2X1								Non-Adhesive	Black	120
181-00640	181-00640	SLHDA2X1								Adhesive	Black	120
2" x 2" (50.8 x 50.8) Nominal Duct Size												
184-22008	184-22008	SLHD2X2	2.03 (51.6)	2.06 (52.3)	2.0 (50.8)	.16 (4.1)	.4 (10.2)	1.62 (41.1)	Three rows of holes .5 (12.7)	Non-Adhesive	White	120
184-22003	184-22003	SLHDA2X2								Adhesive	White	120
184-22005	184-22005	SLHD2X2								Non-Adhesive	Gray	120
181-00644	181-00644	SLHDA2X2								Adhesive	Gray	120
181-00608	181-00608	SLHD2X2								Non-Adhesive	Black	120
181-00643	181-00643	SLHDA2X2								Adhesive	Black	120

Dimensions are approximate and subject to technical changes. Use Part No. for ordering and Type for specification purposes. High density slotted wall duct in larger sizes continued on the next page. Covers are listed on page 115.

### High Density Slotted Duct

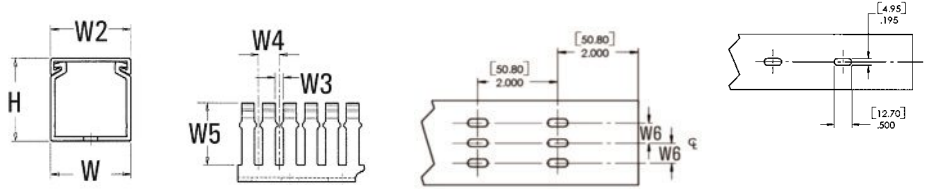


Product Selection

Article No.	Part No.	Type	Width (W)	Height (H)	Width (W2)	Width (W3)	Width (W4)	Width (W5)	Width (W6)	Description	Color	Pkg. Qty
			in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)			ft. (6 ft. lengths)
<b>2" x 3" (50.8 x 76.2) Nominal Duct Size</b>												
184-23006	184-23006	SLHD2X3	2.02 (51.3)	3.06 (77.7)	2.0 (50.8)	.16 (4.1)	.4 (10.2)	2.6 (66.0)	Three rows of holes .5 (12.7)	Non-Adhesive	White	120
184-23003	184-23003	SLHDA2X3								Adhesive	White	120
184-23004	184-23004	SLHD2X3								Non-Adhesive	Gray	120
181-00646	181-00646	SLHDA2X3								Adhesive	Gray	120
181-00609	181-00609	SLHD2X3								Non-Adhesive	Black	120
181-00645	181-00645	SLHDA2X3								Adhesive	Black	120
<b>2" x 4" (50.8 x 101.6) Nominal Duct Size</b>												
184-24007	184-24007	SLHD2X4	2.0 (50.8)	4.06 (103.1)	2.0 (50.8)	.16 (4.1)	.4 (10.2)	3.6 (91.4)	Three rows of holes .5 (12.7)	Non-Adhesive	White	120
184-24003	184-24003	SLHDA2X4								Adhesive	White	120
184-24004	184-24004	SLHD2X4								Non-Adhesive	Gray	120
181-00648	181-00648	SLHDA2X4								Adhesive	Gray	120
181-00610	181-00610	SLHD2X4								Non-Adhesive	Black	120
181-00647	181-00647	SLHDA2X4								Adhesive	Black	120
<b>2" x 5" (50.8 x 127) Nominal Duct Size</b>												
181-00265	181-00265	SLHD2X5	2.0 (50.8)	5.0 (127.0)	2.0 (50.8)	.16 (4.1)	.4 (10.2)	4.6 (116.8)	Three rows of holes .5 (12.7)	Non-Adhesive	White	120
181-00259	181-00259	SLHDA2X5								Adhesive	White	120
181-00252	181-00252	SLHD2X5								Non-Adhesive	Gray	120
181-00254	181-00254	SLHDA2X5								Adhesive	Gray	120
181-00320	181-00320	SLHD2X5								Non-Adhesive	Black	120
181-00321	181-00321	SLHDA2X5								Adhesive	Black	120
<b>2.5" x 3" (63.5 x 76.2) Nominal Duct Size</b>												
181-00232	181-00232	SLHD2.5X3	2.5 (63.5)	3.0 (76.2)	2.5 (63.5)	.16 (4.1)	.4 (10.2)	2.6 (66.0)	Three rows of holes .75 (19.05)	Non-Adhesive	White	120
181-00234	181-00234	SLHDA2.5X3								Adhesive	White	120
181-00228	181-00228	SLHD2.5X3								Non-Adhesive	Gray	120
181-00230	181-00230	SLHDA2.5X3								Adhesive	Gray	120
181-00322	181-00322	SLHD2.5X3								Non-Adhesive	Black	120
181-00323	181-00323	SLHDA2.5X3								Adhesive	Black	120

Dimensions are approximate and subject to technical changes. Use Part No. for ordering and Type for specification purposes. High density slotted wall duct in larger sizes continued on the next page. Covers are listed on page 115.

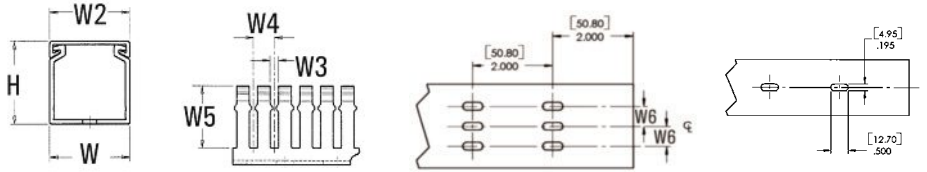
### High Density Slotted Duct



Article No.	Part No.	Type	Width (W) in. (mm)	Height (H) in. (mm)	Width (W2) in. (mm)	Width (W3) in. (mm)	Width (W4) in. (mm)	Width (W5) in. (mm)	Width (W6) in. (mm)	Description	Color	Pkg. Qty ft. (6 ft. lengths)
<b>3" x 1" (76.2 x 25.4) Nominal Duct Size</b>												
181-00613	181-00613	SLHD3X1	3.02 (76.7)	1.0 (25.4)	3.0 (76.2)	.16 (4.1)	.4 (10.2)	.75 (19.1)	Three rows of holes 1.0 (25.4)	Non-Adhesive	White	120
181-00652	181-00652	SLHDA3X1								Adhesive	White	120
181-00612	181-00612	SLHD3X1								Non-Adhesive	Gray	120
181-00651	181-00651	SLHDA3X1								Adhesive	Gray	120
181-00611	181-00611	SLHD3X1								Non-Adhesive	Black	120
181-00649	181-00649	SLHDA3X1								Adhesive	Black	120
<b>3" x 2" (76.2 x 50.8) Nominal Duct Size</b>												
184-32004	184-32004	SLHD3X2	3.03 (76.96)	2.06 (52.3)	3.0 (76.2)	.16 (4.1)	.4 (10.2)	1.62 (41.1)	Three rows of holes 1.0 (25.4)	Non-Adhesive	White	120
181-00655	181-00655	SLHDA3X2								Adhesive	White	120
184-32001	184-32001	SLHD3X2								Non-Adhesive	Gray	120
181-00654	181-00654	SLHDA3X2								Adhesive	Gray	120
181-00614	181-00614	SLHD3X2								Non-Adhesive	Black	120
181-00653	181-00653	SLHDA3X2								Adhesive	Black	120
<b>3" x 3" (76.2 x 76.2) Nominal Duct Size</b>												
184-33004	184-33004	SLHD3X3	3.02 (76.71)	3.06 (77.7)	3.0 (76.2)	.16 (4.1)	.4 (10.2)	2.6 (66.0)	Three rows of holes 1.0 (25.4)	Non-Adhesive	White	120
184-33001	184-33001	SLHD3X3								Adhesive	White	120
184-33002	184-33002	SLHDA3X3								Non-Adhesive	Gray	120
181-00657	181-00657	SLHDA3X3								Adhesive	Gray	120
181-00615	181-00615	SLHD3X3								Non-Adhesive	Black	120
181-00656	181-00656	SLHD3X3								Adhesive	Black	120
<b>3" x 4" (76.2 x 101.6) Nominal Duct Size</b>												
184-34005	184-34005	SLHD3X4	3.0 (76.2)	4.06 (103.1)	3.0 (76.2)	.16 (4.1)	.4 (10.2)	3.6 (91.4)	Three rows of holes 1.0 (25.4)	Non-Adhesive	White	120
184-34001	184-34001	SLHD3X4								Adhesive	White	120
184-34003	184-34003	SLHDA3X4								Non-Adhesive	Gray	120
181-00659	181-00659	SLHDA3X4								Adhesive	Gray	120
181-00616	181-00616	SLHD3X4								Non-Adhesive	Black	120
181-00658	181-00658	SLHD3X4								Adhesive	Black	120

Dimensions are approximate and subject to technical changes. Use Part No. for ordering and Type for specification purposes. High density slotted wall duct in larger sizes continued on the next page. Covers are listed on page 115.

### High Density Slotted Duct



Lead Free File # E64139 File # 49249

Product Selection

Article No.	Part No.	Type	Width (W)	Height (H)	Width (W2)	Width (W3)	Width (W4)	Width (W5)	Width (W6)	Description	Color	Pkg. Qty.
			in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)			ft. (6 ft. lengths)
<b>4" x 2" (101.6 x 50.8) Nominal Duct Size</b>												
184-42003	184-42003	SLHD4X2	4.03 (102.4)	2.06 (52.3)	4.0 (101.6)	.16 (4.1)	.40 (10.2)	1.62 (41.1)	Three rows of holes 1.5 (38.1)	Non-Adhesive	White	120
181-00665	181-00665	SLHDA4X2								Adhesive	White	120
184-42001	184-42001	SLHD4X2								Non-Adhesive	Gray	120
181-00664	181-00664	SLHDA4X2								Adhesive	Gray	120
181-00617	181-00617	SLHD4X2								Non-Adhesive	Black	120
181-00663	181-00663	SLHDA4X2								Adhesive	Black	120
<b>4" x 3" (101.6 x 76.2) Nominal Duct Size</b>												
184-43003	184-43003	SLHD4X3	4.03 (102.4)	3.06 (77.7)	4.0 (101.6)	.16 (4.1)	.4 (10.2)	2.6 (66.0)	Three rows of holes 1.5 (38.1)	Non-Adhesive	White	120
181-00152	181-00152	SLHDA4X3								Adhesive	White	120
184-43001	184-43001	SLHD4X3								Non-Adhesive	Gray	120
181-00153	181-00153	SLHDA4X3								Adhesive	Gray	120
181-00618	181-00618	SLHD4X2								Non-Adhesive	Black	120
181-00154	181-00154	SLHDA4X3								Adhesive	Black	120
<b>4" x 4" (101.6 x 101.6) Nominal Duct Size</b>												
184-44004	184-44004	SLHD4X4	4.0 (101.6)	4.06 (103.1)	4.0 (101.6)	.16 (4.1)	.4 (10.2)	3.6 (91.4)	Three rows of holes 1.5 (38.1)	Non-Adhesive	White	120
184-44001	184-44001	SLHDA4X4								Adhesive	White	120
184-44002	184-44002	SLHD4X4								Non-Adhesive	Gray	120
181-00667	181-00667	SLHDA4X4								Adhesive	Gray	120
181-00619	181-00619	SLHD4X4								Non-Adhesive	Black	120
181-00666	181-00666	SLHDA4X4								Adhesive	Black	120

Dimensions are approximate and subject to technical changes. Use Part No. for ordering and Type for specification purposes. Covers are listed on page 115.



## Material Properties and Capacity Chart

Wiring Duct Material Properties

Physical Properties	Material	ASTM Method	Test Units	Test Results
Specific Gravity (Gray)	PVC	D-792	—	1.4
Durometer Hardness	PVC	D-2240	Shore Hardness	77D
Flexural Strength	PVC	D-790	psi	9,900
Modulus of Elasticity (Tension)	PVC	D-638	psi	351,000
Continuous Operating Temperature	PVC	UL746B	°F (°C)	122 (50)
Heat Deflection Temperature (264 psi)	PVC	D-648	°F (°C)	161 (72)
Tensile Strength (+73°F)	PVC	D-638	psi	6,500
Izod Impact Strength (+73°F)	PVC	D-256	ft. lbs./in. notch	15
Flame Resistance	PVC	D-635	—	Self-extinguishing
UL Standard 94	PVC		.029 and .062	94V-O



Wiring Capacity

Duct Size (W"xH")	Duct Area (Sq. In.)	ELECTRICAL							DATA		
		10 AWG	12 AWG	14AWG	14AWG	16 AWG	18 AWG	22 AWG	CAT 5E	CAT 6	CAT 6A
		WIRE O.D.									
		0.176	0.158	0.165	0.139	0.125	0.113	0.065	0.217	0.240	0.354
.5x.5	0.18	4	5	4	6	7	9	27	2	2	1
.5x1	0.38	8	10	9	13	15	19	57	5	4	2
.75x.75	0.28	6	7	7	9	11	14	42	4	3	1
1x1	0.735	15	19	17	24	30	37	111	10	8	4
1x1.5	1.135	23	29	27	37	46	57	171	15	13	6
1x2	1.515	31	39	35	50	62	76	228	20	17	8
1x3	2.22	46	57	52	73	90	111	335	30	25	11
1x4	2.936	60	75	69	97	120	146	443	40	32	15
1.5x1	1.205	25	31	28	40	49	60	182	16	13	6
1.5x1.5	1.85	38	47	43	61	75	92	279	25	20	9
1.5x2	2.475	51	63	58	82	101	123	373	33	27	13
1.5x3	3.669	75	94	86	121	150	183	553	50	41	19
1.5x4	4.881	100	125	114	161	199	243	736	66	54	25
2x1	1.678	35	43	39	55	68	84	253	23	19	9
2x2	3.438	71	88	80	113	140	171	518	47	38	17
2x3	5.122	105	131	120	169	209	255	772	69	57	26
2x4	6.829	140	174	160	225	278	341	1030	92	76	35
2x5	8.488	175	217	199	280	346	423	1280	115	94	43
2.5x3	6.564	135	167	154	216	268	327	990	89	73	33
3x1	2.57	53	66	60	85	105	128	388	35	28	13
3x2	5.36	110	137	125	177	219	268	809	73	59	27
3x3	8.03	165	205	188	265	327	400	1210	109	89	41
3x4	10.72	221	274	251	354	437	535	1617	145	119	55
3x5	13.38	275	341	313	441	546	668	2017	181	148	68
4x2	7.288	150	186	171	240	297	364	1099	99	81	37
4x3	10.932	225	279	256	360	446	545	1648	148	121	56
4x4	14.62	301	373	342	482	596	729	2204	198	162	74
4x5	18.27	375	466	427	602	745	911	2754	247	202	93
6x4	22.4	461	572	524	739	913	1117	3377	303	248	114
8x4	30.16	620	770	706	994	1230	1505	4548	408	334	153

Formula used to calculate fill capacity: Number of wires = duct area / (1.57 x (wire o.d.)<sup>2</sup>) or duct area x (0.637/(wire o.d.)<sup>2</sup>) \* 50% Fill Capacity

### Helawrap Cable Management System

Helawrap is the flexible and complete solution for bundling, protecting and securing cables and wires in industrial, datacom and electrical applications. Material options include both rugged Polypropylene (PP) and flame retardant Polyamide 6 V0 (PA6V0). Helawrap bases and clips are specifically designed to organize Helawrap sleeving, which can be affixed effectively anywhere. An installation tool is available for quick and effortless assembly over long cable lengths.

#### Application

Helawrap is designed to bundle and protect cable assemblies in the electrical industry, in panel building, on machines, transportation, electronics, and in industrial automation applications—especially within environments where movement and vibration are experienced. The easy branch-out feature and flexible sleeving also protect against unintentional bending of critical data transmission cables, making it ideal for sensitive data networking applications. Helawrap Polyamide 6 V0 is available for applications that require flame retardant properties.

#### Benefits

- Unique open design allows for easy branch-offs at any point along the harness.
- Overwrap formation provides abrasion protection and accommodates multiple bundle configurations.
- Flexible construction and design is well suited for applications that involve movement and vibration.
- Innovative split shape allows for future access without disassembly.
- Eliminates pinch points and minimizes bending fatigue to wires and cables.
- Easy to use installation tool makes assembly fast and easy.
- Specially-designed swivel clips and bases help hold Helawrap sleeving in place.



The protection and affixing of cables in a wiring cabinet with Helawrap sleeving.



Cables can be branched off at any point for better, more flexible protection.

Material Data	
Series	HWPP
Material	Polypropylene (PP)
Operating Temperature	-76° F to +230° F, Intermittent -60° C to +110° C, Intermittent
Melt Point	284° F / +140° C
Flammability	UL 94 HB



Material Data	
Series	HWP6-V0 Flame Retardant
Material	Polyamide 6 V0 (PA6V0)
Operating Temperature	-40° F to +194° F, Intermittent -40° C to +90° C, Intermittent
Melt Point	248° F / +120° C
Flammability	UL 94 V0



## HWPP Series - Polypropylene (PP)

Flexible cable protection for applications that require movement or vibration.

Product Selection		Nominal Size		Type	Minimum Bundle Diameter		Maximum Bundle Diameter		Color	Package Quantity per Carton		Wall Thickness		Weight (est)	
Part No.	In.	mm.	in.		mm.	in.	mm.	ft.		m.	in.	mm.	lbs.	kg.	
161-64112	.25	8	HWPP8	0.28	7	0.36	9	Black	100	30.5	0.029	0.75	1.61	0.73	
161-64213	.5	16	HWPP16	0.51	13	0.63	16	Black	100	30.5	0.031	0.80	2.55	1.16	
161-64310	.75	20	HWPP20	0.71	18	0.83	21	Black	100	30.5	0.037	0.95	2.56	1.18	
161-64414	1	25	HWPP25	0.91	23	1.06	27	Black	100	30.5	0.041	1.05	6.45	2.93	
161-64507	1.25	30	HWPP30	1.14	29	1.26	32	Black	100	30.5	0.051	1.30	9.68	4.39	

Each package will include one corresponding application tool (HAT). Use Part No. for ordering and Type for specification purposes.

## HWP6-V0 Series - Polyamide 6 V0 (PA6V0)

Flexible cable protection in dynamic conditions where flame retardant properties are required.

Product Selection		Nominal Size		Type	Minimum Bundle Diameter		Maximum Bundle Diameter		Color	Package Quantity per Carton		Wall Thickness		Weight (est)	
Part No.	In.	mm.	in.		mm.	in.	mm.	ft.		m.	in.	mm.	lbs.	kg.	
161-63103	.25	8	HWP6V08	0.28	7	0.36	9	Black	100	30.5	0.033	0.85	2.66	1.21	
161-63203	.5	16	HWP6V016	0.51	13	0.63	16	Black	100	30.5	0.033	0.85	3.95	1.79	
161-63303	.75	20	HWP6V020	0.71	18	0.83	21	Black	100	30.5	0.037	0.95	5.73	2.6	
161-63403	1	25	HWP6V025	0.91	23	1.06	27	Black	100	30.5	0.041	1.05	8.06	3.66	
161-63503	1.25	30	HWP6V030	1.14	29	1.26	32	Black	100	30.5	0.041	1.05	9.83	4.46	

Use Part No. for ordering and Type for specification purposes.



## Helawrap Accessories HWClips and HWBases

Helawrap accessories consist of retaining clips and mounting plates designed specifically for the Helawrap cable sleeving. Each size clip is designed to fit with its corresponding Helawrap sleeving diameter (i.e. use HWCLIP16 with HWPP16).



Material Data	
Series	HWCLIP
Material	Polyamide 6.6 High Impact Modified Heat Stabilized (PA66HIRHS)
Operating Temperature	-40° F to +221° F, Intermittent -40° C to +105° C, Intermittent
Melt Point	284° F / +140° C
Flammability	UL 94 HB



### Clips

Helawrap accessory clips and mounting plates can be linked together to bundle, protect and secure any number of cables on industrial machines, as well as in the door area of an automation wiring cabinet where repeated movement occurs.

Each clip size sits snugly around the corresponding Helawrap sleeving and holds it firmly in place. With an innovative coupling system, each clip is to be joined to a mounting plate or another clip of any size. Many clips can be linked together and each can turn freely. As a result, any number of differing cable sizes can be bundled together.



Multiple clips can be joined. Clips swivel freely.



For secure hold, R1 loop can be used (for HWClip25 and HWClip30 only).

Product Selection		Nominal size		Type	Color	Pack Count	Weight	
Part No.		in.	mm.				lbs.	kg.
161-64002		.5	8	HWCLIP08	Black	50	0.19	0.09
161-64004		.75	16	HWCLIP16	Black	50	0.3	0.14
161-64006		1.25	20	HWCLIP20	Black	50	0.35	0.16
161-64008		2	25	HWCLIP25	Black	50	0.42	0.19
161-64010		2.5	30	HWCLIP30	Black	50	0.5	0.23
201-20010		----	----	R1	Black	500	0.67	0.3

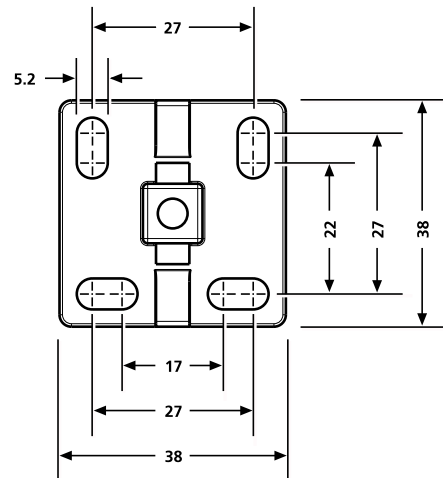
Use Part No. for ordering and Type for specification purposes.

### Bases

With the highly adaptable mounting plate, cables can be protected alongside most existing structures and installations. The plate can be affixed with screws, with a cable tie threaded through or around the base of the plate, or with an adhesive to provide a long-lasting hold.

#### Benefits

- An innovative coupling system allows for an unlimited number of bundling combinations.
- Clips can be easily released and re-used.
- Clips swivel freely which reduces mechanical stress and eliminates pinch points.
- High Impact Polyamide 6.6 material provides firm fit even in rugged conditions.
- An R1 strap can be stretched over larger clips to provide a tight hold in rugged industrial applications.
- Consists of acrylate adhesive with base of polyurethane foam allowing it to adhere firmly and easily to nearly any surface.



Product Selection		Adhesive	Type	Color	Pack Count	Weight	
Part No.						lbs.	kg.
161-64012		Acrylate with base of Polyurethane foam	HWBASEA	Black	50	0.35	0.16
161-64014		----	HWBASE	Black	50	0.31	0.14

Use Part No. for ordering and Type for specification purposes.

## Application Tool (HAT)

The Helawrap applicator tool enables the end user to bundle cable rapidly and effortlessly. The applicator tool has been optimized to glide smoothly through the sleeving and allows easy insertion of cable into the Helawrap sleeving. The unique design also allows individual cables to be removed from the applicator tool and branched off through the sleeve opening. A tool is included with every Helawrap package.

Product Selection	Use with Nominal Size		Type	Color	Pack Count	Weight	
	in.	mm.				lbs.	kg.
	.25	8	HAT8	Blue	10	0.078	0.035
	.5	16	HAT16	Blue	10	0.27	0.122
	.75	20	HAT20	Blue	10	0.45	0.204
	1.0	25	HAT25	Blue	10	0.71	0.321
	1.25	30	HAT30	Blue	10	0.77	0.348

Use Part No. for ordering and Type for specification purposes.



Applicator tools HAT are available for every Helawrap sleeving size.



Insert one or more cables into the insertion slot of the applicator tool.



Place the applicator tool in one end of the Helawrap cable sleeving.



Simply slide the applicator tool through the Helawrap sleeving.

## Split Wrap Installation Tool

This installation tool is designed especially for post installation or retrofit applications. The Split Wrap tool has a twist barrel design that allows the tool to be inserted over a wire bundle that is currently in place. There is no need to disassemble the harness to add the Helawrap sleeving. Simply twist the white barrel to its open position, insert the bundle, twist the barrel to its closed position and pull the tool through the Helawrap sleeving. Wires can be branched off at any point by twisting the white barrel open at the desired location and removing the wires.

Product Selection	Use With Nominal Size		Type	Color	Pack Count	Weight	
	in.	mm.				lbs.	kg.
	.25	8	BSWTOOL14	Orange	1	0.03	0.014
	.5	16	BSWTOOL12	Orange	1	0.03	0.014
	.75	20	BSWTOOL34	Orange	1	0.04	0.018
	1.0	25	BSWTOOL1	Orange	1	0.05	0.023
	1.25	30	BSWTOOL114	Orange	1	0.06	0.028

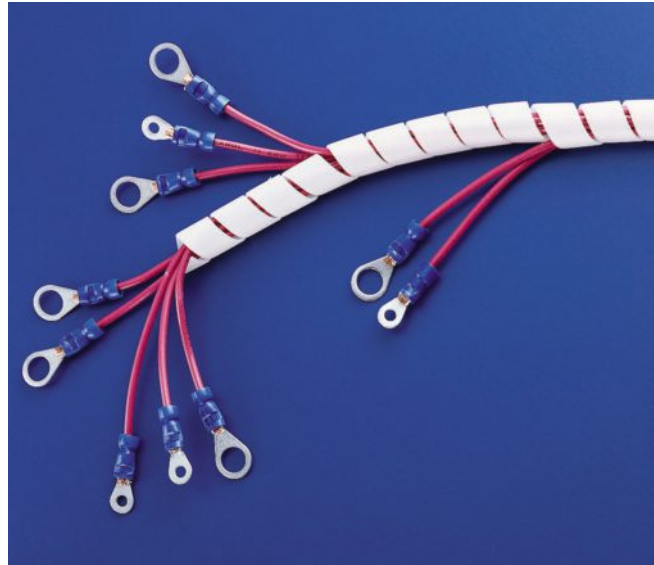
Purchased separately. Use Part No. for ordering and Type for specification purposes.





## Spiralwrap

Spiralwrap protective sheathing allows flexible routing and lead-out of cables. The inner edges are beveled to prevent damage to cables. U.L. Recognized Spiralwrap is reusable and resistant to most chemicals. Natural and black are standard colors (see material descriptions). Colors may be available dependent upon volume requirements. Contact HellermannTyton for more information.



### Application

**Control Cabinet Doors:** Protects cable from friction when one end of the cable is fastened within the panel and the other is fastened to the panel door. Allows flexibility and prevents wire chafing when door is opened and closed.

**Robotics:** Protects hoses and wires during movement.

**Pneumatic Hoses:** Protects hoses from abrasion while on semi-trucks and other vehicles.

**Spark Plug Wires:** Lengthens the life of spark plug wires by reducing abrasion to wire insulation.

### Installation

Spiralwrap can be installed in two basic ways:

In a gapped installation, Spiralwrap is wrapped with space between the sheathing. This accommodates wire breakouts and also keeps the wire bundle flexible.

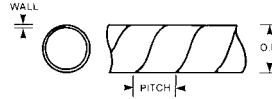
In a butted installation, Spiralwrap is wrapped so the sheathing completely insulates the wire bundle. This provides superior abrasion resistance and additional rigidity.

Polyethylene (PE)	Size					
	1/8"	1/4"	3/8"	1/2"	3/4"	1"
Color						
Brown (1)	X	X		X		
Red (2)	X		X	X	X	X
Orange (3)	X		X			
Yellow (4)	X	X	X	X	X	X
Green (5)	X	X	X			
Blue (6)	X	X	X	X	X	X
Purple (7)	X		X			
Gray (8)						
White (10)	X	X	X	X	X	X
Pink (15)			X			
DG Orange (DG3)	X	X	X	X	X	X
DG Yellow (DG4)			X			
DG Green (DG5)						
Glow in the Dark (DG9)			X			
DG Pink (DG15)		X	X			

All size/color combinations denoted with an "X" in the table above are available upon request. Contact HellermannTyton for pricing, part numbers, minimum order quantities and lead times. Additional size/color combinations may be available upon request. Contact your local HellermannTyton representative for pricing and minimums.



## Spiralwrap continued



File # E147924

Product Selection			Ø D	Wall Thickness	Pitch	Min. Ø Bundle	Max. Ø Bundle	Color	Pkg. Qty.
Article No.	Part No.	Type							
<b>Natural Polyethylene (PE)</b>									
161-05013	1NFP9C	1NFP	.125" (3.18)	.032" (.81)	.187" (4.75)	.0625" (1.60)	.50" (12.7)	Natural	100
161-05043	2NFP9C	2NFP	.250" (6.35)	.045" (1.14)	.375" (9.53)	.1875" (4.75)	2" (50.8)	Natural	100
161-05027	2.5NFP9C	2.5NFP	.375" (9.53)	.052" (1.32)	.438" (11.13)	.3125" (7.92)	3" (76.2)	Natural	100
161-05055	3NFP9C	3NFP	.5" (12.7)	.062" (1.57)	.563" (14.3)	.375" (9.52)	4" (102)	Natural	100
161-05075	4NFP9C	4NFP	.750" (19.05)	.065" (1.65)	.750" (19.05)	.750" (19.10)	5" (127)	Natural	100
161-05080	5NFP9C	5NFP	1" (25.4)	.095" (2.41)	1" (25.4)	1" (25.4)	7" (178)	Natural	100
<b>Black Polyethylene (PE)</b>									
161-05004	1NFP0C	1NFP	.125" (3.18)	.032" (.81)	.187" (4.75)	.0625" (1.60)	.50" (12.7)	Black	100
161-05036	2NFP0C	2NFP	.250" (6.35)	.045" (1.14)	.375" (9.53)	.1875" (4.75)	2" (50.8)	Black	100
161-05024	2.5NFP0C	2.5NFP	.375" (9.53)	.052" (1.32)	.438" (11.13)	.3125" (7.92)	3" (76.2)	Black	100
161-05052	3NFP0C	3NFP	.5" (12.7)	.062" (1.57)	.5" (12.7)	.375" (9.52)	4" (102)	Black	100
161-05074	4NFP0C	4NFP	.750" (19.05)	.065" (1.65)	.750" (19.05)	.750" (19.10)	5" (127)	Black	100
161-05079	5NFP0C	5NFP	1" (25.4)	.095" (2.41)	1" (25.4)	1" (25.4)	7" (178)	Black	100
<b>Natural Polyethylene (PE), flame-retardant</b>									
161-05001	1FRP9C	1FRP	.125" (3.18)	.032" (.81)	.187" (4.75)	.0625" (1.60)	.50" (12.7)	Natural	100
161-05030	2FRP9C	2FRP	.250" (6.35)	.045" (1.14)	.375" (9.53)	.1875" (4.75)	2" (50.8)	Natural	100
161-05017	2.5FRP9C	2.5FRP	.375" (9.53)	.052" (1.32)	.438" (11.13)	.3125" (7.92)	3" (76.2)	Natural	100
161-05049	3FRP9C	3FRP	.5" (12.7)	.062" (1.57)	.563" (14.3)	.375" (9.52)	4" (102)	Natural	100
161-05058	4FRP9C	4FRP	.750" (19.05)	.065" (1.65)	.750" (19.05)	.750" (19.10)	5" (127)	Natural	100
161-05077	5FRP9C	5FRP	1" (25.4)	.095" (2.41)	1" (25.4)	1" (25.4)	7" (178)	Natural	100
<b>Black Polyethylene (PE), flame-retardant</b>									
161-05000	1FRP0C	1FRP	.125" (3.18)	.032" (.81)	.187" (4.75)	.0625" (1.60)	.50" (12.7)	Black	100
161-05029	2FRP0C	2FRP	.250" (6.35)	.045" (1.14)	.375" (9.53)	.1875" (4.75)	2" (50.8)	Black	100
161-05016	2.5FRP0C	2.5FRP	.375" (9.53)	.052" (1.32)	.438" (11.13)	.3125" (7.92)	3" (76.2)	Black	100
161-05048	3FRP0C	3FRP	.5" (12.7)	.062" (1.57)	.563" (14.3)	.375" (9.52)	4" (102)	Black	100
161-05057	4FRP0C	4FRP	.750" (19.05)	.065" (1.65)	.750" (19.05)	.750" (19.10)	5" (127)	Black	100
161-05084	5FRP0C	5FRP	1" (25.4)	.095" (2.41)	1" (25.4)	1" (25.4)	7" (178)	Black	100
<b>Natural Polyamide 6 (PA6)</b>									
161-05003	1N9C	1N	.125" (3.18)	.015" (.38)	.187" (4.75)	.0625" (1.60)	.50" (12.7)	Natural	100
161-05034	2N9C	2N	.250" (6.35)	.0250" (.64)	.375" (9.53)	.1875" (4.75)	2" (50.8)	Natural	100
161-05019	2.5N9C	2.5N	.375" (9.53)	.035" (.89)	.438" (11.13)	.3125" (7.92)	3" (76.2)	Natural	100
161-05051	3N9C	3N	.5" (12.7)	.035" (.89)	.500" (12.7)	.375" (9.52)	4" (102)	Natural	100
161-05072	4N9C	4N	.750" (19.05)	.032" (.81)	.750" (19.05)	.5" (12.7)	5" (127)	Natural	100
161-05085	5N9C	5N	1" (25.4)	.032" (.81)	1" (25.4)	1" (25.4)	7" (178)	Natural	100
<b>Black Polyamide 6 (PA6)</b>									
161-05002	1N0C	1N	.125" (3.18)	.015" (.38)	.187" (4.75)	.0625" (1.60)	.50" (12.7)	Black	100
161-05032	2N0C	2N	.250" (6.35)	.025" (.64)	.375" (9.53)	.1875" (4.75)	2" (50.8)	Black	100
161-05018	2.5N0C	2.5N	.375" (9.53)	.035" (.89)	.438" (11.13)	.3125" (7.92)	3" (76.2)	Black	100
161-05050	3N0C	3N	.5" (12.7)	.035" (.89)	.50" (12.7)	.375" (9.52)	4" (102)	Black	100
161-05071	4N0C	4N	.750" (19.05)	.032" (.81)	.750" (19.05)	.50" (12.7)	5" (127)	Black	100
161-05078	5N0C	5N	1" (25.4)	.032" (.81)	1" (25.4)	1" (25.4)	7" (178)	Black	100
<b>Natural Polytetrafluoroethylene -Teflon (PTFE)</b>									
161-05015	1P9C	1P	.125" (3.18)	.020" (.76)	.187" (4.75)	.0625" (1.60)	.50" (12.7)	Natural	100
161-05047	2P9C	2P	.250" (6.35)	.030" (.76)	.375" (9.53)	.1875" (4.75)	2" (50.8)	Natural	100
161-05028	2.5P9C	2.5P	.375" (9.53)	.030" (.76)	.438" (11.13)	.3125" (7.92)	2.5" (63.5)	Natural	100
161-05056	3P9C	3P	.5" (12.7)	.030" (.76)	.5" (12.7)	.375" (9.52)	3" (76.2)	Natural	100
161-05076	4P9C	4P	.750" (19.05)	.032" (.81)	.750" (19.05)	.5" (12.7)	4" (102)	Natural	100
161-05081	5P9C	5P	1" (25.4)	.040" (1.02)	1" (25.4)	.750" (19.10)	5" (127)	Natural	100

Teflon is a registered trademark of the DuPont Corporation. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

**Spiralwrap continued**

Material Data

Material	Operating Temperature	Abrasion Resistance	Specific Gravity D792-66	Effect of Solvents	Effect of Acids	Effect of Alkalies	Water Absorption	Flammability	Mil. Spec & Approvals
<b>RoHS Polyethylene (PE)</b> Polyethylene is ideal for general applications that are not affected by ordinary solvents. Available in colors. Ultraviolet resistant black polyethylene is for outdoor use. It has the same qualities as clear polyethylene, but also contains an ultraviolet absorber which permits it to be used in direct sunlight for long periods of time. Available by special order in gray.									
Natural Polyethylene (PE)	-76°F to +190°F (-60°C to +88°C)	22	0.92	None below 122°F (50°C)	None	None	0.014	Flammable	MIL I-631D MIL P-21922B Fed. Spec. LP390C A-A-59602 Typel
Black Polyethylene (PE)	-76°F to +190°F (-60°C to +88°C)	20	0.93	None below 122°F (50°C)	None	None	0.03	Flammable	MIL I-631D MIL P-21922B Fed. Spec. LP390C A-A-59602 Typel
<b>RoHS Polyethylene (PE), flame-retardant</b> Suitable for applications requiring a self-extinguishing material. Lower cost than polyamide 6 or teflon materials. Note: Natural color is milky white.									
Natural Polyethylene (PE), flame-retardant	-4°F to +176°F (-20°C to + 80°C)	27	1.29	None below 122°F (50°C)	None	None	0.02	94-V2	
Black Polyethylene (PE), flame-retardant	-4°F to +176°F (-20°C to + 80°C)	27	1.29	None below 122°F (50°C)	None	None	0.02	94-V2	
<b>RoHS Polyamide 6 (PA6)</b> Natural polyamide 6 is recommended for use in enclosed environments where the possibility of fire exists. Self-extinguishing. Does not produce any toxic or irritation, even when exposed to open flame or excessive temperatures. Polyamide 6 is six times as strong as polyethylene. Black polyamide 6 features the same properties as natural polyamide 6 with the added benefit of an ultraviolet absorber so that it can be used in direct sunlight for long periods of time.									
Natural Polyamide 6 (PA6)	-40°F to +250°F (-40°C to +121°C)	6-8	1.14	None	Satisfactory except for strong acids	None	1.5	Self Extinguishing	AS 1294 A-A 59602 Type II
Black Polyamide 6 (PA6)	-40°F to +250°F (-40°C to +121°C)	6-8	1.14	None	Satisfactory except for strong acids	None	1.5	Self Extinguishing	AS 1294 A-A 59602 Type II
<b>RoHS Polytetrafluorethylene -Teflon (PTFE)</b> Polytetrafluoroethylene -Teflon (PTFE) offers the widest operating temperature range of any material. It's chemically inert and non-flammable. Natural color is milky white, available with special order in black and colors.									
Natural Polytetrafluoroethylene -Teflon (PTFE)	-450°F to +500°F (-268°C to +260°C)	7	2.1	None	None	None	0.05	Non-flammable	AMS 3653C AMS 3654 AMS 3655 ASTM D3295 MIL I-22129C AS 1294 ASTMD1710 A-A 59602 Type III

Teflon is a registered trademark of the DuPont Corporation.

## Convoluted Tubing

Convoluted tubing provides an efficient method of routing and protecting wire harness assemblies, while reducing the chance of installation damage. It also can serve to protect valuable wiring circuits. HellermannTyton's convoluted tubing offers excellent protection against automotive fluids, vibration wear, water, snow, ice, and the effects of heat, cold, and sunlight on cables and wires. Available in standard, bulk, and dispenser box packaging.

### Applications

- Wire Harnesses
- Auto, Truck, and Bus Industry Applications
- Trailer & R.V. Manufacturing
- Snowmobiles and Watercraft
- Agricultural and Construction Machinery
- Electronic Equipment Wire Management



Material Data		RoHS
Material	<b>Polyethylene (PE)</b>	
Operating Temperature	<b>-40 °F to +200 °F (-40 °C to +93 °C)</b>	
Flammability	<b>UL94 V2</b>	

Material Data		RoHS
Material	<b>Polyamide 6 (PA6)</b>	
Operating Temperature	<b>-40 °F to +300 °F (-40 °C to +149 °C)</b>	
Flammability	<b>UL94 V2</b>	

The following materials are available as a special order. Minimums and custom terms apply. Contact HellermannTyton for more information.

Material	Color	Operating Temperature
<b>Polypropylene</b>	Black w/ Blue Stripe	-40 °F (-40 °C) to 275 °F (135 °C)
<b>Flame Retardant Polyethylene</b>	Gray	-40 °F (-40 °C) to 200 °F (93 °C)

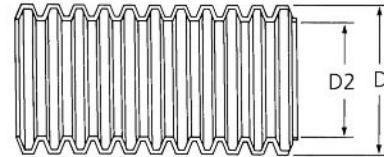
## Convoluted Tubing Dispenser Box

The convoluted tubing dispenser boxes offer an efficient packaging option. The sturdy and compact dispenser boxes allow for easy storage and moving around in the work area. The reel inside the box allows for tangle free dispensing, making it much easier to work with the product. Convoluted tubing in dispenser boxes is available in polyamide 6 material –1/4", 3/8", 1/2", 3/4" and 1" sizes.

Product Selection				
Article No.	Part No.	Type	Description	Pkg. Qty. ft.
169-60022	<b>169-60022</b>	CTN140	1/4" Convoluted Tubing, Slit - Polyamide 6, Black	100 ft
169-60018	<b>169-60018</b>	CTN380	3/8" Convoluted Tubing, Slit - Polyamide 6, Black	100 ft
169-60019	<b>169-60019</b>	CTN120	1/2" Convoluted Tubing, Slit - Polyamide 6, Black	100 ft
169-60020	<b>169-60020</b>	CTN340	3/4" Convoluted Tubing, Slit - Polyamide 6, Black	100 ft
169-60021	<b>169-60021</b>	CTN10	1" Convoluted Tubing, Slit - Polyamide 6, Black	50 ft

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.



Convuluted Tubing *continued*

Product Selection			Nominal Ø	Ø D	Ø D2	Wall Thickness	Pkg. Qty.
Article No.	Part No.	Type	in. (mm)	in. (mm)	in. (mm)	in. (mm)	ft.
<b>Polyethylene (PE), Black</b>							
169-60509	<b>CTP140STD</b>	CTP140	.250" (6.35)	.40" (10.16)	.27" (6.858)	.004" (.1016)	3200 ft
169-60508	<b>CTP140</b>	CTP140	.250" (6.35)	.40" (10.16)	.27" (6.858)	.004" (.1016)	25000 ft
169-60515	<b>CTP380STD</b>	CTP380	.380" (9.652)	.526" (13.36)	.380" (9.652)	.005" (.127)	1900 ft
169-60514	<b>CTP380</b>	CTP380	.380" (9.652)	.526" (13.36)	.380" (9.652)	.005" (.127)	15000 ft
169-60507	<b>CTP120STD</b>	CTP120	.50" (12.7)	.70" (17.78)	.516" (13.11)	.005" (.127)	1100 ft
169-60506	<b>CTP120</b>	CTP120	.50" (12.7)	.70" (17.78)	.516" (13.11)	.005" (.127)	8500 ft
169-60517	<b>CTP580STD</b>	CTP580	.625" (15.87)	.837" (21.26)	.639" (16.23)	.005" (.127)	800 ft
169-60516	<b>CTP580</b>	CTP580	.625" (15.87)	.837" (21.26)	.639" (16.23)	.005" (.127)	5500 ft
169-60513	<b>CTP340STD</b>	CTP340	.750" (19.05)	.989" (25.12)	.759" (19.28)	.005" (.127)	550 ft
169-60512	<b>CTP340</b>	CTP340	.750" (19.05)	.989" (25.12)	.759" (19.28)	.005" (.127)	4200 ft
169-60501	<b>CTP10STD</b>	CTP10	1" (25.4)	1.32" (33.53)	1.06" (26.92)	.005" (.127)	300 ft
169-60500	<b>CTP10</b>	CTP10	1" (25.4)	1.32" (33.53)	1.06" (26.92)	.005" (.127)	2250 ft
169-60505	<b>CTP1140STD</b>	CTP1140	1.250" (31.75)	1.50" (38.1)	1.257" (31.93)	.006" (.1524)	250 ft
169-60504	<b>CTP1140</b>	CTP1140	1.250" (31.75)	1.50" (38.1)	1.257" (31.93)	.006" (.1524)	1800 ft
169-60503	<b>CTP1120STD</b>	CTP1120	1.5" (38.1)	1.947" (49.45)	1.65" (41.91)	.006" (.1524)	150 ft
169-60502	<b>CTP1120</b>	CTP1120	1.5" (38.1)	1.947" (49.45)	1.65" (41.91)	.006" (.1524)	1000 ft
169-60511	<b>CTP20STD</b>	CTP20	2" (50.8)	2.42" (61.47)	2.05" (52.07)	.011" (.28)	100 ft
<b>Polyamide 6 (PA6), Black with Gray Stripe</b>							
169-60009	<b>CTN140STD</b>	CTN140	.250" (6.35)	.40" (10.16)	.27" (6.858)	.004" (.1016)	3200 ft
169-60008	<b>CTN140</b>	CTN140	.250" (6.35)	.40" (10.16)	.27" (6.858)	.004" (.1016)	28000 ft
169-60015	<b>CTN380STD</b>	CTN380	.380" (9.652)	.526" (13.36)	.380" (9.652)	.005" (.127)	1900 ft
169-60014	<b>CTN380</b>	CTN380	.380" (9.652)	.526" (13.36)	.380" (9.652)	.005" (.127)	15000 ft
169-60007	<b>CTN120STD</b>	CTN120	.50" (12.7)	.70" (17.78)	.516" (13.11)	.005" (.127)	1200 ft
169-60006	<b>CTN120</b>	CTN120	.50" (12.7)	.70" (17.78)	.516" (13.11)	.005" (.127)	8500 ft
169-60017	<b>CTN580STD</b>	CTN580	.625" (15.87)	.837" (21.26)	.639" (16.23)	.005" (.127)	800 ft
169-60016	<b>CTN580</b>	CTN580	.625" (15.87)	.837" (21.26)	.639" (16.23)	.005" (.127)	5500 ft
169-60013	<b>CTN340STD</b>	CTN340	.750" (19.05)	.989" (25.12)	.759" (19.28)	.005" (.127)	550 ft
169-60012	<b>CTN340</b>	CTN340	.750" (19.05)	.989" (25.12)	.759" (19.28)	.005" (.127)	4200 ft
169-60001	<b>CTN10STD</b>	CTN10	1" (25.4)	1.32" (33.53)	1.06" (26.92)	.005" (.127)	300 ft
169-60000	<b>CTN10</b>	CTN10	1" (25.4)	1.32" (33.53)	1.06" (26.92)	.005" (.127)	2250 ft
169-60005	<b>CTN1140STD</b>	CTN1140	1.250" (31.75)	1.50" (38.1)	1.257" (31.93)	.006" (.1524)	250 ft
169-60004	<b>CTN1140</b>	CTN1140	1.250" (31.75)	1.50" (38.1)	1.257" (31.93)	.006" (.1524)	1800 ft
169-60003	<b>CTN1120STD</b>	CTN1120	1.5" (38.1)	1.947" (49.45)	1.65" (41.91)	.006" (.1524)	150 ft
169-60002	<b>CTN1120</b>	CTN1120	1.5" (38.1)	1.947" (49.45)	1.65" (41.91)	.006" (.1524)	1000 ft
169-60011	<b>CTN20STD</b>	CTN20	2" (50.8)	2.42" (61.47)	2.05" (52.07)	.011" (.28)	100 ft

Standard tubing is slit. Unslit is available upon request. Please contact HellermannTyton for pre-cut length requirements. Colors are available dependent upon volume requirements. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

## Convoluted Tubing Mounts

Designed especially for mounting convoluted tubing, these mounts are available in stud mount and fir tree mount versions and accommodate a range of tube diameters.

### Material Data

Material	<b>Polyamide 6.6 high impact modified, Heat Stabilized, UV Resistant (PA66HIRHS)</b>
Operating Temperature	<b>-40 °F to +230 °F (-40 °C to +110 °C) continuous</b>
Flammability	<b>UL94 HB</b>



## Stud Mount

Product Selection										
Article No.	Part No.	Type	Tube Ø		Recommended Weld Stud	Minimum Weld Stud Height		Color	Pkg. Qty.	Drawing
			in.	(mm)		in.	(mm)			
151-00700	<b>151-00700</b>	CTC4.5SBS6	.175"	(4.5)	M6	.39"	(10)	Black	500	
151-00701	<b>151-00701</b>	CTC7.5SBS6	.29"	(7.5)	M6	.39"	(10)	Black	500	
151-00702	<b>151-00702</b>	CTC10SBS6	.39"	(10)	M6	.39"	(10)	Black	500	
151-00703	<b>151-00703</b>	CTC13SBS6	.50"	(13)	M6	.39"	(10)	Black	500	
151-00010	<b>151-00010</b>	CTC17SBS6	.66"	(17)	M6	.39"	(10)	Black	500	

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

## Fir Tree Mount

Product Selection											
Article No.	Part No.	Type	Tube Ø		Panel Thickness		Mounting Hole Ø		Color	Pkg. Qty.	Drawing
			in.	(mm)	in.	(mm)	in.	(mm)			
151-14314	<b>151-14314</b>	CTC4.5FT6LG	.17"	(4.5)	.029" - .234"	(.75 - 6)	.25" - .27"	(6.5 - 7)	Black	500	
151-14313	<b>151-14313</b>	CTC7.5FT6LG	.29"	(7.5)	.029" - .234"	(.75 - 6)	.25" - .27"	(6.5 - 7)	Black	500	
151-00018	<b>151-00018</b>	CTC10FT6LG	.39"	(10)	.029" - .234"	(.75 - 6)	.25" - .27"	(6.5 - 7)	Black	500	
151-00019	<b>151-00019</b>	CTC13FT6LG	.507"	(13)	.029" - .234"	(.75 - 6)	.25" - .27"	(6.5 - 7)	Black	500	

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

## Braided Sleeving

HellermannTyton's line of expandable braided sleeving provides protection for hoses, cable assemblies, and wire bundles against abrasion and damage caused by excessive wear and motion. Lightweight and flexible, the construction of braided sleeving allows it to expand beyond its nominal size to fit several bundle sizes and shapes. The relatively easy expansion and quick slip-over accommodates a variety of market applications. Securing the ends of braided sleeving is fast and easy with cable ties, electrical tape or heat shrink materials.

The braided sleeving lineup from HellermannTyton covers a range of materials, sizes and styles-including standard Polyester (PET), PA66 Nylon, Flame Retardant, Split Wrap and High Temperature products. The sleeving is also resistant to harsh environments such as chemicals, salts, solvents, de-icing fluids and petroleum products as well as being resilient against UV light. The unique physical weave of braided sleeving makes it extremely flexible yet it will not trap moisture or humidity. Most of the items can be cut with a hot knife, which shears the edges and reduces the amount of fraying that occurs during the lifetime of the product. For applications that do not allow access to a hot knife, a fray resistant version is available that can be cut with any ordinary scissors with minimal unravel.

### Market Applications

Automotive, Transportation, Industrial Equipment, Electronics, Automation/Robotics, Control Panels, Marine, Machine Tools, General Manufacturing

### Product Applications

Hose Assemblies, Cable Bundles, Wire Harnesses, Electrical Cables.

#### SELECTION GUIDE

Materials Comparison	General Purpose			Flame Retardant				
	General Purpose Expandable Braided Sleeving	General Purpose Expandable Braided Sleeving Helagaine Dispenser Packs	Fray Resistant Expandable Braided Sleeving	Flame Retardant Expandable Braided Sleeving	Flame Retardant + Fray Resistant Expandable Braided Sleeving	Hook & Loop Flame Retardant Expandable Braided Sleeving	Split Wrap Flame Retardant Braided Sleeving	Electromagnetic Flame Retardant Helagaine
Color	Black or Orange	Black	Black	Black or Gray	Black	Black	Black	Tin Colored & Black
Temperature Range	-94°F to 257°F	-58°F to 230°F	-94°F to 257°F	-94°F to 257°F	-94°F to 257°F	-94°F to 257°F	-94°F to 257°F	-40°F to 347°F
	-70°C to 125°C	-50°C to 150°C	-70°C to 125°C	-70°C to 125°C	-70°C to 125°C	-70°C to 125°C	-70°C to 125°C	-40°C to 175°C
Melt Point	482°F / 250°C	482°F / 250°C	482°F / 250°C	482°F / 250°C	482°F / 250°C	482°F / 250°C	446°F / 230°C	392°F / 200°C
Flammability Rating	UL 94-V0		UL 94-V0	UL VW-1	UL VW-1	UL VW-1	UL VW-1	UL94-V0
ROHS	•	•	•	•	•	•	•	•
UL / CSA	•		•	•	•	•	•	
Other Certifications	FMVSS 302, FAR-25			FMVSS 302, Mil-202 FAR-25	Mil-202	Mil-202	FAR-25	FMVSS 302
Recommended Cutting	Hot Knife	Hot Knife	Scissors	Hot Knife	Scissors	Hot Knife	Hot Knife	Shears
Abrasion Protection	M	M	M	M	M	M	H	H
Outgassing	M	M	M	M	M	M	M	M
Cut Resistance	M	M	H	M	H	M	H	H
Chemical Resistance	M	M	M	M	M	M	H	H
UV Resistance	•	•	•	•	•	•	•	•
Halogen Free	•	•	•	•	•	•	•	
Expandable	•	•	•	•	•	•		•

VH = Very High H = High M=Medium L=Low



## Braided Sleeving *continued*

### Key Benefits

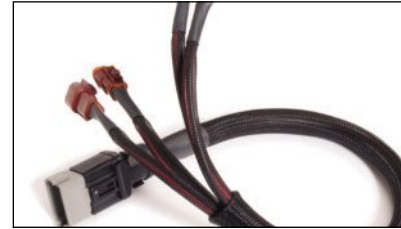
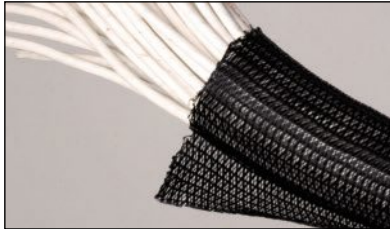
**Flexible Installation** Goes over cable bundles quickly and easily. Adjusts to fluctuations in bundle size or shape. Enables routing around obstructions, corners and edges.

**Less Bulk** Provides abrasion and corrosion protection without adding volume in tight spaces.

**Lightweight** Adds protection without increasing weight unlike convoluted tubing and spiral wrap materials.

**Aesthetics** Delivers a clean, crisp appearance.

**Moisture Dissipation** Results in no trapping of water, moisture or chemicals.



Specialty						Extreme Temperature		
Electromagnetic Helagain	Polyamide 6.6 Expandable Braided Sleeving	Polyamide 6.6 Helagain Expandable Braided Sleeving	Split Wrap Braided Sleeving	Hook & Loop Expandable Braided Sleeving	Plenum Rated Halar® Expandable Braided Sleeving	Extreme High Temperature Resin Saturated Fiberglass Expandable Braided Sleeving	High Temperature Nomex® Expandable Braided Sleeving	High Temperature Aluminum Laminated Fiberglass Sleeving
Tin Colored & Black	Black	Gray	Black or Orange	Black	Black or White	Black	Green	Silver
-40°F to 347°F	-49°F to 302°F	-76°F to 302°F	-94°F to 257°F	-94°F to 257°F	-103°F to 302°F	-94°F to 1,202°F	-320°F to 662°F	-76°F to 491°F
-40°C to 175°C	-45°C to 150°C	-60°C to 150°C	-70°C to 125°C	-70°C to 125°C	-75°C to 150°C	-70°C to 650°C	-196°C to 350°C	-60°C to 255°C
392°F / 200°C	491°F / 255°C	491°F / 255°C	482°F / 250°C	482°F / 250°C	482°F / 250°C	2,048°F / 1,120°C	NA	2,048°F / 1,120°C
UL94-V2	Non Flammable	UL 94-V2	UL 94-V0	UL 94-V0	UL VW-1	UL VW-1	Non Flammable	Non Flammable
•	•	•	•	•	•	•	•	•
		•	•	•	•	•		
FMVSS 302		FMVSS 302		FAR-25	UL 2024, NFPA 262, FAR-25, FMVSS 302			
Shears	Hot Knife	Hot Knife	Hot Knife	Hot Knife	Hot Knife	Scissors	Scissors	Scissors
H	H	H	M	M	M	VH	L	NA
M	H	H	M	M	L	L	NA	NA
H	H	H	M	M	M	VH	L	H
H	H	H	M	M	M	H	M	H
•	•	•	•	•	•	•	•	•
•	•	•	•			•	•	•
•	•	•		•	•	•	•	

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### General Purpose Expandable Braided Sleeving

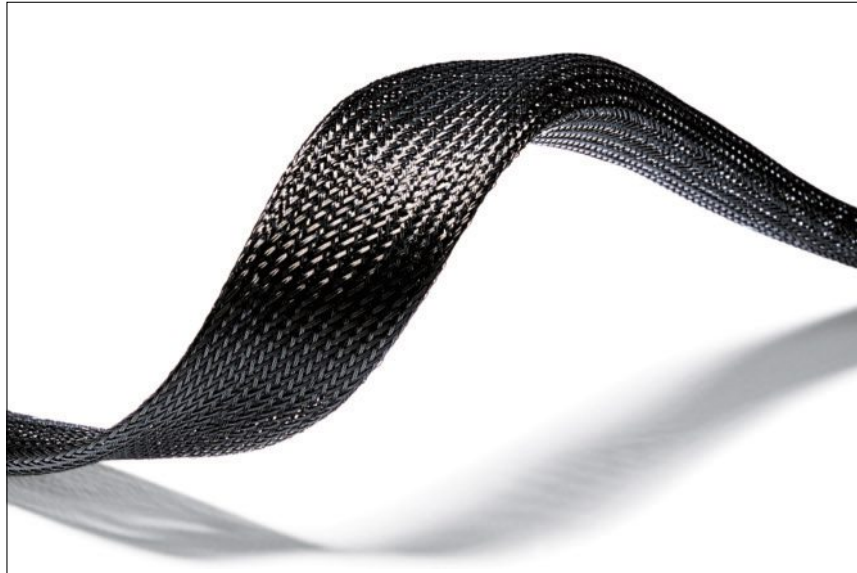
Designed to adjust and expand to irregular shapes, this general purpose sleeving is lightweight and offers a high tensile strength while still maintaining flexibility. This sleeving is an excellent choice for protecting wire and cable bundles from abrasion, chafing, and heat degradation.

#### Application

Commonly used in electrical and industrial wire harnessing applications where economy and durability are required for the protection of wires, cables, tubing, bundles and pneumatic hoses.

#### Benefits

- Adjusts to twisting and flexing without creating wrinkles, bends or bulges.
- Provides tough, durable protection through a wide range of temperatures.
- Expands up to 150% of flat diameter for easy installation.
- Offers excellent abrasion and cut-through resistance as well as inertness to most chemicals and fungus.



Material Data	
Material	PET (Polyester)
Flammability	UL 94-V0
Operating Temperature	-94°F to 257°F -70°C to 125°C
Melt Point	482°F / 250°C
Abrasion Protection	Medium
Recommended Cutting	Hot Knife



#### Product Selection

Part No.	Nominal Size		Type	Expansion Range		Expansion Range		Color	Reel Length*		Weight	
	in.	mm.		(Min.) in.	(Max.) in.	(Min.) mm.	(Max.) mm.		ft.	m.	lbs.	kg.
170-03177	1/8	3.2	BSP180	.094	.25	2.4	6.4	Black	225	68.6	.41	.19
170-03000	1/4	6.4	BSP140	.125	.437	3.2	11.1	Black	200	61.0	.52	.24
170-03001	1/2	12.7	BSP120	.25	.75	6.4	19.1	Black	100	30.5	.77	.35
170-03002	3/4	19.1	BSP340	.50	1.25	12.7	31.8	Black	75	22.9	.90	.41
170-03003	1	25.4	BSP100	.625	1.625	15.9	41.3	Black	65	19.8	.87	.40
170-03004	1-1/4	31.8	BSP1140	.75	1.75	19.1	44.5	Black	50	15.2	.80	.363
170-03005	1-1/2	38.1	BSP1120	1.00	2.125	25.4	54.0	Black	40	12.2	.79	.358

#### Bulk Sized Reels

170-03174	1/8	3.2	BSP180B	.094	.25	2.4	6.4	Black	1000	304.8	1.8	.82
170-03041	1/4	6.4	BSP140B	.125	.437	3.2	11.1	Black	1000	304.8	2.60	1.18
170-03042	1/2	12.7	BSP120B	.25	.75	6.4	19.1	Black	500	152.4	3.85	1.75
170-03043	3/4	19.1	BSP340B	.50	1.25	12.7	31.8	Black	250	76.2	3.00	1.36
170-03044	1	25.4	BSP100B	.625	1.625	15.9	41.3	Black	250	76.2	3.35	1.52
170-03045	1-1/4	31.8	BSP1140B	.75	1.75	19.1	44.5	Black	250	76.2	4.00	1.81

Use Part No. for ordering and Type for specification. \*Pre-cut lengths available upon request.



### General Purpose Expandable Braided Sleeving Helagain Dispenser Packs

This convenient package holds mini spools of expandable braided sleeving. Designed to save space and provide easy access when dispensing, this unit allows for the efficient handling and management of sleeving.

#### Application

The perfect solution for use in field-service applications where a large spool of braided sleeving is not feasible or when only a small amount of sleeving is required for a quick-fix project.

#### Benefits

- Expands (3:1 ratio) to allow for a wide range of bundle sizes.
- Dispenser box protects sleeving from dirt and keeps it from unraveling.



#### Material Data

Material	PET (Polyester)
Operating Temperature	-58°F to 230°F -50°C to 150°C
Melt Point	482°F / 250°C
Abrasion Protection	Medium
Recommended Cutting	Hot Knife



#### Product Selection

Part No.	Nominal Size		Type	Expansion Range		Expansion Range		Color	Reel Length		Weight	
	in.	mm.		(Min.) in.	(Max.) in.	(Min.) mm.	(Max.) mm.		ft.	m.	lbs.	kg.
170-80150	1/4	6.4	HLB15	.20	.83	5.1	21.1	Black	32.8	10.0	.45	.20
170-80250	1/2	12.7	HLB25	.40	1.18	10.2	30.0	Black	32.8	10.0	.56	.25
170-80350	1	25.4	HLB35	.71	2.13	18.0	54.1	Black	32.8	10.0	.67	.30

Use Part No. for ordering and Type for specification.

### General Purpose Expandable Braided Sleeving - Orange

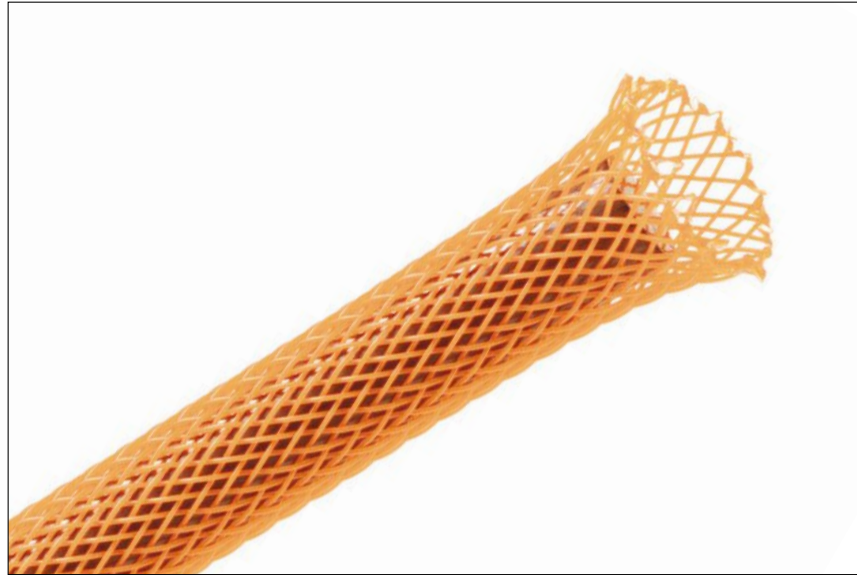
Orange PET braided sleeving is an extremely flexible, general purpose option for bundling and protecting wires and cables in abrasive type applications. Its color makes it ideal for systematic color coding of complex wiring installations.

#### Application

Commonly used to shield cable harnesses in battery-powered vehicles, such as hybrid cars, golf carts, and light trucks.

#### Benefits

- Provides easy visual and safety identification of critical wiring components.
- Offers high tensile strength while maintaining extreme flexibility.
- Expands up to 150% of flat diameter for easy installation.
- Does not trap heat and humidity.
- Installs quickly and accommodates expansions and varying cable assembly shapes, reducing installation costs.



Material Data	
Material	PET (Polyester)
Flammability	UL 94-V0
Operating Temperature	-94°F to 257°F -70°C to 125°C
Melt Point	482°F / 250°C
Abrasion Protection	Medium
Recommended Cutting	Hot Knife



#### Product Selection

Part No.	Nominal Size		Type	Expansion Range		Expansion Range		Color	Reel Length*		Weight	
	in.	mm.		(Min.) in.	(Max.) in.	(Min.) mm.	(Max.) mm.		ft.	m.	lbs.	kg.
170-03076	1/4	6.4	BSP143B	.125	.437	3.2	11.1	Orange	1000	304.8	2.6	1.18
170-03077	1/2	12.7	BSP123B	.25	.75	6.4	19.1	Orange	500	152.4	3.85	1.75
170-03078	3/4	19.1	BSP343B	.50	1.25	12.7	31.8	Orange	250	76.2	3.0	1.36
170-03079	1	25.4	BSP103B	.625	1.625	15.9	41.3	Orange	250	76.2	3.35	1.52
170-03080	1-1/4	31.8	BSP1143B	.75	1.75	19.1	44.5	Orange	250	76.2	4.0	1.81
170-03081	1-1/2	38.1	BSP1123B	1.00	2.125	25.4	54.0	Orange	200	61.0	6.6	3.0

Use Part No. for ordering and Type for specification. \*Pre-cut lengths available upon request.



## Fray Resistant Expandable Braided Sleeving

A versatile and economical general purpose sleeving that resists fraying when cut with ordinary scissors.

### Application

For use in automotive, industrial and computer applications where the wires, cables and hoses being covered endure frequent handling.

### Benefits

- Enables field installations without a hot knife thus reducing time and assembly costs.
- Expands up to 150% of flat diameter for easy installation.
- Offers excellent abrasion and cut-through resistance as well as inertness to most chemicals and fungus.



Material Data		
Material	PET (Polyester)	
Flammability	UL 94-V0	
Operating Temperature	-94°F to 257°F -70°C to 125°C	
Melt Point	482°F / 250°C	
Abrasion Protection	Medium	
Recommended Cutting	Scissors	



### Product Selection

Part No.	Nominal Size		Type	Expansion Range		Expansion Range		Color	Reel Length		Weight	
	in.	mm.		(Min.) in.	(Max.) in.	(Min.) mm.	(Max.) mm.		ft.	m.	lbs.	kg.
170-03123	1/8	3.2	BSPSC180	.125	.25	3.2	6.4	Black	100	30.5	.40	.18
170-03035	1/4	6.4	BSPSC140	.156	.437	4.0	11.1	Black	100	30.5	.46	.21
170-03012	1/2	12.7	BSPSC120	.25	.75	6.4	19.1	Black	100	30.5	.82	.37
170-03013	3/4	19.1	BSPSC340	.625	1.0	15.9	25.4	Black	75	22.9	.83	.38
170-03014	1	25.4	BSPSC100	.75	1.19	19.1	30.2	Black	50	15.2	.62	.28
170-03015	1-1/4	31.8	BSPSC1140	1.0	1.50	25.4	38.1	Black	50	15.2	.78	.35
170-03016	1-1/2	38.1	BSPSC1120	1.25	2.0	31.8	50.8	Black	50	15.2	.93	.42

Use Part No. for ordering and Type for specification.



### Flame Retardant Expandable Braided Sleeving

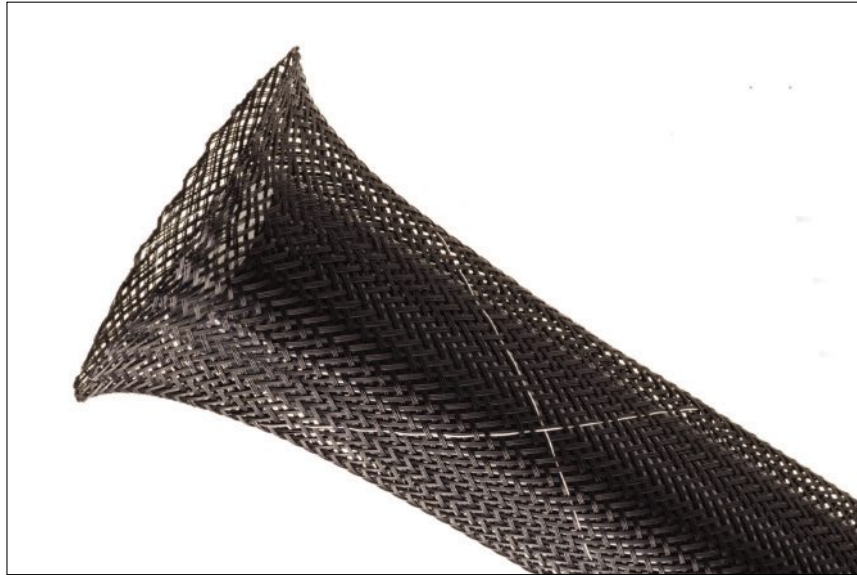
A flame retardant woven (threaded) polyester sleeving that is resistant to cuts and abrasion, and contains a combustion inhibitor allowing it to achieve a UL and CSA flame-resistance rating of VW-1.

#### Application

This fire extinguishing braided sleeving is ideal for electronic and high tech applications because of its light weight and durable qualities.

#### Benefits

- Resists gasoline, engine fluids, chemicals and cleaning solvents.
- Expands up to 150% of flat diameter for easy installation.
- Enables quick and easy installation over large connectors.



Material Data	
Material	Treated PET (Polyester)
Flammability	UL VW-1
Operating Temperature	-94°F to 257°F -70°C to 125°C
Melt Point	482°F / 250°C
Abrasion Protection	Medium
Recommended Cutting	Hot Knife



#### Product Selection

Part No.	Nominal Size		Type	Expansion Range		Expansion Range		Color	Reel Length		Weight	
	in.	mm.		(Min.) in.	(Max.) in.	(Min.) mm.	(Max.) mm.		ft.	m.	lbs.	kg.
170-03006	1/4	6.4	BSPFR140	.125	.437	3.2	11.1	Black	200	61.0	.48	.22
170-03007	1/2	12.7	BSPFR120	.25	.75	6.4	19.1	Black	100	30.5	.72	.33
170-03008	3/4	19.1	BSPFR340	.50	1.25	12.7	31.8	Black	75	22.9	.65	.30
170-03010	1-1/4	31.8	BSPFR1140	.75	1.75	19.1	44.5	Black	50	15.2	.80	.363
170-03011	1-1/2	38.1	BSPFR1120	1.0	2.125	25.4	53.9	Black	40	12.2	.79	.358
170-03071	1/8	3.2	BSPFR188	.094	.25	2.4	6.4	Gray	225	68.6	.40	.18
170-03072	1/4	6.4	BSPFR148	.125	.437	3.2	11.1	Gray	200	61.0	.48	.22
170-03073	1/2	12.7	BSPFR128	.25	.75	6.4	19.1	Gray	100	30.5	.72	.33
170-03074	3/4	19.1	BSPFR348	.50	1.25	12.7	31.8	Gray	75	22.9	.65	.30
170-03066	1-1/2	38.1	BSPFR1128	1.0	2.125	25.4	53.9	Gray	40	12.2	.79	.358
<b>Bulk Sized Reels</b>												
170-03089	1/8	3.2	BSPFR180B	.094	.25	2.4	6.4	Black	1000	304.8	1.6	.73
170-03090	1/4	6.4	BSPFR140B	.125	.437	3.2	11.1	Black	1000	304.8	2.4	1.1
170-03091	1/2	12.7	BSPFR120B	.25	.75	6.4	19.1	Black	500	152.4	3.6	1.6
170-03092	3/4	19.1	BSPFR340B	.50	1.25	12.7	31.8	Black	250	76.2	2.2	1.0
170-03093	1	25.4	BSPFR100B	.625	1.625	15.9	41.3	Black	250	76.2	3.4	1.5
170-03094	1-1/4	31.8	BSPFR1140B	.75	1.75	19.1	44.5	Black	250	76.2	4.0	1.8
170-03095	1-1/2	38.1	BSPFR1120B	1.0	2.125	25.4	54.0	Black	200	61.0	3.9	1.77

Use Part No. for ordering and Type for specification.





## Flame Retardant + Fray Resistant Expandable Braided Sleeving

This protective sleeving is self-extinguishing and can be cut with sharp scissors instead of a hot knife for fray-resistant ends.

### Application

Readily used in the automotive, audiovisual, industrial, wire, cable and computer industries where flame retardancy is required to reduce the likelihood of ignition and/or reduce the rate of flame spread. It is suited for situations where access to a hot knife is either impractical or impossible.

### Benefits

- Provides fuller coverage and a medium-to-high abrasion resistance.
- Expands for ease of installation in either the shop or the field.
- Offers increased braid density without loss of flexibility.
- Contains white tracer thread for simple identification of flame retardancy.
- Extinguishes quickly and reduces flame spread to surrounding components.



### Material Data

Material	Treated PET (Polyester)
Flammability	UL VW-1
Operating Temperature	-94°F to 257°F -70°C to 125°C
Melt Point	482°F / 250°C
Abrasion Protection	Medium
Recommended Cutting	Scissors



### Product Selection

Part No.	Nominal Size		Type	Expansion Range		Expansion Range		Color	Reel Length		Weight	
	in.	mm.		(Min.) in.	(Max.) in.	(Min.) mm.	(Max.) mm.		ft.	m.	lbs.	kg.
170-03036	1/4	6.4	BSSCFR140	.156	.437	4.0	11.1	Black	100	30.5	.40	.18
170-03017	1/2	12.7	BSSCFR120	.25	.75	6.4	19.1	Black	100	30.5	.82	.37
170-03018	3/4	19.1	BSSCFR340	.625	1.00	15.9	25.4	Black	75	22.9	.83	.38
170-03019	1	25.4	BSSCFR100	.75	1.188	19.1	30.2	Black	50	15.2	.62	.28
170-03020	1-1/4	31.8	BSSCFR1140	1.0	1.50	25.4	38.1	Black	50	15.2	.78	.35
170-03021	1-1/2	38.1	BSSCFR1120	1.25	2.0	31.8	50.8	Black	50	15.2	.93	.42
<b>Bulk Sized Reels</b>												
170-03116	1/8	3.3	BSSCFR180B	.125	.25	3.2	6.4	Black	1000	304.8	4.0	1.8
170-03117	1/4	6.4	BSSCFR140B	.156	.437	4.0	11.1	Black	1000	304.8	4.6	2.1
170-03118	1/2	12.7	BSSCFR120B	.25	.75	6.4	19.1	Black	500	152.4	4.1	1.9
170-03119	3/4	19.1	BSSCFR340B	.625	1.0	15.9	25.4	Black	250	76.2	2.78	1.3
170-03120	1	25.4	BSSCFR100B	.75	1.9	19.1	48.3	Black	250	76.2	3.1	1.4
170-03121	1-1/4	31.8	BSSCFR1140B	1.0	1.50	25.4	38.1	Black	250	76.2	3.9	1.8
170-03122	1-1/2	38.1	BSSCFR1120B	1.25	2.0	31.8	50.8	Black	250	76.2	4.63	2.1

Use Part No. for ordering and Type for specification.



### Hook & Loop Flame Retardant Expandable Braided Sleeving

Hook and loop edging keeps this flame retardant sleeving securely wrapped around cables, but allows for easy access when maintenance is necessary.

#### Application

Ideal for high-technology applications, especially operating environments where harsh fluids are present.

#### Benefits

- Conforms to irregular shapes and contours.
- Meets military specifications (Mil-202 approved).
- Cuts easily with a bench-mount hot knife.
- Resists chemicals and cleaning solvents.



Material Data	
Material	Treated PET (Polyester)
Flammability	UL VW-1
Operating Temperature	-94°F to 257°F -70°C to 125°C
Melt Point	482°F / 250°C
Abrasion Protection	Medium
Recommended Cutting	Hot Knife



#### Product Selection

Part No.	Nominal Size		Type	Wall Thickness		Color	Reel Length		Weight	
	in.	mm.		in.	in.		ft.	m.	lbs.	kg.
170-03153	1/2	12.7	BSHKLPFR120B	.25	6.4	Black	100	30.5	1.3	.60
170-03154	3/4	19.1	BSHKLPFR340B	.63	16	Black	100	30.5	1.8	.82
170-03155	1-1/4	31.8	BSHKLPFR1140B	.63	16	Black	100	30.5	2.3	1.04
170-03156	2	50.8	BSHKLPFR200B	.63	16	Black	100	30.5	3.2	1.45
170-03157	2-1/2	63.5	BSHKLPFR212B	.63	16	Black	100	30.5	3.75	1.70

Use Part No. for ordering and Type for specification.



### Split Wrap Flame Retardant Braided Sleeving

Used when flame retardancy is a primary requirement, this protection option incorporates a lateral split which allows the tube to open up to accommodate a variety of bundling requirements and the semi-rigid braid configuration simply closes around the entire installation without the need for any additional fasteners.

#### Application

Use this self-extinguishing product that complies with UL VW-1 standards where cables exit a wall and need to be managed for an uncluttered, clean appearance.

#### Benefits

- Installs easily, saving assembly time.
- Allows for future accessibility without disassembly.
- Needs no fasteners (i.e., tape, hook and loop, etc.).
- Provides a greater flexibility than spiralwrap or convoluted tubing.
- Retains shape and rigidity throughout operating temperature range.



#### Material Data

Material	Treated PET (Polyester)
Flammability	UL VW-1
Operating Temperature	-94°F to 257°F -70°C to 125°C
Melt Point	446°F / 230°C
Abrasion Protection	High
Recommended Cutting	Hot Knife



#### Product Selection

Part No.	Nominal Size*		Type	Wall Thickness		Color	Reel Length		Weight	
	in.	mm.		in.	mm.		ft.	m.	lbs.	kg.
170-03140	1/8	3.2	BSSWFR180B	.024	.61	Black	400	121.9	.80	.36
170-03141	1/4	6.4	BSSWFR140B	.025	.64	Black	200	61.0	1.2	.54
170-03142	1/2	12.7	BSSWFR120B	.025	.64	Black	150	45.7	2.1	.95
170-03143	3/4	19.1	BSSWFR340B	.025	.64	Black	100	30.5	1.6	.73
170-03144	1	25.4	BSSWFR100B	.038	.97	Black	100	30.5	20	.91
170-03145	1-1/4	31.8	BSSWFR1140B	.038	.97	Black	75	22.9	1.8	.82
170-03146	1-1/2	38.1	BSSWFR1120B	.038	.97	Black	75	22.9	2.1	.95
170-03147	2	50.8	BSSWFR200B	.038	.97	Black	50	15.2	1.8	.82

Use Part No. for ordering and Type for specification. \*Nominal size measures internal diameter of sleeving.



### Electromagnetic Flame Retardant Helagaine

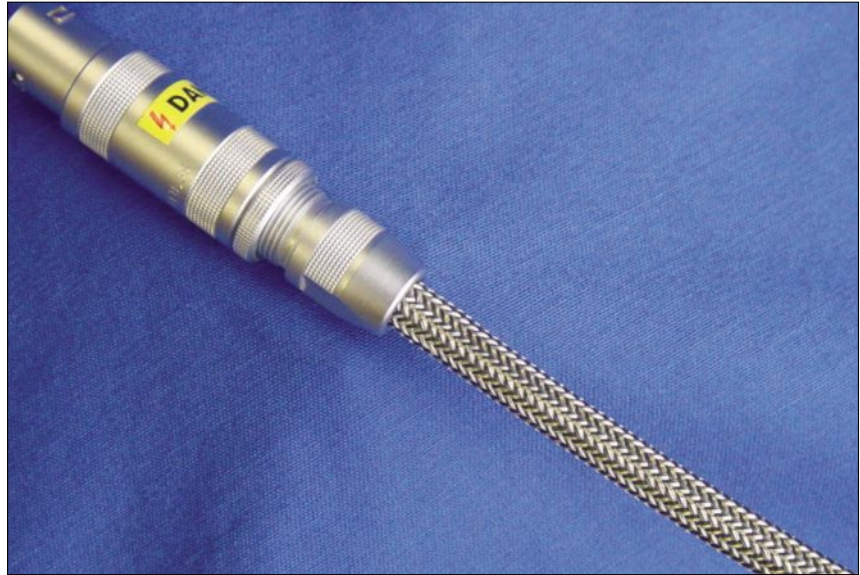
Helagaine VO (HEGEMIPVO) is tubular braided sleeving made from Polyester PBT monofilaments. The raw material is treated with non-burning agents so it has flame retardant and self-extinguishing properties. Rated VO by Underwriters Laboratories.

#### Application

Excellent for use where flame can cause damage therefore the protection of highly sensitive wiring is critical, such as in laboratories, computer rooms, satellites, mass transit and airplanes.

#### Benefits

- Shields or dissipates wire and cables from electromagnetic interference.
- Resists most chemicals.
- Expands (ratio 2:1) to allow for easy placement over bundles.



Material Data	
Material	PBT / Tin-Plated Copper (TNCU)
Flammability	UL 94-V0
Operating Temperature	-40°F to 347°F -40°C to 175°C
Melt Point	392°F / 200°C
Abrasion Protection	High
Recommended Cutting	Shears
EMI Requirements	10 KHz to 1 GHz according to CISPR25



#### Product Selection

Part No.	Nominal Size		Type	Expansion Range		Expansion Range		Color	Reel Length		Weight	
	in.	mm.		(Min.) in.	(Max.) in.	(Min.) mm.	(Max.) mm.		ft.	m.	lbs.	kg.
173-60400	1/8	3.2	HEGEMIPV004	.16	.26	4.1	6.6	Tin+Black	328	100	4.74	2.2
173-60600	1/4	6.4	HEGEMIPV006	.20	.40	5.1	10.2	Tin+Black	328	100	6.28	2.8
173-60800	5/16	7.9	HEGEMIPV008	.32	.45	8.1	11.4	Tin+Black	328	100	5.84	2.6
173-61000	3/8	9.5	HEGEMIPV010	.32	.52	8.1	13.2	Tin+Black	164	50	9.6	4.4
173-61200	7/16	11.1	HEGEMIPV012	.40	.59	10.20	15.0	Tin+Black	164	50	10.6	4.8
173-61400	1/2	12.7	HEGEMIPV014	.47	.71	11.9	18.0	Tin+Black	328	100	12.8	5.8
173-61600	9/16	14.3	HEGEMIPV016	.55	.79	14.0	20.1	Tin+Black	328	100	15.9	7.2
173-61800	5/8	15.9	HEGEMIPV018	.63	.87	16.0	22.1	Tin+Black	164	50	17.3	7.8
173-62000	3/4	19.1	HEGEMIPV020	.71	.98	18.0	25.0	Tin+Black	164	50	22.1	10.0

Use Part No. for ordering and Type for specification.

## Electromagnetic Helagaine

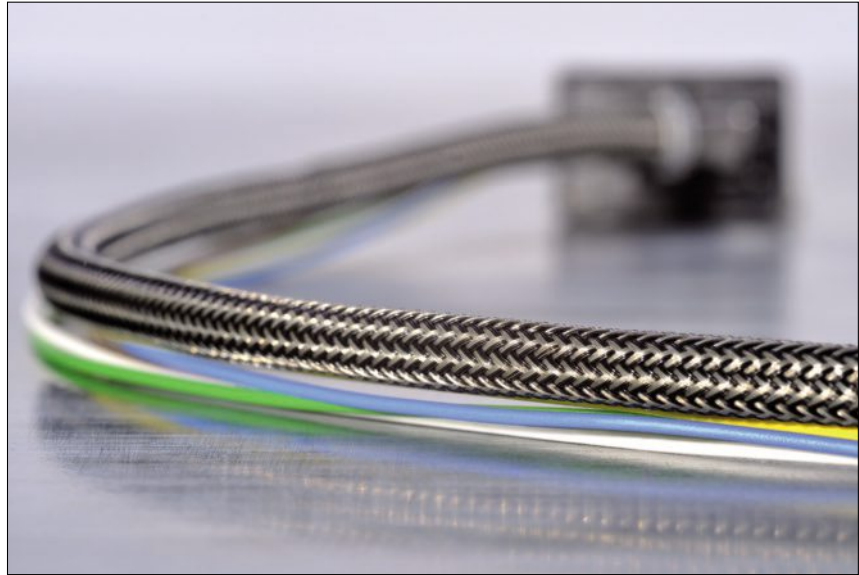
Helagaine (HEGEMIP) is a sleeving created from tin-plated copper and polyester threads that offers not only secure cable bundling but electromagnetic protection as well. The formulated mix of materials offers inside and outside abrasion resistance.

### Application

Particularly suitable for applications with movement and little space; ideal for short-run cables found in electrical appliances and radio equipment.

### Benefits

- Features a supporting inner tube that makes insertion of cable easier and protects the sleeve from deformation during transport.
- Attenuates electrical field interference.
- Provides electromagnetic and electrostatic shielding.
- Delivers added shielding in retrofit applications.
- Retains original form even when bent and twisted, unlike purely copper braids.



### Material Data

Material	PET (Polyester) / Tin-Plated Copper (TNCU)
Flammability	UL 94-V2
Operating Temperature	-40°F to 347°F -40°C to 175°C
Melt Point	392°F / 200°C
Abrasion Protection	High
Recommended Cutting	Shears
EMI Requirements	10 KHz to 1 GHz according to CISPR25



### Product Selection

Part No.	Nominal Size		Type	Expansion Range		Expansion Range		Color	Reel Length		Weight	
	in.	mm.		(Min.) in.	(Max.) in.	(Min.) mm.	(Max.) mm.		ft.	m.	lbs.	kg.
173-00400	1/8	3.2	HEGEMIP04	.16	.26	4.1	6.6	Tin+Black	328	100	4.74	2.2
173-00600	1/4	6.4	HEGEMIP06	.20	.40	5.1	10.2	Tin+Black	328	100	6.28	2.8
173-00800	5/16	7.9	HEGEMIP08	.32	.45	8.1	11.4	Tin+Black	328	100	5.84	2.6
173-01000	3/8	9.5	HEGEMIP10	.32	.52	8.1	13.2	Tin+Black	164	50	9.6	4.4
173-01200	7/16	11.1	HEGEMIP12	.40	.59	10.2	15.0	Tin+Black	164	50	10.6	4.8
173-01400	1/2	12.7	HEGEMIP14	.47	.71	11.9	18.0	Tin+Black	328	100	12.8	5.8
173-01600	9/16	14.3	HEGEMIP16	.55	.79	14.0	20.1	Tin+Black	328	100	15.9	7.2
173-01800	5/8	15.9	HEGEMIP18	.63	.87	16.0	22.1	Tin+Black	164	50	17.3	7.8
173-02000	3/4	19.1	HEGEMIP20	.71	.98	18.0	25.0	Tin+Black	164	50	22.1	10.0

Use Part No. for ordering and Type for specification.



### Polyamide 6.6 Expandable Braided Sleeving - Black

A pliable yet durable nylon sleeve that delivers excellent protection against cuts, abrasions and excessive wear caused by repetitive motion.

#### Application

Used on hoses, pipes, wiring harnesses and cables installed in cars, trucks, military vehicles, trains and industrial equipment. Protects delicate wiring in engine compartments and near exhaust systems or used to organize wires and breakouts in electrical harnesses.

#### Benefits

- Resists fuels, salts and solvents, gasoline, and other common contaminants.
- Offers a tight, 12 mil braid that provides full coverage but will not rot or retain moisture.
- Performs well in wet applications and where abiding substrate has a smooth surface.
- Expands up to 150% of flat diameter for easy installation.



Material Data	
Material	Polyamide 6.6 (Nylon)
Flammability	Non-Flammable
Operating Temperature	-49°F to 302°F -45°C to 150°C
Melt Point	491°F / 255°C
Abrasion Protection	High
Recommended Cutting	Hot Knife



#### Product Selection

Part No.	Nominal Size		Type	Expansion Range		Expansion Range		Color	Reel Length*		Weight	
	in.	mm.		(Min.) in.	(Max.) in.	(Min.) mm.	(Max.) mm.		ft.	m.	lbs.	kg.
170-03069	1/4	6.4	BSPA66140	.125	.375	3.2	9.5	Black	200	61.0	.60	.27
170-03027	1/2	12.7	BSPA66120	.375	.75	9.5	19.1	Black	100	30.5	1.03	.47
170-03028	3/4	19.1	BSPA66340	.50	1.25	12.7	31.8	Black	75	22.9	1.10	.50
170-03029	1	25.4	BSPA66100	.625	1.375	15.9	35.0	Black	50	15.2	.80	.36
170-03030	1-1/4	31.8	BSPA661140	.75	1.50	19.1	38.1	Black	50	15.2	.89	.40
<b>Bulk Sized Reels</b>												
170-03070	1/4	6.4	BSPA66140B	.125	.375	3.2	9.5	Black	1000	304.8	3.10	1.41
170-03046	1/2	12.7	BSPA66120B	.375	.75	9.5	19.1	Black	500	152.4	5.15	2.34
170-03047	3/4	19.1	BSPA66340B	.50	1.25	12.7	31.8	Black	250	76.2	3.68	1.67
170-03048	1	25.4	BSPA66100B	.625	1.375	15.9	35.0	Black	250	76.2	4.0	1.81
170-03049	1-1/4	31.8	BSPA661140B	.75	1.50	19.1	38.1	Black	250	76.2	4.50	4

Use Part No. for ordering and Type for specification. \*Pre-cut lengths available upon request.



## Polyamide 6.6 Helagaine Expandable Braided Sleeving - Gray

Made from heat-stabilized monofilament strands, this lightweight protection is a tougher sleeving with excellent resistance to abrasion. Despite its sturdy composition, Helagaine is expandable and durable and can easily be applied over irregular surfaces.

### Application

Suitable for automotive and transportation industry applications for the protection of sensitive cables and wires from abrasion.

### Benefits

- Offers a strand diameter that is approximately 10% larger than that of polyester, allowing for greater expandability.
- Resists fuels, salts and solvents, gasoline, and other common contaminants.
- Performs well in wet applications and where abiding substrate has a smooth surface.



Material Data		
Material	Polyamide 6.6 (PA66)	
Flammability	UL 94-V2	
Operating Temperature	-76°F to 302°F -60°C to 150°C	
Melt Point	491°F / 255°C	
Abrasion Protection	High	
Recommended Cutting	Hot Knife	



### Product Selection

Part No.	Nominal Size		Type	Expansion Range		Expansion Range		Color	Reel Length		Weight	
	in.	mm.		(Min.) in.	(Max.) in.	(Min.) mm.	(Max.) mm.		ft.	m.	lbs.	kg.
170-20400	1/8	4	HEGPA6604	.12	.24	3.0	6.1	Gray	656	200.0	1.1	.50
170-20600	3/16	6	HEGPA6606	.16	.32	4.1	8.1	Gray	328	100.0	1.3	.59
170-20800	1/4	8	HEGPA6608	.20	.40	5.1	10.2	Gray	328	100.0	1.1	.50
170-21000	3/8	10	HEGPA6610	.28	.47	7.0	12.0	Gray	328	100.0	2.09	.95
170-21200	1/2	12	HEGPA6612	.32	.55	8.1	14.0	Gray	328	100.0	2.4	1.1
170-21500	5/8	16	HEGPA6616	.47	.71	12.0	18.0	Gray	164	50	2.76	1.25
170-22000	3/4	20	HEGPA6620	.59	.91	15.0	23.1	Gray	164	50.3	3.1	1.41
170-22500	1	25	HEGPA6625	.71	1.10	18.0	28.0	Gray	164	50.3	3.9	1.77
170-23000	1-1/4	30	HEGPA6630	.98	1.26	24.9	32.0	Gray	164	50.3	4.9	2.22
170-25000	2	50	HEGPA6650	1.58	2.17	40.1	55.1	Gray	164	50.3	10.4	4.72

Use Part No. for ordering and Type for specification.



### Split Wrap Braided Sleeving

A bundling and protection option with a lateral split and a semi-rigid braid configuration that is the ideal solution for circumstances where ease of installation is the primary concern. The lateral split allows the sleeving to open up to adjust to the bundling requirement while the 25% edge overlap folds back over the connector or splices.



#### Application

More flexible than spiral wraps or convoluted tubing, this product is a fast and easy option for adding protection in post-assembly or post-installation situations.

#### Benefits

- Needs no fasteners (i.e., tape, hook and loop, etc.).
- Bends to a tight radius without distortion or splitting open.
- Allows future access without disassembly.
- Withstands cuts, abrasions and tension.

#### Material Data

Material	PET (Polyester)
Flammability	UL 94-V0
Operating Temperature	-94°F to 257°F -70°C to 125°C
Melt Point	482°F / 250°C
Abrasion Protection	Medium
Recommended Cutting	Hot Knife



#### Product Selection

Part No.	Nominal Size		Type	Wall Thickness		Color	Reel Length*		Weight	
	in.	mm.		in.	mm.		ft.	m.	lbs.	kg.
170-03037	1/4	6.4	BSPSW140	.025	.64	Black	100	30.5	.60	.27
170-03024	1/2	12.7	BSPSW120	.025	.64	Black	75	22.9	1.05	.48
170-03038	3/4	19.1	BSPSW340	.025	.64	Black	50	15.2	.80	.36
170-03025	1	25.4	BSPSW100	.038	.97	Black	50	15.2	1.0	.45
170-03026	1-1/4	31.8	BSPSW1140	.038	.97	Black	25	7.1	.60	.27
<b>Bulk Box</b>										
170-03124	1/8	3.2	BSPSW180B	.024	.61	Black	400	121.9	.80	.36
170-03125	1/4	6.4	BSPSW140B	.025	.64	Black	200	61.0	1.2	.54
170-03126	1/2	12.7	BSPSW120B	.025	.64	Black	150	45.7	2.1	.95
170-03127	3/4	19.1	BSPSW340B	.025	.64	Black	100	30.5	1.6	.73
170-03128	1	25.4	BSPSW100B	.038	.97	Black	100	30.5	2.0	.91
170-03129	1-1/4	31.8	BSPSW1140B	.038	.97	Black	75	22.9	1.8	.82
170-03130	1-1/2	38.1	BSPSW1120B	.038	.97	Black	75	22.9	2.1	.95
170-03131	2	50.8	BSPSW200B	.038	.97	Black	50	15.2	1.8	.82
<b>Large Bulk Sized Reels</b>										
170-03132	1/8	3.2	BSPSW180LB	.024	.61	Black	10,000	3,048.8	20.0	9.0
170-03133	1/4	6.4	BSPSW140LB	.025	.64	Black	3,000	914.4	18.0	8.2
170-03134	1/2	12.7	BSPSW120LB	.025	.64	Black	1,200	365.8	12.0	5.4
170-03135	3/4	19.05	BSPSW340LB	.025	.64	Black	500	152.4	16.8	7.6
170-03136	1	25.4	BSPSW100LB	.038	.97	Black	400	121.9	8.0	3.6
170-03137	1-1/4	31.8	BSPSW140LB	.038	.97	Black	300	91.4	8.0	3.6
170-03138	1-1/2	38.1	BSPSW1120LB	.038	.97	Black	200	61.0	7.2	3.3
170-03139	2	50.8	BSPSW200LB	.038	.97	Black	150	45.7	5.4	2.4

Use Part No. for ordering and Type for specification. \*Additional sizes available upon request.



### Split Wrap Braided Sleeving - Orange

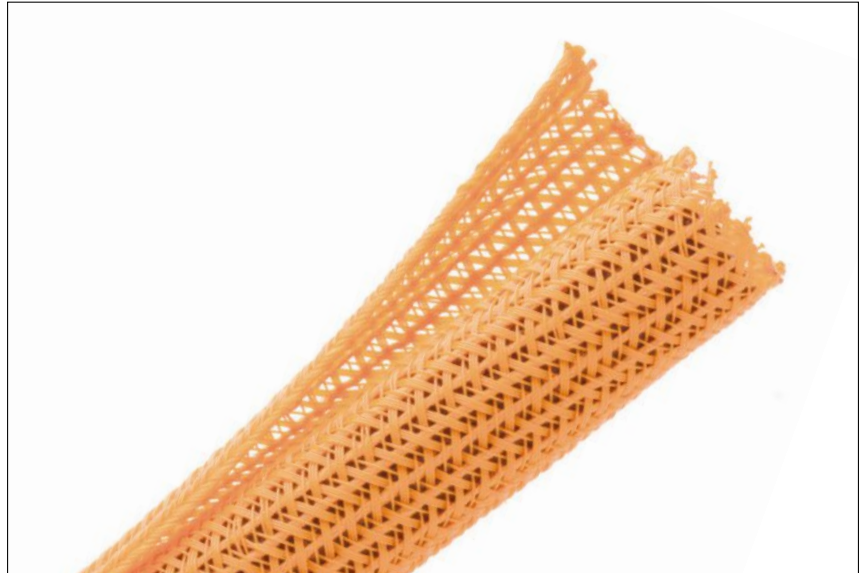
Used for safety identification, this bundling and protection option also offers a lateral split and a semi-rigid braid configuration that wraps around the bundle assembly without requiring any fasteners, such as hook & loop, cables ties or tape.

#### Application

A non-expandable product that is an uncomplicated option for adding protection and identification in electrical-powered vehicles, aircraft and automotive applications.

#### Benefits

- Contains the same physical properties of the General Purpose Black Split Wrap product.
- Needs no fasteners (i.e., tape, hook and loop, etc.).
- Bends to a tight radius without distortion or splitting open.
- Adapts easily and will not impair the flexibility of the harness assembly, nor will it fracture under stress.



Material Data	
Material	PET (Polyester)
Flammability	UL 94-V0
Operating Temperature	-94°F to 257°F -70°C to 125°C
Melt Point	482°F / 250°C
Abrasion Protection	Medium
Recommended Cutting	Hot Knife



#### Product Selection

Part No.	Nominal Size		Type	Wall Thickness		Color	Reel Length		Weight	
	in.	mm.		in.	mm.		ft.	m.	lbs.	kg.
170-03082	1/4	6.4	BSPSW143B	.025	.64	Orange	200	61.0	1.2	.54
170-03083	1/2	12.7	BSPSW123B	.025	.64	Orange	150	45.7	2.1	.95
170-03084	3/4	19.1	BSPSW343B	.025	.64	Orange	100	30.5	1.6	.73
170-03085	1	25.4	BSPSW103B	.038	.97	Orange	100	30.5	2.0	.91
170-03086	1-1/4	31.8	BSPSW1143B	.038	.97	Orange	75	22.9	1.8	.82
170-03087	1-1/2	38.1	BSPSW1123B	.038	.97	Orange	75	22.9	2.1	.95
170-03088	2	50.8	BSPSW203B	.038	.97	Orange	50	15.2	1.8	.82

Use Part No. for ordering and Type for specification.



### Hook & Loop Expandable Braided Sleeving

Designed for the quick and easy management of wires, this expandable sleeving has an internal hook and loop strap that is able to adhere to its outer PET braid, delivering flexibility that allows it to fit around odd-shaped connectors. Its color-matched hook-and-loop closure provides for an easy on-and-off installation, as well as instant and convenient access for harness break-outs and networks.

#### Application

When component disassembly is not an option or when frequent access to bundles wires or cables is essential. The primary application for this sleeving is the wrapping and bunching of cables in a deployed situation (i.e., location recordings).

#### Benefits

- Conforms to irregular shapes and contours.
- Wraps effortlessly over a cable bundle and closes; readily reopens.
- Saves time, allows those working on cables to easily splice or combine wires.
- Offers PET yarn construction for excellent protection against cuts and abrasions.



Material Data		
Material	PET (Polyester)	
Flammability	UL 94-VO	
Operating Temperature	94°F to 257°F -70°C to 125°C	
Melt Point	482°F / 250°C	
Abrasion Protection	Medium	
Recommended Cutting	Hot Knife	



#### Product Selection

Part No.	Nominal Size		Type	Wall Thickness		Color	Reel Length		Weight	
	in.	mm.		in.	mm.		ft.	m.	lbs.	kg.
170-03148	1/2	12.7	BSHKLP120B	.25	6.4	Black	100	30.5	1.3	.60
170-03149	3/4	19.1	BSHKLP340B	.63	16.0	Black	100	30.5	1.8	.82
170-03150	1-1/4	31.8	BSHKLP1140B	.63	16.0	Black	100	30.5	2.3	1.04
170-03151	2	50.8	BSHKLP200B	.63	16.0	Black	100	30.5	3.2	1.45
170-03152	2.5	63.5	BSHKLP212B	.63	16.0	Black	100	30.5	3.75	1.7

Use Part No. for ordering and Type for specification.



## Plenum Rated Halar® Expandable Braided Sleeving

Halar® self-extinguishing sleeving is used where flammability, high temperature endurance and low outgassing are the concern. This sleeving is made from strands of high temperature, flame resistant Halar monofilaments that are able to resist a wide range of corrosive chemicals and organic solvents.

### Application

Its low flame spread and smoke generation properties make it the perfect option for use in technologically-advanced applications, such as those in the automotive, aerospace and vital military markets.



### Benefits

- Resists gasoline and engine chemicals.
- Exceeds automotive industry requirements of FMVSS 302 as well as aviation industry requirements of FAR 25.
- Expands up to 150% for economical and expeditious installation.
- Withstands abrasion and won't degrade when exposed to Cobalt 60 radiation conditions.
- Meets UL 2024 and NFPA 262 specifications for plenum applications.

### Material Data

Material	Ethylene Chlorotrifluoroethylene Monofilament (ECTFE)
Flammability	UL VW-1
Operating Temperature	-103°F to 302°F -75°C to 150°C
Melt Point	482°F / 250°C
Abrasion Protection	Medium
Recommended Cutting	Hot Knife



### Product Selection

Part No.	Nominal Size		Type	Expansion Range		Expansion Range		Color	Reel Length		Weight	
	in.	mm.		(Min.) in.	(Max.) in.	(Min.) mm.	(Max.) mm.		ft.	m.	lbs.	kg.
170-03098	1/8	3.2	BSHLR180	.094	.25	2.4	6.4	Black	225	68.6	.6	.27
170-03100	1/4	6.4	BSHLR140	.125	.437	3.2	11.1	Black	200	61.0	.8	.36
170-03102	3/8	9.5	BSHLR380	.187	.625	4.7	15.9	Black	125	38.1	1.1	.50
170-03104	1/2	12.7	BSHLR120	.25	.75	6.4	19.1	Black	100	30.5	1.1	.50
170-03106	3/4	19.1	BSHLR340	.50	1.25	12.7	31.8	Black	75	22.9	1.3	.60
170-03108	1	25.4	BSHLR100	.625	1.625	15.9	41.3	Black	65	19.8	1.4	.64
170-03110	1-1/4	31.8	BSHLR1140	.75	1.75	19.1	44.5	Black	50	15.2	1.3	.60
170-03112	1-3/4	44.4	BSHLR1340	1.25	2.75	31.8	69.9	Black	30	9.1	1.3	.60
170-03114	2	50.8	BSHLR200	1.50	3.50	38.1	88.9	Black	50	15.2	2.3	1.04
170-03099	1/8	3.2	BSHLR1810	.094	.25	2.4	6.4	White	225	68.6	.6	.27
170-03101	1/4	6.4	BSHLR1410	.125	.437	3.2	11.1	White	200	61.0	.8	.36
170-03103	3/8	9.5	BSHLR3810	.187	.625	4.8	15.9	White	125	38.1	1.1	.50
170-03105	1/2	12.7	BSHLR1210	.25	.75	6.4	19.1	White	100	30.5	1.1	.50
170-03107	3/4	19.1	BSHLR3410	.50	1.25	12.7	31.8	White	75	22.9	1.3	.60
170-03109	1	25.4	BSHLR1010	.625	1.625	15.9	41.3	White	65	19.8	1.4	.64
170-03111	1-1/4	31.8	BSHLR11410	.75	1.75	19.1	44.5	White	50	15.2	1.3	.60
170-03113	1-3/4	44.4	BSHLR13410	1.25	2.75	31.8	69.9	White	30	9.1	1.3	.60
170-03115	2	50.8	BSHLR2010	1.50	3.50	38.1	88.9	White	50	15.2	2.3	1.04

Use Part No. for ordering and Type for specification.  
Halar® is a registered trademark of the Solvey Solexis Corporation.  
Halar product is produced on 8" diameter mini spools, which will not fit in merchandising display.





### Extreme High Temperature Resin Saturated Fiberglass Expandable Braided Sleeving

An extremely high-temperature resistant sleeve designed as protection for wires and cables subjected to continuous temperature variations, vibration, abrasion, and mechanical stress.

#### Application

Perfect for engine manifolds and exhaust systems or any application where fire and exceeding temperatures create a hazard to workforce and equipment.

#### Benefits

- Provides thermal protection up to 1,200°F.
- Maintains its tight structure under extreme shaking, scraping, pressure and varying temperature conditions.
- Cuts cleanly with scissors and installs easily.
- Comes in a wide range of diameters.



Material Data	
Material	Resin Saturated Fiberglass
Flammability	UL VW-1
Operating Temperature	-94°F to 1,202°F -70°C to 650°C
Melt Point	2,048°F / 1,120°C
Abrasion Protection	Very High
Recommended Cutting	Scissors



#### Product Selection

Part No.	Nominal Size		Type	Wall Thickness		Maximum Diameter		Color	Reel Length		Weight	
	in.	mm.		in.	mm.	in.	mm.		ft.	m.	lbs.	kg.
170-03058	1/4	6.4	BSHTFG140	.031	.79	.375	9.5	Black	50	15.2	1.0	.45
170-03059	1/2	12.7	BSHTFG120	.046	1.67	.75	19.1	Black	50	15.2	2.4	1.1
170-03060	3/4	19.1	BSHTFG340	.046	1.67	1.125	28.6	Black	50	15.2	3.2	1.5
170-03061	1	25.4	BSHTFG100	.057	1.45	1.625	41.3	Black	25	7.6	2.6	1.2
<b>Bulk Sized Reels</b>												
170-03050	1/4	6.4	BSHTFG140B	.031	.79	.375	9.5	Black	200	61.0	4.0	1.81
170-03051	1/2	12.7	BSHTFG120B	.046	1.17	.75	19.1	Black	200	61.0	9.6	4.35
170-03052	3/4	19.1	BSHTFG340B	.046	17	1.125	28.6	Black	200	61.0	12.8	5.81
170-03053	1	25.4	BSHTFG100B	.057	1.45	1.625	41.3	Black	100	30.5	10.5	4.76

Use Part No. for ordering and Type for specification.





## High Temperature Nomex® Expandable Braided Sleeving

Manufactured with densely woven aramid fibers, this soft and flexible sleeving is self-extinguishing and is able to withstand temperatures reaching up to 662°F.

### Application

Excellent for use in extremely harsh environments including those with exposure to direct flame, high temperatures, as well as Beta, Gamma and X-ray radiation – in particular, military and aerospace wiring and harnessing applications.

### Benefits

- Does not melt and is unaffected by most acids.
- Provides excellent thermal stability against flames.
- Meets FMVSS 302 approval for use in automotive engineering.
- Cuts with ordinary scissors which reduces assembly time.



### Material Data

Material	Polyaramid Polymetaphenylene Isophthalamide
Flammability	Non-Flammable
Operating Temperature	-320°F to 662°F -196°C to 350°C
Melt Point	N/A
Abrasion Protection	Low
Recommended Cutting	Scissors



### Product Selection

Part No.	Nominal Size		Type	Expansion Range		Expansion Range		Color	Reel Length		Weight	
	in.	mm.		(Min.) in.	(Max.) in.	(Min.) mm.	(Max.) mm.		ft.	m.	lbs.	kg.
170-03158	1/8	3.2	BSNMX185B	.062	.25	1.6	6.4	Green	100	30.5	.12	.05
170-03159	1/4	6.4	BSNMX145B	.125	.312	3.2	7.9	Green	100	30.5	.50	.23
170-03160	3/8	9.5	BSNMX385B	.25	.50	6.4	12.7	Green	100	30.5	.67	.30
170-03161	1/2	12.7	BSNMX125B	.312	.625	7.9	15.9	Green	100	30.5	.91	.41
170-03162	3/4	19.1	BSNMX345B	.562	1	14.3	25.4	Green	100	30.5	1.34	.61
170-03163	1	25.4	BSNMX105B	.75	1.12	19.1	28.6	Green	100	30.5	2.42	1.1
170-03164	1-1/4	31.8	BSNMX1145B	1	1.5	25.4	38.1	Green	100	30.5	3.49	1.58
170-03165	1-1/2	38.1	BSNMX1125B	1.25	1.75	31.8	44.4	Green	100	30.5	4.03	1.83
170-03166	1-3/4	44.4	BSNMX1345B	1.50	2	38.1	50.9	Green	100	30.5	4.76	2.16

Use Part No. for ordering and Type for specification.  
Nomex® is a registered trademark of the DuPont Corporation.

## High Temperature Aluminum Laminated Fiberglass Sleeving

A tubular shaped product that combines the protection of bonded aluminum and fiberglass into a single solution that is able to reflect radiant heat away from the sensitive contents inside the tube.

### Application

Terrific for applications when appearance and insulation are important for protecting delicate wire bundles, cables and hoses from damage caused by nearby exhaust pipes, headers or heat-generating components.

### Benefits

- Adds a layer of protection that prevents scraping; cut and abrasion resistant.
- Resists gasoline and engine chemicals.
- Creates an insulation barrier for vulnerable cable and wire materials within high-temperature environments.
- Cuts cleanly with scissors.



Material Data	
Material	Bonded Aluminum + Fiberglass
Flammability	Non-Flammable
Operating Temperature	-76°F to 491°F -60°C to 255°C
Melt Point	2,048°F / 1,120°C
Abrasion Protection	N/A
Recommended Cutting	Scissors



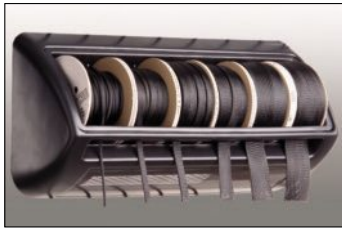
### Product Selection

Part No.	Nominal Size*		Type	Wall Thickness *.006 in.		Maximum Diameter		Color	Reel Length		Weight	
	in.	mm.		in.	mm.	in.	mm.		ft.	m.	lbs.	kg.
170-03175	3/8	9.7	BSHTTST38SR	.025	.64	.317	8.1	Silver	100	30.5	2.3	1.1
170-03062	1/2	12.7	BSHTTST12SR	.025	.64	.437	11.1	Silver	100	30.5	2.6	1.2
170-03063	3/4	19.1	BSHTTST34SR	.025	.64	.687	17.4	Silver	100	30.5	3.5	1.6
170-03064	1	25.4	BSHTTST10SR	.025	.64	.937	23.8	Silver	100	30.5	4.5	2.0
170-03065	1-3/4	44.5	BSHTTST134SR	.025	.64	1.687	42.8	Silver	50	15.2	3.7	1.7
170-03097	2-1/2	63.5	BSHTTST212SR	.025	.64	2.375	60.3	Silver	50	15.2	5.05	2.3
<b>Bulk Sized Reels</b>												
170-03054	1/2	12.7	BSHTTST12SRB	.025	.64	.437	11.1	Silver	250	76.2	6.37	2.90
170-03055	3/4	19.1	BSHTTST34SRB	.025	.64	.687	17.4	Silver	250	76.2	8.62	3.91
170-03056	1	25.4	BSHTTST10SRB	.025	.64	.937	23.8	Silver	250	76.2	11.2	5.08
170-03057	1-3/4	44.5	BSHTTST134SRB	.025	.64	1.687	42.8	Silver	100	30.5	7.40	3.36

Use Part No. for ordering and Type for specification. \*Nominal size measures external diameter of sleeving.

### Merchandising Display Rack

Designed to save space and provide easy access when dispensing braided sleeving, this unit allows for the efficient handling and management of sleeving.



- Simplifies cut-to-length counter sales.
- Dispenses easily from preformed slot.
- Includes mounting hardware.
- Constructed of durable ABS plastic.
- Holds six standard-sized spools; drop-in reels sold separately.
- Dimensions: 23.5"(W) x 10"(D) x 6"(H)

Product Selection		
Part No.	Type	Color
170-03031	BSDISPLAY	Black

Use Part No. for ordering and Type for specification.

### Split Wrap Installation Tool

Use this wire loom tool to guide a cable or insert a cable harness inside the split wrap sleeving. Eases addition and removal of wires quickly and easily while protecting installer's hands from cuts. Can also be used with split loom convoluted tubing.



Product Selection			
Part No.	Size	Type	Description
170-03067	1/4"	BSWTOOL14	1/4" Split Wrap Installation Tool
170-03032	1/2"	BSWTOOL12	1/2" Split Wrap Installation Tool
170-03068	3/4"	BSWTOOL34	3/4" Split Wrap Installation Tool
170-03033	1"	BSWTOOL1	1" Split Wrap Installation Tool
170-03034	1-1/4"	BSWTOOL114	1-1/4" – Split Wrap Installation Tool

Use Part No. for ordering and Type for specification.

### Bench and Handheld Hot Knife Tools

For the best results during sleeving installation, the sleeving should be cut with a hot knife.



Bench Mount Braided Sleeve Hot Knife

- Designed for production Environments
- Uses 2.5" blade
- Lighted power switch
- Heats to 1,112°F in 30 sec.
- 110 volt operation
- Replaceable blades



Handheld Braided Sleeve Hot Knife

- Trigger switch
- Heats quickly
- 110 volt operation
- Replaceable blades

Product Selection			
Part No.	Type	Color	Description
170-03039	BSBHK	White	Bench Mount Braided Sleeve Hot Knife
170-03040	BSPHK	Black	Handheld Braided Sleeve Hot Knife

Use Part No. for ordering and Type for specification.

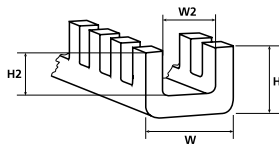
### Flexiform Edge Protection Grommet Strip

HellermannTyton's Flexiform grommet is a unique, continuous wire protection product which fits easily in all shapes and sizes of holes without the aid of tools or adhesives. Since Flexiform can be cut to the right length with scissors, it eliminates waste, helping keep grommet stock to a minimum. HellermannTyton's Flexiform grommet can be used on any type of material including wood, steel, aluminum, plexiglass, and glass. It is available in 9 sizes for thicknesses from .016" to .512".



Optimal protection of cables and wires at panel edges.

### Polyamide 6 Grommet



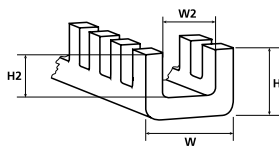
Flexiform grommet strip

Material Data		RoHS
Material	<b>Polyamide 6 (PA6)</b>	
Color	<b>Natural</b>	
Operating Temperature	<b>-76 °F to +203 °F (-60 °C to +95 °C)</b>	

Product Selection									
Article No.	Part No.	Type	Panel Thickness	Width (W)	Width (W2)	Height (H)	Height (H2)	Pkg. Qty.	
			in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)		
<b>Polyamide 6 (PA6)</b>									
251-21109	FHA	G51NA	.015" - .059" (0.4 - 1.5)	.154" (3.9)	.059" (1.5)	.169" (4.3)	.106" (2.7)	82 ft	
251-21209	FHB	G51NB	.051" - .094" (1.3 - 2.4)	.181" (4.6)	.094" (2.4)	.169" (4.3)	.106" (2.7)	82 ft	
251-21309	FHC	G51NC	.087" - .134" (2.2 - 3.4)	.224" (5.7)	.138" (3.5)	.169" (4.3)	.106" (2.7)	82 ft	
251-21409	FHD	G51ND	.130" - .197" (3.3 - 5.0)	.331" (8.4)	.201" (5.1)	.244" (6.2)	.169" (4.3)	82 ft	
251-21509	FHE	G51NE	.193" - .264" (4.9 - 6.7)	.390" (9.9)	.264" (6.7)	.252" (6.4)	.177" (4.5)	82 ft	
251-21609	FHF	G51NF	.256" - .323" (6.5 - 8.2)	.449" (11.4)	.327" (8.3)	.268" (6.8)	.189" (4.8)	82 ft	
251-21709	FHG	G51NG	.315" - .394" (8.0 - 10.0)	.520" (13.2)	.398" (10.1)	.268" (6.8)	.189" (4.8)	82 ft	
251-21809	FHH	G51NH	.382" - .520" (9.7 - 13.2)	.646" (16.4)	.520" (13.2)	.268" (6.8)	.189" (4.8)	82 ft	

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### Polyethylene Grommet



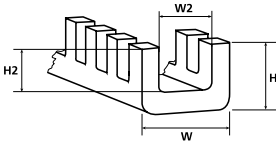
Flexiform grommet strip

Material Data		RoHS
Material	<b>Polyethylene (PE)</b>	
Color	<b>Natural</b>	
Operating Temperature	<b>-22 °F to +176 °F (-30 °C to +80 °C)</b>	

Product Selection									
Article No.	Part No.	Type	Panel Thickness	Width (W)	Width (W2)	Height (H)	Height (H2)	Pkg. Qty.	
			in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)		
<b>Polyethylene (PE)</b>									
251-10009	FPAA	G51PAA	.016" - .035" (0.4 - 0.9)	.087" (2.2)	.037" (0.95)	.094" (2.4)	.063" (1.6)	82 ft	
251-10109	FPA	G51PA	.016" - .059" (0.4 - 1.5)	.154" (3.9)	.059" (1.5)	.169" (4.3)	.106" (2.7)	82 ft	
251-10209	FPB	G51PB	.051" - .094" (1.3 - 2.4)	.181" (4.6)	.094" (2.4)	.169" (4.3)	.106" (2.7)	82 ft	
251-10309	FPC	G51PC	.087" - .134" (2.2 - 3.4)	.224" (5.7)	.138" (3.5)	.169" (4.3)	.106" (2.7)	82 ft	
251-10409	FPD	G51PD	.130" - .197" (3.3 - 5.0)	.331" (8.4)	.201" (5.1)	.244" (6.2)	.169" (4.3)	82 ft	
251-10509	FPE	G51PE	.193" - .264" (4.9 - 6.7)	.390" (9.9)	.264" (6.7)	.252" (6.4)	.177" (4.5)	82 ft	
251-10609	FPF	G51PF	.256" - .323" (6.5 - 8.2)	.449" (11.4)	.327" (8.3)	.268" (6.8)	.189" (4.8)	82 ft	
251-10709	FPG	G51PG	.315" - .394" (8.0 - 10.0)	.520" (13.2)	.398" (10.1)	.268" (6.8)	.189" (4.8)	82 ft	
251-10809	FPH	G51PH	.382" - .520" (9.7 - 13.2)	.646" (16.4)	.520" (13.2)	.268" (6.8)	.189" (4.8)	82 ft	

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

## Flexiform Edge Protection Grommet Strip *continued* Teflon Grommet



Flexiform grommet strip

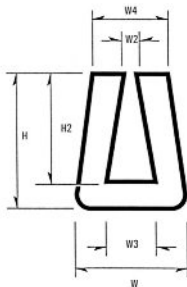
Material Data		RoHS
Material	Polytetrafluoroethylene -Teflon (PTFE)	
Color	Natural	
Operating Temperature	-76 °F to +500 °F (-60 °C to +260 °C)	
Flammability	non-burning	

Product Selection								
Article No.	Part No.	Type	Panel Thickness	Width (W)	Width (W2)	Height (H)	Height (H2)	Pkg. Qty.
			in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	ft.
<b>Polytetrafluoroethylene -Teflon (PTFE)</b>								
251-30109	FTA	G51TA	.015" - .059" (0.4 - 1.5)	.153" (3.9)	.059" (1.5)	.169" (4.3)	.106" (2.7)	9.7 ft
251-30209	FTB	G51TB	.051" - .094" (1.3 - 2.4)	.181" (4.6)	.094" (2.4)	.169" (4.3)	.106" (2.7)	9.7 ft
251-30309	FTC	G51TC	.087" - .134" (2.2 - 3.4)	.224" (5.7)	.138" (3.5)	.169" (4.3)	.106" (2.7)	9.7 ft
251-30409	FTD	G51TD	.130" - .196" (3.3 - 5.0)	.331" (8.4)	.201" (5.1)	.244" (6.2)	.169" (4.3)	9.7 ft
251-30509	FTE	G51TE	.193" - .264" (4.9 - 6.7)	.390" (9.9)	.264" (6.7)	.252" (6.4)	.177" (4.5)	9.7 ft
251-30609	FTF	G51TF	.256" - .323" (6.5 - 8.2)	.449" (11.4)	.327" (8.3)	.268" (6.8)	.189" (4.8)	9.7 ft
251-30709	FTG	G51TG	.315" - .394" (8.0 - 10.0)	.520" (13.2)	.398" (10.1)	.268" (6.8)	.189" (4.8)	9.7 ft
251-30809	FTH	G51TH	.382" - .520" (9.7 - 13.2)	.646" (16.4)	.520" (13.2)	.268" (6.8)	.189" (4.8)	9.7 ft

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes. Teflon is a registered trademark of the DuPont Corporation.

## Self-Extinguishing Flexiform Grommet

HellermannTyton's Flexiform grommet is also manufactured from a self-extinguishing UL 94 V0 rated flexible PVC compound which ensures flexibility and ease of application.



Material Data		RoHS
Material	Flexible Polyvinyl Chloride, cadmium free (PVC)	
Color	Black	
Operating Temperature	-85 °F to +221 °F (-65 °C to +105 °C)	
Flammability	UL94 V0	

Product Selection										
Article No.	Part No.	Type	Panel Thickness	Width (W)	Width (W2)	Width (W3)	Width (W4)	Height (H)	Height (H2)	Pkg. Qty.
			in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	ft. (Meters)
<b>Flexible Polyvinyl Chloride, cadmium free (PVC)</b>										
800-00004	SM1BK75MT	SM1	.03937" - .07874" (1.0 - 2.0)	.1969"(5.0)	.03937"(1.0)	.07" (1.8)	.165" (4.2)	.248" (6.3)	.192" (4.9)	246.1 ft (75)

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

Electrical Tape



HellermannTyton electrical tapes are used for color coding, cable splicing, terminating, wire insulating, and more. These conformable, high quality tapes have exceptional surface adhesive characteristics.

Installation

For best results, the tape should be applied by using tension. When the application is complete, the memory of the tape returns, tightening the seal and making the taped area even more waterproof. For the best seal, each layer of tape should overlap the previous layer by approximately 50%. HellermannTyton electrical tapes are a fast, easy, and economical way of insulating, splicing, and terminating electrical connections.

Product Selection

Article No.	Part No.	Type	Width (W)		Color	Roll Length	Pkg. Qty.
			in.	(mm)			
<b>7.0 Mil PVC</b>							
904-00007	<b>ET330</b>	ET33	.75"	(19.05)	Black	33 ft/Roll	10 Rolls
904-00008	<b>ET660</b>	ET66	.75"	(19.05)	Black	66 ft/Roll	10 Rolls
<b>8.0 Mil PVC</b>							
904-00010	<b>ETCW660</b>	ETCW66	.75"	(19.05)	Black	66 ft/Roll	10 Rolls
<b>Butyl Rubber</b>							
904-0006	<b>ETSB6210</b>	ETSB	.75"	(19.05)	Black	21 ft/Roll	10 Rolls
<b>7.0 Mil PVC - Colors</b>							
904-00011	<b>ETST661</b>	ETST66	.75"	(19.05)	Brown	66 ft/Roll	10 Rolls
904-00012	<b>ETST6610</b>	ETST66	.75"	(19.05)	White	66 ft/Roll	10 Rolls
904-00014	<b>ETST662</b>	ETST66	.75"	(19.05)	Red	66 ft/Roll	10 Rolls
904-00016	<b>ETST663</b>	ETST66	.75"	(19.05)	Orange	66 ft/Roll	10 Rolls
904-00018	<b>ETST664</b>	ETST66	.75"	(19.05)	Yellow	66 ft/Roll	10 Rolls
904-00020	<b>ETST665</b>	ETST66	.75"	(19.05)	Green	66 ft/Roll	10 Rolls
904-00022	<b>ETST666</b>	ETST66	.75"	(19.05)	Blue	66 ft/Roll	10 Rolls
904-00024	<b>ETST667</b>	ETST66	.75"	(19.05)	Purple	66 ft/Roll	10 Rolls
904-00026	<b>ETST668</b>	ETST66	.75"	(19.05)	Gray	66 ft/Roll	10 Rolls

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification.

Material Data

Product Type and Material	Thickness	Technical	Operating Temperature	Description	Agency Approvals
ET & ETST (PVC)	7.0 mil	Adhesion: 16 oz./inch Tensile Strength: 15.4 lbs./inch Elongation: 180% Breakdown Voltage: 7,800 V	+20 °F to 176°F (-7 °C to +80 °C)	A heavy duty vinyl tape which is ideal for general purpose applications.	U.L. Listed, Meets U.L. 510, Meets Mil-Std. Mil - 1-7798-A
ETCW (PVC)	8.0 mil	Adhesion: 17 oz./inch Tensile Strength: 20 lbs./inch Elongation: 200% Breakdown Voltage: 8,600 V	0 °F to +194 °F (-18 °C to +90 °C)	A heavy duty vinyl tape which is ideal for cold weather installations and "weather resistant" for outdoor installations.	U.L. Listed, Meets U.L. 510, Meets Mil-Std. Mil - 1-24391-A
ETSB (Butyl Rubber)	20 mil	Adhesion: n/a Tensile Strength: n/a Elongation: 600% Breakdown Voltage: 14,000 V	-14 °F to +176 °F (-26 °C to +80 °C)	A self-bonding butyl rubber tape which provides void-free insulation over irregular surfaces, such as splices. Outstanding self-bonding properties.	U.L. Listed, Meets ASTM D-119



Snapper Hose Clamps .....169-174  
Screw Mount Cable Clamps .....175-177  
Adhesive Cable Clamps .....178-179  
Flat Ribbon Cable Clamps .....180  
Nail Clips .....181



## Snapper Hose Clamps

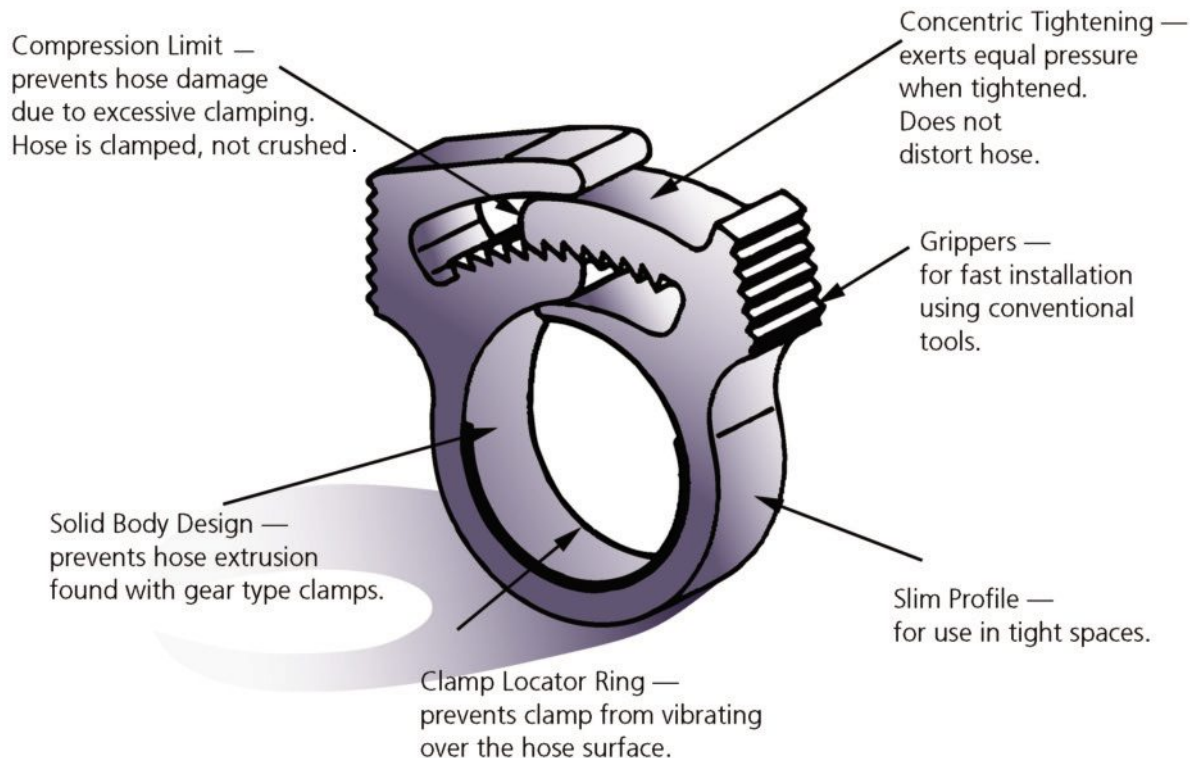
HellermannTyton's Snapper is a lightweight, corrosion resistant hose clamp manufactured from high performance, thermoplastic materials selected to work well in a variety of diverse environments. A quick, ratchet closure provides for reduced application time and allows for application after connection of the hose. Release is achieved by initiating opposed lateral movement of the ratchet ends. Heat stabilized materials are available for high temperature, motor and under-hood applications. Snappers are also stable in a wide variety of chemicals including salts, bases, alcohols, ethers, detergents, gasoline, lubricating oils, and greases.



The Snapper is available in 32 standard sizes ranging from 1/4" to 4-1/2" ID. Snappers are manufactured in white polyacetal and black polyamide 6.6 glass filled impact modified heat stabilized material. Custom designed and different colored or shaped Snappers are available based upon applications and volume requirements.

### Snapper Clamp Features

- Will not rust or corrode
- Installation and removal can be five times faster than conventional clamps
- Completely reusable
- Safety engineered
- No protruding band or cluster
- Can be installed with hose in place
- Will not damage hose
- One hand installation for tight places



## Snapper Hose Clamp Applications



Snapper clamp selection will vary with hose thickness and fitting sizes. End use testing is recommended to determine the actual size needed for each application.

### Snapper Clamp Applications

Snapper hose clamps are used in a variety of markets and diverse applications.

- Automotive
- Air Lines
- Pumps
- Marine
- Drain Lines
- Sprayers
- Truck
- Water Lines
- Fuel Lines
- Heavy Equipment
- Sprinkler Systems
- Garden Hoses
- Many more hose and tubing applications

Double Braid Utility Hoses		Clear Vinyl Tubing		Neoprene Hoses		Fuel Line Hoses	
Diameter	Product	(I.D.) - (O.D.)	Product	Diameter	Product	Diameter	Product
1/4"	Snapper 8	3/16" - 5/16"	Snapper 1.5	1/8"	Snapper 1.5	1/4"	Snapper 6
3/8"	Snapper 12	1/4" - 3/8"	Snapper 4	3/16"	Snapper 2	5/8"	Snapper 8
1/2"	Snapper 19	5/16" - 7/16"	Snapper 6	9/32"	Snapper 8	3/8"	Snapper 12
5/8"	Snapper 22	3/8" - 1/2"	Snapper 8	3/8"	Snapper 12		
3/4"	Snapper 28	1/2" - 5/8"	Snapper 12	Garden Hoses		Heater Hoses	
1"	Snapper 33/34	5/8" - 7/8"	Snapper 19	1/2"	Snapper 14	1/2"	Snapper 18
1-1/4"	Snapper 38	3/4" - 1"	Snapper 24	5/8"	Snapper 18	5/8"	Snapper 19
1-1/2"	Snapper 50	1" - 1-1/4"	Snapper 32	3/4"	Snapper 32	3/8"	Snapper 24

## Snapper Hose Clamp Tools

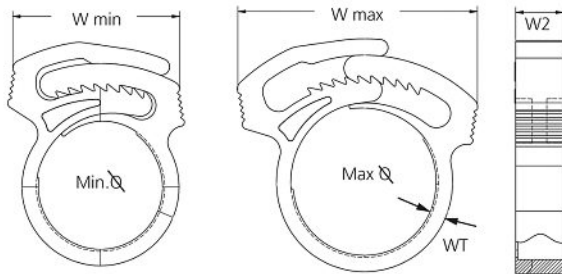
Snapper installation tools are available in both pneumatic and mechanical versions. They are specifically developed to increase reliability, reduce operator fatigue and installation time.



Product Selection			Tool Description			
Article No.	Part No.	Type	Type	Use	Stroke	Snapper Range
191-00010	<b>PHSNP2-36</b>	PHSNP2-36	Pneumatic	Production	Horizontal	2-36
191-00012	<b>PHSNP38-100</b>	PHSNP38-100				38-100
191-00014	<b>PSNP2-22</b>	PSNP2-22			Vertical	2-22
191-00019	<b>PSNP24-70</b>	PSNP24-70				24-70
191-02220	<b>ASNP2-22</b>	ASNP2-22	Mechanical	Production	Vertical	2-22
191-24700	<b>ASNP24-70</b>	ASNP24-70				24-70
191-01700	<b>MSNP1-70</b>	MSNP1-70			Maintenance/ Removal	Vertical

Use **Part No.** for ordering and **Type** for specification purposes.

## Snapper Hose Clamps Polyamide 6.6 Glass Filled Impact Modified Heat Stabilized



Material Data	
Material	<b>Polyamide 6.6 glass filled impact modified heat stabilized (PA66GF13%)</b>
Operating Temperature	<b>-40 °F to +221 °F (-40 °C to +105 °C)</b>
Color	<b>Black</b>
Flammability	<b>UL94 HB</b>



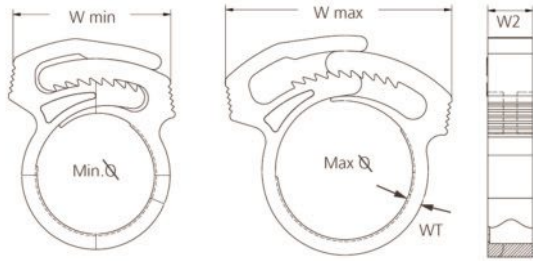
### Product Selection

Article No.	Part No.	Type	Min. Ø	Max. Ø	Width (W2)	Wall Thickness (WT)	Width (W) Min.	Width (W) Max.	Pkg. Qty.
					in. (mm)	in. (mm)	in. (mm)	in. (mm)	
192-10010	SNP1GHS0C2	SNP1	0.233 " (5.928)	0.262 " (6.643)	0.149" (3.838)	0.04 " (1.01)	0.323" (8.181)	0.456" (11.615)	100
190-00019	SNP1GHS0M4		0.233 " (5.928)	0.262 " (6.643)	0.149" (3.838)	0.04 " (1.01)	0.323" (8.181)	0.456" (11.615)	1000
190-00029	SNP1.25GHS0C2	SNP1.25	0.275 " (6.95)	0.297 " (7.563)	0.15" (3.838)	0.042 " (1.111)	0.408" (10.403)	0.491" (12.423)	100
190-00030	SNP1.25GHS0M4		0.275 " (6.95)	0.297 " (7.563)	0.15" (3.838)	0.042 " (1.111)	0.408" (10.403)	0.491" (12.423)	1000
190-00251	SNP1.5GHS0C2	SNP1.5	0.314 " (7.972)	0.35 " (8.891)	0.147" (3.737)	0.055 " (1.414)	0.414" (10.504)	0.593" (15.049)	100
190-00035	SNP1.5GHS0M4		0.314 " (7.972)	0.35 " (8.891)	0.147" (3.737)	0.055 " (1.414)	0.414" (10.504)	0.593" (15.049)	1000
192-10020	SNP2GHS0C2	SNP2	0.359 " (9.096)	0.403 " (10.22)	0.233" (5.959)	0.068 " (1.717)	0.477" (12.12)	0.679" (17.271)	100
190-00098	SNP2GHS0M4		0.359 " (9.096)	0.403 " (10.22)	0.233" (5.959)	0.068 " (1.717)	0.477" (12.12)	0.679" (17.271)	1000
190-00132	SNP3GHS0C2	SNP3	0.396 " (10.016)	0.45 " (11.446)	0.234" (5.959)	0.07 " (1.818)	0.567" (14.342)	0.805" (20.402)	100
190-00134	SNP3GHS0M4		0.396 " (10.016)	0.45 " (11.446)	0.234" (5.959)	0.07 " (1.818)	0.567" (14.342)	0.805" (20.402)	1000
192-10040	SNP4GH0C2	SNP4	0.413 " (10.527)	0.462 " (11.753)	0.235" (5.959)	0.067 " (1.717)	0.529" (13.433)	0.756" (19.19)	100
190-00167	SNP4GHS0M4		0.413 " (10.527)	0.462 " (11.753)	0.235" (5.959)	0.067 " (1.717)	0.529" (13.433)	0.756" (19.19)	1000
192-10060	SNP6GHS0C2	SNP6	0.459 " (11.651)	0.522 " (13.286)	0.235" (5.959)	0.07 " (1.818)	0.578" (14.645)	0.846" (21.513)	100
190-00186	SNP6GHS0M4		0.459 " (11.651)	0.522 " (13.286)	0.235" (5.959)	0.07 " (1.818)	0.578" (14.645)	0.846" (21.513)	1000
192-10070	SNP7GHS0C2	SNP7	0.463 " (11.753)	0.558 " (14.206)	0.235" (5.959)	0.07 " (1.818)	0.653" (16.564)	0.981" (24.947)	100
190-00202	SNP7GHS0M4		0.463 " (11.753)	0.558 " (14.206)	0.235" (5.959)	0.07 " (1.818)	0.653" (16.564)	0.981" (24.947)	1000
192-10080	SNP8GHS0C2	SNP8	0.524 " (13.286)	0.599 " (15.228)	0.233" (5.959)	0.07 " (1.818)	0.653" (16.564)	0.981" (24.947)	100
190-00222	SNP8GHS0M4		0.524 " (13.286)	0.599 " (15.228)	0.233" (5.959)	0.07 " (1.818)	0.653" (16.564)	0.981" (24.947)	1000
192-10100	SNP10GHS0C2	SNP10	0.582 " (14.819)	0.664 " (16.863)	0.235" (5.959)	0.069 " (1.717)	0.682" (17.372)	1.038" (26.361)	100
190-00043	SNP10GHS0M4		0.582 " (14.819)	0.664 " (16.863)	0.235" (5.959)	0.069 " (1.717)	0.682" (17.372)	1.038" (26.361)	1000
190-00254	SNP12AGHS0C2	SNP12A	.626 " (15.9)	.716 " (18.2)	.233" (5.92)	.070 " (1.78)	.816" (20.7)	1.172" (29.8)	100
190-00255	SNP12AGHS0M4		.626 " (15.9)	.716 " (18.2)	.233" (5.92)	.070 " (1.78)	.816" (20.7)	1.172" (29.8)	1000
190-00300	SNP14AGHS0C2	SNP14A	0.729 " (18.52)	0.827 " (21.01)	0.234" (5.94)	0.070 " (1.78)	0.823" (20.9)	1.185" (30.1)	100
190-00301	SNP14AGHS0M4		0.729 " (18.52)	0.827 " (21.01)	0.234" (5.94)	0.070 " (1.78)	0.823" (20.9)	1.185" (30.1)	1000
192-10160	SNP16GHS0C2	SNP16	0.776 " (19.735)	0.867 " (21.973)	0.234" (5.959)	0.068 " (1.717)	0.795" (20.2)	1.222" (31.209)	100
190-00076	SNP16GHS0M4		0.776 " (19.735)	0.867 " (21.973)	0.234" (5.959)	0.068 " (1.717)	0.795" (20.2)	1.222" (31.209)	1000
190-00258	SNP18AGHS0C2	SNP18A	.802 " (20.4)	.940 " (23.9)	.240" (6.1)	.070 " (1.78)	.958" (24.3)	1.418" (36)	100
190-00259	SNP18AGHS0M4		.802 " (20.4)	.940 " (23.9)	.240" (6.1)	.070 " (1.78)	.958" (24.3)	1.418" (36)	1000

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes. Snapper performance varies on application and environmental factors; end use testing is highly recommended.



## Snapper Hose Clamps Polyamide 6.6 Glass Filled Impact Modified Heat Stabilized *continued*



Material Data	
Material	<b>Polyamide 6.6 glass filled impact modified heat stabilized (PA66GF13%)</b>
Operating Temperature	<b>-40 °F to +221 °F (-40 °C to +105 °C)</b>
Color	<b>Black</b>
Flammability	<b>UL94 HB</b>

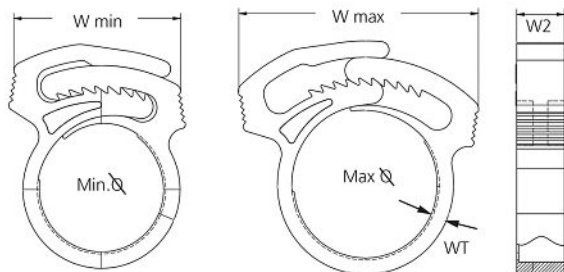


### Product Selection

Article No.	Part No.	Type	Min. Ø	Max. Ø	Width (W2)	Wall Thickness (WT)	Width (W) Min.	Width (W) Max.	Pkg. Qty.
					in. (mm)	in. (mm)	in. (mm)	in. (mm)	
190-00090	<b>SNP19GHS0C2</b>	SNP19	0.878 " (22.28)	1.011 " (25.652)	0.234" (5.959)	0.071 " (1.818)	0.908"(23.028)	1.423" (36.158)	100
190-00093	<b>SNP19GHS0M4</b>								1000
192-10220	<b>SNP22GHS0C2</b>	SNP22	0.948 " (24.119)	1.096 " (27.798)	0.236" (5.959)	0.071 " (1.818)	0.941"(23.937)	1.488" (37.774)	100
190-00111	<b>SNP22GHS0M4</b>								1000
192-10240	<b>SNP24GHS0C2</b>	SNP24	1.007 " (25.55)	1.16 " (29.434)	0.295" (7.474)	0.07 " (1.818)	0.973"(24.745)	1.538" (39.087)	100
190-00119	<b>SNP24GHS0H4</b>								500
190-00127	<b>SNP28GHS0C2</b>	SNP28	1.148 " (29.127)	1.325 " (33.624)	0.291" (7.373)	0.069 "(1.717)	1.018"(25.856)	1.647" (41.814)	100
190-00128	<b>SNP28GHS0H4</b>								500
192-10320	<b>SNP32GHS0K2</b>	SNP32	1.245 " (31.58)	1.436 " (36.485)	0.29" (7.373)	0.069 "(1.717)	1.075" (27.27)	1.741" (44.238)	50
190-00140	<b>SNP32GHS0H4</b>								500
190-00244	<b>SNP33GHS0K2</b>	SNP33	1.311 " (33.317)	1.63 " (41.391)	0.293" (7.474)	0.068 "(1.717)	1.58" (9.797)	2.542" (64.539)	50
190-00148	<b>SNP33GHS0H4</b>								500
190-00149	<b>SNP34GHS0K2</b>	SNP34	1.367 " (34.748)	1.6 " (40.676)	0.295" (7.474)	0.069 "(1.717)	1.198"(30.401)	1.986" (50.399)	50
190-00150	<b>SNP34GHS0H4</b>								500
192-10360	<b>SNP36GHS0K2</b>	SNP36	1.504 " (38.223)	1.762 " (44.764)	0.29" (7.373)	0.068 "(1.717)	1.274" (32.32)	2.113" (53.631)	50
190-00158	<b>SNP36GHS0H4</b>								500
192-10380	<b>SNP38GHS0K2</b>	SNP38	1.629 " (41.391)	1.903 " (48.341)	0.294" (7.474)	0.069 "(1.717)	1.362"(34.643)	2.261" (57.469)	50
190-00163	<b>SNP38GHS0H4</b>								500
191-00005	<b>SNP42NGHS0K2</b>	SNP42N	1.768 " (44.866)	2.054 " (52.224)	0.358" (9.09)	0.069 "(1.717)	1.383"(35.148)	2.325" (59.085)	50
191-00008	<b>SNP42NGHS0C2</b>								100
192-10500	<b>SNP50GHS0C2</b>	SNP50	2.042 " (51.92)	2.327 " (59.07)	0.294" (7.474)	0.068 "(1.717)	1.425"(36.158)	2.364" (60.095)	100
190-00197	<b>SNP60GHS0C2</b>	SNP60	2.308 " (58.66)	2.639 " (67.04)	0.294" (7.474)	0.068 "(1.717)	1.463"(38.481)	2.585" (65.65)	100
190-00209	<b>SNP70GHS0C2</b>	SNP70	2.562 " (65.10)	2.961 " (75.22)	0.374" (9.494)	0.078 " (2.02)	1.834"(46.561)	3.02" (76.659)	100
190-00215	<b>SNP76GHS0C2</b>	SNP76	2.901 " (73.69)	3.276 " (83.19)	0.391" (9.898)	0.067 "(1.717)	1.704"(43.329)	2.862" (72.72)	100
190-00229	<b>SNP80GHS0C2</b>	SNP80	3.224 " (81.86)	3.600 " (91.47)	0.453" (11.514)	0.101 "(2.525)	1.913"(48.581)	3.171" (80.598)	100
190-00249	<b>SNP90GHS0C2</b>	SNP90	3.583 " (91.06)	4.008 " (101.79)	0.389" (9.898)	0.068 "(1.717)	1.936"(49.187)	3.236" (82.214)	100
192-11000	<b>SNP100GHS0X2</b>	SNP100	3.956 " (100.46)	4.491 " (114.06)	0.398" (10.1)	0.099 "(2.424)	2.068"(52.52)	3.543" (89.991)	25
190-00053	<b>SNP101GHS0X2</b>	SNP101	4.121 " (104.65)	4.718 " (119.88)	0.446" (11.312)	0.099 "(2.525)	2.426" (61.61)	4.261"(108.272)	25

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes. Snapper performance varies on application and environmental factors; end use testing is highly recommended.

## Snapper Hose Clamps Polyacetal (POM)



Material Data	
Material	<b>Polyacetal (POM)</b>
Operating Temperature	<b>-40 °F to +185 °F (-40 °C to +85 °C)</b>
Color	<b>White</b>
Flammability	<b>UL94 HB</b>



### Product Selection

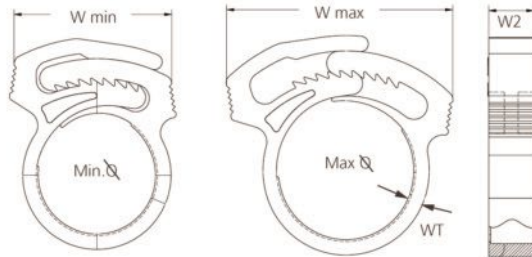
Article No.	Part No.	Type	Min. Ø	Max. Ø	Width (W2)	Wall Thickness (WT)	Width (W) Min.	Width (W) Max.	Pkg. Qty.
					in. (mm)	in. (mm)	in. (mm)	in. (mm)	
190-00022	<b>SNP110C2</b>	SNP1	0.228 " (5.8)	0.256 " (6.5)	0.148" (3.8)	0.04 " (1)	0.32" (8.1)	0.451" (11.5)	100
190-00023	<b>SNP110M4</b>		0.228 " (5.8)	0.256 " (6.5)	0.148" (3.8)	0.04 " (1)	0.32" (8.1)	0.451" (11.5)	1000
190-00027	<b>SNP1.2510C2</b>	SNP1.25	0.269 " (6.8)	0.291 " (7.4)	0.149" (3.8)	0.042 " (1.1)	0.404" (10.3)	0.486" (12.3)	100
190-00028	<b>SNP1.2510M4</b>		0.269 " (6.8)	0.291 " (7.4)	0.149" (3.8)	0.042 " (1.1)	0.404" (10.3)	0.486" (12.3)	1000
190-00033	<b>SNP1.510C2</b>	SNP1.5	0.307 " (7.8)	0.342 " (8.7)	0.146" (3.7)	0.054 " (1.4)	0.41" (10.4)	0.587" (14.9)	100
190-00034	<b>SNP1.510M4</b>		0.307 " (7.8)	0.342 " (8.7)	0.146" (3.7)	0.054 " (1.4)	0.41" (10.4)	0.587" (14.9)	1000
190-00101	<b>SNP210C2</b>	SNP2	0.351 " (8.9)	0.394 " (10)	0.231" (5.9)	0.067 " (1.7)	0.472" (12)	0.672" (17.1)	100
190-00102	<b>SNP210M4</b>		0.351 " (8.9)	0.394 " (10)	0.231" (5.9)	0.067 " (1.7)	0.472" (12)	0.672" (17.1)	1000
190-00135	<b>SNP310C2</b>	SNP3	0.387 " (9.8)	0.44 " (11.2)	0.232" (5.9)	0.069 " (1.8)	0.561" (14.2)	0.797" (20.2)	100
190-00136	<b>SNP310M4</b>		0.387 " (9.8)	0.44 " (11.2)	0.232" (5.9)	0.069 " (1.8)	0.561" (14.2)	0.797" (20.2)	1000
190-00165	<b>SNP410C2</b>	SNP4	0.404 " (10.3)	0.452 " (11.5)	0.233" (5.9)	0.066 " (1.7)	0.524" (13.3)	0.749" (19)	100
190-00170	<b>SNP410M4</b>		0.404 " (10.3)	0.452 " (11.5)	0.233" (5.9)	0.066 " (1.7)	0.524" (13.3)	0.749" (19)	1000
190-00187	<b>SNP610C2</b>	SNP6	0.449 " (11.4)	0.511 " (13)	0.233" (5.9)	0.069 " (1.8)	0.572" (14.5)	0.838" (21.3)	100
190-00190	<b>SNP610M4</b>		0.449 " (11.4)	0.511 " (13)	0.233" (5.9)	0.069 " (1.8)	0.572" (14.5)	0.838" (21.3)	1000
190-00204	<b>SNP710C2</b>	SNP7	0.453 " (11.5)	0.546 " (13.9)	0.233" (5.9)	0.069 " (1.8)	0.647" (16.4)	0.971" (24.7)	100
190-00206	<b>SNP710M4</b>		0.453 " (11.5)	0.546 " (13.9)	0.233" (5.9)	0.069 " (1.8)	0.647" (16.4)	0.971" (24.7)	1000
190-00224	<b>SNP810C2</b>	SNP8	0.513 " (13)	0.586 " (14.9)	0.231" (5.9)	0.069 " (1.8)	0.647" (16.4)	0.971" (24.7)	100
190-00226	<b>SNP810M4</b>		0.513 " (13)	0.586 " (14.9)	0.231" (5.9)	0.069 " (1.8)	0.647" (16.4)	0.971" (24.7)	1000
190-00045	<b>SNP1010C2</b>	SNP10	0.569 " (14.5)	0.65 " (16.5)	0.233" (5.9)	0.068 " (1.7)	0.675" (17.2)	1.028" (26.1)	100
190-00046	<b>SNP1010M4</b>		0.569 " (14.5)	0.65 " (16.5)	0.233" (5.9)	0.068 " (1.7)	0.675" (17.2)	1.028" (26.1)	1000
190-00252	<b>SNP12A10C2</b>	SNP12A	.615 " (15.62)	.704 " (17.88)	.233" (5.92)	.070 " (1.78)	.802" (20.37)	1.152" (29.26)	100
190-00253	<b>SNP12A10M4</b>		.615 " (15.62)	.704 " (17.88)	.233" (5.92)	.070 " (1.78)	.802" (20.37)	1.152" (29.26)	1000
190-00302	<b>SNP14A10C2</b>	SNP14A	0.714 " (18.4)	0.810 " (20.57)	0.233" (5.92)	0.069 " (1.75)	0.805" (20.45)	1.157" (29.39)	100
190-00303	<b>SNP14A10M4</b>		0.714 " (18.4)	0.810 " (20.57)	0.233" (5.92)	0.069 " (1.75)	0.805" (20.45)	1.157" (29.39)	1000
190-00077	<b>SNP1610C2</b>	SNP16	0.759 " (19.31)	0.848 " (21.5)	0.232" (5.9)	0.067 " (1.7)	0.787" (20)	1.21" (30.9)	100
190-00079	<b>SNP1610M4</b>		0.759 " (19.31)	0.848 " (21.5)	0.232" (5.9)	0.067 " (1.7)	0.787" (20)	1.21" (30.9)	1000
181-00256	<b>SNP18A10C2</b>	SNP18A	.790 " (20)	.933 " (23.7)	.239" (6.07)	.067 " (1.7)	.940" (23.9)	1.391" (35.3)	100
190-00257	<b>SNP18A10M4</b>		.790 " (20)	.933 " (23.7)	.239" (6.07)	.067 " (1.7)	.940" (23.9)	1.391" (35.3)	1000

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

Acetal black is also available based upon minimum volume requirements. Snapper performance varies on application and environmental factors; end use testing is highly recommended.



## Snapper Hose Clamps Polyacetal (POM) *continued*



Material Data	
Material	<b>Polyacetal (POM)</b>
Operating Temperature	<b>-40 °F to +185 °F (-40 °C to +85 °C)</b>
Color	<b>White</b>
Flammability	<b>UL94 HB</b>



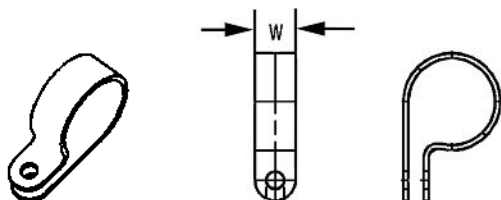
Product Selection									
Article No.	Part No.	Type	Min. Ø	Max. Ø	Width (W2)	Wall Thickness (WT)	Width (W) Min.	Width (W) Max.	Pkg. Qty.
					in. (mm)	in. (mm)	in. (mm)	in. (mm)	
190-00094	<b>SNP1910C2</b>	SNP19	0.859 " (21.8)	0.989 " (25.1)	0.232" (5.9)	0.07 " (1.8)	0.899" (22.8)	1.409" (35.8)	100
190-00095	<b>SNP1910M4</b>		0.859 " (21.8)	0.989 " (25.1)	0.232" (5.9)	0.07 " (1.8)	0.899" (22.8)	1.409" (35.8)	1000
190-00113	<b>SNP2210C2</b>	SNP22	0.928 " (23.6)	1.072 " (27.2)	0.234" (5.9)	0.07 " (1.8)	0.932" (23.7)	1.473" (37.4)	100
190-00114	<b>SNP2210M4</b>		0.928 " (23.6)	1.072 " (27.2)	0.234" (5.9)	0.07 " (1.8)	0.932" (23.7)	1.473" (37.4)	1000
190-00121	<b>SNP2410C2</b>	SNP24	0.985 " (25)	1.135 " (28.8)	0.292" (7.4)	0.069 " (1.8)	0.963" (24.5)	1.523" (38.7)	100
190-00122	<b>SNP2410H4</b>		0.985 " (25)	1.135 " (28.8)	0.292" (7.4)	0.069 " (1.8)	0.963" (24.5)	1.523" (38.7)	500
190-00124	<b>SNP2810C2</b>	SNP28	1.123 " (28.5)	1.296 " (32.9)	0.288" (7.3)	0.068 " (1.7)	1.008" (25.6)	1.631" (41.4)	100
190-00125	<b>SNP2810H4</b>		1.123 " (28.5)	1.296 " (32.9)	0.288" (7.3)	0.068 " (1.7)	1.008" (25.6)	1.631" (41.4)	500
190-00142	<b>SNP3210K2</b>	SNP32	1.218 " (30.9)	1.405 " (35.7)	0.287" (7.3)	0.068 " (1.7)	1.064" (27)	1.724" (43.8)	50
190-00143	<b>SNP3210H4</b>		1.218 " (30.9)	1.405 " (35.7)	0.287" (7.3)	0.068 " (1.7)	1.064" (27)	1.724" (43.8)	500
190-00146	<b>SNP3310K2</b>	SNP33	1.283 " (32.6)	1.595 " (40.5)	0.29" (7.4)	0.067 " (1.7)	1.564" (9.7)	2.517" (63.9)	50
190-00147	<b>SNP3310H4</b>		1.283 " (32.6)	1.595 " (40.5)	0.29" (7.4)	0.067 " (1.7)	1.564" (9.7)	2.517" (63.9)	500
190-00151	<b>SNP3410K2</b>	SNP34	1.338 " (34)	1.566 " (39.8)	0.292" (7.4)	0.068 " (1.7)	1.186" (30.1)	1.966" (49.9)	50
190-00152	<b>SNP3410H4</b>		1.338 " (34)	1.566 " (39.8)	0.292" (7.4)	0.068 " (1.7)	1.186" (30.1)	1.966" (49.9)	500
190-00157	<b>SNP3610K2</b>	SNP36	1.472 " (37.4)	1.724 " (43.8)	0.287" (7.3)	0.067 " (1.7)	1.261" (32)	2.092" (53.1)	50
190-00156	<b>SNP3610H4</b>		1.472 " (37.4)	1.724 " (43.8)	0.287" (7.3)	0.067 " (1.7)	1.261" (32)	2.092" (53.1)	500
190-00162	<b>SNP3810K2</b>	SNP38	1.594 " (40.5)	1.862 " (47.3)	0.291" (7.4)	0.068 " (1.7)	1.349" (34.3)	2.239" (56.9)	50
190-00245	<b>SNP3810H4</b>		1.594 " (40.5)	1.862 " (47.3)	0.291" (7.4)	0.068 " (1.7)	1.349" (34.3)	2.239" (56.9)	500
190-00247	<b>SNP42N10K2</b>	SNP42N	1.73 " (43.9)	2.01 " (51.1)	0.354" (9)	0.068 " (1.7)	1.369" (34.8)	2.302" (58.5)	50
190-00246	<b>SNP42N10C2</b>		1.73 " (43.9)	2.01 " (51.1)	0.354" (9)	0.068 " (1.7)	1.369" (34.8)	2.302" (58.5)	100
190-00248	<b>SNP5010C2</b>	SNP50	1.999 " (50.8)	2.277 " (57.8)	0.291" (7.4)	0.067 " (1.7)	1.411" (35.8)	2.341" (59.5)	100
190-00196	<b>SNP6010C2</b>	SNP60	2.259 " (57.4)	2.582 " (65.6)	0.291" (7.4)	0.067 " (1.7)	1.449" (38.1)	2.559" (65)	100
190-00212	<b>SNP7010C2</b>	SNP70	2.507 " (63.7)	2.897 " (73.6)	0.37" (9.4)	0.077 " (2)	1.816" (46.1)	2.99" (75.9)	100
190-00217	<b>SNP7610C2</b>	SNP76	2.839 " (72.1)	3.206 " (81.4)	0.387" (9.8)	0.066 " (1.7)	1.687" (42.9)	2.834" (72)	100
190-00231	<b>SNP8010C2</b>	SNP80	3.155 " (80.1)	3.523 " (89.5)	0.449" (11.4)	0.1 " (2.5)	1.894" (48.1)	3.14" (79.8)	100
190-00233	<b>SNP9010C2</b>	SNP90	3.506 " (89.1)	3.922 " (99.6)	0.385" (9.8)	0.067 " (1.7)	1.917" (48.7)	3.204" (81.4)	100
190-00052	<b>SNP10010X2</b>	SNP100	3.871 " (98.3)	4.395 " (111.6)	0.394" (10)	0.098 " (2.4)	2.048" (52)	3.508" (89.1)	25
190-00250	<b>SNP10110X2</b>	SNP101	4.033 " (102.4)	4.617 " (117.3)	0.442" (11.2)	0.098 " (2.5)	2.402" (61)	4.219" (107.2)	25

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

## Clamps and Clips

### P Clamps

HellermannTyton's P clamps are designed for locating wires, cables, and components in instruments, appliances, and electrical apparatus. These injection molded clamps are used for both internal and external installations. The inside edges are radiused to prevent cutting into cable insulation.



Material Data	
Material	<b>Polyamide 6.6 heat stabilized (PA66HS)</b>
Color	<b>Black</b>
Operating Temperature	<b>-40 °F to +221 °F (-40 °C to +105 °C)</b>
Flammability	<b>UL94 V2</b>



Product Selection

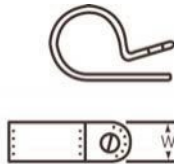
Article No.	Part No.	Type	Max. Ø Bundle	Width (W)	Mounting Hole Centers	Mounting Hole Ø	Radius	Pkg. Qty.
			in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	
211-60000	<b>211-60000</b>	H1P	.125" (3.2)	.393" (10.0)	.3346" (8.5)	.1654" (4.2)	.01969" (0.5)	100
211-60010	<b>211-60010</b>	H1P	.125" (3.2)	.393" (10.0)	.3346" (8.5)	.1654" (4.2)	.01969" (0.5)	1000
211-60001	<b>211-60001</b>	H2P	.196" (5.0)	.3937" (10.0)	.375" (9.5)	.1654" (4.2)	.03937" (1.0)	100
211-60020	<b>211-60020</b>	H2P	.196" (5.0)	.3937" (10.0)	.375" (9.5)	.1654" (4.2)	.03937" (1.0)	1000
211-60002	<b>211-60002</b>	H3P	.255" (6.5)	.3937" (10.0)	.3937" (10.0)	.1654" (4.2)	.03937" (1.0)	100
211-60040	<b>211-60040</b>	H3P	.255" (6.5)	.3937" (10.0)	.3937" (10.0)	.1654" (4.2)	.03937" (1.0)	1000
211-60003	<b>211-60003</b>	H4P	.314" (8.0)	.3937" (10.0)	.3937" (10.0)	.1654" (4.2)	.03937" (1.0)	100
211-60050	<b>211-60050</b>	H4P	.314" (8.0)	.3937" (10.0)	.3937" (10.0)	.1654" (4.2)	.03937" (1.0)	1000
211-60005	<b>211-60005</b>	H6P	.433" (11.0)	.3937" (10.0)	.5118" (13.0)	.1654" (4.2)	.03937" (1.0)	100
211-60061	<b>211-60061</b>	H6P	.433" (11.0)	.3937" (10.0)	.5118" (13.0)	.1654" (4.2)	.03937" (1.0)	1000
211-60006	<b>211-60006</b>	H7P	.492" (12.5)	.3937" (10.0)	.5512" (14.0)	.1654" (4.2)	.05906" (1.5)	100
211-60078	<b>211-60078</b>	H7P	.492" (12.5)	.3937" (10.0)	.5512" (14.0)	.1654" (4.2)	.05906" (1.5)	1000
211-60007	<b>211-60007</b>	H8P	.55" (14.0)	.3937" (10.0)	.5906" (15.0)	.1654" (4.2)	.05906" (1.5)	100
211-60090	<b>211-60090</b>	H8P	.55" (14.0)	.3937" (10.0)	.5906" (15.0)	.1654" (4.2)	.05906" (1.5)	1000
211-60008	<b>211-60008</b>	H9P	.629" (16.0)	.3937" (10.0)	.63" (16.0)	.1654" (4.2)	.05906" (1.5)	1000
211-60009	<b>211-60009</b>	H10P	.688" (17.5)	.3937" (10.0)	.6693" (17.0)	.1654" (4.2)	.05906" (1.5)	1000
211-60120	<b>211-60120</b>	H11P	.748" (19.0)	.3937" (10.0)	.7087" (18.0)	.1654" (4.2)	.07874" (2.0)	1000
211-60140	<b>211-60140</b>	H13P	.866" (22.0)	.4724" (12.0)	.8071" (20.5)	.2047" (5.2)	.07874" (2.0)	1000
211-60160	<b>211-60160</b>	H15P	1.003" (25.5)	.4724" (12.0)	.9055" (23.0)	.2047" (5.2)	.09843" (2.5)	1000

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

## T Clamps

### T3 Series

T Series clamps are injection molded and designed for applications in electronics, automotive, aircraft, and appliance industries. The T3 series has a 3/8" wide contact area. All contact edges have a full radius for product protection, and sizes are clearly marked on each clamp.



Material Data		RoHS
Material	<b>Polyamide 6.6 (PA66)</b>	
Operating Temperature	<b>-40 °F to +185 °F (-40 °C to +85 °C)</b>	
Flammability	<b>UL94 V2</b>	

**UL**  
US  
File# E64139

#### Product Selection

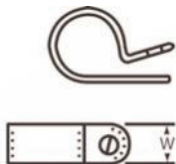
Article No.	Part No.	Type	Max. Ø Bundle	Width (W)	Mounting Hole Centers	Wall Thickness	Color	Pkg. Qty.
			in. (mm)	in. (mm)	in. (mm)	in. (mm)		
<b>T Clamps - T3 Series</b>								
211-00132	<b>T3D012510M4</b>	T3D0125	.125" (3.2)	.375" (9.5)	.329" (8.4)	.050" (1.3)	White	1000
211-00131	<b>T3D01250M4</b>	T3D0125					Black	1000
211-00158	<b>T3D018710M4</b>	T3D0187	.188" (4.7)	.375" (9.5)	.430" (10.9)	.050" (1.3)	White	1000
211-00133	<b>T3D01870M4</b>	T3D0187					Black	1000
211-00135	<b>T3D025010M4</b>	T3D0250	.250" (6.3)	.375" (9.5)	.410" (10.4)	.050" (1.3)	White	1000
211-00134	<b>T3D02500M4</b>	T3D0250					Black	1000
211-00137	<b>T3D031210M4</b>	T3D0312	.313" (7.9)	.375" (9.5)	.495" (12.6)	.050" (1.3)	Black	1000
211-00136	<b>T3D03120M4</b>	T3D0312					Black	1000
211-00139	<b>T3D037510M4</b>	T3D0375	.375" (9.5)	.375" (9.5)	.595" (15.1)	.050" (1.3)	White	1000
211-00138	<b>T3D03750M4</b>	T3D0375					Black	1000
211-00140	<b>T3D043710M4</b>	T3D0437	.438" (11.1)	.375" (9.5)	.574" (14.6)	.050" (1.3)	White	1000
211-00146	<b>T3D04370M4</b>	T3D0437					Black	1000
211-00141	<b>T3D050010M4</b>	T3D0500	.500" (12.7)	.375" (9.5)	.605" (15.4)	.050" (1.3)	White	1000
211-00142	<b>T3D05000M4</b>	T3D0500					Black	1000
211-00143	<b>T3D056210M4</b>	T3D0562	.563" (14.3)	.375" (9.5)	.606" (15.4)	.050" (1.3)	White	1000
211-00159	<b>T3D05620M4</b>	T3D0562					Black	1000
211-00145	<b>T3D062510M4</b>	T3D0625	.625" (15.8)	.375" (9.5)	.678" (17.2)	.050" (1.3)	White	1000
211-00144	<b>T3D06250M4</b>	T3D0625					Black	1000

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

## T Clamps

### T5 Series

T Series clamps are injection molded and designed for applications in electronics, automotive, aircraft, and appliance industries. The T5 series provides a full 1/2" wide contact area. All contact edges have a full radius for product protection, and sizes are clearly marked on each clamp.



Material Data	
Material	Polyamide 6.6 (PA66)
Operating Temperature	-40 °F to +185 °F (-40 °C to +85 °C)
Flammability	UL94 V2



  
 File# E64139

Product Selection		Type	Max. Ø Bundle	Width (W)	Mounting Hole Centers	Wall Thickness	Color	Pkg. Qty.
Article No.	Part No.		in. (mm)	in. (mm)	in. (mm)	in. (mm)		
<b>T Clamps - T5 Series</b>								
211-00117	<b>T5D012510M4</b>	T5D0125	.125" (3.2)	.500" (12.7)	.315" (9.1)	.050" (1.3)	White	1000
211-00129	<b>T5D01250M4</b>	T5D0125					Black	1000
211-00118	<b>T5D018710M4</b>	T5D0187	.188" (4.7)	.500" (12.7)	.425" (10.8)	.050" (1.3)	White	1000
211-00130	<b>T5D01870M4</b>	T5D0187					Black	1000
211-00109	<b>T5D025010M4</b>	T5D0250	.250" (6.3)	.500" (12.7)	.410" (11.7)	.050" (1.3)	White	1000
211-00123	<b>T5D02500M4</b>	T5D0250					Black	1000
211-00110	<b>T5D031210M4</b>	T5D0312	.313" (7.9)	.500" (12.7)	.500" (12.7)	.050" (1.3)	White	1000
211-00147	<b>T5D03120M4</b>	T5D0312					Black	1000
211-00111	<b>T5D037510M4</b>	T5D0375	.375" (9.5)	.500" (12.7)	.530" (13.4)	.050" (1.3)	White	1000
211-00124	<b>T5D03750M4</b>	T5D0375					Black	1000
211-00148	<b>T5D043710M4</b>	T5D0437	.438" (11.1)	.500" (12.7)	.560" (14.2)	.050" (1.3)	White	1000
211-00149	<b>T5D04370M4</b>	T5D0437					Black	1000
211-00112	<b>T5D050010M4</b>	T5D0500	.500" (12.7)	.500" (12.7)	.595" (15.1)	.050" (1.3)	White	1000
211-00125	<b>T5D05000M4</b>	T5D0500					Black	1000
211-00113	<b>T5D056210M4</b>	T5D0562	.563" (14.3)	.500" (12.7)	.606" (15.4)	.050" (1.3)	White	1000
211-00150	<b>T5D05620M4</b>	T5D0562					Black	1000
211-00114	<b>T5D062510M4</b>	T5D0625	.625" (15.8)	.500" (12.7)	.655" (16.6)	.050" (1.3)	White	1000
211-00126	<b>T5D06250M4</b>	T5D0625					Black	1000
211-00115	<b>T5D075010M4</b>	T5D0750	.750" (19.0)	.500" (12.7)	.780" (19.8)	.050" (1.3)	White	1000
211-00127	<b>T5D07500M4</b>	T5D0750					Black	1000
211-00116	<b>T5D087510H4</b>	T5D0875	.875" (22.2)	.500" (12.7)	.845" (21.4)	.050" (1.3)	White	500
211-00128	<b>T5D08750H4</b>	T5D0875					Black	500
211-00119	<b>T5D100010H4</b>	T5D1000	1.000" (25.4)	.500" (12.7)	.910" (23.1)	.050" (1.3)	White	500
211-00151	<b>T5D10000H4</b>	T5D1000					Black	500
211-00120	<b>T5D112510H4</b>	T5D1125	1.125" (28.6)	.500" (12.7)	.970" (24.6)	.050" (1.3)	White	500
211-00152	<b>T5D11250H4</b>	T5D1125					Black	500
211-00153	<b>T5D118710H4</b>	T5D1187	1.188" (30.1)	.500" (12.7)	1.000" (25.4)	.050" (1.3)	White	500
211-00154	<b>T5D11870H4</b>	T5D1187					Black	500
211-00121	<b>T5D125010F4</b>	T5D1250	1.250" (31.7)	.500" (12.7)	1.060" (26.9)	.050" (1.3)	White	250
211-00155	<b>T5D12500F4</b>	T5D1250					Black	250
211-00157	<b>T5D137510F4</b>	T5D1375	1.375" (34.9)	.500" (12.7)	1.125" (28.9)	.050" (1.3)	White	250
211-00156	<b>T5D13750F4</b>	T5D1375					Black	250
211-00122	<b>T5D150010F4</b>	T5D1500	1.500" (38.1)	.500" (12.7)	1.190" (30.2)	.050" (1.3)	White	250

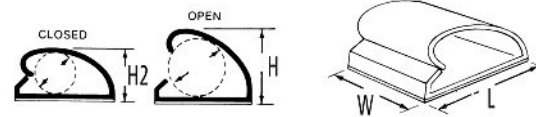
Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

## WAC Adhesive

WAC Adhesive clamps offer a fast, convenient, low cost method of routing wires and cables. The easy to install adhesive system eliminates the time and expense of drilling holes. Ideal for economical wire and cable retention applications. Extruded from PVC. For 0.5" to 1" bundles.

Material Data	
Material	PVC (Polyvinylchloride)
Color	Gray
Operating Temperature	-20 °F to +150 °F (-28 °C to +65 °C)
Flammability	UL94 V0 (excluding adhesive)

RoHS



Product Selection			Min. Ø Bundle in. (mm)	Max. Ø Bundle in. (mm)	Length (L) in. (mm)	Width (W) in. (mm)	Height (H) in. (mm)	Height (H2) in. (mm)	Pkg. Qty.
Article No.	Part No.	Type							
151-00667	<b>151-00667</b>	WACO75	0.5" (12.7)	0.75" (19.1)	1.13" (28.7)	1" (25.4)	0.62" (15.75)	1.05" (26.7)	500
151-00668	<b>151-00668</b>	WAC100	0.75" (19.1)	1.0" (25.4)	1.5" (38.1)	1.25" (31.75)	0.85" (21.59)	1.39" (34.3)	500

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

## RB Clips

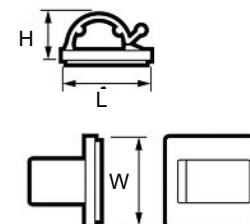
RB self-adhesive clips are ideal for cable and pipe bundles. Bundles are easily snapped into or out of clips. The RB clips suit diameters of 1/8", 5/16", and 1/2".



Adhesive clips come in pairs connected together on adhesive liner.

Material Data	
Material	Polyamide 6.6 (PA66)
Color	Natural
Operating Temperature	-40 °F to +185 °F (-40 °C to +85 °C)
Flammability	UL94 V2 (excluding adhesive)

RoHS

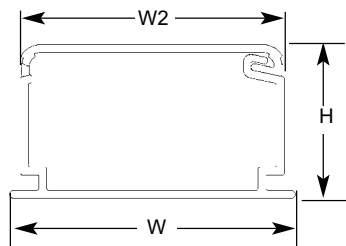
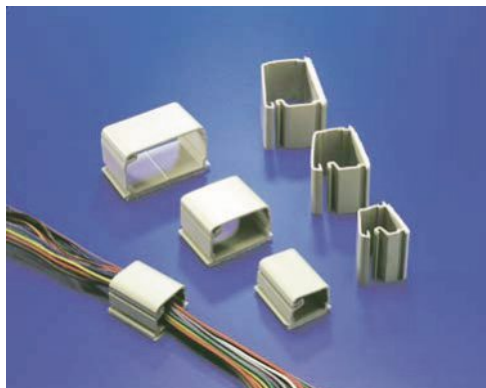


Product Selection			Max. Ø Bundle in. (mm)	Length (L) in. (mm)	Width (W) in. (mm)	Height (H) in. (mm)	Pkg. Qty.
Article No.	Part No.	Type					
151-14005	<b>RB5H4</b>	RB5	.1969" (5.0)	.75" (19.0)	.75" (19.0)	.24" (6.0)	500
151-13608	<b>RB8L4</b>	RB8	.315" (8.0)	1" (25.0)	1" (25.0)	.45" (11.5)	200
151-00506	<b>RB14L4</b>	RB14	.5512" (14.0)	1.307" (33.2)	1.079" (27.4)	.63" (16.0)	200

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

## TSR Adhesive Clips

TSR clips are designed for HellermannTyton's TSR surface raceway. The co-extruded hinge offers almost unlimited access to wire and cable without deformation or signs of wear often found when using many conventional clips. Designed for applications that require repeated access to the wire and cable, TSR clips are easy to open and close quickly and repeatedly. The tough, rubber-based adhesive allows for permanent bond to most surfaces. TSR clips are especially useful in prototype construction, engineering labs, or where constant changes are necessary.



### Material Data

Material	PVC (Polyvinylchloride)
Color	Ivory
Flammability	UL94 V0 (excluding adhesive)



### Product Selection

Article No.	Part No.	Type	Max. Ø Bundle	Length (L)	Width (W)	Width (W2)	Height (H)	Pkg. Qty.
			in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	
151-00278	<b>SRCI0500C2</b>	SRCI0500	.50" (12.7)	.755" (19.17)	.84" (21.3)	.75" (19.05)	.50" (12.7)	100
151-00279	<b>SRCI0750C2</b>	SRCI0750	.75" (19.05)	1.25" (31.75)	1.36" (34.5)	1.25" (31.75)	.75" (19.05)	100
151-00280	<b>SRCI1000K2</b>	SRCI1000	1.0" (25.4)	1.75" (44.45)	1.88" (47.8)	1.75" (44.45)	1.0" (25.4)	50

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

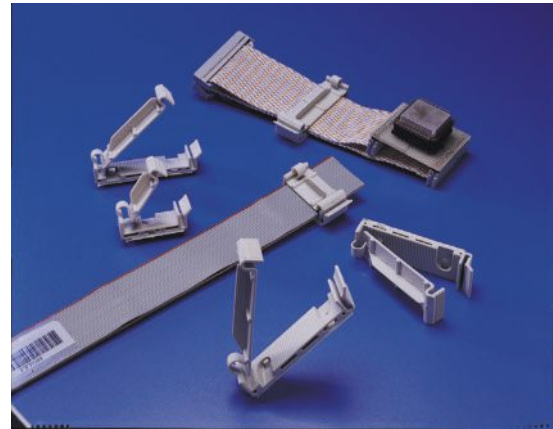


## Dual Adjustable Flat Ribbon Cable Clamps

Designed to route, protect and secure flat ribbon cables in computers, electronics, panels and components, this unique adjustable clamp will not damage sensitive wire and cable. The clamp will adjust and close to the exact height of the ribbon cable, using only as much force as needed to secure the cable. The clamp is releasable on demand and adjustable on both sides. The low profile design allows for use in confined areas where space is a premium.

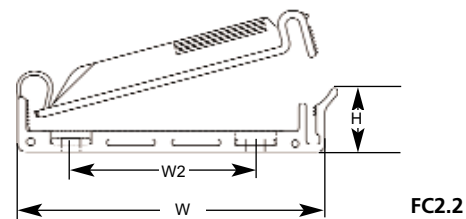
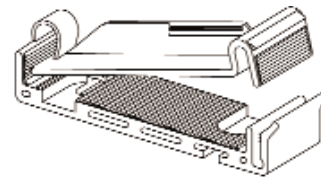
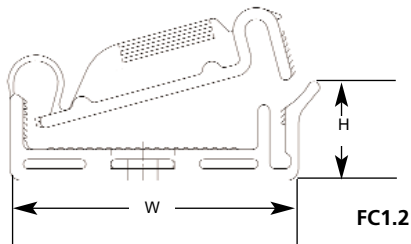
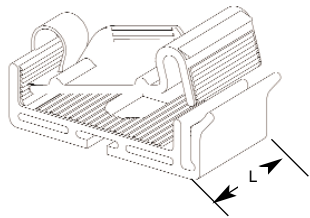
The clamp is adjustable so that single or stacked cable can be routed. The "snap clamp" design of this flat ribbon clamp makes it an excellent choice for specification and installation.

Both adhesive backed and non-adhesive screw mount versions are available.



### Material Data

Material	<b>Polyamide 6.6 (PA66)</b>
Color	<b>Telecom Gray</b>
Operating Temperature	<b>-40 °F to +185 °F (-40 °C to +85 °C)</b>
Flammability	<b>UL94 V2 (excluding adhesive)</b>



### Product Selection

Article No.	Part No.	Type	Length (L)	Width (W)	Width (W2)		Height (H)	Mounting Hole Ø		Max Cable Width	Pkg. Qty.
			in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	
<b>Adhesive</b>											
154-00013	<b>FC1.2AK2</b>	FC1.2A	.75" (19)	1.5" (38.1)	n/a	n/a	.51" (13.1)	n/a	n/a	1.2" (30.48)	50
154-00012	<b>FC1.2AH4</b>	FC1.2A	.75" (19)	1.5" (38.1)	n/a	n/a	.51" (12.9)	n/a	n/a	1.2" (30.48)	500
154-00017	<b>FC2.2AK2</b>	FC2.2A	.75" (19)	2.5" (63.5)	n/a	n/a	.51" (12.75)	n/a	n/a	2.0" (50.8)	50
154-00016	<b>FC2.2AH4</b>	FC2.2A	.75" (19)	2.5" (63.5)	n/a	n/a	.51" (12.75)	n/a	n/a	2.0" (50.8)	500
<b>Non-Adhesive</b>											
154-00011	<b>FC1.2K2</b>	FC1.2	.75" (19)	1.5" (38.1)	n/a	n/a	.51" (12.9)	.138"	(6.0)	1.2" (30.48)	50
154-00010	<b>FC1.2H4</b>	FC1.2	.75" (19)	1.5" (38.1)	n/a	n/a	.51" (12.9)	.138"	(6.0)	1.2" (30.48)	500
154-00015	<b>FC2.2K2</b>	FC2.2	.75" (19)	2.5" (63.5)	1.5" (38.1)	1.5" (38.1)	.51" (12.95)	.138"	(6.0)	2.0" (50.8)	50
154-00014	<b>FC2.2H4</b>	FC2.2	.75" (19)	2.5" (63.5)	1.5" (38.1)	1.5" (38.1)	.51" (12.95)	.138"	(6.0)	2.0" (50.8)	500

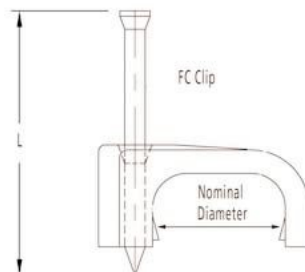
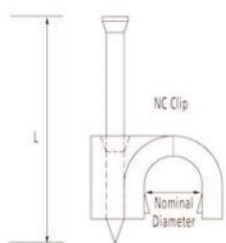
Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

## Nail Clips

HellermannTyton nail clips are easy to use and highly reliable. The tough, precision engineered clips hold wire and cable securely in place. The nail is hardened for driving into wood, masonry joints, cinder block and mortar. The nails are also perpendicular to the work surface and are driven in straight, greatly reducing cracking. The nail clips do not have sharp edges, which reduce the chance of cutting cable jackets or sheaths and causing signal loss.



Material Data	
Material	Polyethylene (PE), Steel (ST)



### Product Selection

Article No.	Part No.	Type	Nominal Ø in. (mm)	Length (L) in. (mm)	Application	Color	Pkg. Qty.
148-00005	<b>NC3.50</b>	NC3.5	.138" (3.5)	.630" (16)	14# Ground Wire, Telecom 1 pair	Black	100
148-00006	<b>NC3.510</b>	NC3.5	.138" (3.5)	.630" (16)		White	100
148-00007	<b>NC50</b>	NC5	.197" (5)	.630" (16)	Telecom 4 pair	Black	100
148-00008	<b>NC510</b>	NC5	.197" (5)	.630" (16)		White	100
148-00009	<b>NC60</b>	NC6	.236" (6)	.630" (16)	Telecom 6 pair, RG59	Black	100
148-00010	<b>NC610</b>	NC6	.236" (6)	.630" (16)		White	100
148-00011	<b>NC70</b>	NC7	.276" (7)	.787" (20)	RG6 and RG59 Double Shielded	Black	100
148-00012	<b>NC710</b>	NC7	.276" (7)	.787" (20)		White	100
148-00013	<b>NC80</b>	NC8	.315" (8)	.787" (20)	Telecom 10 pair RG7, and RG6 Double and Quad Shielded	Black	100
148-00014	<b>NC810</b>	NC8	.315" (8)	.787" (20)		White	100
148-00015	<b>NC90</b>	NC9	.354" (9)	.787" (20)	Telecom 12 pair	Black	100
148-00016	<b>NC910</b>	NC9	.354" (9)	.787" (20)		White	100
148-00003	<b>NC110</b>	NC11	.433" (11)	.984" (25)	Telecom 25 pair	Black	100
148-00004	<b>NC1110</b>	NC11	.433" (11)	.984" (25)		White	100
148-00017	<b>FC140</b>	FC14	.551" (14)	.984" (25)	RG59 and RG6 Flat Twin and Ground	Black	100
148-00018	<b>FC1410</b>	FC14	.551" (14)	.984" (25)		White	100

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

# IDENTIFICATION SYSTEMS

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# TagPrint<sup>®</sup>PRO 3.0

## Increase Productivity, Reduce Errors and Decrease Time Spent Producing Labels with a Complete Labeling Management Solution from HellermannTyton

HellermannTyton's labeling system is comprised of the feature-rich labeling design software – TagPrint Pro 3.0, the highest quality thermal transfer, laser and ink jet printable labels, and a complete line of desk top thermal transfer printers.

### Simplify Your Label Design and Printing Process with TagPrint Pro 3.0

TagPrint Pro 3.0 is the cost-effective, easy-to-use label design and printing software in the HellermannTyton labeling system for achieving improved efficiency in wire and component marking, asset tagging, and structured cabling identification. Compatible with Windows<sup>®</sup> 7, Vista and XP as well as future operating systems such as Windows<sup>®</sup> 8, TagPrint Pro 3.0 delivers an individualized, task-based experience that enables a user to easily develop labels with bar codes, text and graphics to meet numerous applications.

Designed for the industry specific needs of a business producing products on a shop floor or labeling products at a remote job site, the intuitive interface of TagPrint Pro 3.0 simplifies the process of creating labels. TagPrint Pro 3.0 streamlines labeling production by offering a user full control over the importing or entering of data, advanced security features, the option to group label designs under a single file name or job number, and the ability to batch print to either one or more printers at the same time.

Increase efficiency and reduce labor. TagPrint Pro 3.0 allows for complete management of the labeling production process with a label design software system that simplifies the label creation process used to identify cables, tubes, conduits, components and equipment.

#### 1 Familiar Task-based Navigation

TagPrint Pro 3.0 has a Ribbon interface that offers quick and easy access to the commands that are needed to complete a task. Commands are organized in logical groups, which are collected together under tabs. Each tab relates to a type of activity, such as "Label", "Table", "Print" and "Utility".

#### 2 Batch Printing

3.0 has a "print-later" feature for the purpose of batching under one file name in a simple print utility. Using built-in Macros, design each label and then define print options for execution at time of printing. Access the project file and concurrently print labels to a single printer or multiple printers.

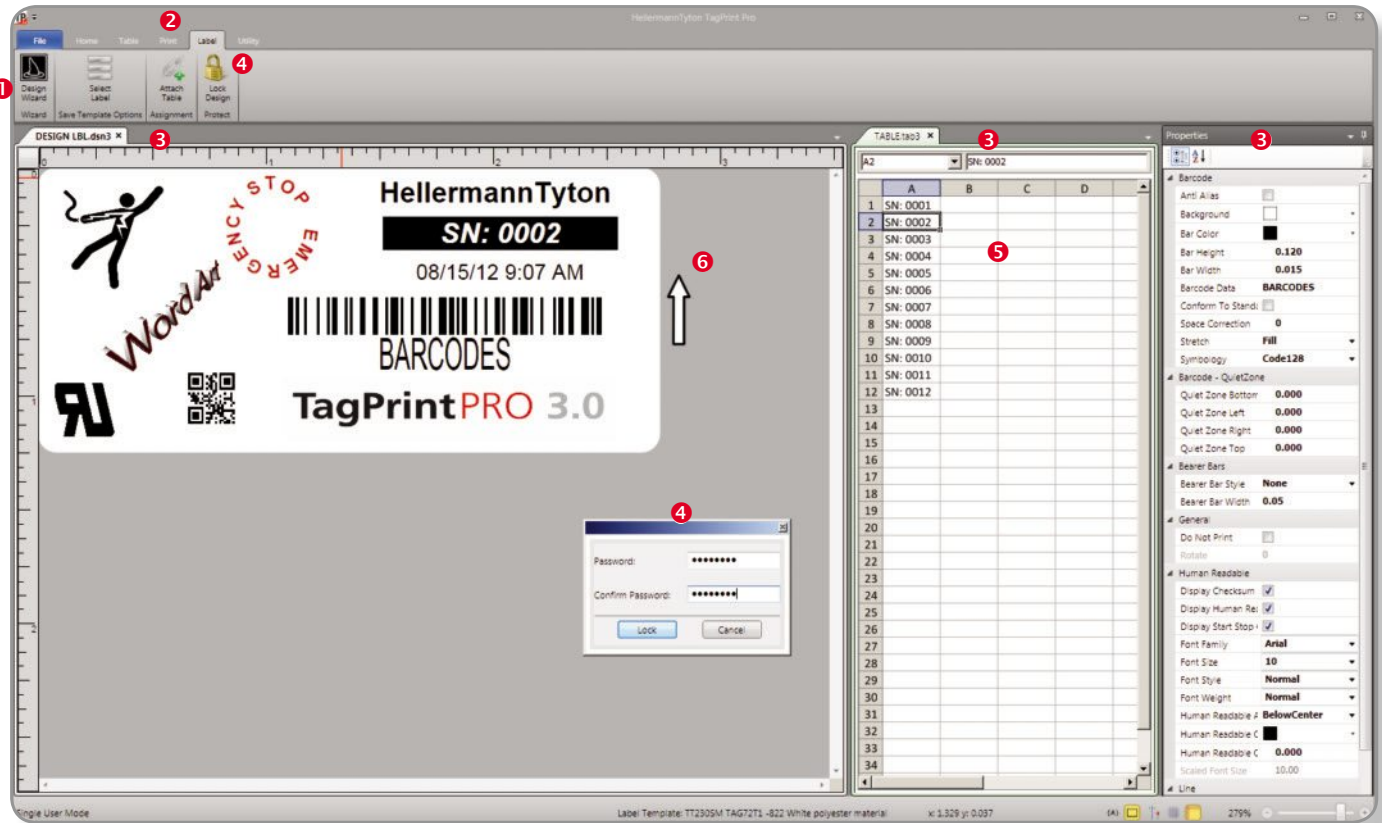
#### 3 At-a-glance Interface

Whether it is one label or a page of labels, the 3.0 interface was designed to allow ease of control over print jobs from a single screen. Information is viewable at a glance so a user can view object properties, data information, and actual label layout at the same time. When changes are made, information is updated.

#### 4 Built-in Security

TagPrint Pro 3.0 offers a built-in security system for the restriction of use or protection of data. This feature allows the user to lockout or password protect label designs and data tables from unauthorized label editing. Available for purchase as a single-user or network license.





### 5 Expanded Import Capabilities and "Live Sync"

3.0 has the ability to import a database that has been exported from another program (i.e., CAD) or connect to existing database (i.e., Excel) files with the added ability to sync up to that database at timed intervals set by the user. If enabled, this feature allows variable information to be updated automatically so that print data is fully controlled from one location without a manual refresh at each computer terminal.

### 6 Editing Convenience

Label designs can be edited in Portrait or Landscape mode, as well as show the direction of label feed next to the design.

### "PIN" Favorites

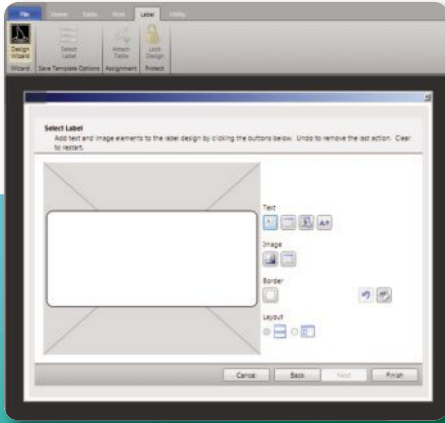
Tagprint Pro 3.0 allows the user to "pin" saved label designs and data tables making them immediately available in the file menu.

### Single-user License or Network Version Available

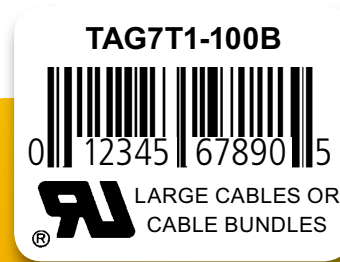
TagPrint Pro 3.0 is available as a single-user license or as a network version which allows a user to share printers, label designs, and data tables from multiple workstations within a single location.



## Enhanced Features

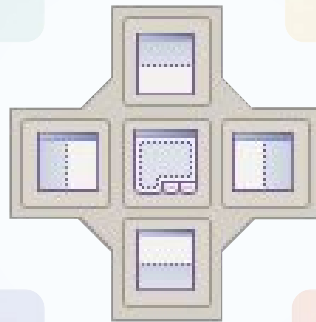


Optional **wizards** easily guide a user through the addition of text, images, and barcodes to create a label.



**Barcodes now automatically scale** and fit within the label eliminating the need to adjust barcode density, barcode ratio, and other attributes to get the barcode to fit on small labels.

The Screen View can be **Customized** by the End User.

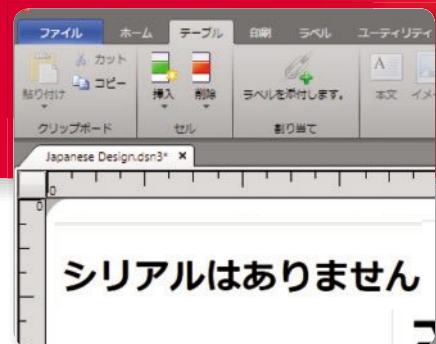


Manage and change the position and location of the screen attributes (snap-to properties).

Includes time stamp customization for easy insertion of date and/or time fields into the labels.



Interface can be configured to any one of a **number of supported languages** including: English, German, Spanish, French, Portuguese, Japanese and Korean.





## DESIGN FEATURES

- TagPrint® Pro 3.0 is What You See Is What You Get (WYSIWYG) label creation software with practical pull-down menus and a wide array of design options.
- In PREVIEW mode, view multiple labels on a sheet at one time.
- Word Art for user creation of unique text.
- Open and print multiple label designs at one time.
- Save label designs as .jpg, or .xml files.
- Scale text size by simply increasing or decreasing the text box size on the label design.
- Scale text by height or width or by character spacing.
- Auto-distribute text.
- Draw lines and boxes.
- Text path capabilities (make text go in a circle).
- TagPrint Pro 3.0 allows for various templates and data tables to be open concurrently.

## GRAPHIC FEATURES

- Manipulate graphics by forcing them to fit or automatically centering them in a specified area.
- Easily link graphics to the table for adding different graphics to different labels.
- Software includes hundreds of clip art images (or use your own).
- Flip, rotate, inverse or mirror image graphics and text.
- Adjust opacity of text and graphics.

## BAR CODE FEATURES

- Human readable on top, side or bottom of the bar code.
- Control the position of the barcode properties box in TagPrint Pro 3.0.
- Allow "bold" text in the bar code.
- Print the most popular bar code symbologies. Datamatrix ECC 200, Code 39, Code 39 Extended, Code 128, EAN/UCC 128, QR Code, EAN 13, Interleaved 2/5, PDF417, UPC-A as well as many other types.
- Preview the barcodes on-screen before printing to ensure they will fit in the space provided.
- Control bar code specifications such as module, ratio, compensation and height.

## PRINTING FEATURES

- Full software control of printer features and settings, eliminating the need to go to the printer driver.
- PREVIEW mode allows the user to check accuracy prior to printing.
- Print to virtually all thermal transfer, laser, ink jet or dot matrix printers with a valid 32 or 64 bit Windows or Windows NT driver.
- Select a "Do Not Print" option for specific objects on the label.
- Allows the user to customize the print functions.
- Stores heat and speed settings in the template, when saved.

## TABLE FEATURES

- Open imported files directly into the table.
- Reuse the same table with different label designs.
- Create serial numbers automatically.
- TagPrint Pro 3.0 will auto size text when printing from a table.
- Data in the table will text wrap so that all the data in a cell is always visible.
- Copy rows to columns automatically.
- Cut and paste between cells.
- Insert and delete columns and rows.
- Import using the ASCII or ODBC utility field.
- Store saved label designs in each row of a column within a single table.
- Print multiple, different label designs from a single table.

Product Selection			
Part No.	Type	Description	Pkg. Qty.
556-00035	TAGPRINT3	Single-user License	1
556-00042	TAGPRINT3UPGRD	Single-user License Upgrade	1
556-00036	TAGPRINT3LIC	2-3 Network User	1
556-00037	TAGPRINT5LIC	2-5 Network User	1
556-00038	TAGPRINT10LIC	2-10 Network User	1
556-00039	TAGPRINT25LIC	2-25 Network User	1

**SUPPORTED GRAPHIC TYPES**

BMP Bitmap, EMF Windows Metafile (Extended), GIF, JPEG, PNG, TIF, PCX, WMF

**SYSTEM REQUIREMENTS**

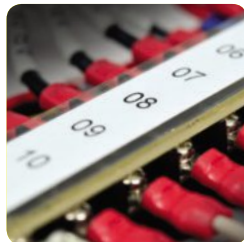
**Single User:**

PC running Microsoft Windows XP, SP3, Vista SP1 or later,  
 Windows 7, 32-bit or 64-bit  
 .NET Framework 4  
 512 MB RAM (XP SP3)  
 1.0 GB RAM (Vista / Windows 7)  
 500 MB Available Hard Disk Space

**Network User:**

PC running Microsoft Windows 7, Windows Server 2008  
 .NET Framework 4  
 Microsoft SQL Server Express Edition 2008  
 1.0 GM RAM  
 500 MB Available Hard Disk Space

Made in the USA.



Wire & Cable Marking

Terminal Block Marking

Control Panel and Component Marking

Rating Plate Identification

Voice and Date Equipment Labeling

Conduit and Voltage Marking

110-block Marking

Cable Tray Identification

## SwiftMark Automatic Label Printer and Applicator

Designed specifically for the wire and cable industry, the SwiftMark sets a new standard in labeling efficiency. The SwiftMark Automatic Label Printer and Applicator prints self-laminating vinyl labels and applies them to various sizes of wire and cable, increasing labeling productivity by up to 300%. With a cycle time of just over 4 seconds, the SwiftMark can print and apply labels in a fraction of the time required to manually print and apply labels, which increases productivity and reduces labeling errors while providing the highest printing and application quality.

Labels can be quickly and easily designed in the accompanying Tagprint Pro software, and label files can be downloaded and stored on the SwiftMark via a USB ethernet, Parallel port, or serial connection. Simply select the file and label quantity using the user-friendly touch screen, and labeling is as simple as placing the cable in the machine and pressing a button or foot pedal.

The SwiftMark has a simple interface which makes it very easy to use, yet it is capable of printing advanced label sequences such as label sets with different serial numbers and text on each label.



Labels are designed in TagPrint Pro and downloaded to the SwiftMark.



The SwiftMark prints and automatically applies labels to various sizes of wire and cable.

### Product Features

- Fastest cycle time in the industry
- Touch screen LCD
- Marks to within .5" of the end of the cable
- Labels cables from .06" to .75" in diameter
- Works with various sizes of self-laminating adhesive labels
- Ribbon save feature minimizes ribbon usage by up to 85%
- 300 d.p.i. thermal transfer printer
- Stores label files on removable SD card
- USB, parallel port, and serial connections
- Accommodates various types of cables
- Eliminates label wrinkles or "flags"
- Adjustable wire grippers
- Easy to load with labels and ribbon
- Automatically keeps track of application cycles
- Foot pedal, touch screen, and 24V wrap initiation options
- Electric universal power supply
- View label on touch screen prior to printing
- Ethernet connectivity

Material Data	
Width	19.56" (497 mm)
Height	14.67" (372.6 mm)
Depth	31.6" (802.6 mm)
Weight	80 lbs.
Operating Temperature	+40 °F to +104 °F (+4 °C to +40 °C)
Storage Temperature	-30 °F to +160 °F (-34 °C to +71 °C)
Minimum-Maximum Cable Diameter	.06" to .75" (1.52 to 19.05 mm)
Minimum-Maximum Label Width	.5" to 2.0" (12.7 to 50.8 mm)
Print Method	Thermal Transfer




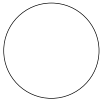
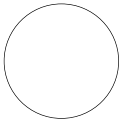
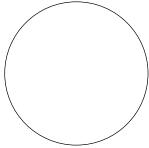
### Product Selection

Article No.	Part No.	Type	Description	Pkg. Qty.
558-00060	<b>558-00060</b>	SMLA1	SwiftMark Printer Applicator	1
558-00065	<b>558-00065</b>	SMFP01	Foot Pedal for SwiftMark and Autotool Systems	1
558-00066	<b>558-00066</b>	SMSC01	Replacement shipping case	1

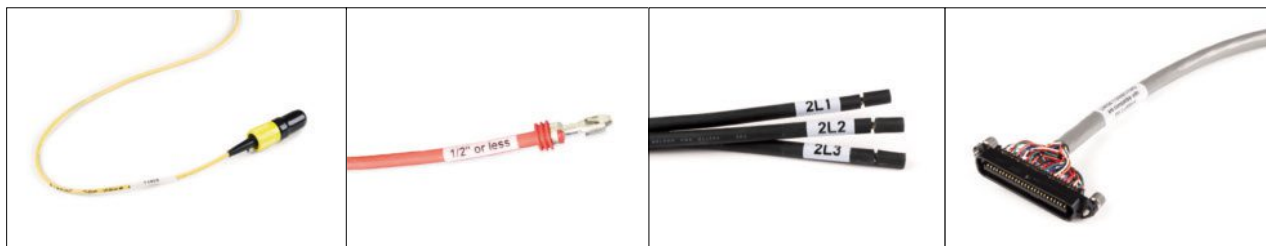
Use **Part No.** for ordering and **Type** for specification purposes.

### Wire Diameter Guide to SwiftMark Labels

This guide can be used to determine which labels will work best with the wire diameter selected. Simply place the end of the wire over the appropriate circle to select the best label size.

If your wire or cable diameter is less than or equal to below, use:	Label Size	Label Width	Approximate Wire Gauge
.10" 	558-00179	0.5" (12.7 mm)	18 - 22
.17" 	558-00045	0.5" (12.7 mm)	6 - 16
	558-00046	0.5" (12.7 mm)	
	558-00047	1.0" (25.4 mm)	
	558-00063	1.5" (38.1 mm)	
	558-00069	1.0" (25.4 mm)	
.30" 	558-00071	1.0" (25.4 mm)	6 - 16 14 - 18
	558-00045	0.5" (12.7 mm)	
	558-00046	1.0" (25.4 mm)	
	558-00047	1.5" (38.1 mm)	
	558-00061	2.0" (50.8 mm)	
.50" 	558-00051	1.0" (25.4 mm)	1/0 - 8
	558-00052	1.5" (38.1 mm)	
	558-00053	2.0" (50.8 mm)	
.60" 	558-00056	1.5" (38.1 mm)	3/0 - 6
	558-00057	1.75" (44.5 mm)	
	558-00059	2.0" (50.8 mm)	
	558-00058	2.0" (50.8 mm)	
.75" 	558-00059	2.0" (50.8 mm)	4/0 - 3/0

### Examples of SwiftMark Applications



The SwiftMark is gentle on delicate fiber optic cables and small wires.

The SwiftMark can place a label to within .5" of the end of a cable.

Sets of labels can be printed for wire groups with different data on each conductor.

Even pre-terminated wire and cable can be marked using the SwiftMark.

### SwiftMark Thermal Transfer Printer Ribbon

The SwiftMark utilizes a ribbon save feature that maximizes ribbon life. The ribbon only moves enough to accommodate each line of text printed and does not advance on a 1 to 1 ratio with label media. Label and ribbon loading is easy and the user has complete access to the entire ribbon and label path.




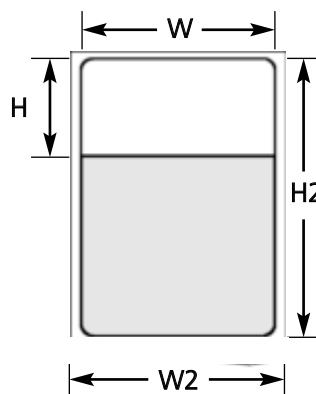
Product Selection							
Article No.	Part No.	Type	Color	Width		Length	
				In.	(mm)	Ft.	(M)
556-00165	SM100OUT	SM100OUT	Black	2.0	(50.8)	984	(300)
558-00227	SMWAXOUT	SMWAXOUT	Black	2.0		984	(300)

Use **Part No.** for ordering and **Type** for specification purposes. *UL Recognized when used with HellermannTyton SwiftMark labels.*

### SwiftMark Thermal Transfer Labels

SwiftMark labels utilize a high quality self-laminating vinyl film that is UL recognized when used with SwiftMark thermal transfer printer ribbon. The vinyl has a highly adhesive bond that adheres quickly and strongly to the recommended wire insulation types.

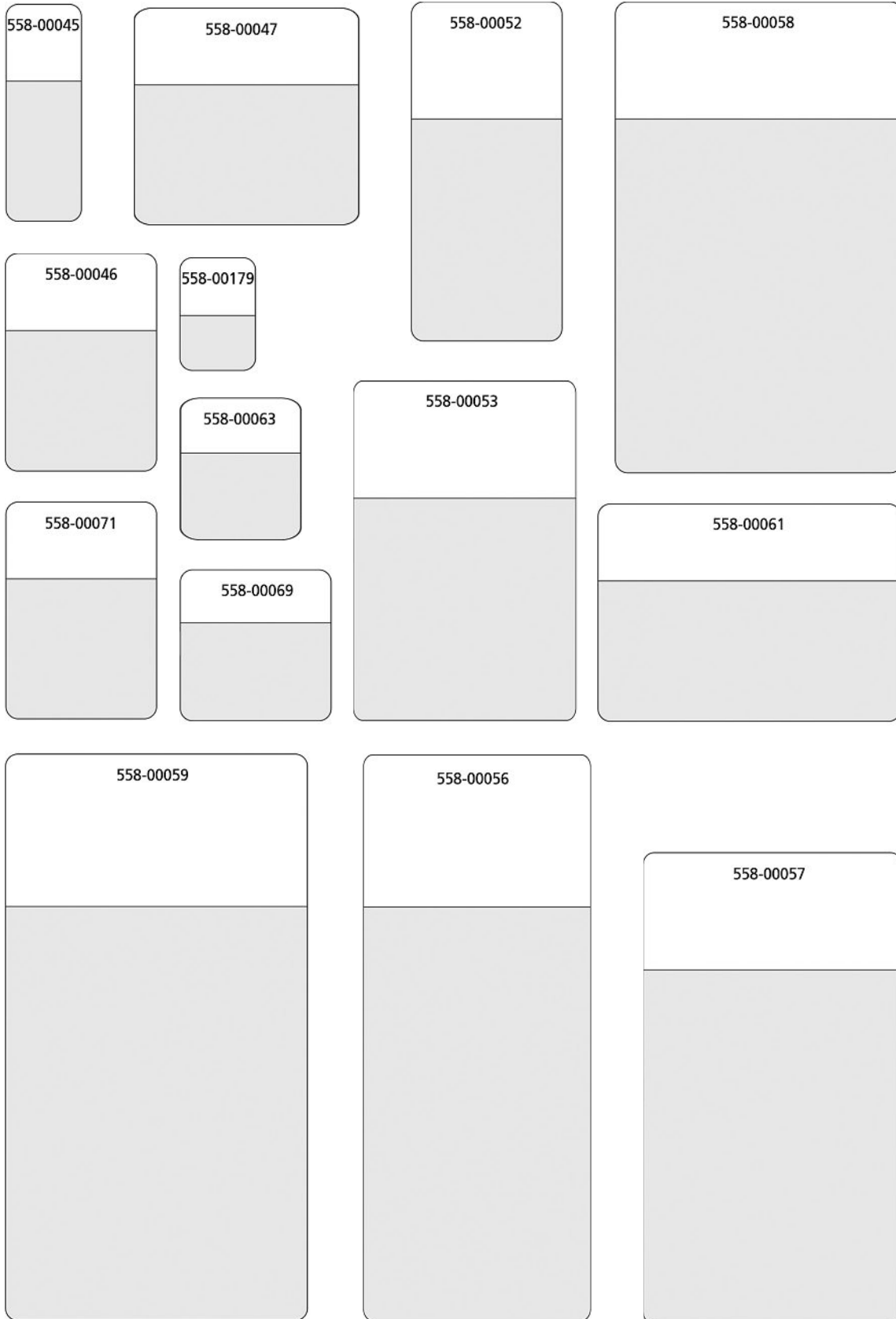
Material Data	
Material	Clear Vinyl
Printer	SwiftMark
Liner	3.1 mil high speed dispensing 50# paper
Temperature Range	-40°F to +175°F (-40°C to +80°C)
Adhesive Type	Acrylic
Application	For marking wire and cable
Certifications	
Ribbon	TT100OUTSM



Product Selection															
Article No.	Part No.	Type	Width (W)		Height of Printable Area (H)		Height of Label (H2)		Width of Liner (W2)		Min. Ø Cable		Max. Ø Cable		Pkg. Qty.
			In.	(mm.)	In.	(mm.)	In.	(mm)	In.	(mm.)	In.	(mm)	In.	(mm.)	
558-00045	558-00045	TAG38-76W127SM	.5"	(12.7)	.5"	(12.7)	1.44"	(36.5)	.90"	(22.86)	.14"	3.5	.3"	7.6	2500
558-00046	558-00046	TAG38-76W254SM	1.0"	(25.4)	.5"	(12.7)	1.44"	(36.5)	1.13"	(28.57)	.14"	3.5	.3"	7.6	2500
558-00047	558-00047	TAG38-76W381SM	1.5"	(38.1)	.5"	(12.7)	1.44"	(36.5)	1.63"	(41.27)	.14"	3.5	.3"	7.6	2500
558-00061	558-00061	TAG38-76W508SM	2.0"	(50.8)	.75"	(19.05)	1.44"	(36.5)	1.13"	(28.57)	.14"	3.5	.3"	7.6	2500
558-00179	558-00179	TAG15-30W127SM	.5"	(12.7)	.35"	(8.89)	.875"	(22.2)	.90"	(22.86)	.06"	1.5	.13"	3.3	4500
558-00063	558-00063	TAG20-47W203SM	.8"	(20.3)	.35"	(8.89)	.94"	(23.9)	1.13"	(31.75)	.08"	2.0	.18"	4.7	2500
558-00052	558-00052	TAG61-121W254SM	1.0"	(25.4)	.75"	(19.05)	2.25"	(57.1)	1.13"	(28.57)	.24"	5.5	.47"	12.1	1000
558-00053	558-00053	TAG61-121W381SM	1.5"	(38.1)	.75"	(19.05)	2.25"	(57.1)	1.63"	(41.27)	.24"	5.5	.47"	12.1	1000
558-00056	558-00056	TAG85-100W381SM	1.5"	(38.1)	1.0"	(25.4)	3.0"	(76.2)	1.63"	(41.27)	.33"	8.5	.39"	10.0	1000
558-00057	558-00057	TAG85-100W444SM	1.75"	(44.5)	1.0"	(25.4)	3.0"	(76.2)	1.88"	(47.62)	.33"	8.5	.39"	10.0	1000
558-00058	558-00058	TAG85-100W508SM	2.0"	(50.8)	1.0"	(25.4)	3.0"	(76.2)	2.13"	(53.97)	.33"	8.5	.39"	10.0	1000
558-00059	558-00059	TAG111-190W508SM	2.0"	(50.8)	1.5"	(38.1)	3.75"	(95.3)	2.13"	(53.97)	.60"	11.1	.75"	19.0	1000
558-00069	558-00069	TAG26-53W254SM	1.0"	(25.4)	.35"	(8.89)	1.0"	(25.4)	1.13"	(28.57)	.10"	2.6	.20"	5.3	5000
558-00071	558-00071	TAG38-81W254SM	1.0"	(25.4)	.5"	(12.7)	1.5"	(38.1)	1.13"	(28.57)	.15"	3.8	.32"	8.1	2500

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### Label Sizes





### TT230SM Printer

HellermannTyton's TT230SM thermal transfer printer is the next generation of printer available for small to medium volume users looking for an easy to use and functional thermal transfer printer. The TT230SM prints to a wide variety of materials including all of HellermannTyton labels and ShrinkTrak. The TT230SM is also Ethernet network ready, which gives the user options on placing the unit away from the host computer. The TT230SM comes with a label holder (caddy) for loading large reels behind the printer for easy dispensing and printing. There also is an optional carrying case that can be used to safely transport the printer to remote job sites.



#### Product Features

- Print on ShrinkTrak
- Print on Adhesive Labels
- Print on Tiptags
- Uses standard ribbons
- Print head 300dpi
- Barcodes: standard and 2D
- Print speed up to 3" (76.2mm) per second
- Max print width 4.1" (106mm)
- Max label width 4.37 (111mm)
- Max print length 39" (101cm)
- 8MB DRAM, 2MB Flash
- Interfaces: RS232-C, Ethernet, USB v.2.0 and Centronics
- Windows drivers: 2000, XP, NT4.0, Vista, 7
- Dimensions: 7.95"(201mm) x 10.16" (258mm) x 6.81"(172mm)
- Weight 4.4lbs (2kg)

Article No.	Part No.	Type	Description	Pkg. Qty.
556-00230	<b>556-00230</b>	TT230SM	TT230SM Printer	1
556-00231	<b>556-00231</b>	CASE230SM	Carrying Case for TT230SM Printer	1
556-00236	<b>556-00236</b>	TT230BATTERY	TT230SM Rechargeable Battery Pack	1

### TT230SM Thermal Transfer Ribbons

Product Selection		Label Material												Width (W)		Length (L)	
Article No.	Part No.	Type	Color	Paper	100	250	795	822	822C	900	1500	DTH	ShrinkTrak	In.	(mm)	Ft.	(M)
556-00147**	<b>TT822OUTSM2</b>	TT822OUTSM2	Red	•	•	•	•				•			4.33	(110)	242	(74)
556-00148**	<b>TT822OUTSM3</b>	TT822OUTSM3	Orange	•	•	•	•	•	•		•			4.33	(110)	242	(74)
556-00149**	<b>TT822OUTSM4</b>	TT822OUTSM4	Yellow	•	•	•	•	•	•		•			4.33	(110)	242	(74)
556-00150**	<b>TT822OUTSM5</b>	TT822OUTSM5	Green	•	•	•	•	•	•		•			4.33	(110)	242	(74)
556-00151**	<b>TT822OUTSM6</b>	TT822OUTSM6	Blue	•	•	•	•	•	•		•			4.33	(110)	242	(74)
556-00152**	<b>TT822OUTSM7</b>	TT822OUTSM7	Purple	•	•	•	•	•	•		•			4.33	(110)	242	(74)
556-00153**	<b>TT822OUTSM8</b>	TT822OUTSM8	Silver Gray								•		•	4.33	(110)	242	(74)
556-00143**	<b>TTDTHOUTSM</b>	TTDTHOUTSM	Black									• (5)	• (5)	4.33	(110)	242	(74)
556-00145	<b>TT822OUTSM</b>	TT822OUTSM	Black	•	(1)	•	• (1,2)	• (1,2)	•		•		• (4)	4.33	(110)	242	(74)
556-00163	<b>TTHSTOUTSM</b>	TTHSTOUTSM	Black		° (1)	°							• (4)	4.33	(110)	242	(74)
556-00169	<b>TT100OUTSM</b>	TT100OUTSM	Black	•	° (1)	°							• (4)	4.33	(110)	242	(74)
556-00190	<b>556-00190</b>	TTWHITEOUTSM	White								•			4.33	(110)	229	(70)

Use **Part No.** for ordering and **Type** for specification purposes.

• =Recommended ribbon

° =Acceptable ribbon alternative

(1) UL Recognized material / ribbon combination with HellermannTyton thermal transfer printers

(2) CSA Normal Use approved material / ribbon combination with HellermannTyton thermal transfer printers

(3) CSA Heavy Duty Use approved material / ribbon combination with HellermannTyton thermal transfer printers

(4) Meets ASM-DTL-23053/5 Class I & III, SAE-AS81531 for print performance

(5) Outstanding chemical, abrasion and solvent resistance where UL and CSA requirements are not needed














\*\* 24 ribbon minimum order

\* for use on black ShrinkTrak







## Thermal Transfer Label Materials




HellermannTyton provides a wide variety of thermal transfer label stocks to fit most industrial applications. Materials can be used in applications ranging from high heat, wire wrapping and long term indelible marking. A mix of sizes and types allows for stock solutions to most labeling needs. For instance, HellermannTyton provides thermal transfer labels in a high performance white polyester. HellermannTyton 822 material provides a high quality mark when used with the TT822 ribbon and the TT1210 printer, or compatible. If the 822 material is used in combination with the TT822 ribbon, the TT1210 printer or specific recommended printers, a UL Recognized mark can be achieved.\*

Label Material	100 Material 	100B Material 	101 Material 	250 Material 
<b>Material Name</b>	Self-Laminating Vinyl	100 Clear Vinyl	Paper	Conformable Woven Cloth
<b>Printer(s)</b>	Spirit Handheld/ Dot Matrix	Thermal Transfer Desktop	Thermal Transfer Desktop	Thermal Transfer Desktop
<b>Topcoat</b>	Specially formulated for superb ink anchorage	Specially formulated for superb ink anchorage	Specially formulated for superb ink anchorage	Specially formulated for superb ink anchorage
<b>Liner</b>	50#	50#	40#	55#
<b>Temperature Range</b>	-50°F to +200°F (-46°C to +93°C)	-50°F to +200°F (-46°C to +93°C)	-65°F to +200°F (-40°C to +93°C)	-40°F to +250°F (-40°C to +121°C)
<b>Adhesive Type</b>	Permanent pressure sensitive acrylic	Permanent pressure sensitive acrylic	Permanent pressure sensitive rubber based	Permanent pressure sensitive acrylic
<b>Application</b>	For wires, cable and other conformable surfaces	For wires, cable and other conformable surfaces	For use on plastic bags	For wrapping and flagging on small gauge wires
<b>Certifications</b>				
<b>Specifications</b>	N/A	N/A	N/A	N/A
<b>Ribbon</b>	HHHST (recommended) HHIGR	TT100OUTSM TT100OUT TT822OUT TT822OUTSM TTHSTOUT TTHSTOUTSM	TT100OUTSM TT100OUT	TT100OUTSM TT100OUT
<b>Notes</b>	N/A	N/A	N/A	N/A
Label Material	336 Material 	518 Material 	795 Material 	799 Material 
<b>Material Name</b>	White Polyester	Polyethylene Foam and Polyester Laminate	Metalized Polyester	Metalized Polyester
<b>Printer(s)</b>	Thermal Transfer Desktop & Spirit Handheld		Thermal Transfer Desktop	Spirit Handheld
<b>Topcoat</b>	Specially formulated for superb ink anchorage	Gloss surface for high contrast thermal transfer printing.	Specially formulated for superb ink anchorage	Specially formulated for superb ink anchorage
<b>Liner</b>	50#	6.7 Mil poly coated paper.	50#	50#
<b>Temperature Range</b>	-40°F to +300°F (-40°C to +149°C)	-40F to +176F (-40F to + 80C)	-40°F to +300°F (-40°C to +149°C)	-40°F to +300°F (-40°C to +149°C)
<b>Adhesive Type</b>	Permanent pressure sensitive acrylic	Permanent Acrylic	Permanent pressure sensitive acrylic	Permanent pressure sensitive acrylic
<b>Application</b>	For flat or slightly curved surfaces	Control panels, push button markers, nameplate identification	For flat or slightly curved surfaces only	For flat or slightly curved surfaces only
<b>Certifications</b>		ASTM D 903, ASTM D 3654, ASTM D 2970		
<b>Specifications</b>	N/A	Material tested to 10 years outdoor durability with no significant fading.	Use with 822OUT for UL and CSA recognition	Use HHIGR for UL recognition.
<b>Ribbon</b>	TT822OUT* TT822OUTSM* HHIGR	TT822OUT, TT822OUTSM, TT100OUT, TT100OUTSM	TT822OUT** TT822OUTSM**	HHIGR
<b>Notes</b>	*Use TT822OUT ribbon for UL Recognition on the TT1000, TT1210, TT300SM, TT10SM, TT210SM, TT310SM, & TT320SM printers. Use HHIGR for UL Recognition on the Spirit Printer.	Foam button and nameplate labels are easy to design and print using Tagprint Pro 3.0 labeling software.	**Use the TT822TYPE ribbon for UL & CSA Recognition on the TT1000, TT1210, TT300SM, TT10SM, TT210SM, TT310SM, & TT320SM - UL file no.MH18396, CSA file no. 106410. 2 Year outdoor durability.	Use HHIGR for UL Recognition on the Spirit Printer.



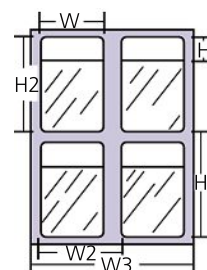
**Thermal Transfer Label Materials *continued***

Label Material	822 Material 	822C Material 	395 Material 	1500 Material 
<b>Material Name</b>	White Polyester	Clear Polyester	White Polyethylene	Vinyl
<b>Printer(s)</b>	Thermal Transfer Desktop	Thermal Transfer Desktop	Thermal Transfer Desktop	Thermal Transfer Desktop
<b>Topcoat</b>	Specially formulated for superb ink anchorage	Specially formulated for superb ink anchorage	Smooth surface for thermal transfer printing	Smooth surface for thermal transfer printing
<b>Liner</b>	50#	50#	1.4 mil clear polyester	78#
<b>Temperature Range</b>	-40°F to +300°F (-40°C to +149°C)	-40°F to +300°F (-40°C to +149°C)	-40F to +176F (-40F to + 80C)	-40F to +180F (-40F to +82C)
<b>Adhesive Type</b>	Permanent pressure sensitive acrylic	Permanent pressure sensitive acrylic	Rubber Based	Acrylic
<b>Application</b>	For flat or slightly curved surfaces only	For flat or slightly curved surfaces only	Terminal Blocks	Alternative Energy
<b>Certifications</b>			ASTM D 903, ASTM D 3654, ASTM D 2979	UL File number MH18396, UL969
<b>Specifications</b>	Use with TT822TYPE ribbon for UL and CSA recognition	N/A	Use with TT822 Type ribbon. Made for marking terminal blocks and patch panels.	Material is extruded in color for maximum UV fade protection. Tested to 10 year outdoor durability with no significant fading.
<b>Ribbon</b>	TT822OUT* TT822OUTSM*	TT822OUT TT822OUTSM	TT822OUT, TT822OUTSM, TT100OUT, TT100OUTSM	TT822OUT, TT822OUTSM, TT100OUT, TT100OUTSM
<b>Notes</b>	*Use the TT822TYPE ribbon for UL & CSA Recognition on the TT1000, TT1210, TT300SM, TT105SM, TT210SM, TT310SM, & TT320SM - UL file no.MH18396, CSA file no. 106410. 5 year outdoor durability.	N/A	Tagprint Pro 3.0 can print the terminal to terminal spacing required to print a terminal block label.	Available on continuous rolls for printing and cutting.

Label Material	926 Material 	DTH Material 	ShrinkTrak™ Markers 
<b>Material Name</b>	White Polyester	Durattach - High Density Polyolefin	Flexible, radiation cross-linked polyolefin
<b>Printer(s)</b>	Thermal Transfer Desktop	TT320SM & TT1210 Desktop and Spirit Portable Printer	TT320SM & TT1210 Desktop
<b>Topcoat</b>	Smooth surface for thermal transfer printing	Specially formulated for formulated for indelible ink anchorage using DTH ribbon specifically	3:1 shrink ratio
<b>Liner</b>	3.2 mil SCK	50#	N/A
<b>Temperature Range</b>	-40F to +302F (-40C to +150C)	-40°F to +140°F (-40°C to +60°C)	-67°F to +275°F (-55°C to +135°C)
<b>Adhesive Type</b>	Acrylic	Acrylic	N/A
<b>Application</b>		For flat or slightly curved surfaces only	For cable, wire, terminals and other components
<b>Specifications</b>	Use for making signage for industrial automation and control panels.	N/A	Flammability - U.L. 224 U.L. Recognized SAE-AS81531 for print performance. AMS-DTL-23053/5 Class I & III. Mil STD 202G Method 215K
<b>Ribbon</b>	TT822OUT, TT822OUTSM, TT100OUT, TT100OUTSM	TTDTHOUT TTDTHOUTSM HHDT	TT822OUT, TT822OUTSM TT100OUT, TT100OUTSM TTDTHOUT*,TTDTHOUTSM* TTHSTOUT, TTHSTOUTSM
<b>Notes</b>	Certifications: UL 969 File# MH12627,BS4509: 1986 edition	N/A	*Using the TTDTHOUTSM or TTDTHOUT ribbons will give an almost indelible mark on HellermannTyton's ShrinkTrak™.

### Thermal Transfer Self-Laminating Labels

HellermannTyton's self-laminating labels are used for marking wire and cable. The clear overlap protects printed information. Thermal transfer labels and printers offer crisp, clear marking and a high level of durability.



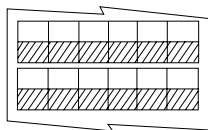
Product Selection

Article No.	Part No.	Type	Drawing Reference	Width (W)	Height of Printable Area (H)	Height of Label (H2)	Vertical Repeat (H3)	Horizontal Repeat (W2)	Width of Liner (W3)	Labels per Row	Pkg. Qty.
			(page 197)	In. (mm)	In. (mm)	In. (mm)	In. (mm)	In. (mm)	In. (mm)		
<b>100B Material</b>											
596-00009	<b>TAG26T6-100B</b>	TAG26T6	A	.5" (12.7)	.375" (9.52)	.75" (19.05)	1.0" (25.4)	.5" (12.7)	3.35" (85.09)	6	10000
596-00010	<b>TAG2T5-100B</b>	TAG2T5	B	.5" (12.7)	.5" (12.7)	1.43" (36.5)	1.62" (41.28)	.66" (16.81)	3.35" (85.09)	5	10000
596-00014	<b>TAG51T3-100B</b>	TAG51T3	C	1.0" (25.4)	.35" (8.8)	.75" (19.05)	.937" (23.7)	1.075" (27.3)	3.35" (85.09)	3	10000
596-00006	<b>TAG22T2-100B</b>	TAG22T2	D	1.0" (25.4)	.5" (12.7)	1.43" (36.5)	1.62" (41.28)	1.075" (27.3)	2.25" (57.1)	2	5000
596-00007	<b>TAG22T3-100B</b>	TAG22T3	E	1.0" (25.4)	.5" (12.7)	1.43" (36.5)	1.62" (41.28)	1.075" (27.3)	3.35" (85.09)	3	5000
596-00027	<b>TAG9T3-100B</b>	TAG9T3	F	1.0" (25.4)	.75" (19.05)	2.25" (57.1)	2.5" (63.5)	1.0" (25.4)	3.35" (85.09)	3	5000
596-00013	<b>TAG3T3-100B</b>	TAG3T3	G	1.0" (25.4)	1.0" (25.4)	3.75" (95.25)	4.0" (101.6)	1.075" (27.3)	3.35" (85.09)	3	3000
596-00011	<b>TAG38T4-100B</b>	TAG38T4	H	1.0" (25.4)	1.5" (38.1)	7.347" (188.89)	7.75" (196.80)	1.0" (25.4)	4.10" (104.14)	4	1000
596-00045	<b>TAG53T2-100B</b>	TAG53T2	I	1.5" (38.1)	.7" (17.78)	1.437" (36.49)	1.62" (41.28)	1.5" (38.1)	3.35" (89.05)	2	2500
596-00005	<b>TAG1T1-100B</b>	TAG1T1	J	1.9" (48.2)	.75" (19.05)	3.12" (79.2)	3.42" (86.8)	1.9" (48.2)	3.875" (98.42)	2	2500
596-00008	<b>TAG24T1-100B</b>	TAG24T1	K	2.0" (50.8)	.5" (12.7)	1.437" (36.49)	1.68" (42.6)	2.0" (50.8)	2.2" (55.9)	1	1000
596-00002	<b>TAG10T2-100B</b>	TAG10T2	L	2.0" (50.8)	.75" (19.05)	2.25" (57.1)	2.5" (63.5)	2.0" (50.8)	3.875" (98.42)	2	2500
596-00021	<b>TAG7T1-100B</b>	TAG7T1	M	2.0" (50.8)	1.5" (38.1)	7.347" (188.89)	7.75" (196.80)	2.0" (50.8)	4.10" (104.14)	2	1000
596-00016	<b>TAG6T1-100B</b>	TAG6T1	N	2.0" (50.8)	1.5" (38.1)	3.75" (95.25)	4.0" (101.6)	2.0" (50.8)	2.20" (68.58)	1	1000

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

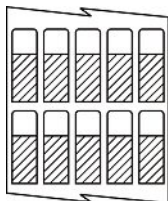
**Thermal Transfer Self-Laminating Labels *continued***

(Not shown to scale)



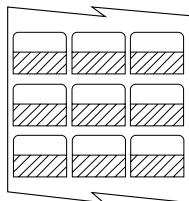
TAG26T6-100B

**A**



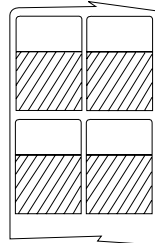
TAG2T5-100B

**B**



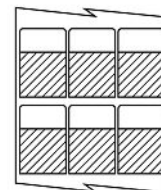
TAG51T3-100B

**C**



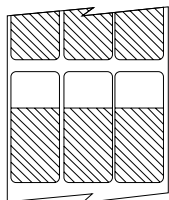
TAG22T2-100B

**D**



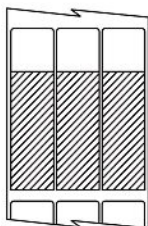
TAG22T3-100B

**E**



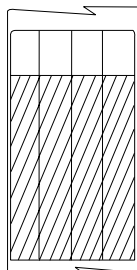
TAG9T3-100B

**F**



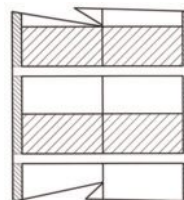
TAG3T3-100B

**G**



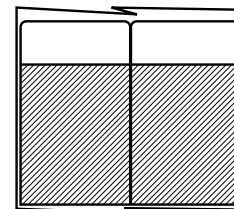
TAG38T4-100B

**H**



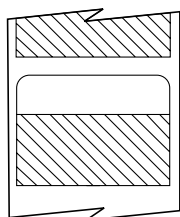
TAG53T2-100B

**I**



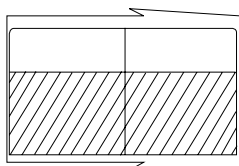
TAG1T1-100B

**J**



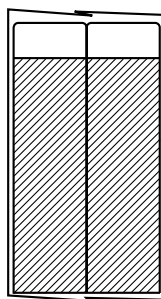
TAG24T1-100B

**K**



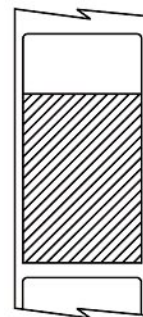
TAG10T2-100B

**L**



TAG7T1-100B

**M**



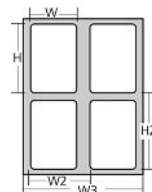
TAG6T1-100B

**N**



### Thermal Transfer Labels

HellermannTyton thermal transfer labels provide the best printing quality. These labels are particularly suitable for permanent marking on the flat surfaces of production machines and equipment. The technology used in the printing of thermal transfer labels produces the most accurate barcodes of all existing printing technologies. The large selection of labels makes it easy to find the correct label for almost any application. Thermal transfer labels are designed for high heat and are resistant to chemicals as well as petroleum based oils and solvents.



Turn page for full selection.

Product Selection															
Article No.	Part No.	Type	Drawing Reference	Width (W)		Height (H)		Vertical Repeat (H2)		Horizontal Repeat (W2)		Width of Liner (W3)		Labels per Row	Pkg. Qty.
			pages (200-201)	In.	(mm.)	In.	(mm.)	In.	(mm.)	In.	(mm.)	In.	(mm.)		
250 Material															
598-00277	<b>TYHCT-250</b>	TYHC	A	.250"	(6.35)	1.50"	(38.10)	1.625	41.27	.250"	6.35	4.120"	104.70	16	5000
596-21250	<b>TAG21T6-250</b>	TAG21T6	B	.5"	(12.7)	.75"	(19.05)	.875"	22.22	.5"	12.7	3.25"	82.55	6	10000
596-11250	<b>TAG11T4-250</b>	TAG11T4	C	.65"	(16.5)	.2"	(5.08)	.3"	7.62	.65"	16.5	2.6"	66.04	4	5000
596-28250	<b>TAG28T4-250</b>	TAG28T4	D	.80"	(20.3)	1.43"	(36.3)	1.62"	41.1	.80"	20.3	3.45"	87.6	4	5000
596-15250	<b>TAG15T3-250</b>	TAG15T3	E	1.0"	(25.4)	.5"	(12.7)	.6"	15.24	1.0"	25.4	3.35"	85.09	3	10000
596-00044	<b>TAG35T2-250</b>	TAG35T2	F	2.0"	(50.8)	.375"	(9.53)	.50"	12.7	2.0"	50.8	4.1"	104.14	2	10000
336 Material															
596-00026	<b>TAG96T1-336</b>	TAG96T1	G	1.875"	(47.6)	.25"	(6.35)	.375"	9.35	1.875"	47.6	2.0"	50.8	1	5000
596-00041	<b>TAG69T1-336</b>	TAG69T1	H	2.0"	(50.8)	.275"	(6.98)	.5"	12.7	2.0"	50.8	2.125"	53.97	1	10000
596-00040	<b>TAG68T1-336</b>	TAG68T1	J	3.8"	(96.5)	.275"	(6.98)	.5"	12.7	3.8"	96.5	4.0"	101.6	1	10000
795 Material															
596-15795	<b>TAG15T3-795</b>	TAG15T3	E	1.0"	(25.4)	.5"	(12.7)	.6"	15.24	1.0"	25.4	3.35"	85.09	3	10000
596-27795	<b>TAG27T1-795</b>	TAG27T1	J	1.5"	(38.11)	.75"	(19.05)	.875"	22.2	1.5"	38.11	2.20"	55.88	1	3000
596-75795	<b>TAG75T1-795</b>	TAG75T1	K	2.0"	(50.8)	.625"	(15.87)	.75"	19.05	2.0"	50.8	2.12"	53.8	1	2000
596-73795	<b>TAG73T1-795</b>	TAG73T1	AA	2.0"	(50.8)	1.0"	(25.4)	1.125"	28.57	1.0"	25.4	2.20"	55.83	1	3000
596-76795	<b>TAG76T1-795</b>	TAG76T1	L	2.5"	(63.5)	2.0"	(50.8)	2.12"	53.8	2.5"	63.5	2.62"	66.5	1	1000
596-72795	<b>TAG72T1-795</b>	TAG72T1	M	2.75"	(69.85)	1.25"	(31.75)	1.375"	34.93	2.75"	69.85	2.95"	74.95	1	5000
596-78795	<b>TAG78T1-795</b>	TAG78T1	N	3.0"	(76.2)	4.0"	(101.6)	4.12"	104.7	3.0"	76.2	3.12"	79.2	1	500
596-80795	<b>TAG80T1-795</b>	TAG80T1	O	3.0"	(76.2)	5.0"	(127)	3.0"	76.2	3.0"	76.2	3.125"	79.37	1	500
596-79795	<b>TAG79T1-795</b>	TAG79T1	P	4.0"	(101.6)	2.0"	(50.8)	2.12"	53.97	4.0"	101.6	4.25"	107.9	1	500

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

\* TAG17T2-822 not recommended for TT105M, TT210SM, TT230SM, TT300SM, TT310SM, and TT330SM printers. Use TAG82T2 instead.

### Terminal Block Labels

Terminal Block labels can be printed to match the terminal spacing of most terminal blocks using Tagprint Pro 3.0 labeling software.

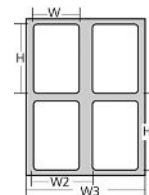
Article No.	Part No.	Type	Description	Pkg. Qty.
596-00380	<b>596-00380</b>	TBL375	.375" wide continuous polyethylene	100
596-00381	<b>596-00381</b>	TBL500	.5" wide continuous polyethylene	100

### Phase Labels

Phase labels are micro-perforated between each label so that it can be applied as one strip to the panel or broken into individual labels.

Article No.	Part No.	Type	Description	Pkg. Qty.
596-00382	<b>596-00382</b>	PLW3P	1" x .5" White polyester phase label	2500
596-00383	<b>596-00383</b>	PLB3P	1" x .5" Black polyester phase label	2500

Thermal Transfer Labels *continued*



Product Selection

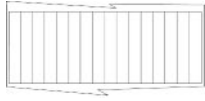
Article No.	Part No.	Type	Drawing Reference	Width (W)		Height (H)		Vertical Repeat (H2)		Horizontal Repeat (W2)		Width of Liner (W3)		Labels per Row	Pkg. Qty.
				pages (200-201)	In.	(mm.)	In.	(mm.)	In.	(mm.)	In.	(mm.)	In.		
822 Material															
596-27822	<b>TAG27T1-822</b>	TAG27T1	J	1.5"	(38.11)	.75"	(19.05)	.875"	22.2	1.5"	38.11	2.20"	55.88	1	3000
596-00019	<b>TAG75T1-822</b>	TAG75T1	K	2.0"	(50.8)	.625"	(15.87)	.75"	19.05	2.0"	50.8	2.12"	53.8	1	2000
596-70822	<b>TAG70T12-822</b>	TAG70T12	Q	.25"	(6.35)	.25"	(6.35)	.5"	12.7	.25"	6.35	3.2"	81.2	12	10000
596-00028	<b>TAGPP1T6-822</b>	TAGPP1T6	R	.625"	(15.87)	.333"	(8.45)	.75"	19.05	.625"	15.87	3.8"	96.52	6	1000
596-00082	<b>TAGPP1T6-82210M</b>	TAGPP1T6	R	.625"	(15.87)	.333"	(8.45)	.75"	19.05	.625"	15.87	3.8"	96.52	6	10000
596-11822	<b>TAG11T4-822</b>	TAG11T4	C	.65"	(16.5)	.2"	(5.08)	.3"	7.62	.65"	16.5	2.6"	66.04	4	5000
596-00046	<b>TAGPP2T6-822</b>	TAGPP2T6	T	.66"	(16.7)	.33"	(8.38)	.75"	19.05	.66"	16.7	4.125"	104.7	6	1000
596-00083	<b>TAGPP3T4-822</b>	TAGPP3T4	U	.688"	(17.4)	.25"	(6.35)	.375"	9.52	.688"	17.4	2.9"	73.66	4	1000
596-13822	<b>TAG13T4-822</b>	TAG13T4	V	.75"	(19.05)	.25"	(6.35)	.35"	8.89	.75"	19.05	3.35"	85.09	4	10000
596-15822	<b>TAG15T3-822</b>	TAG15T3	E	1.0"	(25.4)	.5"	(12.7)	.6"	15.24	1.0"	25.4	3.35"	85.09	3	1000
596-84822	<b>TAG84T3-822</b>	TAG84T3	S	1.25"	(31.75)	.375"	(9.53)	.50"	12.7	1.25"	31.75	4.0"	101.6	3	10000
596-00023	<b>TAG83T1-822</b>	TAG83T1	W	4.0"	(101.6)	.312"	(7.52)	.438"	11.13	4.0"	101.6	4.1"	104.14	1	5000
596-00022	<b>TAG81T8-822</b>	TAG81T8	X	.325"	(8.25)	.20"	(5.08)	.30"	7.62	.325"	8.25	2.6"	66.04	8	5000
596-16822	<b>TAG16T3-822</b>	TAG16T3	Y	.9"	(22.86)	.25"	(6.35)	.35"	8.89	.9"	22.86	3.35"	85.09	3	10000
596-17822	<b>TAG17T2-822</b>	TAG17T2	Z	1.5"	(38.11)	.25"	(6.35)	.35"	8.89	1.65"	41.98	3.35"	85.09	2	10000
596-73822	<b>TAG73T1-822</b>	TAG73T1	AA	2.0"	(50.8)	1.0"	(25.4)	1.125"	28.57	1.0"	25.4	2.20"	55.83	1	3000
596-42822	<b>TAG72T1-822</b>	TAG72T1	M	2.75"	(69.85)	1.25"	(31.75)	1.375"	34.93	2.75"	69.85	2.95"	74.95	1	3000
596-71822	<b>TAG71T5-822</b>	TAG71T5	BB	.5"	(12.7)	.43"	(11.1)	.662"	16.81	.43"	11.1	3.35"	85.09	5	10000
596-82822	<b>TAG82T2-822</b>	TAG82T2	CC	1.5"	(38.1)	.25"	(6.35)	.30"	7.62	1.5"	38.1	3.20"	81.28	2	10000
822C Material*															
596-00029	<b>TAGPP1T6-822C</b>	TAGPP1T6	R	.625"	(15.87)	.333"	(8.45)	.75"	19.05	.625"	15.87	3.8"	96.52	6	1000
596-00030	<b>TAGPP1T6-822C10M</b>	TAGPP1T6	R	.625"	(15.87)	.333"	(8.45)	.75"	19.05	.625"	15.87	3.8"	96.52	6	10000
596-00003	<b>TAG11T4-822C</b>	TAG11T4	C	.65"	(16.5)	.2"	(5.08)	.3"	7.62	.65"	16.5	2.6"	66.04	4	5000
596-00047	<b>TAGPP2T6-822C</b>	TAGPP2T6	T	.66"	(16.7)	.33"	(8.38)	.75"	19.05	.66"	16.7	4.125"	104.7	6	1000
596-00084	<b>TAGPP3T4-822C</b>	TAGPP3T4	U	.688"	(17.4)	.25"	(6.35)	.375"	9.52	.688"	17.4	2.9"	73.66	4	1000
596-00001	<b>TAG15T3-822C10M</b>	TAG15T3	E	1.0"	(25.4)	.5"	(12.7)	.6"	15.24	1.0"	25.4	3.35"	85.09	3	10000
596-00043	<b>TAG27T1-822C</b>	TAG27T1	J	1.5"	(38.11)	.75"	(19.05)	.875"	22.2	1.5"	38.11	2.20"	55.88	1	3000
DTH Material***															
596-00033	<b>TAG13T4-DTH</b>	TAG13T4	V	.75"	(19.05)	.25"	(6.35)	.35"	8.89	.75"	19.05	3.35"	85.09	4	10000
596-00034	<b>TAG16T3-DTH</b>	TAG16T3	Y	.9"	(22.86)	.25"	(6.35)	.35"	8.89	.9"	22.86	3.35"	85.09	3	10000
596-00035	<b>TAG15T3-DTH</b>	TAG15T3	E	1.0"	(25.4)	.5"	(12.7)	.6"	15.24	1.0"	25.4	3.35"	85.09	3	10000
596-00036	<b>TAG27T2-DTH</b>	TAG27T2	J	1.5"	(38.11)	.75"	(19.05)	.875"	22.2	1.5"	38.11	2.20"	55.83	2	10000
596-00037	<b>TAG99T1-DTH</b>	TAG99T1	DD	2.0"	(50.8)	.25"	(6.35)	.375"	9.52	2.0"	50.8	2.2"	55.8	1	2500
596-00038	<b>TAG73T1-DTH</b>	TAG73T1	AA	2.0"	(50.8)	1.0"	(25.4)	1.125"	28.57	1.0"	25.4	2.20"	55.83	1	3000
596-00039	<b>TAG33T1-DTH</b>	TAG33T1	EE	3.0"	(76.2)	2.0"	(50.8)	2.125"	53.97	2.0"	50.8	3.1"	78.74	1	1000
PAP - Non-Adhesive Cardstock															
596-00017	<b>TAG74T2-PAP</b>	TAG74T2	FF	1.75"	(44.45)	.375"	(9.53)	.562"	14.2	1.75"	44.45	3.5"	88.9	2	1000
596-00025	<b>TAG82T2-PAP</b>	TAG82T2	GG	2.0"	(50.8)	.396"	(10.05)	.562"	14.2	2.0"	50.8	4.05"	102.0	2	1000
596-00024	<b>TAG85T1-PAP</b>	TAG85T1	HH	3.0"	(76.2)	.50"	(12.7)	.60"	15.24	3.0"	76.2	3.2"	8.28	1	5000

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

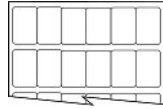
\* Clear \*\*\* For use with DTH ribbons only!

**Thermal Transfer Labels *continued***

(Not shown to scale)



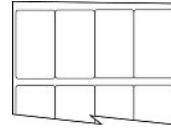
TYHCT-250  
**A**



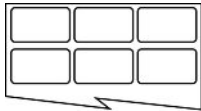
TAG21T6-250  
**B**



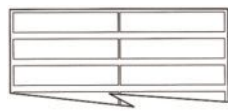
TAG11T4-250,  
TAG11T4-822,  
TAG11T4-822C  
**C**



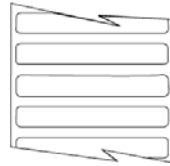
TAG28T4-250  
**D**



TAG15T3-DTH,  
TAG15T3-795,  
TAG15T3-822,  
TAG15T3-822C10M  
TAG15T3-250  
**E**



TAG35T2-250  
**F**



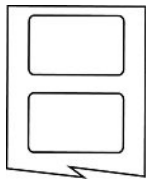
TAG96T1-336  
**G**



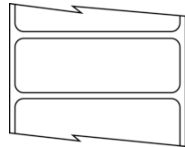
TAG69T1-336  
**H**



TAG68T1-336  
**I**



TAG27T1-822,  
TAG27T1-795,  
TAG27T1-822C,  
TAG27T2-DTH  
**J**



TAG751-822  
TAG75T1-795  
**K**



TAG76T1-795  
**L**



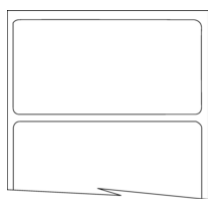
TAG72T1-795,  
TAG72T1-822  
**M**



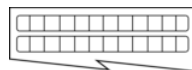
TAG78T1-795  
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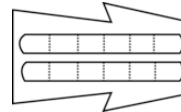
TAG80T1-795  
**O**



TAG79T1-795  
**P**



TAG70T12-822  
**Q**



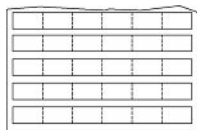
TAGPP1T6-822,  
TAGPP1T6-822C,  
TAGPP1T6-82210M,  
TAGPP1T6-822C10M  
**R**



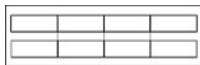
TAG84T3-822  
**S**

**Thermal Transfer Labels *continued***

(Not shown to scale)



TAGPP2T6-822,  
TAGPP2T6-822C  
**T**



TAGPP3T4-822,  
TAGPP3T4-822C  
**U**



TAG13T4-822,  
TAG13T4-900,  
TAG13T4-DTH  
**V**



TAG83T1-822  
**W**



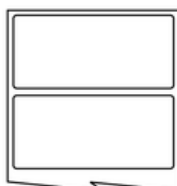
TAG81T8-822  
**X**



TAG16T3-DTH,  
TAG16T3-822,  
TAG16T3-900  
**Y**



TAG17T2-822  
**Z**



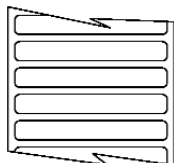
TAG73T1-822,  
TAG73T1-DTH,  
TAG73T1-795  
**AA**



TAG71T5-822  
**BB**



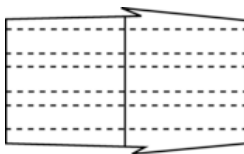
TAG82T2-822  
**CC**



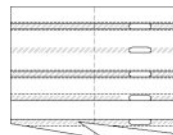
TAG99T1-DTH  
**DD**



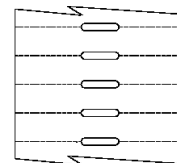
TAG33T1-DTH  
**EE**



TAG74T2-PAP  
**FF**



TAG82T2-PAP  
**GG**



TAG85T1-PAP  
**HH**

### Foam Nameplate Labels

Foam nameplate labels are designed to replace plastic and metal engraved phenolic plates commonly found on control panels in many markets. The labels have a foam base so that they conform to textured surfaces, but still provide a perfectly flat printing surface that is resistant to chemicals, solvents, heat and UV exposure. HellermannTyton's foam nameplate labels include computer printable button labels that fit around the panel hole where the button is inserted. The foam nameplate labels can be printed on demand in any volume needed and any design can be printed on the labels using TagPrint® Pro labeling software and HellermannTyton thermal transfer printers.



#### Foam Nameplate Markers

<b>Material Number:</b>	<b>518</b>
Material:	Polyester
Foam:	Polyethylene
Adhesive:	Acrylic
Temperature Range:	-40°F (-40°C) to +176°F (+80°C) 2 year outdoor rated



#### Product Selection

Article No.	Part No.	Type	Width	Height	Hole Diameter	Color	Pkg. Qty
<b>Foam Nameplates</b>							
596-00500	596-00500	NPL27X13WH	1.06" (26.9mm)	.49" (12.4mm)	N/A	White	500
596-00503	596-00503	NPL27X13BK	1.06" (26.9mm)	.49" (12.4mm)	N/A	Black	500
596-00504	596-00504	NPL51X25WH	2" (50.8mm)	1" (25.4mm)	N/A	White	500
596-00507	596-00507	NPL51X25BK	2" (50.8mm)	1" (25.4mm)	N/A	Black	500
596-00417	596-00417	NPL76X101WH	3" (76.2mm)	4" (101.6mm)	N/A	White	150

Foam Nameplates



Article No.	Part No.	Type	Width	Height	Hole Diameter	Color	Pkg. Qty
<b>Foam Button Nameplates</b>							
596-00412	596-00412	NPLH31X31WH22.5	1.25" (31.7mm)	1.25" (31.7mm)	.88" (22.3mm)	White	250
596-00413	596-00413	NPLH31X31BK22.5	1.25" (31.7mm)	1.25" (31.7mm)	.88" (22.3mm)	Black	250
596-00414	596-00414	NPLH44X44WH30.5	1.75" (44.4mm)	1.75" (44.4mm)	1.2" (30.4mm)	White	250
596-00415	596-00415	NPLH44X44BK30.5	1.75" (44.4mm)	1.75" (44.4mm)	1.2" (30.4mm)	Black	250

Foam Button Nameplates



Article No.	Part No.	Type	Description	Pkg. Qty
<b>Colored Foam Button Nameplate Labels</b>				
596-00405	596-00405	NPLH31X38YE22.5	1.2" x 1.5" Yellow button label with .88" (22.5mm) hole	500
596-00406	596-00406	NPLH31X38RD22.5	1.2" x 1.5" Red button label with .88" (22.5mm) hole	500
596-00407	596-00407	NPLH31X38BK22.5	1.2" x 1.5" Black button label with .88" (22.5mm) hole	500
596-00404	596-00404	NPLH31X38WH22.5	1.2" x 1.5" White button label with .88" (22.5mm) hole	500
596-00323	596-00323	NPLH31X38GN22.5	1.2" x 1.5" Green button label with .88" (22.5mm) hole	500

Article No.	Part No.	Type	Description	Pkg. Qty
<b>Emergency Stop Foam Nameplate Label</b>				
596-00202	596-00202	NPL60X60YE	2.375" x 2.375" Yellow emergency stop label	100

Use Part No. for ordering and Type for specification

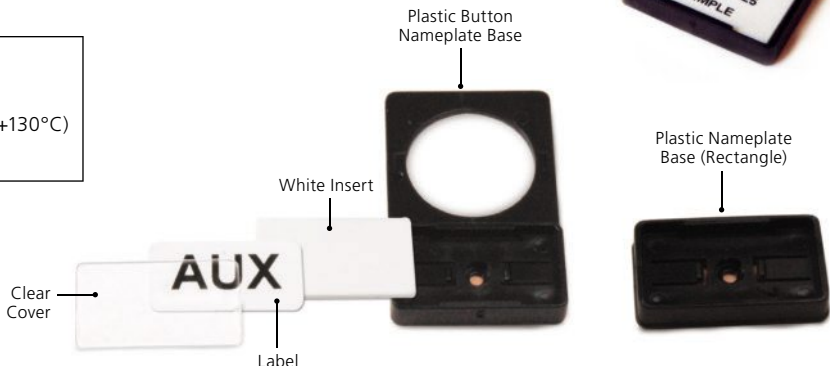
### Plastic Nameplate Markers

HellermannTyton plastic nameplate markers are made of polycarbonate that is rated to UL94VO. The plastic nameplate markers can be mechanically mounted and include a clear polycarbonate cover that protects the printed text. Both nameplate and button nameplate designs are available. Designed for long term durability, the plastic nameplate markers still allow individual customization, on demand, while providing the performance of an engraved plate. They are excellent for use on solar control panels, electrical boxes, inverters, or anything requiring long term identification.



#### Plastic Nameplates

Material:	Polycarbonate
Adhesive:	Acrylic
Temperature Range:	-22°F (30°C) to +266°F (+130°C)
Flammability:	UL94VO



#### Product Selection

Article No.	Part No.	Type	Width	Length	Description	Hole Diameter	Color	Pkg. Type	Pkg. Qty
<b>Plastic Button Nameplate Bases</b>									
596-00189	596-00189	PTSA-22	1.12" (28.4mm)	1.87" (47.4mm)	Button legend base WITH LOCATORS	.88" (22.3mm)	Black	Flat PKG	100
596-00190	596-00190	PTOA-22	1.12" (28.4mm)	1.87" (47.4mm)	Button legend base W/O LOCATORS	.88" (22.3mm)	Black	Flat PKG	100
<b>White Inserts</b>									
596-00418	596-00418	WPL15X27	1.06" (26.92mm)	.59" (14.9mm)	White insert for use in 596-00189, 596-00190 and 596-00191	N/A	White	Flat PKG	360
596-00419	596-00419	WPL15X49	1.92" (48.7mm)	.59" (14.9mm)	White insert for use in 596-00192	N/A	White	Flat PKG	180
596-00420	596-00420	WPL15X67	2.63" (66.8mm)	.59" (14.9mm)	White insert for use in 596-00193	N/A	Black	Flat PKG	90
<b>Labels For Use On Inserts</b>									
596-00184	596-00184	NPL25X13	1" (25.4mm)	.5" (12.7mm)	Label for use in 596-00418 insert	N/A	White	RL	500
596-00185	596-00185	NPL47X13	1.85" (46.9mm)	.5" (12.7mm)	Label for use in 596-00419 insert	N/A	White	RL	500
596-00183	596-00183	NPL63X13	2.5" (63.5mm)	.5" (12.7mm)	Label for use in 596-00420 insert	N/A	White	RL	500
<b>Clear Covers</b>									
596-00194	596-00194	TC15X27	1.06" (26.92mm)	.59" (14.9mm)	Clear cover for use with 596-00189, 596-00190 and 596-00191	N/A	Clear	Flat PKG	360
596-00195	596-00195	TC15X49	1.92" (48.7mm)	.59" (14.9mm)	Clear cover for use in 596-00192	N/A	Clear	Flat PKG	180
596-00196	596-00196	TC15X67	2.63" (66.8mm)	.59" (14.9mm)	Clear cover for use in 596-00193	N/A	Clear	Flat PKG	90
<b>Plastic Nameplate Bases (Rectangle)</b>									
596-00191	596-00191	LB15X27	1.06" (26.92mm)	.59" (14.9mm)	Black rectangle legend base	N/A	Black	Flat PKG	100
596-00192	596-00192	LB15X49	1.92" (48.7mm)	.59" (14.9mm)	Black rectangle legend base	N/A	Black	Flat PKG	100
596-00193	596-00193	LB15X67	2.63" (66.8mm)	.59" (14.9mm)	Black rectangle legend base	N/A	Black	Flat PKG	100

Use Part No. for ordering and Type for specification

Plastic nameplates are made to be assembled as kits. The black base should also include the white insert, a label for the insert and a clear cover to protect the printing. Each is sold separately. Please see descriptions of which parts are recommended to go with the basic Plastic button nameplate bases and or Plastic rectangular nameplate bases.  
 BASE + WHITE INSERT + LABEL (OPTIONAL\*) + CLEAR COVER

\*White inserts can also be directly printed using an ink jet plotter.



### Continuous Vinyl Labels

HellermannTyton’s continuous vinyl labels come in a variety of colors and printing widths. Designed to optimize unique and custom printing designs on demand, vinyl labels allow the maximum flexibility for printing unique sizes of labels. The vinyl has been tested for UV resistance up to ten years in outdoor applications and can be used to print warning labels, voltage markers, switch identifiers, and even pipe markers using TagPrint® Pro 3.0 labeling software and any HellermannTyton thermal transfer printing system.



#### Material Data

Material:	Vinyl
Adhesive:	Acrylic
Temperature Range:	-40°F to +180°F (-40°C to +82°C)
Liner:	10 Year Outdoor Rated

#### Product Selection

Article No.	Part No.	Type	Width	Length	Description	Color	Pkg. Type	Pkg. Qty
558-00309	558-00309	HT1WH250	1 (25.4)	250 (76)	1" White Vinyl Continuous Roll	White	RL	1
558-00313	558-00313	HT2WH250	2 (50.8)	250 (76)	2" White Vinyl Continuous Roll	White	RL	1
558-00345	558-00345	HT3WH250	3 (76.2)	250 (76)	3" White Vinyl Continuous Roll	White	RL	1
558-00350	558-00350	HT4WH250	4 (101.6)	250 (76)	4" White Vinyl Continuous Roll	White	RL	1
558-00310	558-00310	HT1YE250	1 (25.4)	250 (76)	1" Yellow Vinyl Continuous Roll	Yellow	RL	1
558-00314	558-00314	HT2YE250	2 (50.8)	250 (76)	2" Yellow Vinyl Continuous Roll	Yellow	RL	1
558-00346	558-00346	HT3YE250	3 (76.2)	250 (76)	3" Yellow Vinyl Continuous Roll	Yellow	RL	1
558-00308	558-00308	HT1RD250	1 (25.4)	250 (76)	1" Red Vinyl Continuous Roll	Red	RL	1
558-00312	558-00312	HT2RD250	2 (50.8)	250 (76)	2" Red Vinyl Continuous Roll	Red	RL	1
558-00006	558-00006	HT3RD250	3 (76.2)	250 (76)	3" Red Vinyl Continuous Roll	Red	RL	1
558-00370	558-00370	HT4RD250	4 (101.6)	250 (76)	4" Red Vinyl Continuous Roll	Red	RL	1
558-00307	558-00307	HT1BK250	1 (25.4)	250 (76)	1" Black Vinyl Continuous Roll	Black	RL	1
558-00311	558-00311	HT2BK250	2 (50.8)	250 (76)	2" Black Vinyl Continuous Roll	Black	RL	1
558-00374	558-00374	HT3BK250	3 (76.2)	250 (76)	3" Black Vinyl Continuous Roll	Black	RL	1
558-00336	558-00336	HT1OE250	1 (25.4)	250 (76)	1" Orange Vinyl Continuous Roll	Orange	RL	1
558-00337	558-00337	HT2OE250	2 (50.8)	250 (76)	2" Orange Vinyl Continuous Roll	Orange	RL	1
558-00338	558-00338	HT3OE250	3 (76.2)	250 (76)	3" Orange Vinyl Continuous Roll	Orange	RL	1
558-00339	558-00339	HT1BU250	1 (25.4)	250 (76)	1" Blue Vinyl Continuous Roll	Blue	RL	1
558-00341	558-00341	HT2BU250	2 (50.8)	250 (76)	2" Blue Vinyl Continuous Roll	Blue	RL	1
558-00343	558-00343	HT3BU250	3 (76.2)	250 (76)	3" Blue Vinyl Continuous Roll	Blue	RL	1
558-00340	558-00340	HT1GN250	1 (25.4)	250 (76)	1" Green Vinyl Continuous Roll	Green	RL	1
558-00342	558-00342	HT2GN250	2 (50.8)	250 (76)	2" Green Vinyl Continuous Roll	Green	RL	1
558-00344	558-00344	HT3GN250	3 (76.2)	250 (76)	3" Green Vinyl Continuous Roll	Green	RL	1
558-00351	558-00351	HT4GN250	4 (101.6)	250 (76)	4" Green Vinyl Continuous Roll	Green	RL	1

Use Part No. for ordering and Type for specification.

## ShrinkTrak™ Heat Shrinkable Markers

HellermannTyton's ShrinkTrak™ heat shrinkable markers make it easy to mark wire, cable, and other components. These ladder-style markers are designed with side slits for easier application. All ShrinkTrak® markers are military specified. They also reduce printer jams with their efficient and high performance design. For seamless labeling, ShrinkTrak™ can be printed using HellermannTyton's TagPrint® Pro professional label creation software, thermal transfer printers and ribbons to create a permanent and solvent resistant print when shrunk and applied.

### Versatile

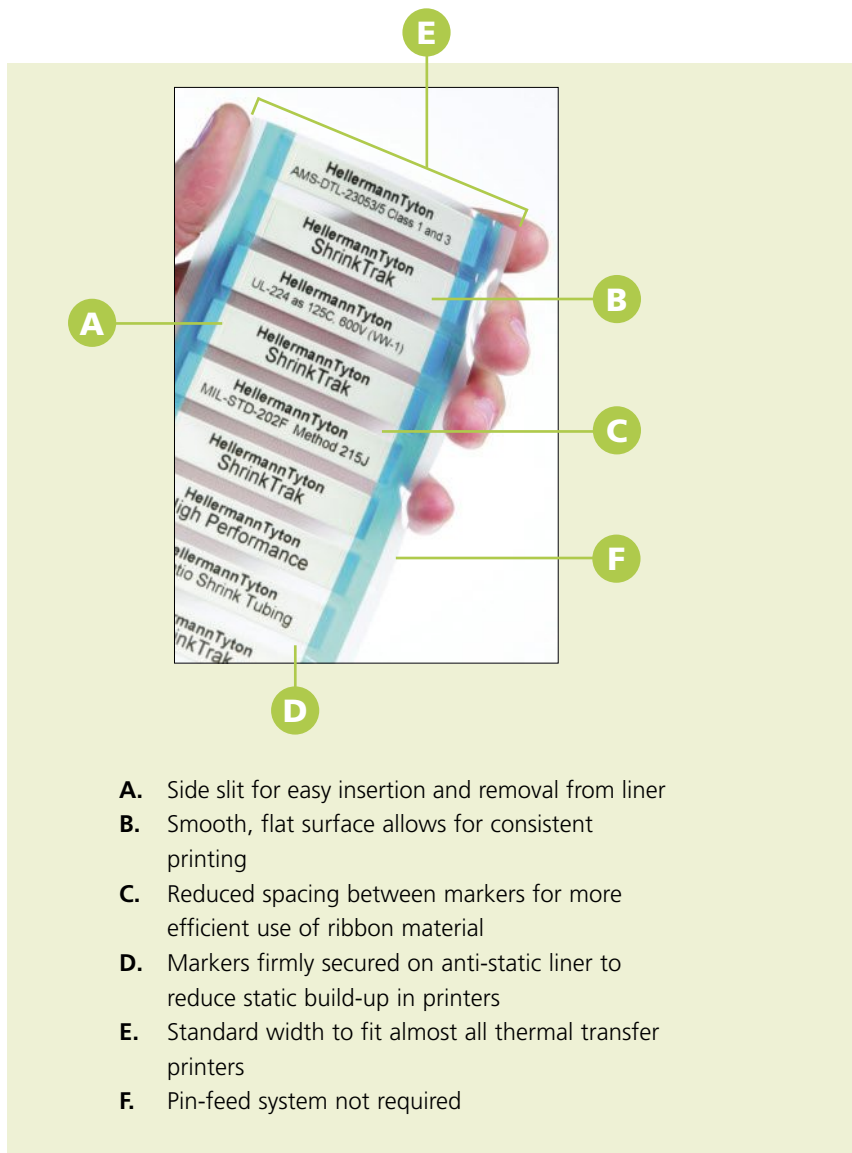
- Flexible, flame retardant, heat shrinkable polyolefin tubing meets all military specifications
- 3:1 shrink ratio
- Standard colors - yellow, white and black
- Larger packaging options result in less box changes

### High Performance Design

- Center slit versions reduce or eliminate hand cutting
- Non-slip, printable liner allows additional marker data to be printed on the reverse side for records and placement instructions
- Utilize HellermannTyton's Durattach ribbon system for the highest print performance on the market

### Reduce Printer Jams

- Markers dispense directly into HellermannTyton thermal transfer printers with custom box opening
- Dispense markers faster and easier with waxed core dispenser



### Ease of Use - Step by Step Guide



**Step 1**  
Print with thermal transfer printer



**Step 2**  
Bend liner at side slit



**Step 3**  
Insert wire into marker



**Step 4**  
Pull-up on wire - the marker will pull away from liner



**ShrinkTrak Applied!**

**ShrinkTrak™ Heat Shrinkable Markers *continued***

Material Data	
Material	<b>Polyolefin, cross-linked (POX)</b>
Product Thickness	<b>3 mil total thickness</b>
Shrink Temperature (nominal)	<b>+194 °F (+90 °C)</b>
Operating Temperature	<b>-67 °F to +275 °F (-55 °C to +135 °C)</b>
Flame Retardant	<b>Yes</b>
Flammability	<b>UL224 VW1</b>
Flexibility	<b>flexible</b>
Abrasion Resistance	<b>Good</b>
Solvent Resistance	<b>Good</b>
Standard Colors	<b>White, Yellow &amp; Black</b>
*For other colors, contact HellermannTyton	
UL Rating	<b>Meets UL-224 as +257 °F (+125 °C), 600V (VW-1)</b>
Certification	<b>AMS-DTL-23053/5 Class 1 and 3, SAE-AS81531, MIL-STD-202G Method 215K</b>



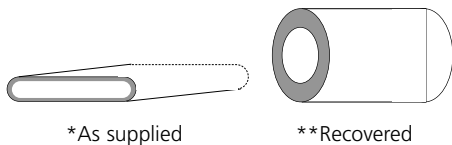
**Recommended Thermal Transfer Ribbons**

- |                        |   |
|------------------------|---|
| <b>TT230SM Printer</b> | <b>TTM430/TTM460</b>                      |
| TTDTHOUTSM             | <b>or other thermal transfer printers</b> |
| T822OUTSM              | TTDTHOUT                                  |
| TTHSTOUTSM             | TT822OUT                                  |
| TT900OUTSM             | TTHSTOUT                                  |
|                        | TT900OUT                                  |



**ShrinkTrak Specifications**

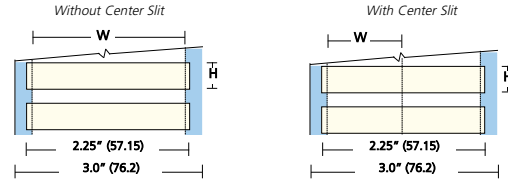
Diameter Size	0.125"	0.187"	0.25"	0.375"	0.50"	0.75"	1.0"
Wire Size Range (AWG/MCM)	18-22 (.044 - 1)	12-18 (.063 - .17)	10-16 (.083 - .230)	8-14 (.122 - .340)	2-10 (.166 - .470)	6-0000 (.25 - .725)	1-400 (.330 - .876)
Inside Diameter as Supplied In. (mm)*	0.118 +/- 0.024 (3.0 +/- 0.6)	0.177 +/- 0.032 (4.5 +/- 0.8)	0.236 +/- 0.040 (6.0 +/- 1.0)	0.354 +/- 0.040 (9.0 +/- 1.0)	0.470 +/- 0.024 (12.0 +/- 1.0)	0.732 +/- 0.040 (18.6 +/- 1.0)	1.024 +/- 0.040 (26.0 +/- 1.0)
Inside Diameter After Recovery In. (mm)	0.043 (1.0)	0.063 (1.6)	0.083 (2.1)	0.122 (3.1)	0.166 (4.2)	0.25 (6.35)	0.33 (8.3)
Wall Thickness After Recovery In. (mm)	0.0209 +/- 0.040 (.53 +/- 0.10)	0.026 +/- 0.004 (.65 +/- 0.10)	0.028 +/- 0.004 (.71 +/- 0.10)	0.031 +/- 0.006 (0.78 +/- 0.15)	0.033 +/- 0.006 (0.83 +/- 0.15)	0.036 +/- 0.006 (0.91 +/- 0.15)	0.039 +/- 0.006 (.99 +/- 1.6)
Overall Width In. (mm)	0.209 +/- 0.040 (5.3 +/- 1.0)	0.303 +/- 0.052 (7.7 +/- 1.3)	0.398 +/- 0.063 (10.1 +/- 1.6)	0.587 +/- 0.063 (14.9 +/- 1.6)	0.776 +/- 0.063 (19.7 +/- 1.6)	1.21 +/- 0.063 (30.8 +/- 1.6)	1.63 +/- 0.063 (41.38 +/- 1.6)
Overall Height In. (mm)	0.020 (0.508)	0.020 (0.508)	0.020 (0.508)	0.022 (0.558)	0.023 (0.582)	0.025 (0.63)	0.03 (0.76)
Dimensional Reference (if the wire or cable diameter is less than or equal to)							



\* Contact HellermannTyton for custom color options.

\*\* Meets printer performance requirements of SAE-AS81531 using the ribbons listed above in any thermal transfer printer, including HellermannTyton's TT320SM and TT1210

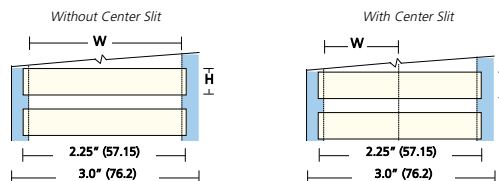
ShrinkTrak Heat Shrinkable Markers *continued*



Product Selection										
Article No.	Part No.	Type	Cross Ref to Former Part No.	Color	Center Slit	Width (W)		Height (H)		Pkg. Qty.
						In.	(mm.)	In.	(mm.)	
0.125" (3.17mm) - Outside Diameter										
553-50001	<b>553-50001</b>	HST3-1BK	THS-610BM	Black	-	1.9"	(48.26)	.235"	(5.97)	250
553-50002	<b>553-50002</b>	HST3-1WH	THS-610W	White	-	1.9"	(48.26)	1.90"	(48)	250
553-50003	<b>553-50003</b>	HST3-1WH	THS-610W10C	White	-	1.9"	(48.26)	1.90"	(48)	1000
553-50078	<b>553-50078</b>	HST3-1WH	THS-610W25C	White	-	1.9"	(48.26)	.235"	(5.97)	2500
553-50004	<b>553-50004</b>	HST3-1WH-S	THS-610WP	White	Single	.95"	(24.1)	.235"	(5.97)	500
553-50074	<b>553-50074</b>	HST3-1WH-S	THS-610WP10C	White	Single	.95"	(24.1)	.235"	(5.97)	2000
553-50067	<b>553-50067</b>	HST3-1WH-S	THS-610WP25C	White	Single	.95"	(24.1)	.235"	(5.97)	5000
553-50070	<b>553-50070</b>	HST3-1WH-2S	THS-610W2P	White	Double	.63"	(16.08)	.235"	(5.97)	750
553-50075	<b>553-50075</b>	HST3-1WH-2S	THS-610W2P10C	White	Double	.63"	(16.08)	.235"	(5.97)	3000
553-50063	<b>553-50063</b>	HST3-1WH-3S	THS-610W3P	White	Triple	.475"	(12.07)	.235"	(5.97)	1000
553-50088	<b>553-50088</b>	HST3-1WH-3S	THS-610W3P10C	White	Triple	.475"	(12.07)	.475"	(12)	4000
553-50006	<b>553-50006</b>	HST3-1YE	THS-610Y10C	Yellow	-	1.9"	(48.26)	.235"	(5.97)	1000
553-50005	<b>553-50005</b>	HST3-1YE	THS-610Y	Yellow	-	1.9"	(48.26)	.235"	(5.97)	250
553-50007	<b>553-50007</b>	HST3-1YE-S	THS-610YP	Yellow	Single	.95"	(24.1)	.235"	(5.97)	500
553-50076	<b>553-50076</b>	HST3-1YE-S	THS-610YP10C	Yellow	Single	.95"	(24.1)	.235"	(5.97)	2000
553-50071	<b>553-50071</b>	HST3-1YE-2S	THS-610Y2P	Yellow	Double	.63"	(16.08)	.235"	(5.97)	750
553-50077	<b>553-50077</b>	HST3-1YE-2S	THS-610Y2P10C	Yellow	Double	.63"	(16.08)	.235"	(5.97)	3000
0.187" (4.74 mm) - Outside Diameter										
553-50008	<b>553-50008</b>	HST4.8-1.6BK	THS-615BM	Black	-	1.9"	(48.26)	.312"	(7.92)	250
553-50009	<b>553-50009</b>	HST4.8-1.6WH	THS-615W	White	-	1.9"	(48.26)	.312"	(7.92)	250
553-50010	<b>553-50010</b>	HST4.8-1.6WH	THS-615W10C	White	-	1.9"	(48.26)	.312"	(7.92)	1000
553-50177	<b>553-50177</b>	HST4.8-1.6WH	THS-615W30C	White	-	1.9"	(48.26)	.312"	(7.92)	3000
553-50079	<b>553-50079</b>	HST4.8-1.6WH	THS-615W50C	White	-	1.9"	(48.26)	.312"	(7.92)	5000
553-50011	<b>553-50011</b>	HST4.8-1.6WH-S	THS-615WP	White	Single	.95"	(24.1)	.312"	(7.92)	500
553-50080	<b>553-50080</b>	HST4.8-1.6WH-S	THS-615WP10C	White	Single	.95"	(24.1)	.312"	(7.92)	2000
553-50068	<b>553-50068</b>	HST4.8-1.6WH-2S	THS-615W2P	White	Double	.633"	(16.08)	.312"	(7.92)	750
553-50072	<b>553-50072</b>	HST4.8-1.6WH-2S	THS-615W2P10C	White	Double	.633"	(16.08)	.312"	(7.92)	3000
553-50064	<b>553-50064</b>	HST4.8-1.6WH-3S	THS-615W3P	White	Triple	.475"	(12.07)	.312"	(7.92)	1000
553-50081	<b>553-50081</b>	HST4.8-1.6WH-3S	THS-615W3P10C	White	Triple	.475"	(12.07)	.312"	(7.92)	4000
553-50013	<b>553-50013</b>	HST4.8-1.6YE	THS-615Y10C	Yellow	-	1.9"	(48.26)	.312"	(7.92)	1000
553-50012	<b>553-50012</b>	HST4.8-1.6YE	THS-615Y	Yellow	-	1.9"	(48.26)	.312"	(7.92)	250
553-50014	<b>553-50014</b>	HST4.8-1.6YE-S	THS-615YP	Yellow	Single	.95"	(24.1)	.312"	(7.92)	500
553-50069	<b>553-50069</b>	HST4.8-1.6YE-2S	THS-615Y2P	Yellow	Double	.633"	(16.08)	.312"	(7.92)	750
553-50073	<b>553-50073</b>	HST4.8-1.6YE-2S	THS-615Y2P10C	Yellow	Double	.633"	(16.08)	.312"	(7.92)	3000
553-50176	<b>553-50176</b>	HST4.8-1.6WH-S	THS-615Y2P10C	White	Double	.633"	(16.08)	.312"	(7.92)	3000
0.25" (6.35mm) - Outside Diameter										
553-50015	<b>553-50015</b>	HST6-2BK	THS-620BM	Black	-	1.9"	(48.26)	.420"	(10.67)	250
553-50016	<b>553-50016</b>	HST6-2WH	THS-620W	White	-	1.9"	(48.26)	.420"	(10.67)	250
553-50017	<b>553-50017</b>	HST6-2WH	THS-620W10C	White	-	1.9"	(48.26)	.420"	(10.67)	1000
553-50018	<b>553-50018</b>	HST6-2WH	THS-620W50C	White	-	1.9"	(48.26)	.420"	(10.67)	5000
553-50019	<b>553-50019</b>	HST6-2WHC	THS-620WP	White	Single	.95"	(24.1)	.420"	(10.67)	500
553-50020	<b>553-50020</b>	HST6-2YE-S	THS-620YP10C	Yellow	-	1.9"	(48.26)	.420"	(10.67)	2000
553-50021	<b>553-50021</b>	HST6-2YE-2S	THS-620Y2P	Yellow	-	1.9"	(48.26)	.420"	(10.67)	1000
553-50022	<b>553-50022</b>	HST6-2YE-S	THS-620Y3P	Yellow	Single	.95"	(24.1)	.420"	(10.67)	1000

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

ShrinkTrak Heat Shrinkable Markers *continued*



Product Selection		Type	Cross Ref to Former Part No.	Color	Center Slit	Width (W)		Height (H)		Pkg. Qty.
Article No.	Part No.					In.	(mm.)	In.	(mm.)	
0.25" (6.35mm) - Outside Diameter (continued)										
553-50082	<b>553-50082</b>	HST6-2WH-2S	THS-620W2P	White	Double	.633"	(16.08)	.420"	(10.67)	750
553-50083	<b>553-50083</b>	HST6-2YE-2S	THS-620Y2P	Yellow	Double	.633"	(16.08)	.420"	(10.67)	750
553-50084	<b>553-50084</b>	HST6-2WH-S	THS-620WP10C	White	Single	.95"	(24.1)	.420"	(10.67)	2000
553-50085	<b>553-50085</b>	HST6-2YE-S	THS-620YP10C	Yellow	Single	.95"	(24.1)	.420"	(10.67)	2000
553-50089	<b>553-50089</b>	HST6-2WH-3S	THS-620W3P10C	White	Triple	.475"	(12.07)	.420"	(10.67)	4000
0.375" (9.52 mm) - Outside Diameter										
553-50023	<b>553-50023</b>	HST9-3BK	THS-625BM	Black	-	1.9"	(48.26)	.597"	(15.16)	250
553-50024	<b>553-50024</b>	HST9-3WH	THS-625W	White	-	1.9"	(48.26)	.597"	(15.16)	250
553-50025	<b>553-50025</b>	HST9-3WH-S	THS-625WP	White	Single	.95"	(24.1)	.597"	(15.16)	500
553-50066	<b>553-50066</b>	HST9-3WH-3S	THS-625W3P	White	Triple	.475"	(12.07)	.597"	(15.16)	1000
553-50026	<b>553-50026</b>	HST9-3YE	THS-625Y	Yellow	-	1.9"	(48.26)	.597"	(15.16)	250
553-50027	<b>553-50027</b>	HST9-3YE-S	THS-625YP	Yellow	Single	.95"	(24.1)	.597"	(15.16)	500
553-50192	<b>553-50192</b>	HST9-3WH	THS-625W10C	White	-	1.9"	(48.26)	.597"	(15.16)	1000
0.50" (12.7 mm) - Outside Diameter										
553-50028	<b>553-50028</b>	HST12-4BK	THS-630BM	Black	-	1.9"	(48.26)	.77"	(19.55)	250
553-50029	<b>553-50029</b>	HST12-4WH	THS-630W	White	-	1.9"	(48.26)	.77"	(19.55)	250
553-50030	<b>553-50030</b>	HST12-4WH-S	THS-630WP	White	Single	.95"	(24.1)	.77"	(19.55)	500
553-50086	<b>553-50086</b>	HST12-4WH-3S	THS-630W3P	White	Triple	.475"	(12.07)	.77"	(19.55)	1000
553-50031	<b>553-50031</b>	HST12-4YE	THS-630Y	Yellow	-	1.9"	(48.26)	.77"	(19.55)	250
553-50032	<b>553-50032</b>	HST12-4YE-S	THS-630YP	Yellow	Single	.95"	(24.1)	.77"	(19.55)	500
553-50087	<b>553-50087</b>	HST12-4YE-3S	THS-630Y3P	Yellow	Triple	.475"	(12.07)	.77"	(19.55)	1000
553-50231	<b>553-50231</b>	HST12-4WH	THS-630W10C	White	-	1.9"	(48.26)	.77"	(19.55)	1000
553-50232	<b>553-50232</b>	HST12-4WH-S	THS-630WP10C	White	Single	.95"	(24.1)	.77"	(19.55)	2000
0.75" (19.05 mm) - Outside Diameter										
553-50033	<b>553-50033</b>	HST18-6BK	THS-635BM	Black	-	1.9"	(48.26)	1.2"	(30.48)	250
553-50034	<b>553-50034</b>	HST18-6WH	THS-635W	White	-	1.9"	(48.26)	1.2"	(30.48)	250
553-50035	<b>553-50035</b>	HST18-6WH-S	THS-635WP	White	Single	.95"	(24.1)	1.2"	(30.48)	500
553-50036	<b>553-50036</b>	HST18-6YE	THS-635Y	Yellow	-	1.9"	(48.26)	1.2"	(30.48)	250
553-50037	<b>553-50037</b>	HST18-6YE-S	THS-635YP	Yellow	Single	.95"	(24.1)	1.2"	(30.48)	500
553-50233	<b>553-50233</b>	HST18-6WH	THS-635W10C	White	-	1.9"	(48.26)	1.2"	(30.48)	1000
553-50234	<b>553-50234</b>	HST18-6WH-S	THS-635WP10C	White	Single	.95"	(24.1)	1.2"	(30.48)	2000
1.0" (25.4mm) - Outside Diameter										
553-50038	<b>553-50038</b>	HST24-8BK	THS-640BM	Black	-	1.9"	(48.26)	1.69"	(42.93)	250
553-50039	<b>553-50039</b>	HST24-8WH	THS-640W	White	-	1.9"	(48.26)	1.69"	(42.93)	250
553-50040	<b>553-50040</b>	HST24-8WH-S	THS-640WP	White	Single	.95"	(24.1)	1.69"	(42.93)	500
553-50041	<b>553-50041</b>	HST24-8YE	THS-640Y	Yellow	-	1.9"	(48.26)	1.69"	(42.93)	250
553-50042	<b>553-50042</b>	HST24-8YE-S	THS-640YP	Yellow	Single	.95"	(24.1)	1.69"	(42.93)	500
1.5" (38.1mm) - Outside Diameter										
553-50226	<b>553-50226</b>	HFST39-13WH-S	THS-645WP	White	Single	.95"	(24.13)	2.26"	(57.40)	300
553-50209	<b>553-50209</b>	HST39-13WH	THS-645W	White	-	1.9"	(48.26)	2.26"	(57.40)	150
553-50225	<b>553-50225</b>	HFST39-13YE	THS-645Y	Yellow	-	1.9"	(48.26)	2.26"	(57.40)	150
553-50227	<b>553-50227</b>	HFST39-13YE-S	THS-645YP	Yellow	Single	.95"	(24.13)	2.26"	(57.40)	300

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

## TipTags Cable Markers

HellermannTyton's TipTags are non-adhesive, cross laminated polyolefin tags with die cut cable tie slots for mechanical fastening. These cable markers are designed to mark wire bundles or large cables. TipTags are ideal for applications where exceptional print performance and long term service life are critical. TipTags consist of a thin, strong material which allows the tags to be lightweight, very strong, tear resistant, and work well in thermal transfer printers.



- Thermal transfer printable for high print contrast
- Halogen free for low smoke and low fire hazard applications
- White front and yellow back for versatility
- Superior strength and tear resistance for long lasting identification
- Pre-cut slots to secure the TipTag using HellermannTyton cable ties
- Printable on both sides
- Printable with Durattach ribbon on white side for the most durable mark in the industry
- Pre-cut sensor slot which ensures the markers will work in any thermal transfer printer
- Perforated in a bandolier for easy knitting and access to individual markers
- Thin profile to take up less space and eliminate any chance of the marker damaging wire insulation
- Lightweight design for applications that require long-term fuel and weight considerations

Material: Polyolefin cross laminated with clear polyester laminate  
 Polyolefin base: 6.5 mil  
 Clear polyester laminate: 1.0 mil

Properties: Halogen-free (low smoke and low fire hazard)  
 Superior print performance, especially with Durattach ribbons  
 Unaffected by most chemicals  
 Wide service temperature range  
 Non-toxic, odorless, and can be recycled or incinerated

Service Temperature Range: -58°F to +221°F (-50°F to +105°C)  
 Can withstand spikes up to 135°C (275°F) for short periods of time

Approvals: SAE-AS81531 and Mil-Std 202G, Method 215J





### TipTags Cable Markers *continued*

Material Data	
Material	<b>Polyolefin, cross laminated</b>
Operating Temperature	<b>-58 °F to +221 °F (-50 °C to +105 °C) continuous</b>
Certification	<b>Meets SAE-AS81531, Mil-Std 202G Method 215J, and BS 4G 198-3, Type 11a</b>



Product Selection							
Article No.	Part No.	Type	Marker Size		Printable Area		Pkg. Qty.
			in.	(mm)	in.	(mm)	
556-26008	<b>556-26008</b>	TIPTAGVA15X65YEWH	2.59" X .68"	(65 X 17.4)	2.58" X .59"	(65 X 15)	500
556-26006	<b>556-26006</b>	TIPTAGVA10X65YEWH	2.59" X .50"	(65 X 12.7)	2.58" X .39"	(65 X 10)	500
556-26007	<b>556-26007</b>	TIPTAGVA10X90YEWH	3.54" X .50"	(90 X 12.7)	3.54" X .40"	(90 X 10)	500
556-26009	<b>556-26009</b>	TIPTAGVA15X90YEWH	3.54" X .68"	(90 X 17.4)	3.54" X .59"	(90 X 15)	500

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### T18 - T30 Series Cable Ties Natural and Black

Most popular cable ties for use with TipTags.

Material Data	
Material	<b>Polyamide 6.6 (PA66)</b>
Operating Temperature	<b>-40 °F to +185 °F (-40 °C to +85 °C) continuous</b>



File# E64139

File# E64139

Product Selection													
Article No.	Part No.	Type	US Gov. Designation	Min. Tensile Strength		Length (L)		Max. Ø Bundle		Width (W)		Color	Pkg. Qty.
				lbs.	(N)	in.	(mm)	in.	(mm)	in.	(mm)		
111-02809	<b>T18S9M4</b>	T18S	-	18 lbs	(80)	3.27"	(83)	.63"	(16)	.09"	(2.3)	Natural	1000
111-02811	<b>T18S0M4</b>	T18S	-	18 lbs	(80)	3.27"	(83)	.63"	(16)	.09"	(2.3)	Black	1000
111-01872	<b>T18R9M4</b>	T18R	MS3367-4-9	18 lbs	(80)	4"	(100)	.87"	(22)	.10"	(2.5)	Natural	1000
111-01841	<b>T18R0M4</b>	T18R	*	18 lbs	(80)	4"	(100)	.87"	(22)	.10"	(2.5)	Black	1000
111-02322	<b>T18I9M4</b>	T18I	-	18 lbs	(80)	5.51"	(140)	1.38"	(35)	.10"	(2.5)	Natural	1000
111-02315	<b>T18I0M4</b>	T18I	-	18 lbs	(80)	5.51"	(140)	1.38"	(35)	.10"	(2.5)	Black	1000
111-02026	<b>T18L9M4</b>	T18L	-	18 lbs	(80)	8.0"	(205)	2.17"	(55)	.10"	(2.5)	Natural	1000
111-02015	<b>T18L0M4</b>	T18L	-	18 lbs	(80)	8.0"	(205)	2.17"	(55)	.10"	(2.5)	Black	1000
111-03047	<b>T30R9M4</b>	T30R	MS3367-5-9	30 lbs	(135)	5.9"	(150)	1.38"	(35)	.14"	(3.5)	Natural	1000
111-03034	<b>T30R0M4</b>	T30R	*	30 lbs	(135)	5.9"	(150)	1.38"	(35)	.14"	(3.5)	Black	1000
111-03327	<b>T30L9M4</b>	T30L	-	30 lbs	(135)	7.48"	(190)	1.97"	(50)	.14"	(3.5)	Natural	1000
111-03315	<b>T30L0M4</b>	T30L	-	30 lbs	(135)	7.48"	(190)	1.97"	(50)	.14"	(3.5)	Black	1000
111-03517	<b>T30LL9M4</b>	T30LL	-	30 lbs	(135)	11.42"	(290)	3.15"	(80)	.14"	(3.5)	Natural	1000
111-03511	<b>T30LL0M4</b>	T30LL	-	30 lbs	(135)	11.42"	(290)	3.15"	(80)	.14"	(3.5)	Black	1000
111-02907	<b>T30XL9M4</b>	T30XL	-	30 lbs	(135)	14.37"	(365)	4.13"	(105)	.14"	(3.5)	Natural	1000
111-02903	<b>T30XL0M4</b>	T30XL	-	30 lbs	(135)	14.37"	(365)	4.13"	(105)	.14"	(3.5)	Black	1000






Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

\* Military black available. Contact HellermannTyton for more information.

### Laser Tag Label Materials

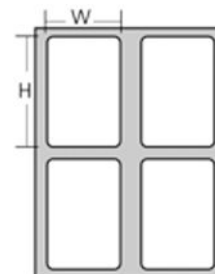
Laser Tags are durable, laser printable labels for applications requiring clear, crisp legibility. The labels come on 8.5" x 11" sheets and are printable using HellermannTyton TagPrint® Pro software and a standard laser printer. Specially designed adhesives and materials are used for the Laser Tags, ensuring that the labels will not curl, change color, or jam laser printers. Laser Tags are available in die-cut on 8-1/2" x 11" polyester sheets.



Label Material	105 Material 	788 Material 	788C Material 	789 Material 
<b>Material Name</b>	Self-Laminating Laser Polyester	White Laser Polyester	Clear Laser Polyester	White Laser Polyester
<b>Printer</b>	Laser	Laser	Laser	Laser
<b>Topcoat</b>	Specially formulated for superb ink anchorage	Specially formulated for superb toner anchorage for most laser printers	Specially formulated for superb toner anchorage for most laser printers	Specially formulated for superb ink anchorage
<b>Liner</b>	82#	68#	68#	90#
<b>Temperature Range</b>	-40°F to +300°F (-40°C to +149°C)	-40°F to +194°F (-40°C to +92°C)	-40°F to +194°F (-40°C to +92°C)	-40°F to +300°F (-40°C to +149°C)
<b>Adhesive Type</b>	Permanent pressure-sensitive acrylic	Permanent pressure-sensitive acrylic	Permanent pressure-sensitive acrylic	Permanent pressure-sensitive acrylic
<b>Application</b>	Excellent for on-the-job wire marking. Ideal for flat ribbon cable, machine tool, and underground wiring. Smallest diameter is 0.15"	Excellent for general purpose component or panel marking. Bar code printable.	Excellent for general purpose component or panel marking. Bar code printable.	For flat labeling applications that require solvent or high temperature resistance. Bar code printable. Can be used to mark electronics and printed circuit boards.
<b>Certifications</b>				
<b>Outdoor Durability</b>	N/A	1 year	1 year	2 years
<b>Chemical Resistance</b>	Good for most petroleum based solvents and lower aliphatic alcohols. Not good for most esters and ketones. Water resistant.	Applied labels will be resistant to water, mild acids, alkalis, salts and most petroleum-based solvents, oils, greases, aliphatic solvents such as kerosene, keptane and reference fuel	Applied labels will be resistant to water, mild acids, alkalis, salts and most petroleum-based solvents, oils, greases, aliphatic solvents such as kerosene, keptane and reference fuel	Applied labels will be resistant to water, mild acids, alkalis, salts and most petroleum based solvents, oils, greases, aliphatic solvent such as kerosene, keptane and reference fuel

## Laser Tag Labels

HellermannTyton's Laser Tag labels are used for component marking.



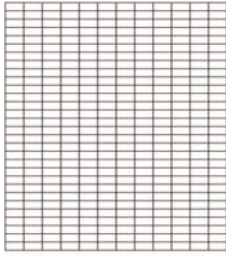
### Product Selection

Article No.	Part No.	Type	Drawing Reference	Width (W)		Height (H)		Labels per Row	Labels per Column	Labels per Sheet	Pkg. Qty.
			(pages 213-214)	In.	(mm.)	In.	(mm.)				
<b>788 Material</b>											
594-01788	<b>TAGPP1-788</b>	TAGPP1	A	1.5"	(15.87)	.37"	(7.87)	12	30	360	1000
594-00001	<b>TAGPP2-788</b>	TAGPP2	B	.66"	(16.7)	.33"	(8.38)	12	30	360	1000
594-62788	<b>TAG62L-788</b>	TAG62L	C	1.50"	(31.75)	.37"	(9.52)	5	25	125	1000
594-61788	<b>TAG61L-788</b>	TAG61L	D	2.62"	(66.67)	1.0"	(25.4)	3	10	30	7500
594-60788	<b>TAG60L-788</b>	TAG60L	E	2.83"	(71.88)	1.5"	(38.1)	3	7	21	5250
594-59788	<b>TAG59L-788</b>	TAG59L	F	4.0"	(101.60)	1.5"	(38.1)	2	7	14	3500
594-58788	<b>TAG58L-788</b>	TAG58L	G	4.0"	(101.60)	2.0"	(50.8)	2	5	10	2500
594-56788	<b>TAG56L-788</b>	TAG56L	H	4.0"	(101.60)	3.33"	(84.5)	2	3	6	1500
594-57788	<b>TAG57L-788</b>	TAG57L	I	4.25"	(107.90)	2.75"	(69.8)	2	4	8	2000
594-55788	<b>TAG55L-788</b>	TAG55L	J	4.25"	(107.90)	5.5"	(139.70)	2	2	4	1000
594-54788	<b>TAG54L-788</b>	TAG54L	K	8.5"	(215.90)	5.5"	(139.70)	1	2	2	500
594-53788	<b>TAG53L-788</b>	TAG53L	L	8.5"	(215.90)	10.81"	(274.6)	1	1	1	250
<b>788C Material</b>											
594-02788	<b>TAGPP1-788C</b>	TAGPP1	A	.625"	(15.87)	.333"	(7.87)	12	30	360	1000
594-00002	<b>TAGPP2-788C</b>	TAGPP2	B	.66"	(16.7)	.33"	(8.38)	12	30	360	1000
<b>789 Material</b>											
594-11789	<b>TAG11L-789</b>	TAG11L	M	.65"	(16.50)	.20"	(5.08)	10	48	480	5000
594-13789	<b>TAG13L-789</b>	TAG13L	N	.75"	(19.00)	.25"	(6.35)	8	39	312	5000
594-14789	<b>TAG14L-789</b>	TAG14L	O	1.0"	(25.40)	.375"	(9.52)	7	25	175	5000
594-15789	<b>TAG15L-789</b>	TAG15L	P	1.0"	(25.40)	.5"	(12.70)	7	19	133	5000
594-96789	<b>TAG96L-789</b>	TAG96L	Q	1.875"	(47.62)	.25"	(6.35)	4	36	144	1000
594-69789	<b>TAG69L-789</b>	TAG69L	R	2.0"	(50.8)	.275"	(6.98)	4	35	140	5000
594-67789	<b>TAG67L-789</b>	TAG67L	S	2.87"	(73)	.375"	(9.52)	2	25	50	1000
594-66789	<b>TAG66L-789</b>	TAG66L	T	3.59"	(91.4)	.375"	(9.52)	2	25	50	1000
594-68789	<b>TAG68L-789</b>	TAG68L	U	3.8"	(96.5)	.275"	(6.98)	2	35	70	2500
594-45789	<b>TAG45L-789</b>	TAG45L	V	4.0"	(101.60)	.80"	(20.32)	2	12	24	5000
<b>Cardstock Material</b>											
593-00001	<b>TAGPHONE</b>	TAGPHONE	W	1.75"	(44.45)	.375"	(9.52)	4	21	84	1000

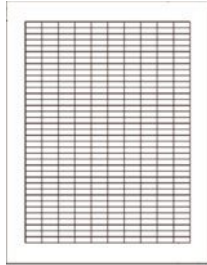
Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

**Laser Tag Labels *continued***

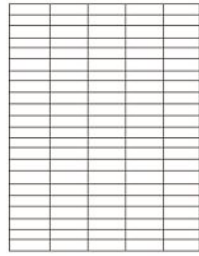
(Not shown to scale)



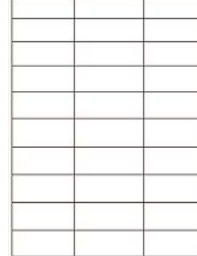
TAGPP1-788,  
TAGPP1-788C  
**A**



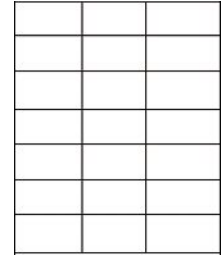
TAGPP2-788,  
TAGPP2-788C  
**B**



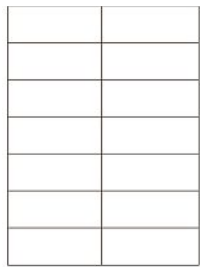
TAG62L-788  
**C**



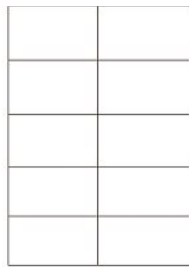
TAG61L-788  
**D**



TAG60L-788  
**E**



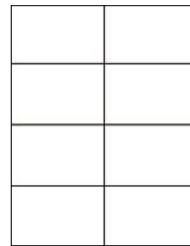
TAG59L-799  
**F**



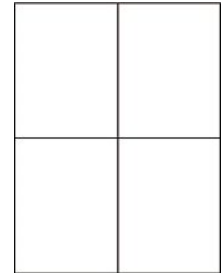
TAG58L-788  
**G**



TAG56L-788  
**H**



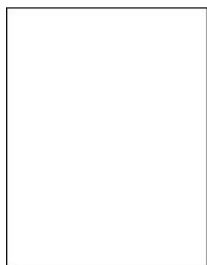
TAG57L-788  
**I**



TAG55L-788  
**J**



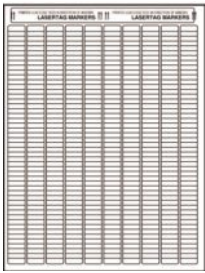
TAG54L-788  
**K**



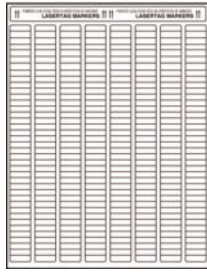
TAG53L-788  
**L**

Laser Tag Labels *continued*

(Not shown to scale)



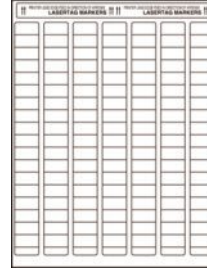
TAG11L-789  
**M**



TAG13L-789  
**N**



TAG14L-789  
**O**



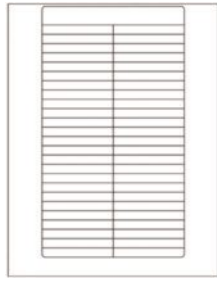
TAG15L-789  
**P**



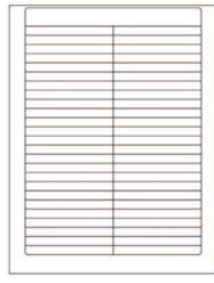
TAG96L-789  
**Q**



TAG69L-789  
**R**



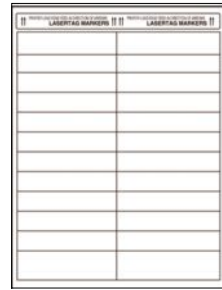
TAG67L-789  
**S**



TAG66L-789  
**T**



TAG68L-789  
**U**



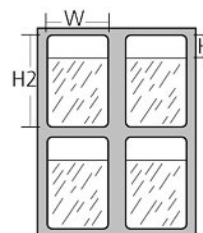
TAG45L-789  
**V**



TAGPHONE  
**W**

### Self-Laminating Laser Tags

HellermannTyton self-laminating Laser Tags are durable, yet conformable to compound surfaces like wires and cables. These labels can be wrapped onto wires without fear of flagging or popping off the wires. The clear overlap protects printed information. Self-laminating Laser Tags are made of 1.0 MIL polyester (105 material).



Product Selection

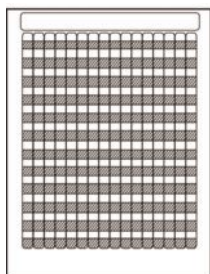
Article No.	Part No.	Type	Drawing References (page 216)	Width (W)		Height of Printable Area (H)		Height of Label (H2)		Labels per Row	Labels per Column	Labels per Sheet	Pkg. Qty.
				In.	(mm.)	In.	(mm.)	In.	(mm.)				
<b>105 Material</b>													
594-26105	<b>TAG26L-105</b>	TAG26L	A	.5"	(12.70)	.375"	(9.5)	.75"	(19.0)	16	16	156	5000
594-02105	<b>TAG2L-105</b>	TAG2L	B	.5"	(12.70)	.5"	(12.7)	1.43"	(36.5)	16	7	112	5000
594-05105	<b>TAG5L-105</b>	TAG5L	C	.8"	(20.30)	.5"	(12.7)	1.43"	(36.4)	8	7	56	5000
594-65105	<b>TAG65L-105</b>	TAG65L	D	.81"	(20.70)	.81"	(20.7)	2.13"	(53.9)	9	4	36	1000
594-51105	<b>TAG51L-105</b>	TAG51L	E	1.0"	(25.40)	.35"	(8.89)	.75"	(19.0)	8	12	84	5000
594-49105	<b>TAG49L-105</b>	TAG49L	F	1.0"	(25.40)	.35"	(8.8)	1.0"	(25.5)	8	8	70	2500
594-63105	<b>TAG63L-105</b>	TAG63L	G	1.0"	(25.40)	.5"	(12.7)	1.33"	(33.78)	8	7	49	2500
594-09105	<b>TAG9L-105</b>	TAG9L	H	1.0"	(25.40)	.75"	(19.00)	2.25"	(57.1)	7	4	28	1000
594-50105	<b>TAG50L-105</b>	TAG50L	I	1.0"	(25.40)	1.0"	(25.4)	3.16"	(80.4)	8	3	21	1000
594-64105	<b>TAG64L-105</b>	TAG64L	J	1.17"	(29.6)	.83"	(21.08)	3.33"	(84.6)	6	3	18	1000
594-01105	<b>TAG1L-105</b>	TAG1L	K	1.9"	(48.20)	.75"	(19.0)	3.25"	(82.5)	4	3	12	1000
594-52105	<b>TAG52L-105</b>	TAG52L	L	2.0"	(50.80)	.47"	(33.70)	1.33"	(33.7)	3	7	21	1000
594-10105	<b>TAG10L-105</b>	TAG10L	M	2.0"	(50.8)	.75"	(19.1)	2.25"	(57.2)	4	4	16	1000

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

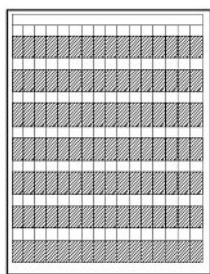


**Self-Laminating Laser Tags *continued***

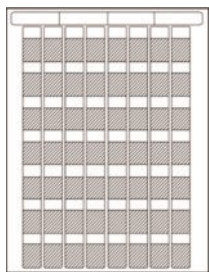
(Not shown to scale)



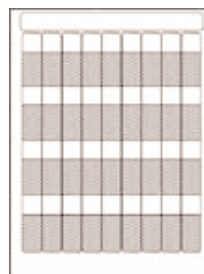
TAG26L-105  
**A**



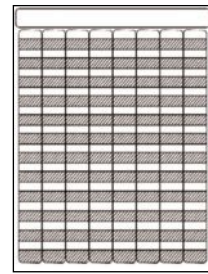
TAG2L-105  
**B**



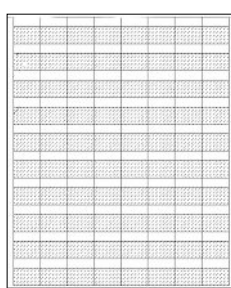
TAG5L-105  
**C**



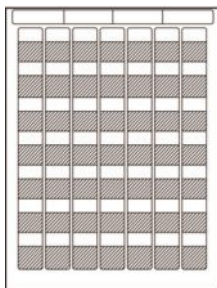
TAG65L-105  
**D**



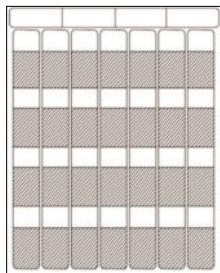
TAG51L-105  
**E**



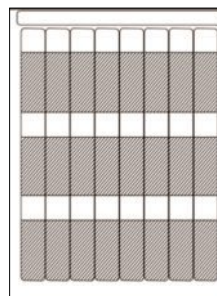
TAG49L-105  
**F**



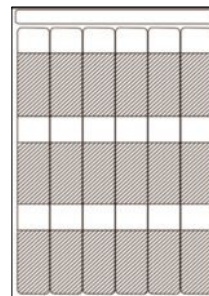
TAG63L-105  
**G**



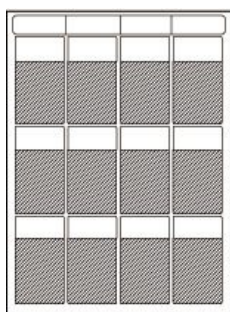
TAG9L-105  
**H**



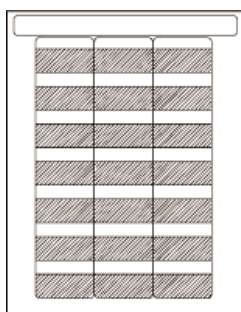
TAG50L-105  
**I**



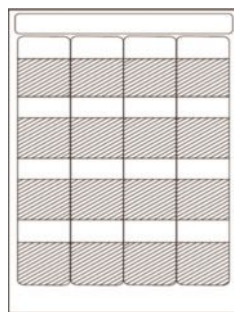
TAG64L-105  
**J**



TAG1L-105  
**K**



TAG52L-105  
**L**

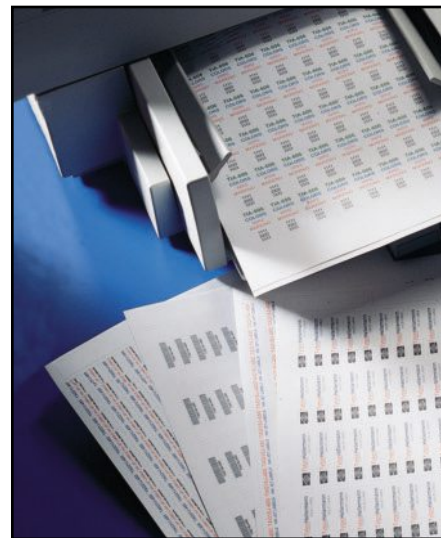





TAG10L-105  
**M**

### Ink Jet Label Materials

HellermannTyton offers a series of technologically advanced labels for use on standard ink jet printers. The labels come on 8.5" x 11" sheets and are printable using HellermannTyton's TagPrint® Pro software.

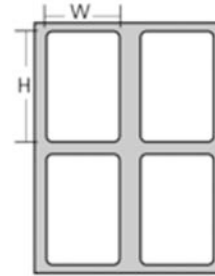
A wide range of materials and sizes is available for wire and component marking. When used with pigment based inks, HellermannTyton ink jet labels offer superior non-smear marks that are chemical and solvent resistant. Colors can be printed when used on a color ink jet printer. Ink jet labels are available in polyester or paper.



Label Material	108 Material 	450 Material 	994 Material 
<b>Material Name</b>	Paper	White Polyester	Clear Self-Laminating Polyester
<b>Printer(s)</b>	Ink Jet	Ink Jet	Ink Jet
<b>Topcoat</b>	Uncoated Paper	Specially formulated for superb toner anchorage and fast-drying printing	Formulated for superb anchorage for ink jet printing
<b>Liner</b>	50#	50#	82#
<b>Temperature Range</b>	-20°F to +200°F (-20°C to +93°C)	-40°F to +300°F (-40°C to +149°C)	-40°F to +300°F (-40°C to +149°C)
<b>Adhesive Type</b>	Pressure sensitive acrylic	Pressure sensitive acrylic	Permanent pressure sensitive acrylic
<b>Application</b>	General purpose flat label applications where the environment is not critical	Flat surface marking using ink jet labels	Excellent for on-the-job wire marking. Ideal for flat ribbon cable, machine tool and underground wiring. For use in ink jet or laser printers.
<b>Chemical Resistance</b>	General purpose paper permanent marking	Excellent chemical resistance to chemicals, solvents, and abrasion when using pigment based ink. Moderate resistance when using dye based inks.	Good for most petroleum based solvents and lower aliphatic alcohols. Not good for most esters and ketones. Water resistant

## Ink Jet Labels

HellermannTyton's inkjet labels are used for component marking.



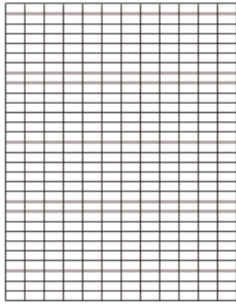
Product Selection

Article No.	Part No.	Type	Drawing Reference	Width (W)		Height (H)		Labels per Row	Labels per Column	Labels per Sheet	Pkg. Qty.
			(page 219)	In.	(mm.)	In.	(mm.)				
<b>108 Material</b>											
593-01108	<b>TAGPP1J-108</b>	TAGPP1J	A	.625"	(15.87)	.31"	(7.87)	12	30	360	1000
593-65108	<b>TAG65J-108</b>	TAG65J	B	1.0"	(25.4)	1.50"	(31.75)	12	10	50	12500
593-59108	<b>TAG59J-108</b>	TAG59J	C	4.0"	(101.6)	1.5"	(38.1)	2	7	14	3500
593-57108	<b>TAG57J-108</b>	TAG57J	D	4.25"	(107.9)	2.75"	(69.80)	2	4	8	2000
593-56108	<b>TAG56J-108</b>	TAG56J	E	3.33"	(84.5)	4.0"	(101.6)	2	3	6	1500
<b>450 Material</b>											
593-11450	<b>TAG11J-450</b>	TAG11J	F	.20"	(5.08)	.65"	(16.05)	21	12	252	5000
593-13450	<b>TAG13J-450</b>	TAG13J	G	.25"	(6.35)	.75"	(19.00)	26	12	312	5000
593-14450	<b>TAG14J-450</b>	TAG14J	H	.375"	(9.52)	1.0"	(25.4)	16	9	144	5000
593-19450	<b>TAG19J-450</b>	TAG19J	I	.375"	(9.52)	2.0"	(50.8)	15	4	60	1000
593-15450	<b>TAG15J-450</b>	TAG15J	J	.5"	(12.7)	1.0"	(25.4)	13	9	117	5000
593-21450	<b>TAG21J-450</b>	TAG21J	K	.5"	(12.7)	.75"	(19.00)	13	12	156	5000
593-28450	<b>TAG28J-450</b>	TAG28J	L	.80"	(20.3)	1.437"	(36.49)	8	6	48	1000
<b>Cardstock Material</b>											
593-00001	<b>TAGPHONE</b>	TAGPHONE	M	1.75"	(44.45)	.375"	(9.52)	4	21	84	1000

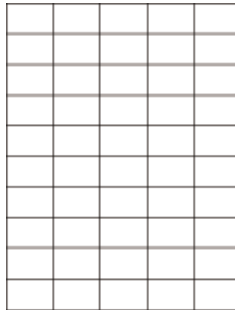
Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

**Ink Jet Labels *continued***

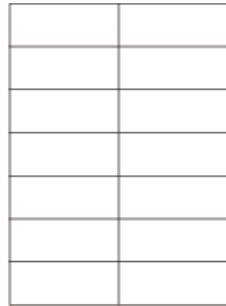
(Not shown to scale)



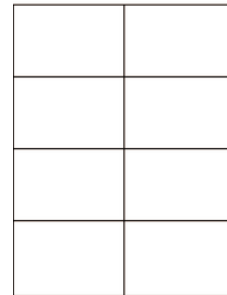
TAGPP1J-788  
**A**



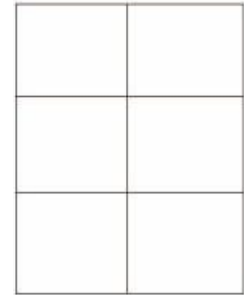
TAG65J-108  
**B**



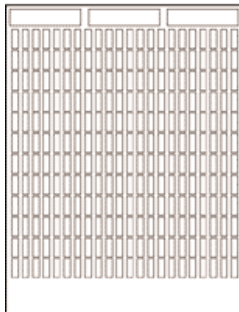
TAG59J-108  
**C**



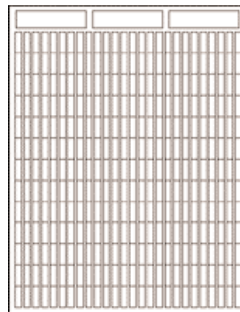
TAG57L-788  
**D**



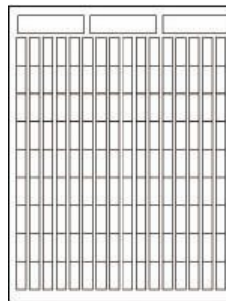
TAG56L-788  
**E**



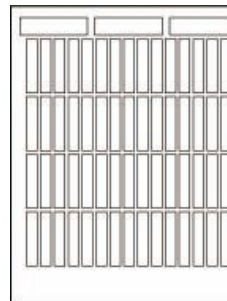
TAG11J-450  
**F**



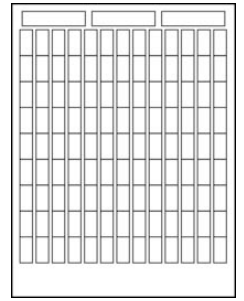
TAG13J-450  
**G**



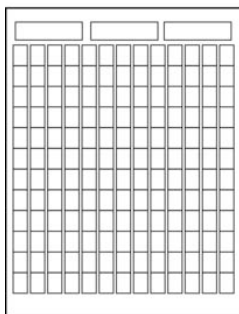
TAG14J-450  
**H**



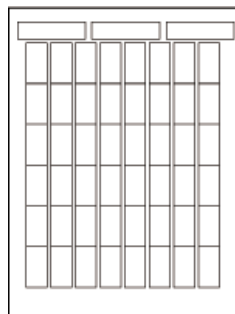
TAG19J-450  
**I**



TAG15J-450  
**J**



TAG21J-450  
**K**



TAG28J-450  
**L**

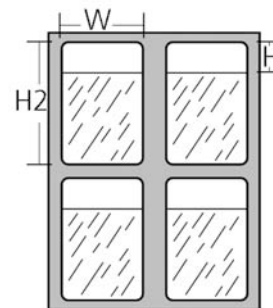
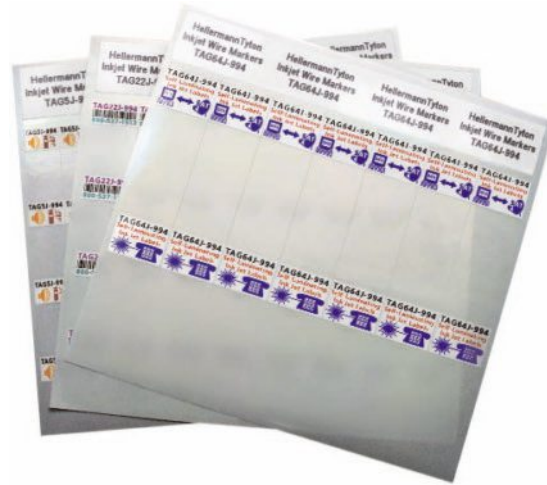


TAGPHONE  
**M**

## Ink Jet Self-Laminating Labels

HellermannTyton's ink jet self-laminating labels are smear resistant, allowing them to be handled immediately. The labels are made of a heat resistant 1mm polyester film with a strong acrylic-based adhesive. The printable area is a special ink-receptive film that absorbs the ink as it is printed on an ink jet printer. This same material, 994 clear polyester, can also be used in any standard laser printer.

Each sheet is smaller than the standard letter size (8.5"x11"). Less waste results from the smaller sheet size because the the user can print smaller quantities at one time. HellermannTyton's ink jet self-laminating labels are also more convenient to store.



Product Selection

Article No.	Part No.	Type	Drawing References	Width (W)	Height of Printable Area (H)	Height of Label (H2)	Labels per Row	Labels per Column	Labels per Sheet	Pkg. Qty.
			(page 221)	In. (mm.)	In. (mm.)	In. (mm.)				
<b>994 Material</b>										
593-26994	<b>TAG26J-994</b>	TAG26J	A	.5" (12.7)	.35" (8.89)	.75" (19.05)	16	8	128	2500
593-05994	<b>TAG5J-994</b>	TAG5J	B	.8" (20.3)	.5" (12.7)	1.43" (36.32)	10	4	40	1000
593-51994	<b>TAG51J-994</b>	TAG51J	C	1.0" (25.4)	.35" (8.89)	.75" (19.05)	8	8	64	1000
593-22994	<b>TAG22J-994</b>	TAG22J	D	1.0" (25.4)	.5" (12.7)	1.43" (36.32)	8	4	32	1000
593-09994	<b>TAG9J-994</b>	TAG9J	E	1.0" (25.4)	.75" (19.05)	2.25" (57.15)	8	3	24	1000
593-64994	<b>TAG64J-994</b>	TAG64J	F	1.16" (29.6)	.86" (21.8)	3.25" (82.6)	7	2	14	1000

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.



**Ink Jet Self-Laminating Labels *continued***

(Not shown to scale)



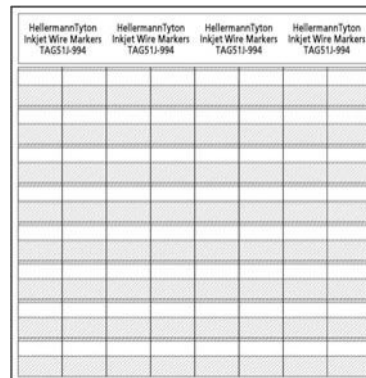
TAG26J-994

**A**



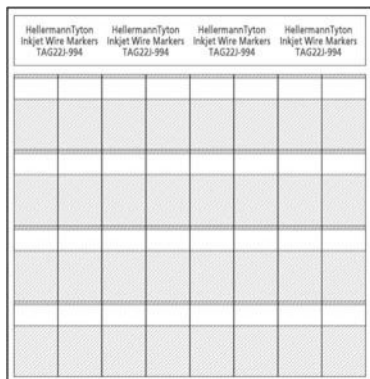
TAG5J-994

**B**



TAG51J-994

**C**



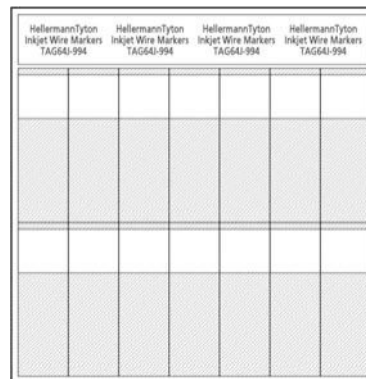
TAG22J-994

**D**



TAG9J-994

**E**



TAG64J-994

**F**



## Spirit® 2100 Portable Printing System



The Spirit 2100 provides fast, high quality, thermal transfer printing for permanent and highly legible label printing. The Spirit 2100 prints on many different types of label materials for wire, cable, and component marking. Self-laminating, white and metalized polyester, and tamper evident materials for calibration and security labeling are available for use with the Spirit system.

### Product Features

- “What You See Is What You Get” label design and creation
- Choose from normal or bold fonts to complete the label design
- Easily change text sizes: tiny, normal or large text
- And much more! Contact HellermannTyton for more details

Product Selection				
Article No.	Part No.	Type	Description	Pkg. Qty.
557-00085	HT2100	HT2100	Portable Printing System includes: Spirit 2100 printer, HT2100 rechargeable battery and charger, ribbon cartridge, TAGH73-336, printer manual, hard shell case, cleaning card, cleaning pen and Spiritlink computer interface software (interface software cable sold separately)	1

Use **Part No.** for ordering and **Type** for specification purposes.

## Spirit 2100 Accessories

Product Selection				
Article No.	Part No.	Type	Description	Pkg. Qty.
591-00076	<b>BC10</b>	BC10	Battery Charger	1
557-00002	<b>557-00002</b>	2100CASE	Spirit Carrying Case	1
557-00004	<b>2100CABLE</b>	2100CABLE	SpiritLink interface cable.	1
557-00003	<b>557-00003</b>	RBP1	Battery Pack	1
557-00005	<b>2100PEN</b>	2100PEN	Cleaning Pen	1
557-00006	<b>TS3003039</b>	TS3003039	Spirit label Spindle Roll	1
557-00007	<b>TS3003040</b>	TS3003040	Spirit label Spindle cap	1
557-00008	<b>2100CARD</b>	2100CARD	Printhead cleaning card	1

Use **Part No.** for ordering and **Type** for specification purposes.

## Ribbon

The ribbon is supplied in a self-contained cartridge for easy loading. *One ribbon per package.*

Product Selection								
Article No.	Part No.	Type	Description	Width (W)		Height (H)		Pkg. Qty.
				In.	(mm)	In.	(mm)	
557-00009*	<b>HHIGR</b>	HHIGR	Replacement ribbon cartridge	2.0	(50.8)	2.50	(63.5)	131 ft (40 m)
557-00092	<b>HHHST</b>	HHHST	Ribbon cartridge	2.0	(50.8)	2.50	(63.5)	131 ft (40 m)
557-00075**	<b>HHDTH</b>	HHDTH	Replacement Durattach ribbon	2.0	(50.8)	2.50	(63.5)	131 ft (40 m)

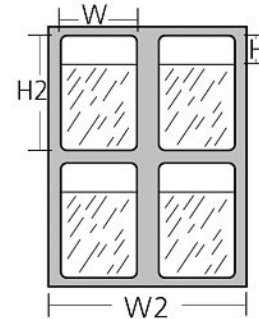
Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

\* HHIGR works on all materials

\*\* HHDTTH can only be used with label materials that have the DTH extension. This provides superior performance to most chemicals and solvents.

### Spirit 2100 Self-Laminating Labels

Self-laminating labels are used for marking wire and cable. The clear overlap protects printed information.

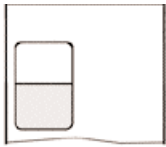


Product Selection													
Article No.	Part No.	Type	Drawing Reference	Color	Width (W)		Height of Printable Area (H)		Height of Label (H2)		Width of Liner (W2)		Pkg. Qty.
			(page 101)		In.	(mm.)	In.	(mm.)	In.	(mm.)	In.	(mm.)	
<b>100 Material</b>													
557-00026	<b>TAGH26-100</b>	TAGH26	A	White	.5"	(12.7)	.35"	(8.8)	.75"	(19.05)	.875"	(22.22)	500
557-00011	<b>TAGH2-100</b>	TAGH2	B	White	.5"	(12.7)	.5"	(12.7)	1.435"	(36.5)	.875"	(22.22)	250
557-00025	<b>TAGH25-100</b>	TAGH25	C	White	.75"	(19.05)	.5"	(12.7)	1.75"	(44.45)	.875"	(22.22)	175
557-00027	<b>TAGH51-100</b>	TAGH51	D	White	1.0"	(25.4)	.35"	(8.8)	.75"	(19.05)	1.125"	(28.57)	500
557-00021	<b>TAGH22-100</b>	TAGH22	E	White	1.0"	(25.4)	.5"	(12.7)	1.435"	(36.5)	1.125"	(28.57)	250
557-00018	<b>TAGH9-100</b>	TAGH9	F	White	1.0"	(25.4)	.75"	(19.05)	2.25"	(57.1)	1.125"	(28.57)	100
557-00013	<b>TAGH3-100</b>	TAGH3	G	White	1.0"	(25.4)	1.0"	(25.4)	3.75"	(95.25)	1.125"	(28.57)	100
557-00028	<b>TAGH95-100</b>	TAGH95	H	White	1.5"	(38.1)	1.0"	(25.4)	3.75"	(95.25)	1.625"	(41.25)	100
557-00010	<b>TAGH1-100</b>	TAGH1	I	White	1.9"	(48.26)	.75"	(19.05)	3.19"	(81.02)	2.025"	(51.43)	100
557-00024	<b>TAGH24-100</b>	TAGH24	J	White	2.0"	(50.8)	.5"	(12.7)	1.435"	(36.5)	2.125"	(53.97)	250
557-00020	<b>TAGH10-100</b>	TAGH10	K	White	2.0"	(50.8)	.75"	(19.05)	2.25"	(57.1)	2.125"	(53.97)	100
557-00015	<b>TAGH6-100</b>	TAGH6	L	White	2.0"	(50.8)	1.0"	(25.4)	3.75"	(95.25)	2.125"	(53.97)	100

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

**Spirit 2100 Self-Laminating Labels *continued***

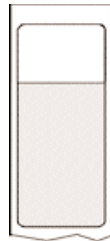
(Not shown to scale)



TAG26-100  
**A**



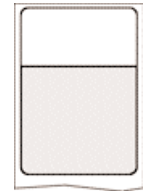
TAGH2-100  
**B**



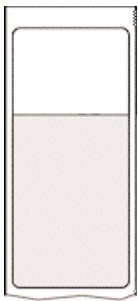
TAGH25-100  
**C**



TAGH51-100  
**D**



TAGH22-100  
**E**



TAGH9-100  
**F**



TAGH3-100  
**G**



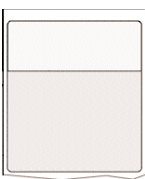
TAGH95-100  
**H**



TAGH1-100  
**I**



TAGH24-100  
**J**



TAGH10-100  
**K**



TAGH6-100  
**L**

## Sport Handheld Printing System

### High-Quality Labels

- Prints on 1/2", 1" and 2" vinyl widths
- 203 dpi print resolution

### Precision Cutter

- Manual cutter lever for clean, crisp label edges

### Large LCD Screen

- 2.62" x 1.31" (256 x 128 pixels)
- LCD screen displays five lines of text in high resolution

### Rugged Design

- Industrial-strength nylon strap with metal loop
- Exterior casing stands up to industrial use

### Intuitive Capabilities

- Soft key menu for easy navigation
- ABC key layout

### Rechargeable Battery

- Print for 120 minutes on a single charge
- Low self-discharge rate for long-term use

### Lightweight Design

- Fits in the palm of your hand
- Weight: 2.7 lbs. (1.22 kg)



HellermannTyton introduces the newest innovation in portable labeling – The Sport hand-held thermal transfer printer allows for on-the-job label creation to ensure that applied labels meet all the current National Electrical Codes (NEC) and International Fire Codes (IFC). In addition, the portability of the Sport makes it ideal for getting off the job faster, and passing inspection the first time. The Sport can print labels on demand, even while the inspector is still present, allowing the installer to print any missing labels or correct any labels that the inspector rejects. This saves time and money by not having to re-schedule the inspection while waiting for replacement labels to be ordered, delivered and installed.

The Sport comes pre-loaded with all the label designs mandated by the NEC and IFC. The existing templates stored in the Sport can be modified to meet specific local code requirements which may be required by the Authority Having Jurisdiction (AHJ).

Standard and reflective label materials (and the printing ribbons) are available with the Sport printer in white and red. HellermannTyton's vinyl labels are manufactured based on the parameters outlined in Section 690 of the NEC using ultraviolet (UV) resistant permanent acrylic adhesive and a base material intended to endure harsh environmental elements. These pre-saved label designs, when pre-printed on the vinyl label stock, meet the governing requirements for durability, color, text height and visibility and can be applied to most surfaces.

## Features

- 2.62" x 1.31" viewable LCD screen shows five lines and offers high resolution (256 x 128 pixels)
- Text/image auto-size eliminates time-consuming "guess-and-check" label design process
- Intuitive soft key menu system for easy navigation and label design
- Lightweight design with convenient hand strap for optimal portability
- 250 pre-installed safety symbols updated to the most-current ANSI standards
- Print 100' of labels before recharging battery
- Truly rugged printer body and internal components meet industrial expectations
- Manual precision cutter provides clean, sharp label edges
- 203 dpi print resolution gives clarity and visibility to label messages and images
- Indoor/Outdoor Premium Vinyl Tape sizes ½", 1" and 2" in width
- Industrial-grade ribbon and tape is resistant to chemicals, moisture, abrasion and fading
- Save up to 32 label designs for future print jobs
- Prints Bar Codes
- Print Preview to actual size

Designing a label is as easy as typing out the text and then selecting a font size.



Step 1) Turn on unit, press the FILE button and select one of the many pre-saved templates.



Step 2) Press the print button to start the printing process.



Step 3) Remove and apply your printed label.

### PV Systems Label Material for Sport Printer

HellermannTyton offers all the labels required to pass an on-site inspection for a photovoltaic panel installation. The continuous vinyl rolls are available both in red and white. Reflective labels, also available in red and white, meet the latest IFC 2012 and NEC 2011 codes for marking a PV installation. Additionally, the white label stock is an option for PV and other types of installations per ANSI Z535.4 Article 7.3 in which black lettering can be used on a white background. Solid colors of red and white are supported by ANSI Z535.4 – Article 7.6.2; a benefit in that a minimum of label widths and colors as well as only two ribbon ink cartridges of black and white need be on hand to meet labeling code requirements. All materials are made of UV resistant adhesives and vinyl for long-lasting outdoor durability.



### Sport Printer and Labels

Product Selection				
Article No.	Part No.	Type	Pkg. Qty	Description
<b>Reflective Solar Labels</b>				
557-00112	557-00112	OSPLP	1	Sport Printer, White Ribbon, 2" Red Vinyl Roll, Charger, Battery, Instructions
557-00113	557-00113	OSPLPKIT	1	Sport Printer Kit, White Ribbon, 1" & 2" Red Vinyl Roll, 1" Reflective Roll, Charger, Battery, Instructions
591-00231	591-00231	SpindleKit	1	Replacement Spindle Slide and Spindle Cover
591-00076	591-00076	BC10	1	Replacement Battery Charger 120V 60Hz
557-00003	557-00003	RBP1	1	Replacement Battery
557-00002	557-00002	2100CASE	1	Optional Hard Shell Carrying Case
591-00263	591-00263	HT2-Softcase	1	Optional Soft Shell Carrying Case
591-00232	591-00232	HHIGRBG	1	Black Ribbon
591-00233	591-00233	HHIGRWG	1	White Ribbon
591-00243	591-00243	HT1RD30	1	1" Red Vinyl 30 Feet Per Roll
591-00264	591-00264	HT1RDRF20	1	1" Red Reflective Vinyl 20 Feet Per Roll
591-00244	591-00244	HT1WH30	1	1" White Vinyl 30 Feet Per Roll
591-00251	591-00251	HT.5RD30	1	1/2" Red Vinyl 30 Feet Per Roll
591-00252	591-00252	HT.5WH30	1	1/2" White Vinyl 30 Feet Per Roll
591-00259	591-00259	HT2RD30	1	2" Red Vinyl 30 Feet Per Roll
591-00265	591-00265	HT2RDRF20	1	2" Red Reflective Vinyl 20 Feet Per Roll
591-00261	591-00261	HT2WH20	1	2" White Vinyl 30 Feet Per Roll
591-00260	591-00260	HT2WHRF20	1	2" White Reflective Vinyl 20 Feet Per Roll
591-00278	591-00278	HT2AF30	1	2" White/Orange Vinyl 30 Feet Per Roll For Arc Flash Labeling

Use Part No. for ordering and Type for specification.



### Pre-printed Labels

HellermannTyton pre-printed and thermal transfer printable labels have a special high-bond adhesive for use on both enamel and powder coat painted surfaces. Labels are a laminated construction for maximum UV stability. Where required, labels are reflective per NEC and IFC standards. Labels meet the requirements of UL969.



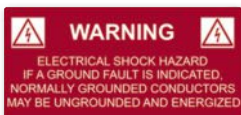
Material Data	
Material	443/552 UV Stable Flexible White Vinyl w/ Acrylic Laminate
Operating Temperature	-40 °F (-40 °C) to 175 °F (79 °C)
Min. Application Temp.	50 °F (10 °C)
Liner	78# White Bleached Paper
Certifications	UL969



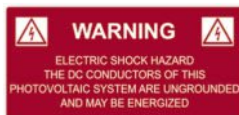
596-00233



596-00232



596-00234



596-00258



596-00235



596-00231



596-00236

Product Selection				
Article No.	Part No.	Type	Roll Qty.	Description
596-00233	596-00233	WESHLBL	50	WARNING - ELECTRICAL SHOCK HAZARD 3.75" (95.25mm) X 2.0" (50.8mm)
596-00232	596-00232	WESHLBDC	50	WARNING - ELECTRICAL SHOCK HAZARD W/DC 3.75" (95.25mm) X 2.5" (63.5mm)
596-00234	596-00234	WGCMC	50	WARNING - GROUNDED CONDUCTORS MAY BE ENERGIZED 4.12" (104.6mm) X 2" (50.8mm)
596-00258	596-00258	WDCCU	50	WARNING - DC CONDUCTORS MAY BE ENERGIZED 4.12" (104.6mm) X 2" (50.8mm)
596-00235	596-00235	WTOPVLBL	50	WARNING - TURN OFF PV AC PRIOR TO WORKING INSIDE PANEL 4.12" (104.6mm) X 2" (50.8mm)
596-00231	596-00231	WDPSLBL	50	WARNING - DUAL POWER SOURCE 4.12" (104.6mm) X .75" (19.05mm)
596-00236	596-00236	CBACKFED	50	CAUTION - PV SYSTEM CIRCUIT BREAKER IS BACKFED 4.12" (104.6mm) X .75" (19.05mm)

Use Part No. for ordering and Type for specification.

### Reflective Rooftop Label

Designed to meet NEC2011 Section 690.4(F) as interpreted by the International Association of Electrical Inspectors (IAEI), HellermannTyton offers an aluminum and vinyl label designed for use on almost any type of roof shingle. Mount via a pre-cut aluminum plate with aluminum clips (both supplied with label) to standard tar shingles, or bend, shape and fasten with construction adhesive or grommet screws on composite or wooden roofing. Label text is reflective to meet IFC requirements.



Material Data	
Material	242/552 UV Stable Reflective Vinyl w/ Acrylic Laminate on Aluminum
Operating Temperature	-40 °F (-40 °C) to 175 °F (79 °C)
Min. Application Temp.	50 °F (10 °C)
Liner	Polyethylene Coated Paper
Certifications	UL969

Product Selection				
Article No.	Part No.	Type	Pkg. Qty.	Description
596-00257	596-00257	PVPSRTM	1	PHOTOVOLTAIC POWER SOURCE 6.75" (171.45mm) X 2.75" (69.85mm)

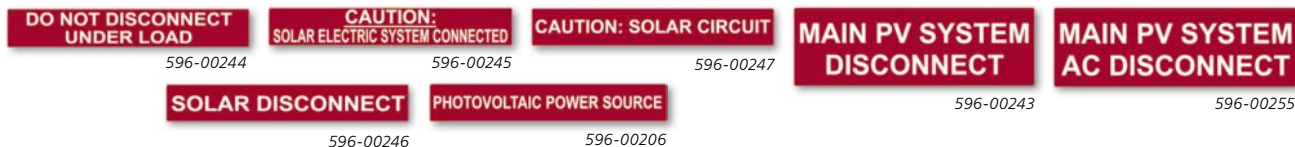
Use Part No. for ordering and Type for specification.

### Pre-printed Reflective Labels

Reflective labels are easier to read at night and are used to ensure fire safety and NEC regulations.



Material Data	
Material	242/552 UV Stable Reflective Vinyl w/ Acrylic Laminate
Operating Temperature	-40 °F (-40 °C) to 175 °F (79 °C)
Min. Application Temp.	50 °F (10 °C)
Liner	Polyethylene Coated Paper
Certifications	UL969



Product Selection				
Article No.	Part No.	Type	Pkg. Qty.	Description
596-00244	596-00244	DNDCUL	50	DO NOT DISCONNECT UNDER LOAD 6.5" (165.1mm) X 1" (25.4mm)
596-00245	596-00245	CSESC	50	CAUTION – SOLAR ELECTRIC SYSTEM CONNECTED 6.5" (165.1mm) X 1" (25.4mm)
596-00247	596-00247	CSCIRLBL	50	CAUTION - SOLAR CIRCUIT 6.5" (165.1mm) X 1" (25.4mm)
596-00246	596-00246	SOLARD	50	SOLAR DISCONNECT 6.5" (165.1mm) X 1" (25.4mm)
596-00243	596-00243	MPVSD	50	MAIN PV SYSTEM DISCONNECT 5.5" (139.7mm) X 1.75" (44.45mm)
596-00255	596-00255	MPVACDIS	50	MAIN PV SYSTEM AC DISCONNECT 5.5" (139.7mm) X 1.75" (44.45mm)
596-00206	596-00206	PVPSR	50	PHOTOVOLTAIC POWER SOURCE 6.5" (165.1mm) X 1" (25.4mm)

Use Part No. for ordering and Type for specification.

### Caution Circuit Markers

The Photovoltaic Power Source markers are a pre-printed, non-adhesive, coiled marker that can be opened and snapped over the cable for long-term, reflective, permanent identification. Designed with a UV stable vinyl, the coiled markers come 25 per bag and will fit on all standard PV cables or EMT conduits.

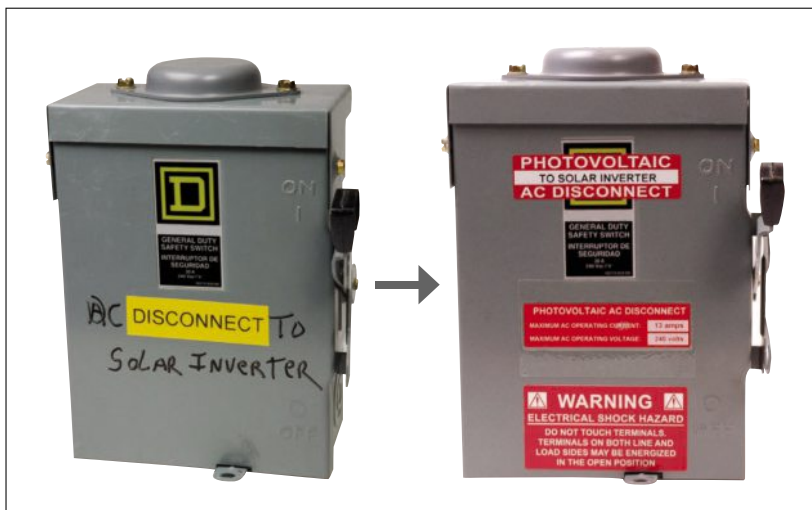


Product Selection				
Article No.	Part No.	Type	Pkg. Qty.	Description
596-00249	596-00249	CSCSNAP4	25	CAUTION - SOLAR CIRCUIT 4" (101.6mm) X 2" (50.8mm) Use on .25" OD PV cables
596-00251	596-00251	CSCSNAP72	25	CAUTION - SOLAR CIRCUIT 7.2" (182.88mm) X 5" (127mm) For EMT conduits up to 1" in OD
596-00207	596-00207	PVPSSNAP4R	25	PHOTOVOLTAIC POWER SOURCE 4" (101.6mm) X 2" (50.8mm) Use on .25" OD PV cables
596-00208	596-00208	PVPSSNAP72R	25	PHOTOVOLTAIC POWER SOURCE 7.2" (182.88mm) X 5" (127mm) For EMT conduits up to 1" in OD

Use Part No. for ordering and Type for specification.

### Thermal Transfer Printable Solar Installation Labels\*

Designed with cross-laminated UV stable materials, the variable imprintable solar installation labels are designed to accept printing from any standard thermal transfer printer using a resin-based ink ribbon for the best durability. Print your voltage information directly on the label and then laminate with an optional clear polyester laminate material for added protection. Even print your disconnecting means and breaker series directly on the labels for a more professional result, ensuring a smooth inspection process.



\*Requires TT2305M printer or equivalent to print data for the rating labels.

Material Data	
Material	840/926 UV Stable White Polyester w/ Clear Polyester Laminate
Operating Temperature	-40 °F (-40 °C) to 300 °F (150 °C)
Min. Application Temp.	50 °F (10 °C)
Liner	55# Paper
Certifications	UL969



Designed to fit the common types of AC and DC breaker boxes, print the breaker series or disconnecting means directly on the labels.



596-00253



596-00240



596-00241



596-00239



596-00237



596-00238



596-00242



596-00252

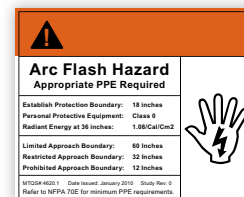
### Product Selection

Article No.	Part No.	Type	Roll Qty.	Description
596-00253	596-00253	DC2011	50	DC MODULE LABEL 4" (101.6mm) X 2" (50.8mm)
596-00240	596-00240	ACRATING	50	DC BACKUP SYSTEM LABEL 4" (101.6mm) X 2" (50.8mm)
596-00241	596-00241	DCRATING	50	DC RATING LABEL 3.75" (95.25mm) X 2" (50.8mm)
596-00239	596-00239	PVACDIS	50	PV AC DISCONNECT RATING 3.75" (95.25mm) X 1" (25.4mm)
596-00237	596-00237	ACDISCT	50	PHOTOVOLTAIC - AC DISCONNECT 3.75" (95.25mm) X 1" (25.4mm)
596-00238	596-00238	DCDISCT	50	PHOTOVOLTAIC - DC DISCONNECT 3.75" (95.25mm) X 1" (25.4mm)
596-00242	596-00242	LAM1	50	LAMINATE FOR AC/DC RATING LABEL 4.2" (106.6mm) X 2.25" (57.15mm)
596-00252	596-00252	AC2011	50	AC MODULE LABEL 4" (101.6mm) X 2" (50.8mm)

Use Part No. for ordering and Type for specification.

### Pre-Printed Continuous Colored Signal Labels

Pre-printed continuous colored signal panel labels come in two colors of yellow and white or orange and white for the creation of Caution or Warning signs to meet the various NEC and ANSI requirements for common safety signage. Using TagPrint Pro 3.0 software, almost any size and length marker can be printed and cut-to-size using pre-saved templates found in the labeling software. Simply open the loaded Caution or Warning design, set the desired length in the program, and print the required text in and below the pre-printed colored header. The orange pre-printed continuous colored signal panel labels are great for making custom ARC FLASH labels on demand.



Product Selection

Article No.	Part No.	Type	Description	Pkg. Qty.
558-00327	<b>558-00327</b>	HT20E50250	2" White vinyl with .5" orange stripe on continuous roll	250
558-00328	<b>558-00328</b>	HT2YE50250	2" White vinyl with .5" yellow stripe on continuous roll	250
558-00330	<b>558-00330</b>	HT3OE75250	3" White vinyl with .75" orange stripe on continuous roll	250
558-00331	<b>558-00331</b>	HT3YE75250	3" White vinyl with .75" yellow stripe on continuous roll	250
558-00333	<b>558-00333</b>	HT4OE10250	4" White vinyl with 1" orange stripe on continuous roll	250
558-00334	<b>558-00334</b>	HT4YE10250	4" White vinyl with 1" yellow stripe on continuous roll	250

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification.

### Pre-Printed Signal Word Labels

The most common signal word signs are DANGER, WARNING, CAUTION, NOTICE and SAFETY as defined by ANSI Z535.4. Each pre-printed Signal Word Label comes with the colored signal panel, signal word, and Safety Alert Symbol (if required). Using TagPrint Pro 3.0 software, the balance of information can easily be designed and printed using pre-saved templates in the labeling software and any HellermannTyton thermal transfer printer. This solution allows almost unlimited capabilities to create practically any conceivable sign on demand with no minimums.



Material Data

Material	Polyester and Clear Laminate
Material Number	690
Operating Temperature	-40°F to +302°F (-40°C to +150°C)
Adhesive	Acrylic

Product Selection

Article No.	Part No.	Type	Description	Pkg. Qty.
596-00203	<b>596-00203</b>	4X6DANGER	4" X 6" White with red DANGER header	250
596-00424	<b>596-00424</b>	3X2DANGER	3" X 2" White with red DANGER header	250
596-00204	<b>596-00204</b>	4X6NOTICE	4" X 6" White with blue NOTICE header	250
596-00426	<b>596-00426</b>	3X2NOTICE	3" X 2" White with blue NOTICE header	250
596-00427	<b>596-00427</b>	4X6CAUTION	4" X 6" White with yellow CAUTION header	250
596-00425	<b>596-00425</b>	3X2CAUTION	3" X 2" White with yellow CAUTION header	250
596-00371	<b>596-00371</b>	4X6SAFETY	4" X 6" White with green SAFETY header	250
596-00375	<b>596-00375</b>	3X2SAFETY	3" X 2" White with green SAFETY header	250
596-00378	<b>596-00378</b>	WV275X135	1.35" X 2.75" Orange WARNING header, blank yellow triangle	250
596-00379	<b>596-00379</b>	DV275X135	1.35" X 2.75" Red DANGER header, blank yellow triangle	250
596-00376	<b>596-00376</b>	WV55X275	2.75" X 5.5" Orange WARNING header, blank yellow triangle	250
596-00377	<b>596-00377</b>	DV55X275	2.75" X 5.5" Red DANGER header, blank yellow triangle	250
596-00386	<b>596-00386</b>	WS275X135	1.35" X 2.75" Orange WARNING header, blank white symbol panel	250
596-00387	<b>596-00387</b>	DS275X135	1.35" X 2.75" Red DANGER header, blank white symbol panel	250
596-00388	<b>596-00388</b>	WS55X275	2.75" X 5.5" Orange WARNING header, blank white symbol panel	250
596-00389	<b>596-00389</b>	DS55X275	2.75" X 5.5" Red DANGER header, blank white symbol panel	250

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification.



### Rite-On® Markers

HellermannTyton's Rite-On Markers are made from a flexible vinyl film and are used to mark wire and cable. The self-laminating labels have a clear tail which seals the legend under clear vinyl, maintaining the quality of the labels. The Rite-On Markers® are packaged in a reusable dispenser made from high impact plastic which is resistant to oils and grease.



#### Product Features

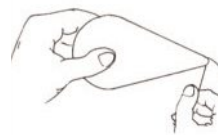
- Easily and conveniently fits in a pants of shirt pocket.
- Once loaded, unit allows minimal label exposure to dust and moisture.
- Can be used with standard ballpoint pens or HellermannTyton nylon making pens.
- Excess liner is easily cut-off by tearing it over the edge guide at the front of the unit.
- The dispenser can be reloaded over and over again, making it a cost-effective and efficient method of labeling.



A special label window holds the label firm for easy marking.



Can be held easily in the palm of the hand to provide a flat writing surface.



Label dispenses automatically when the liner is pulled from the front of the unit.

### Self-Laminating Labels and Dispenser

Product Selection									
Article No.	Part No.	Type	Width in. (mm)	Height of Write-On Area in. (mm)	Height of Label in. (mm)	Wire Size Range (AWG)	Min. Wire Size (in <sup>2</sup> )	Markers per Roll	Pkg. Qty.
590-01750	RO175	RO175	.75 " (19.05)	.75 " (19.05)	3.0 " (76.2)	4 to 4/0	.330	90	1 roll
590-05120	RO512	RO512	.75 " (19.05)	.50 " (12.7)	1.875 " (47.62)	8 to 4 AWG	.263	150	1 roll
590-05140	RO514	RO514	.75 " (19.05)	.375 " (9.52)	1.25 " (31.75)	14 to 8 AWG	.053	200	1 roll
590-10000	RO175WP	RO175WP	.75 " (19.05)	.75 " (19.05)	3.0 " (76.2)	4 to 4/0	.330	90	1 roll

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### Refill Rolls

Product Selection									
Article No.	Part No.	Type	Width	Height of Write-On Area	Height of Label	Markers per Roll	Pkg. Qty.		
			in. (mm)	in. (mm)	in. (mm)				
590-01751	175REF	175REF	.75 " (19.05)	.75 " (19.05)	3.0 " (76.2)	40	1 roll		
590-05121	512REF	512REF	.75 " (19.05)	.50 " (12.7)	1.875 " (47.62)	40	1 roll		
590-05141	514REF	514REF	.75 " (19.05)	.375 " (9.52)	1.25 " (31.75)	40	1 roll		

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

### Nylon Marking Pens

When used with a non-smear FTP nylon marking pen, marking is fast and economical.

Product Selection				
Article No.	Part No.	Type	Color	Pkg. Qty.
500-50822	T82-R	T82R-RD	Red	2 pens
500-50820	T82-S	T82S-BK	Black	2 pens

Use **Part No.** for ordering and **Type** for specification purposes.



### Wire Marker Tape

The wire marker tape dispenser provides a convenient, economical system for wire marking. HellermannTyton's white marker tape features sharp, crisp legends which are coated to resist smearing and abrasion. It is provided on a carrier strip to prevent contamination of the adhesive prior to installation, assuring permanent, non-flagging marker ends.



Material Data	
Material	Tyvek - a polyolefin material that resists tearing and abrasion
Dimensions	.25" W x 1.25" L
Markers per Roll	76 each legend
Adhesive	Aggressive Acrylic Base



Product Selection				
Article No.	Part No.	Type	Description	Pkg. Qty.
598-00256	WMTD0-9	WMTD0-9	Single box of wire marker tape refill. Each box contains 76 markers of each legend 0-9 and is use to refill the empty tape dispenser	1 Dispenser
598-00259	WMT0-9	WMT0-9	One wire marker tape dispenser with 10 rolls of 76 markers per roll, of each legend 0-9.	1 Refill

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification.

### Handi-Paks

Pre-printed wire labels in a convenient pocket-size booklet. Labels are black with non-smear legends on a white background. The labels are made of a plastic-coated cloth that remains flexible, along with a strong adhesive that assures a firm bond on wires.

Material Data	
Material	Vinyl Cloth (TYHC)
Operating Temperature	-40°F to +248°F (-40°C to +120°C)
Adhesion to Steel	40 oz./in. of width



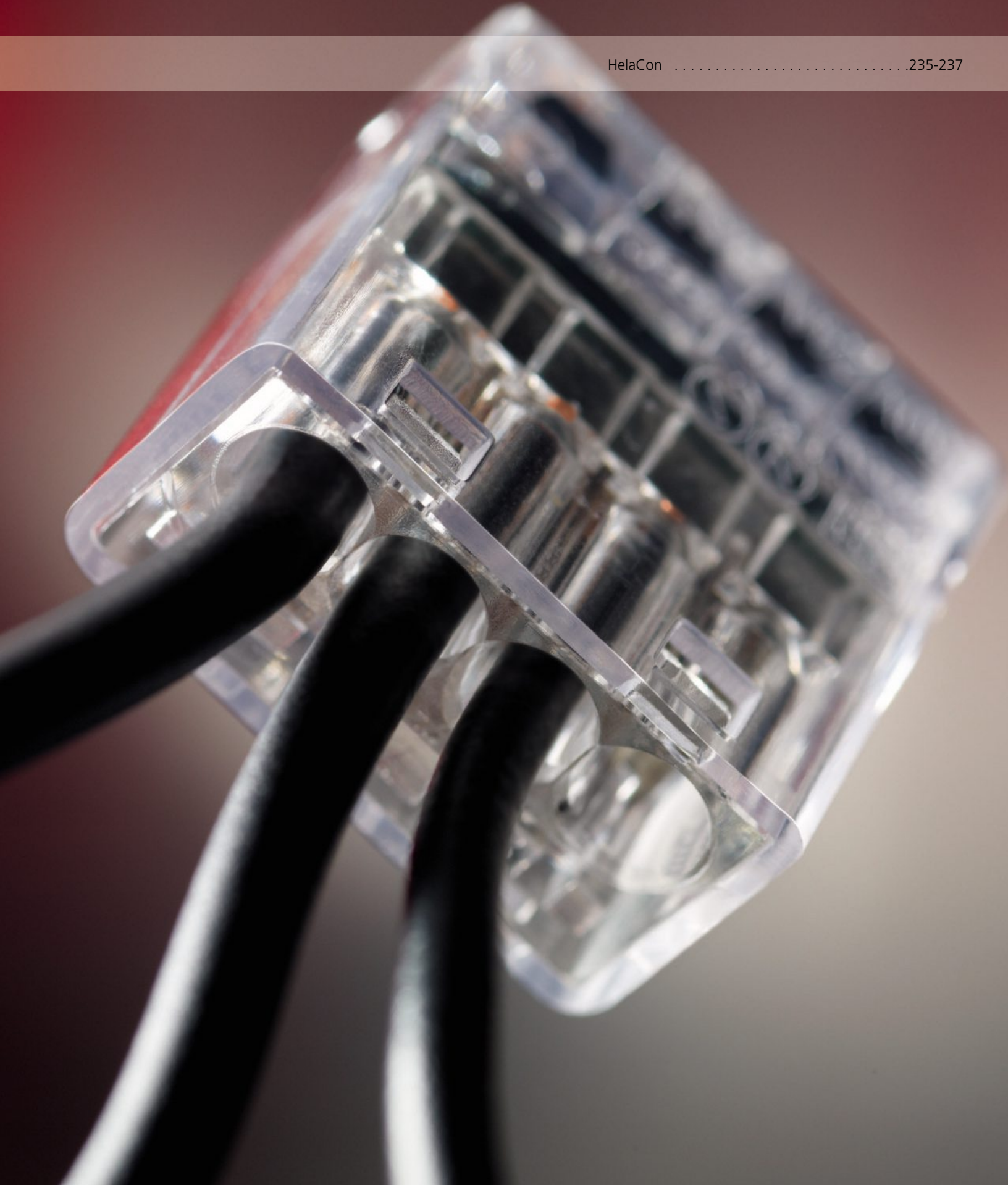
Product Selection				
Article No.	Part No.	Type	Description	Pkg. Qty.
598-00260	TCWM1	TCWM1	45 Markers each of legend 0-9	1 Booklet
598-00261	TCWM2	TCWM2	10 Markers each of A-Z, 1-15,+, -, /	1 Booklet
598-00262	TCWM3	TCWM3	10 Markers each of 1-45	1 Booklet
598-00263	TCWM4	TCWM4	150 Markers each of 1, 2, and 3	1 Booklet
598-00264	TCWM5	TCWM5	150 Markers each of A, B, and C	1 Booklet
598-00265	TCWM6	TCWM6	150 Markers each of T1, T2, and T3	1 Booklet
598-00266	TCWM7	TCWM7	150 Markers each of L1, L2, and L3	1 Booklet
598-00267	TCWM8	TCWM8	6 Markers each 1-15, 4 Markers each 16-90, and 2 Markers each of A-Z, +, -, /	1 Booklet
598-00268	TCWM9	TCWM9	45 Markers each of 1, 2, 3, A, B, C, 30 Markers each of L1, L2, L3 and 30 Markers each of T1, T2, and T3	1 Booklet
598-00269	TCWM10	TCWM10	45 Markers each of 10 NEMA colors	1 Booklet
598-00270	TCWM11	TCWM11	15 Markers each of 1-30	1 Booklet
598-00271	TCWM12	TCWM12	15 Markers each of A-Z, 21 Markers blank, 8 Markers +, and 7 Markers -	1 Booklet
598-00272	TCWM13	TCWM13	45 Markers each of +, -, AC, DC, 33 Markers each of POS, NEG, and GND, 27 Markers each of NEUT and 21 Markers of SPARE and BLANK	1 Booklet
598-00273	TCWM14	TCWM14	45 Markers each of 0-9, 15 Markers each of L1, L2, L3, and 15 Markers each of T1, T2, and T3	1 Booklet
598-00274	TCWM15	TCWM15	10 Markers each of 46-90	1 Booklet
598-00275	TCWM16	TCWM16	10 Markers each of 1-33, A, B, C, +, -, T1, T2, T3, L1, L2, and L3	1 Booklet

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification.



# WIRE CONNECTORS

HelacOn .....235-237



### The HelaCon Plus series of push-in wire connectors for both solid and stranded wire.



As a global manufacturer and supplier of solutions which help connect, manage and identify wire and cable components, HellermannTyton is known worldwide for its technological innovation, quality and value. Designed for wire-to-wire electrical connections, the HelaCon line of push-in wire connectors from HellermannTyton is the better alternative to the traditional wire connectors that involve the time-consuming twisting of wire. And, with the introduction of the double-spring HelaCon Plus push-in connectors, HellermannTyton has once again coupled safety and efficiency in a distinct solution that offers options to twist-on wire connectors for electrical and original equipment manufacturer applications.

HelaCon Plus is unique in that it is the only push-in style wire connector with a DOUBLE-SPRING DESIGN that delivers a safe, secure, and reliable wire connection. The DOUBLE-SPRING DESIGN requires a low insertion force, thus reducing wiring time and operator hand strain while providing a significantly higher retention value. With HelaCon Plus, HellermannTyton offers an affordable and ergonomically-friendly alternative for completing routine wire termination tasks.

### Market Applications

#### Home & Light Commercial Construction

- Junction Boxes
- Dimmer Switches
- Home Automation
- Lighting Fixtures



#### OEM Lighting & Manufacturing

- Garbage Disposals
- Low-Voltage Lighting Systems
- Ceiling Fans
- Garage Door Openers
- Exhaust Units



#### Maintenance, Repair & Replacement

- Repair Kits
- Power Cord Kits
- Lighting Retrofits
- Security and Alarm Systems



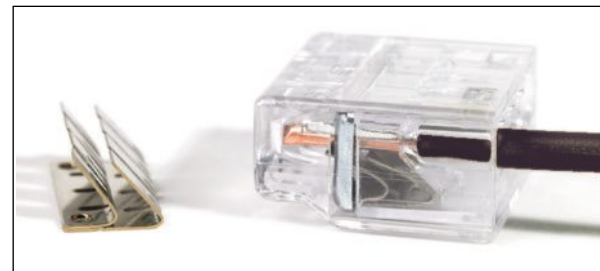
## HelaCon Plus Wire Connector

- Transparent Housing** Clear material for simple identification and quick visual inspection; meets flammability standard of UL94V2.
- Multiple Ports** Individual pole slots for each distinctive wire, regardless of size and style, allowing for flexibility and versatility within the same connector unit.
- Accessible Test Port** Large test port for easy confirmation.

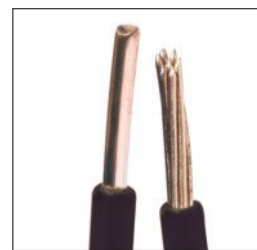


### Material Data

Material Housing	Polycarbonate (PC)
Material Plated Brass	Brass Tinned
Material Spring Plate	Stainless Steel (SS)
Max Current	24 A
Max Voltage	600 V (cULus), 450 V (VDE)
Wire Range (cULus)	12 - 22 AWG solid/stranded
Wire Range (VDE)	0.5 - 2.5mm <sup>2</sup> solid/stranded (max 7 cores)
Stripping Length	0.43 inches (11 mm)
Flammability	UL94 V2
Operating Temperature	-22°F (-30°C) to 221°F (+105°C) (cULus) -30°C to +110°C (VDE)
Certification	cULus, VDE, NEMKO, FIMKO, DEMKO, KEMA-KEUR



Double-spring technology provides for low insertion force while delivering a safe, secure connection.



Accommodates both solid and stranded wire (12-22 AWG)

### Product Selection

Article No.	Part No.	Type	Color	Number of Conductors	UPC	Width		Height		Depth		Pkg. Qty.
						in.	(mm)	in.	(mm)	in.	(mm)	
148-90000	148-90000	HECP-2	Transparent, Yellow	2	089306277217	.46"	(11.75)	.41"	(10.45)	.75"	(19.00)	100
148-90001	148-90001	HECP-3	Transparent, Orange	3	089306277224	.63"	(15.90)	.41"	(10.45)	.75"	(19.00)	100
148-90002	148-90002	HECP-4	Transparent	4	089306277231	.79"	(20.05)	.41"	(10.45)	.75"	(19.00)	75
148-90003	148-90003	HECP-5	Transparent, Blue	5	089306277248	.95"	(24.20)	.41"	(10.45)	.75"	(19.00)	50
148-90004	148-90004	HECP-6	Transparent, Violet	6	089306277255	1.12"	(28.35)	.41"	(10.45)	.75"	(19.00)	50
148-90005	148-90005	HECP-8	Transparent, Gray	8	089306277262	1.44"	(36.65)	.41"	(10.45)	.75"	(19.00)	40
148-90024	148-90024	HECP-2B	Transparent, Yellow	2	089306326878	.46"	(11.75)	.41"	(10.45)	.75"	(19.00)	500
148-90025	148-90025	HECP-3B	Transparent, Orange	3	089306326861	.63"	(15.90)	.41"	(10.45)	.75"	(19.00)	400
148-90026	148-90026	HECP-4B	Transparent	4	089306326908	.79"	(20.05)	.41"	(10.45)	.75"	(19.00)	300
148-90027	148-90027	HECP-5B	Transparent, Blue	5	089306326915	.95"	(24.20)	.41"	(10.45)	.75"	(19.00)	300
148-90028	148-90028	HECP-6B	Transparent, Violet	6	089306326892	1.12"	(28.35)	.41"	(10.45)	.75"	(19.00)	250
148-90029	148-90029	HECP-8B	Transparent, Gray	8	089306326885	1.44"	(36.65)	.41"	(10.45)	.75"	(19.00)	200

Use **Part No.** for ordering and **Type** for specification purposes.

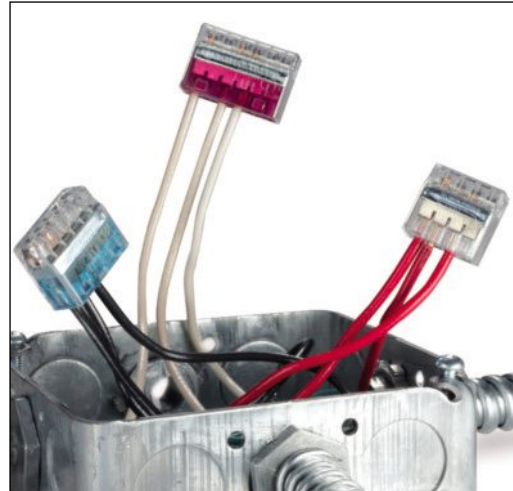
## HelaCon Plus - The Unique Wire Termination Solution

### 1.) Double-Spring Technology

The HelaCon Plus line of wire connectors from HellermannTyton is the only push-in wire connector with a double-spring design: the first spring allows for low insertion force, and the second secures a firm connection with a significantly stronger retention value.

### 2.) For Both Stranded and Solid Wire

The “peace of mind” wire connector from HellermannTyton holds solid wire firmly in place, reduces buckling when connecting stranded wire, accepts a wider range of wire sizes (12 to 22 AWG wire), and houses both solid and stranded wire cores in one unit.



### 3.) The Ergonomically-Friendly Alternative to Twist-On Wire Connectors

No more twisting and taping. No repetitive motion fatigue. No contact stress from tools. Simply strip the wire and insert it into the connector. At HellermannTyton, we recognize the importance of reduced wiring time, lower labor costs and project expenses, easier installations in difficult spots, and the need to minimize hand strain.

### 4.) Color Coded with Multiple Ports

The “clear benefit” of the HelaCon Plus connector from HellermannTyton is its transparent housing with color-coded sides that allows for easy identification and visual verification. And, this connector has multiple in-line port options (2, 3, 4, 5, 6 and 8 pole selection) for future expansion.

### 5.) Testing Simplified

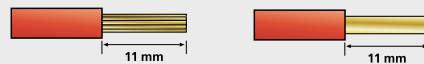
Featuring a separate test slot, the HellermannTyton HelaCon Plus product includes a larger, more accessible test port that is positioned in the center of the connector.

### 6.) Safer, More Dependable

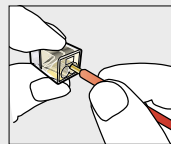
With a 24 A max current rating, the HellermannTyton HelaCon Plus connector easily exceeds even the most rigid building and construction standards with a UL listed approval up to 600 volts for building wire and 1000 volts

### 3 Easy Steps to using HelaCon Plus

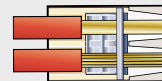
- 1 Strip cable to 0.43 in (11 mm)



- 2 Push cable into HelaCon Plus connector



- 3 Visibly check cable connection through transparent shell





Part No.	Article No.	Page	Part No.	Article No.	Page	Part No.	Article No.	Page	Part No.	Article No.	Page
102-69067	102-69067	68	148-00092	148-00092	64	151-00903	151-00903	69	156-00444	156-00444	57
102-69068	102-69068	68	148-00093	148-00093	64	151-00925	151-00925	70	156-00455	156-00455	18
110-70083	110-70083	76	148-00095	148-00095	64	151-00927	151-00927	72	156-00456	156-00456	18
110-70084	110-70084	76	148-00096	148-00096	64	151-00932	151-00932	69	156-00457	156-00457	48
110-70089	110-70089	76	148-00200	148-00200	41	151-00982	151-00982	44	156-00468	156-00468	42
110-70091	110-70091	76	148-90000	148-90000	236	151-01108	151-01108	70	156-00507	156-00507	71
110-70106	110-70106	76	148-90001	148-90001	236	151-01109	151-01109	68	156-00521	156-00521	71
110-99000	110-99000	76	148-90002	148-90002	236	151-01113	151-01113	71	156-00538	156-00538	39
111-00659	111-00659	22	148-90003	148-90003	236	151-01125	151-01125	68	156-00539	156-00539	39
111-00698	111-00698	22	148-90004	148-90004	236	151-01126	151-01126	68	156-00540	156-00540	39
111-00718	111-00718	22	148-90005	148-90005	236	151-01136	151-01136	71	156-00541	156-00541	39
111-00732	111-00732	22	148-90024	148-90024	236	151-02600	151-02600	69	156-00588	156-00588	42
111-00829	111-00829	24	148-90025	148-90025	236	151-02901	151-02901	68	156-00589	156-00589	42
111-00830	111-00830	24	148-90026	148-90026	236	151-03401	151-03401	43	156-00590	156-00590	42
111-00831	111-00831	24	148-90027	148-90027	236	151-03402	151-03402	43	156-00591	156-00591	42
111-01125	111-01125	22	148-90028	148-90028	236	151-03403	151-03403	43	156-00592	156-00592	42
111-01128	111-01128	19	148-90029	148-90029	236	151-03404	151-03404	43	156-00593	156-00593	42
111-01235	111-01235	18	150-08110	150-08110	68	151-06500	151-06500	106	156-00635	156-00635	42
111-01264	111-01264	20	150-09201	150-09201	69	151-14313	151-14313	142	156-00791	156-00791	62
111-01265	111-01265	20	150-31090	150-31090	47	151-14314	151-14314	142	156-00856	156-00856	39
111-01266	111-01266	20	150-31091	150-31091	47	151-26101	151-26101	69	156-00858	156-00858	39
111-01332	111-01332	23	150-31093	150-31093	47	151-27010	151-27010	100	156-00859	156-00859	39
111-01560	111-01560	20	150-31098	150-31098	48	151-27019	151-27019	100	156-00860	156-00860	39
111-01562	111-01562	20	150-45397	150-45397	69	151-27202	151-27202	100	156-00861	156-00861	39
111-01563	111-01563	20	150-55850	150-55850	46	151-27219	151-27219	100	156-00862	156-00862	39
111-05350	111-05350	47	150-55948	150-55948	48	151-32602	151-32602	70	156-00863	156-00863	39
111-12300	111-12300	14	150-76090	150-76090	39	155-01600	155-01600	69	156-00864	156-00864	39
111-12301	111-12301	14	150-77938	150-77938	48	155-03800	155-03800	71	156-00865	156-00865	39
111-12302	111-12302	14	150-77940	150-77940	46	155-11601	155-11601	68	156-00866	156-00866	40
111-85350	111-85350	54	150-95500	150-95500	68	155-12300	155-12300	60	156-00867	156-00867	40
111-85850	111-85850	54	151-00010	151-00010	142	155-23601	155-23601	61	156-00868	156-00868	40
111-85871	111-85871	47	151-00016	151-00016	69	155-30602	155-30602	59	156-00871	156-00871	40
115-00042	115-00042	34	151-00017	151-00017	69	155-30702	155-30702	71	156-00872	156-00872	41
116-03019	116-03019	11	151-00018	151-00018	142	155-30802	155-30802	68	156-00873	156-00873	41
117-00012	117-00012	38	151-00019	151-00019	142	155-30902	155-30902	69	156-00874	156-00874	40
117-00016	117-00016	35	151-00029	151-00029	68	155-31102	155-31102	71	156-00875	156-00875	40
117-00017	117-00017	35	151-00074	151-00074	69	155-31202	155-31202	62	156-00876	156-00876	40
117-00018	117-00018	35	151-00080	151-00080	69	155-36002	155-36002	71	156-00877	156-00877	41
117-00019	117-00019	35	151-00281	151-00281	69	155-37104	155-37104	40	156-00878	156-00878	41
118-00032	118-00032	18	151-00282	151-00282	69	156-00016	156-00016	41	156-00953	156-00953	46
118-00110	118-00110	27	151-00429	151-00429	71	156-00017	156-00017	40	156-01007	156-01007	39
118-00111	118-00111	27	151-00430	151-00430	71	156-00025	156-00025	46	156-01601	156-01601	40
118-04700	118-04700	27	151-00432	151-00432	92	156-00036	156-00036	63	156-04600	156-04600	41
118-04800	118-04800	27	151-00433	151-00433	92	156-00054	156-00054	47	156-04601	156-04601	41
118-04900	118-04900	27	151-00492	151-00492	49, 85	156-00055	156-00055	47	157-00034	157-00034	58
118-05900	118-05900	27	151-00513	151-00513	71	156-00056	156-00056	47	157-00035	157-00035	58
120-00021	120-00021	87	151-00605	151-00605	68	156-00057	156-00057	47	157-00036	157-00036	58
120-00031	120-00031	87	151-00623	151-00623	69	156-00066	156-00066	46	157-00060	157-00060	38
120-00060	120-00060	83	151-00629	151-00629	69	156-00067	156-00067	50	157-00072	157-00072	51
121-63560	121-63560	34	151-00644	151-00644	106	156-00068	156-00068	50	157-00083	157-00083	59
121-82160	121-82160	34	151-00650	151-00650	69	156-00069	156-00069	50	157-00097	157-00097	51
121-83360	121-83360	34	151-00651	151-00651	68	156-00070	156-00070	50	157-00105	157-00105	60
126-00000	126-00000	41	151-00663	151-00663	68	156-00071	156-00071	50	157-00106	157-00106	60
126-00015	126-00015	54	151-00664	151-00664	69	156-00072	156-00072	50	157-00108	157-00108	51
126-00036	126-00036	41	151-00665	151-00665	69	156-00074	156-00074	50	157-00112	157-00112	53
126-00041	126-00041	56	151-00667	151-00667	178	156-00085	156-00085	48	157-00118	157-00118	52
126-00042	126-00042	56	151-00668	151-00668	178	156-00089	156-00089	47	157-00119	157-00119	52
126-00043	126-00043	55	151-00675	151-00675	71	156-00090	156-00090	47	157-00120	157-00120	52
126-00044	126-00044	55	151-00677	151-00677	70	156-00091	156-00091	47	157-00130	157-00130	52
126-00045	126-00045	55	151-00700	151-00700	142	156-00092	156-00092	47	157-00140	157-00140	51
126-00046	126-00046	55	151-00701	151-00701	142	156-00093	156-00093	47	157-00142	157-00142	53
126-00049	126-00049	56	151-00702	151-00702	142	156-00134	156-00134	63	157-00143	157-00143	53
126-00065	126-00065	57	151-00703	151-00703	142	156-00135	156-00135	63	157-00144	157-00144	53
126-00069	126-00069	56	151-00704	151-00704	71	156-00136	156-00136	63	157-00157	157-00157	53
126-00075	126-00075	54	151-00756	151-00756	99	156-00137	156-00137	63	157-00400	157-00400	58
126-00081	126-00081	54	151-00757	151-00757	18	156-00155	156-00155	62	157-00401	157-00401	58
126-00086	126-00086	54	151-00758	151-00758	18	156-00156	156-00156	46	157-00402	157-00402	58
126-00099	126-00099	54	151-00765	151-00765	71	156-00157	156-00157	46	157-00403	157-00403	58
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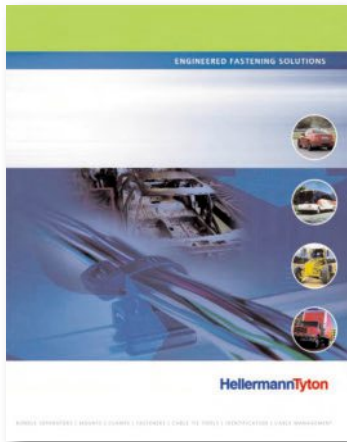
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594-57788	TAG57L-788	212	596-00242	596-00242	230	598-00274	TCWM15	233	854-44391	GT.75X1805	74
594-58788	TAG58L-788	212	596-00243	596-00243	229	598-00275	TCWM16	233	854-44392	GT.75X1806	74
594-59788	TAG59L-788	212	596-00244	596-00244	229	598-00277	TYHCT-250	198	854-44394	GT.75X180MV2	75
594-60788	TAG60L-788	212	596-00245	596-00245	229	598-11250	TAG11T4-250	198	854-44395	GT.75X6000	74
594-61788	TAG61L-788	212	596-00246	596-00246	229	598-15250	TAG15T3-250	198	854-44396	GT.75X9000	74
594-62788	TAG62L-788	212	596-00247	596-00247	229	598-15795	TAG15T3-795	198	854-44397	GT.75X9004	74
594-63105	TAG63L-105	215	596-00249	596-00249	229	598-21250	TAG21T6-250	198	854-90272	WMBH	115
594-64105	TAG64L-105	215	596-00251	596-00251	229	598-27795	TAG27T1-795	198	904-00006	ETSB210	167
594-65105	TAG65L-105	215	596-00252	596-00252	230	598-28250	TAG28T4-250	198	904-00007	ET330	167
594-66789	TAG66L-789	212	596-00253	596-00253	230	598-72795	TAG72T1-795	198	904-00008	ET660	167
594-67789	TAG67L-789	212	596-00255	596-00255	229	598-73795	TAG73T1-795	198	904-00010	ETCW660	167
594-68789	TAG68L-789	212	596-00257	596-00257	228	598-75795	TAG75T1-795	198	904-00011	ETST661	167
594-69789	TAG69L-789	212	596-00258	596-00258	228	598-76795	TAG76T1-795	198	904-00012	ETST6610	167
594-96789	TAG96L-789	212	596-00323	596-00323	202	598-78795	TAG78T1-795	198	904-00014	ETST662	167
596-00001	TAG15T3-822C10M	199	596-00371	596-00371	231	598-79795	TAG79T1-795	198	904-00016	ETST663	167
596-00002	TAG10T2-100B	196	596-00375	596-00375	231	598-80795	TAG80T1-795	198	904-00018	ETST664	167
596-00003	TAG11T4-822C	199	596-00376	596-00376	231	800-00004	SM1BK75MT	166	904-00020	ETST665	167
596-00005	TAG1T1-100B	196	596-00377	596-00377	231	854-44316	GT.375X60C2	73	904-00022	ETST666	167
596-00006	TAG2T2-100B	196	596-00378	596-00378	231	854-44317	GT.50X110C2	74	904-00024	ETST667	167
596-00007	TAG2T3-100B	196	596-00379	596-00379	231	854-44319	GT.50X110C2W	75	904-00026	ETST668	167
596-00008	TAG24T1-100B	196	596-00380	596-00380	198	854-44320	GT.50X110P2	74	904-00284	904-00284	103
596-00009	TAG26T6-100B	196	596-00381	596-00381	198	854-44321	GT.50X110P2W	75	904-00295	904-00295	113
596-00010	TAG2T5-100B	196	596-00382	596-00382	198	854-44322	GT.50X112C2	74	904-00296	904-00296	113
596-00011	TAG38T4-100B	196	596-00383	596-00383	198	854-44323	GT.50X112P2	74	904-00297	904-00297	113
596-00013	TAG3T3-100B	196	596-00386	596-00386	231	854-44324	GT.50X113C2	74			
596-00014	TAG51T3-100B	196	596-00387	596-00387	231	854-44325	GT.50X113P2	74			
596-00016	TAG6T1-100B	196	596-00388	596-00388	231	854-44326	GT.50X114C2	74			
596-00017	TAG74T2-PAP	199	596-00389	596-00389	231	854-44327	GT.50X114P2	74			
596-00019	TAG75T1-822	199	596-00404	596-00404	202	854-44328	GT.50X115C2	74			
596-00021	TAG7T1-100B	196	596-00405	596-00405	202	854-44329	GT.50X115P2	74			
596-00022	TAG81T8-822	199	596-00406	596-00406	202	854-44330	GT.50X116C2	74			
596-00023	TAG83T1-822	199	596-00407	596-00407	202	854-44331	GT.50X116P2	74			
596-00024	TAG82T1-PAP	199	596-00412	596-00412	202	854-44334	GT.50X12MP2V2	75			
596-00025	TAG82T2-PAP	199	596-00413	596-00413	202	854-44336	GT.50X60C2	73			
596-00027	TAG9T3-100B	196	596-00414	596-00414	202	854-44338	GT.50X60C2W	75			
596-00028	TAGPP1T6-822	199	596-00415	596-00415	202	854-44339	GT.50X60P2	73			
596-00029	TAGPP1T6-822C	199	596-00417	596-00417	202	854-44340	GT.50X60P2W	75			
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596-00033	TAG13T4-DTH	199	596-00419	596-00419	203	854-44342	GT.50X62P2	73			
596-00034	TAG16T3-DTH	199	596-00420	596-00420	203	854-44343	GT.50X63C2	73			
596-00035	TAG15T3-DTH	199	596-00424	596-00424	231	854-44344	GT.50X63P2	73			
596-00036	TAG27T2-DTH	199	596-00425	596-00425	231	854-44345	GT.50X64C2	73			
596-00037	TAG99T1-DTH	199	596-00426	596-00426	231	854-44346	GT.50X64P2	73			
596-00038	TAG73T1-DTH	199	596-00427	596-00427	231	854-44347	GT.50X65C2	73			
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596-00043	TAG27T1-822C	199	596-00503	596-00503	202	854-44349	GT.50X66C2	73			
596-00045	TAG53T2-100B	196	596-00504	596-00504	202	854-44350	GT.50X66P2	73			
596-00046	TAGPP2T6-822	199	596-00507	596-00507	202	854-44352	GT.50X6MP2V2	75			
596-00047	TAGPP2T6-822C	199	596-11822	TAG11T4-822	199	854-44353	GT.50X80C2	73			
596-00082	TAGPP1T6-82210M	199	596-13822	TAG13T4-822	199	854-44354	GT.50X80C2W	75			
596-00083	TAGPP3T4-822	199	596-15822	TAG15T3-822	199	854-44355	GT.50X80P2	73			
596-00084	TAGPP3T4-822C	199	596-16822	TAG16T3-822	199	854-44356	GT.50X80P2W	75			
596-00183	596-00183	203	596-17822	TAG17T2-822	199	854-44357	GT.50X82C2	73			
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596-00185	596-00185	203	596-42822	TAG72T1-822	199	854-44359	GT.50X83C2	73			
596-00189	596-00189	203	596-70822	TAG70T12-822	199	854-44360	GT.50X83P2	73			
596-00190	596-00190	203	596-71822	TAG71T5-822	199	854-44361	GT.50X84C2	73			
596-00191	596-00191	203	596-73822	TAG73T1-822	199	854-44362	GT.50X84P2	73			
596-00192	596-00192	203	596-82822	TAG82T2-822	199	854-44363	GT.50X85C2	73			
596-00193	596-00193	203	596-84822	TAG84T3-822	199	854-44364	GT.50X85P2	73			
596-00194	596-00194	203	598-00026	TAG96T1-336	198	854-44365	GT.50X86C2	73			
596-00195	596-00195	203	598-00040	TAG68T1-336	198	854-44366	GT.50X86P2	73			
596-00196	596-00196	203	598-00041	TAG69T1-336	198	854-44368	GT.50X8MP2V2	75			
596-00202	596-00202	202	598-00044	TAG35T2-250	198	854-44369	GT.75X150C2	74			
596-00203	596-00203	231	598-00256	WMTD0-9	233	854-44371	GT.75X150P2	74			

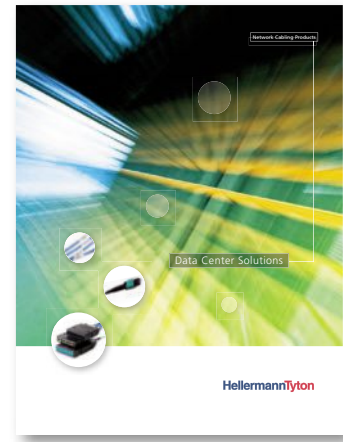
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Sales and Distribution  
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