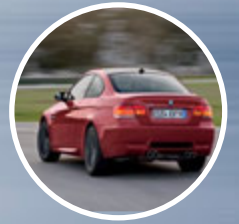


ENGINEERED FASTENING SOLUTIONS



HellermannTyton

HellermannTyton is a leader in designing and manufacturing innovative fastening solutions for the automotive, truck, bus, aerospace, OEM, appliance, marine and heavy equipment industries.

With over 34 locations world wide, HellermannTyton is able to design, produce, and deliver solutions to meet customer's production requirements.

ARGENTINA | AUSTRALIA | AUSTRIA | BELGIUM | BRAZIL | CANADA | CHINA
 CZECH REPUBLIC | DENMARK | FINLAND | FRANCE | GERMANY | HONG KONG
 HUNGARY | IRELAND | ITALY | JAPAN | KOREA | MEXICO | NETHERLANDS | NORWAY | PHILIPPINES
 POLAND | PORTUGAL | ROMANIA | RUSSIAN FEDERATION | SINGAPORE | SLOVENIA | SOUTH AFRICA
 SPAIN | SWEDEN | THAILAND | UNITED KINGDOM | UNITED STATES

MATERIAL INFORMATION AND SPECIFICATIONS

7-8

BUNDLE SEPARATION PRODUCTS

9-20



Dual Swivel Saddle Spacers	9-10
Dual Clamp Ties	11
Standoff Mounting Dual Clamp Tie	12
Double Head Ties	13
Pipe and Hose Clips, PC-Series	14
Automatic Harness Clips	15-16
Isolator	17
Omega Clips	18
Wire Clamping Cable Ties	19
Wire and Hose Swivel Clip Tie	20

MOUNTS

21-38



H Mounts	21
Heavy Duty Mounts	22-23
Weld Stud Mount	24
Saddle Mount for Button Head Ties	25
Two way Saddle Mounts	26
Axial Oval Mounts	27
Fir Tree Saddle Mounts	25
Bundling Clips	29-30
Connector Clips	31-32
Mounting Cradle	33
Lashing Tie Mounts	33
Fir Tree Mount Tube Clip	34
Fir Tree Clip	34
Cable Guide Standoff	35
Cable Tie Mounts	36
Cable Tie Mounting Bases	37-38



FASTENERS

39-78

Wide Strap Cable Ties 39
 Heavy Duty Cable Ties 39-40
 Button Head Cable Ties 41
 Edge Clips 42-45
 Fir Tree Mount Cable Ties 46-51
 Push Mount Cable Ties 52-54
 Arrowhead Mount Cable Ties 55
 Stud Mount Cable Ties 56-59
 Screw Mount Cable Ties 60
 Clamp Cable Ties 61
 Branch Cable Tie 62
 Kabelwrap Bundling System 62
 Standard Cable Ties 63-65
 Specialty Materials Cable Ties 66-71
 Outside Serrated Cable Ties 71
 Releasable Cable Ties 72-76
 Stainless Steel Cable Ties 77-78



CLAMPS

79-88

Snapper Hose Clamps 79-84
 Non-Adhesive Clamps and Clips 85
 Adhesive Cable Clamps and Clips 86
 Flat Ribbon Cable Clips 87-88



CABLE TIE TOOLS

89-103

Mechanical Cable Tie Tools 89-91
 Power Assisted Cable Tie Tools 92-94
 Automatic Cable Tie Tools 95-103



IDENTIFICATION SYSTEMS

104-122

SwiftMark Label Printer/Applicator 104
 TagPrint Pro™ Software 105
 Spirit Printer and Labels 106-108
 Thermal Transfer Printers and Labels 109-110
 Labels 111-122



CABLE MANAGEMENT

122-150

Spiralwrap 123-125
 Convoluted Tubing 126-128
 Grommet 129-130
 Braided Sleeving and Accessories 131-150

INDEX

141-148

Engineered Fastening Solutions

HellermannTyton is a world leader in providing fastening solutions to the global marketplace. But that doesn't mean we rest on our past successes —our product development teams continue to push the possibilities, shaping the future of fastening solutions through innovative designs and an unprecedented commitment to the success of our customers.

The Engineered Process

Innovative Design Technologies – Utilizing the latest customer compatible design software.

Short Concept to Production Cycle – We are an agile company and can act quickly to changing needs.

A Valued Partnership – Our development team works with your engineers to develop solutions specific to your application needs.

Solutions

Customer driven solutions



The Fastening Products

Reduced costs,
assembly time
and warranty
issues

Wide variety of customized
solutions for the automotive,
transportation and OEM markets.

Superior Materials Knowledge –
Offering advanced materials
that address unique application
and environmental needs.

Quality Certified –
TS16949, ISO 9001, and
ISO 14001 certified

Improved quality
and durability



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%.

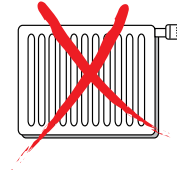
The packaging used by HellermannTyton ensures that the water content in the material remains constant. Therefore, it is important to store the products in their original packaging to preserve the quality of the ties and mounts.



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

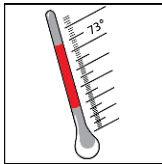


Do not expose the product to direct sunlight

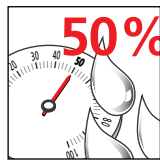


Store the product away from direct sources of heat

Ideal storage conditions:



73 °F



50%
relative
humidity

QUALITY CERTIFICATIONS

HellermannTyton is certified to TS 16949, ISO 9001:2000 and ISO 14001

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. If you have specific questions or need compliance information related to the RoHS or WEEE directives, please go to our website link: www.hellermann.tyton.com/rohs.asp or email us at: rohs@htamericas.com. A HellermannTyton representative will promptly respond to your request.

WARRANTY POLICY

HellermannTyton products are warranted to be free from defects in material and workmanship at the time sold by us; but our obligation under this warranty and that of the seller is limited to the replacement of the product, and neither we nor the seller are bound by any other warranty, expressed, implied or statutory. Under no circumstances are we or the seller liable for any loss, damage, expenses or consequential damages of any kind arising out of the use or inability to use these products. All are sold with the understanding that the user will test them in actual use and determine their adaptability for the intended uses.

The above warranties and remedies are exclusive and in lieu of all other warranties and remedies whatsoever, express or implied, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose which HellermannTyton expressly disclaims.

Cable Ties and Tool Systems

HellermannTyton's cable tie and tool systems are designed to work together to provide optimal consistency, quality, safety, and overall performance. Wrapping and hand tensioning a high quality cable tie is just the first step in assuring a high quality application. It is necessary to use one of HellermannTyton's cable tie tools to ensure that the cable tie is applied with just the right amount of tension and with a flush cut that won't leave a sharp edge. HellermannTyton leads the world in the development and manufacture of ergonomically designed, high performing cable tie tools in mechanical, power assisted, and automatic versions. With HellermannTyton's automatic cable tie systems, cable ties are applied, tensioned and cut-off to the correct tension in approximately one second. HellermannTyton's mechanical and power assisted tools expertly tension and cut-off hand applied cable ties.

Consistency and Quality

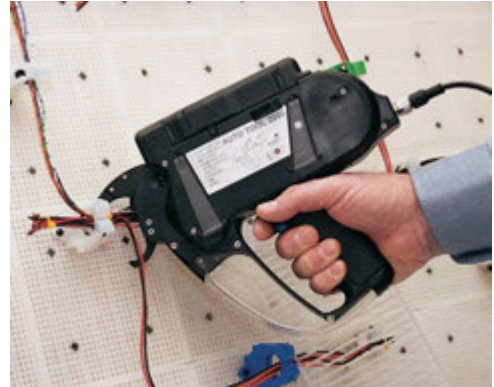
By utilizing HellermannTyton's cable ties and tools together, a consistent tension and cut-off is achieved. When using non-approved methods of cutting off a cable tie, wire and cable can be crushed, the strap of the cable tie may be cut-off too deeply causing the tie to disengage, or the cable tie can be applied too loosely which can affect the bundling and securing properties of the application.

Safety

A flush cut is another benefit of using HellermannTyton's cable tie tools and ties as a system. Worker safety, and resulting reduction of workers' compensation claims, is an increasing priority of most companies. HellermannTyton's cable tie tools are ergonomically designed to reduce worker effort and causes of repetitive motion injuries. When using HellermannTyton's tools and cable ties, a flush cut is achieved, creating a smooth edge. When non-approved methods of applying a cable tie are used, a sharp edge is almost always left at the end of the tie - causing injury to workers and end-customers. All of HellermannTyton's cable tie tool systems offer adjustable tension and cut-off levels to assure optimal tensions and flush cut-offs.

Overall Performance

Used together, HellermannTyton's cable ties and ergonomically designed tool systems assure a high quality installation which prevents damage to wire and cable and potential rework due to inappropriately applied cable ties - all lowering installed costs while improving performance.



AT2000 Automatic Cable Tie Tool — For automatic cable tie tool systems, see page 88.



MK7P - Power Assisted Cable Tie Tool — For power assisted cable tie tools, see page 85.



MK7 and MK9 Mechanical Cable Tie Tools — For mechanical cable tie tools, see page 82.

Materials

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.

Polyamide 6.6 – General Purpose

General purpose polyamide 6.6 features light weight, 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's 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

Impact modifiers are added to increase flexibility. High impact polyamide 6.6 has stable tensile strength due to its reduced influence from moisture. It is excellent for high vibration applications, as within the aircraft and automobile industries and performs better than polyamide 6.6 against ultraviolet rays. Good for outdoor use.

Polyamide 4.6

Polyamide 4.6, like polyamide 6.6, offers light weight 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.

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

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 12 - UV Resistant

Although not as strong as polyamide 6.6 (about half), polyamide 12 is extremely flexible, absorbs little moisture, ages better and has better chemical and UV resistance than general purpose polyamide 6.6. Polyamide 12 is good for applications where products are exposed to metal oxides.

Ethyltertrafluorineethylene - Tefzel

Although about two-thirds the strength of polyamide 6.6, Tefzel is resistant to a wide range of chemicals, such as concentrated hydrofluoric and sulfuric acids. It is also a low water absorbing material, therefore, is not adversely affected by water. Tefzel is radiation resistant up to 200 megarads and meets the fire and smoke requirements of IEEE 383. Tefzel also withstands high temperatures and ultraviolet light exposure. Products made from Tefzel 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>

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.						
Polyamide 6.6 - General Purpose (PA66)	185°F 85°C	-40°F -40°C	12,000	94V-2	28	1 x 10 ⁵ Rads	Poor	ASTM D-4066PA0111 FDA CFR177.1500
Polyamide 6.6 - Heat Stabilized (PA66HS)	221°F 105°C	-40°F -40°C	12,000	94V-2	26	1 x 10 ⁵ Rads	Poor	ASTM D-4066PA0121
*Polyamide 6.6 - UV resistant (PA66UV)	185°F 85°C	-40°F -40°C	12,000	94V-2	26	1 x 10 ⁵ Rads	Good	-
Polyamide 6.6 - 2% Carbon UV stabilized (OUV)	185°F 85°C	-40°F -40°C	12,000	94V-2	26	1 x 10 ⁵ Rads	Excellent	ASTM D-4066PA0181 MS3367/8
Polyamide 6.6 - Flame Retardant (PA66VO)	185°F 85°C	-40°F -40°C	10,800	94V-0	34	1 x 10 ⁵ Rads	Poor	ASTM D-4066PA0110
*Polyamide 6.6 - Impact Mod. Heat Stabilized, UV Resistant (PA66HIRHS)	230°F 110°C	-40°F -40°C	9,500	94-HB	N/A	N/A	Very Good	ASTM D-4066PA0161
Polyamide 6.6 - Impact Modified (PA66HIR)	230°F 110°C	-40°F -40°C	8,800	94-HB	19	1 x 10 ⁵ Rads	Good	ASTM D-4066PA0151
Polyamide 4.6 - Heat Stabilized (PA46)	275°F 135°C	-40°F -40°C	14,400	94V-2	27	9 x 10 ⁶ Rads	Poor	ASTM D-4066PA0922
Polypropylene - Chemical Resistant (PP)	239°F 115°C	-40°F -40°C	3,400	94-HB	N/A	1 x 10 ⁵ Rads	Good	ASTM D-4101PP0327
*Polyamide 12 - UV resistant (UV)	176°F 80°C	-40°F -40°C	5,800	94-HB	N/A	1 x 10 ⁵ Rads	Good	ASTM D-4066PA411
Ethlenterafluorineethylene Tefzel® (E/TFE)	302°F 150°C	-112°F -80°C	5,800	94V-0	30	2 x 10 ⁸ Rads	Excellent	UL2043 ASTM D-3159 Type 1 Grade 1
Polyacetal (POM)	185°F 85°C	-40°F -40°C	6,500	94-HB	N/A	N/A	Excellent	-
Polyetheretherketone (PEEK)	500°F 260°C	-67°F -55°C	14,600	94V-0	24	1 x 10 ⁹ Rads	Poor	21CFR 177.2415 EEC 93/9/EEC 151G
Thermoplastic Vulcanizate (TPV)	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 HIGH IMPACT	POLYAMIDE 4.6 HEAT STABILIZED	POLYPROPYLENE	POLYAMIDE 12 UV RESISTANT	ETHLETERAFLUORINE-ETHYLENE — E/TFE	POLYACETAL	PEEK	TPV
Tensile Strength	8	8	8	9	7	8	7	10	2	4	5	5	10	-
High Temperature	2	3	2	2	2	3	2	9	2	1	10	3	10	10
Flammability	5	5	5	5	10	2	2	5	2	2	10	2	10	2
UV Resistance	1	1	5	8	1	8	2	1	5	3	10	10	1	1
Radiation	3	3	3	3	3	3	3	6	3	3	8	3	10	-
Chemical Resistance	6	6	6	6	6	6	6	6	8	8	10	-	10	-
-Hydrocarbons	8	8	8	8	8	8	8	8	6	8	10	8	10	4
-Chlorinated Hydrocarbons	6	6	6	6	6	6	6	6	3	8	10	5	10	4
-Acids	2	2	2	2	2	2	2	2	8	5	10	8	5	8
-Bases	8	6	6	6	6	6	6	6	8	6	10	8	10	8
-Salts	3	3	3	3	3	3	3	3	10	8	10	8	10	8
Relative Cost	Low	Low	Med.	Med.	Med.	Med.	Med.	Med.	Med.	Med.	High	Med.	High	Med.

10 = Most Recommended 1 = Least Recommended

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.

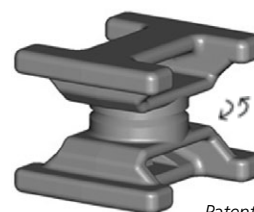
The "H" profile of the saddles allows for broad surface contact with the bundle, minimizing pinching and crushing of the bundle, and it accepts a wide range of bundle diameters from .25 inches to 3 inches.

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.

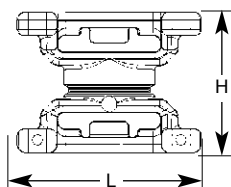


Material Data	
Material	Polyacetal (POM)
Operating Temperature	-40 °F to +185 °F (-40 °C to +85 °C) continuous
Flammability	UL94 HB



swivels
Patents Pending

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	Cable Tie Series	Bundle Ø	Minimum Extraction Strength	Length (L)	Width (W)	Height (H)	Color	Pkg. Qty.
				in. (mm)						
151-06500	151-06500	DSWS4	T50 - T250	.25" - 3" (6.35 - 76.2)	100 lb. (445)	.93" (23.6)	.8" (20.3)	.71" (18)	Black	2200
151-00644	151-00644	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

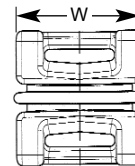
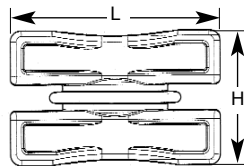
DSWS5

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	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	Bundle Ø	Length (L)	Width (W)	Height (H)	Color	Pkg. Qty.
				in. (mm)	in. (mm)	in. (mm)	in. (mm)		
151-06502	DSWS50HSK2	DSWS5	T50 - T250	.625" - 6" (15.8 - 152.4)	1.6" (40.6)	1" (25.4)	.93" (23.6)	Black	50
151-06501	DSWS50HSH1	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.

Dual Clamp Ties

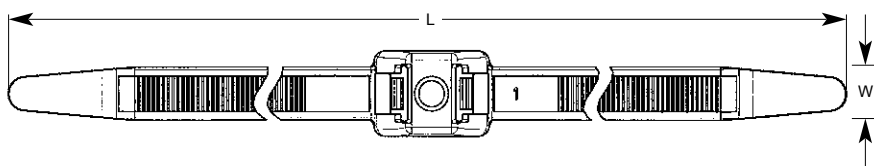
HellermannTyton's dual clamp ties are designed to provide parallel separation between hoses, wires, cables and tubing, protecting them from abrasion. These ties have an optional mounting hole for securing bundles along the chassis of trucks, trailers, and heavy duty equipment. The unique, one-piece design 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	Polyamide 6.6 impact modified, Heat Stabilized, UV Resistant (PA66HIRHS)
Operating Temperature	-40 °F to +230 °F (-40 °C to +110 °C) continuous
Flammability	UL94 HB



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	DCT90HIRK2	DCT9	.25" (6.35)	150 lbs (670)	13.0" (331)	1.3" (33.02)	.50" (12.7)	Black	50
115-00034	DCT90HIRC2	DCT9	.25" (6.35)	150 lbs (670)	13.0" (331)	1.3" (33.02)	.50" (12.7)	Black	100
115-31100	DCT110HIRK2	DCT11	.25" (6.35)	150 lbs (670)	19.2" (489)	2.3" (58.42)	.50" (12.7)	Black	50
115-00033	DCT110HIRC2	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

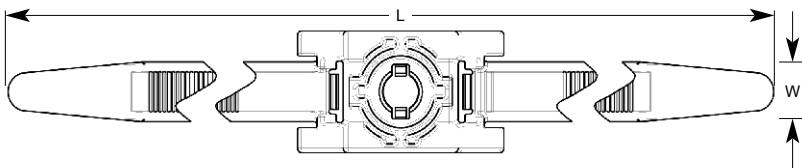
HellermannTyton's standoff dual clamp tie offers the same features as the standard dual clamp tie with a standoff mount that secures the bundle away from the side of the frame rail, protecting the bundles from bolts and other protrusions.

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



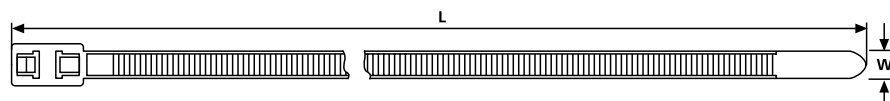
Product Selection			Stud Ø	Min. Tensile Strength	Length (L)	Max. Ø Bundle (each side)	Width (W)	Color	Pkg. Qty.
Article No.	Part No.	Type							
117-00012	117-00012	SDCTR312	.31" (7.94)	100 lbs (445)	20.1" (511)	2.3" (58.42)	.50" (12.7)	Black	250
157-00060	157-00060	SDCTL312	.31" (7.94)	100 lbs (445)	26.1" (663)	3.4" (86.36)	.50" (12.7)	Black	250

Installation tools - MK9, MK9HT, MK9P. 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 can also be used to secure a bundle to an existing fixing point.

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

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

Maximum bundle diameter is variable due to double loops. 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.

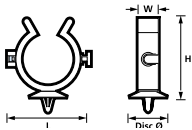
Pipe and Hose Clips, PC-Series

Pipe and hose clips offer simple and secure installation of pipes or hoses to panels. These clips can be attached to the panel prior to installing the pipe or hose. Simply push the pipe into the clip for a firm and secure fixing. These parts can be connected together offering a greater choice of installation options.



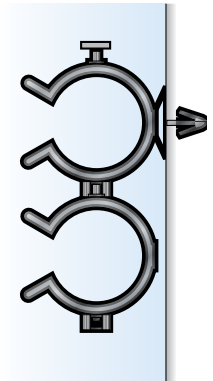
Material Data		RoHS
Material	Polyamide 6.6 (PA66)	
Operating Temperature	-40 °F to +185 °F (-40 °C to +85 °C) continuous	
Flammability	UL94 V2	

Material Data		RoHS
Material	Polyamide 6.6 impact modified (PA66HIR)	
Operating Temperature	-40 °F to +176 °F (-40 °C to +80 °C) continuous	
Flammability	UL94 HB	

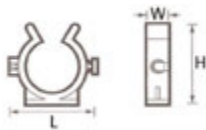


Product Selection											
Article No.	Part No.	Type	Height (H)	Width (W)	Disc Ø	Max. Ø Bundle	Mounting Hole Ø	Max. Panel Thickness	Material	Color	Pkg. Qty.
			in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)			
151-00096	151-00096	IPC10AH	.72" (18.4)	.39" (10)	.87" (22)	.49" (12.5)	.25" (6.3)	.06" (1.6)	PA66HIR	Black	100
151-14130	151-14130	IPC13AH	.83" (21)	.39" (10)	.87" (22)	.53" (13.5)	.25" (6.3)	.06" (1.6)	PA66	Black	100
151-14500	151-14500	IPC15AH	.91" (23)	.39" (10)	.87" (22)	.58" (14.7)	.25" (6.3)	.06" (1.6)	PA66HIR	Black	100
151-14601	151-14601	IPC23AH	1.3" (34)	.39" (10)	.87" (22)	.98" (25)	.25" (6.3)	.06" (1.6)	PA66	Black	100

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

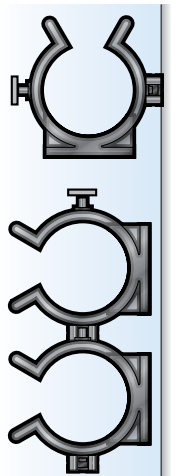


IPC AH Clip connected



Product Selection								
Article No.	Part No.	Type	Height (H)	Width (W)	Max. Ø Bundle	Material	Color	Pkg. Qty.
			in. (mm)	in. (mm)	in. (mm)			
151-14400	151-14400	IPC10P	.59" (15)	.39" (10)	.49" (12.5)	PA66HIR	Black	100
151-14132	151-14132	IPC13P	.69" (17.4)	.39" (10)	.53" (13.5)	PA66	Black	100
151-14502	151-14502	IPC15P	.77" (19.5)	.39" (10)	.58" (14.7)	PA66HIR	Black	100
151-14603	151-14603	IPC23P	1.2" (30.5)	.39" (10)	.98" (25)	PA66	Black	100

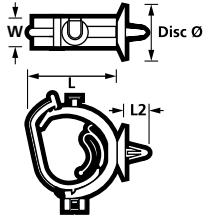
Use **Part No.** for ordering and **Type** for specification purposes.



IPC P Clip connected

Automatic Harness Clips — Connectable

In addition to offering the same simple and secure method of attaching cables to panels as the non-connectable automatic harness clips, these products can be connected for additional installation flexibility.

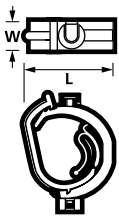


Material Data		RoHS	
Material	Polyamide 6.6 impact modified, Heat Stabilized, UV Resistant (PA66HIRHS)		
Operating Temperature	-40 °F to +230 °F (-40 °C to +110 °C) continuous		
Flammability	UL94 HB		

Product Selection

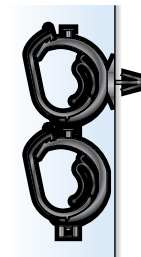
Article No.	Part No.	Type	Length (L)	Length (L2)	Width (W)	Disc Ø	Max. Ø Bundle	Mounting Hole Ø	Panel Thickness in. (mm)		Color	Pkg. Qty.
			in. (mm)	in. (mm)	in. (mm)				Min.	Max.		
151-00378	151-00378	IAHC3AH	1.5" (39)	.28" (7)	.39" (10)	.94" (24)	1.1" (28)	.24 - .26" (6.2 - 6.7)	.02" (.5)	.1" (2.7)	Black	500
151-00211	151-00211	IAHC4AH	1.8" (46)	.28" (7)	.51" (13)	.94" (24)	1.4" (36)	.24 - .26" (6.2 - 6.7)	.02" (.5)	.1" (2.5)	Black	450

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



Product Selection

Article No.	Part No.	Type	Length (L)	Width (W)	Max. Ø Bundle	Color	Pkg. Qty.
			in. (mm)	in. (mm)	in. (mm)		
151-00223	151-00223	IAHC1T	.91" (23)	.39" (10)	.51" (13)	Black	1300
151-00199	151-00199	IAHC2T	1.18" (30)	.39" (10)	.79" (20)	Black	700
151-00213	151-00213	IAHC3T	1.6" (40)	.39" (10)	1.1" (28)	Black	400
151-00207	151-00207	IAHC4T	1.9" (47)	.53" (13.5)	1.4" (36)	Black	1000
151-00195	151-00195	IAHC5T	2.24" (57)	.53" (13.5)	1.8" (45)	Black	700

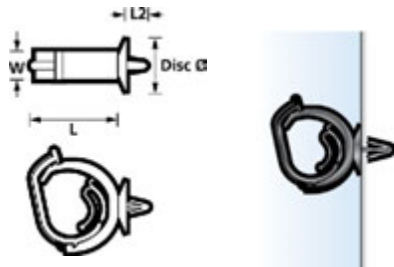


Elements AH and T connected.

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

Automatic Harness Clips — Non-connectable

These clips offer a simple and secure method of attaching cables to panels. They can be attached to the panel prior to installing the cables. Simply pushing the cable into place closes the clip and activates the automatic locking feature.



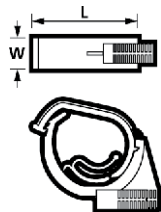
Material Data	
Material	Polyamide 6.6 impact modified, Heat Stabilized, UV Resistant (PA66HIRHS)
Operating Temperature	-40 °F to +230 °F (-40 °C to +110 °C)
Flammability	UL94 HB



Product Selection

Article No.	Part No.	Type	Length (L)	Length (L2)	Width (W)	Disc Ø	Max. Ø Bundle	Mounting Hole Ø	Min. Panel Thickness	Max. Panel Thickness	Color	Pkg. Qty.
			in. (mm)	in. (mm)	in. (mm)				in. (mm)	in. (mm)		
151-00366	151-00366	AHC1AH	.98" (25)	.28" (7)	.39" (10)	.79" (20)	.51" (13)	.24 - .26" (6.2 - 6.7)	.02" (.5)	.08" (2)	Black	1500
151-00367	151-00367	AHC2AH	1.16" (29.5)	.28" (7)	.39" (10)	.79" (20)	.79" (20)	.24 - .26" (6.2 - 6.7)	.02" (.5)	.08" (2)	Black	900

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



Product Selection

Article No.	Part No.	Type	Stud Ø	Length (L)	Width (W)	Max. Ø Bundle	Color	Pkg. Qty.
			in. (mm)	in. (mm)	in. (mm)	in. (mm)		
151-00206	151-00206	AHC2SS	.20" (5)	1.24" (31.5)	.39" (10)	.79" (20)	Black	1000

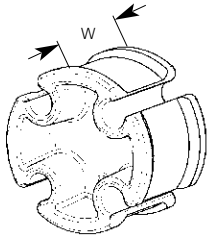
Use **Part No.** for ordering and **Type** for specification purposes.

Isolator

HellermannTyton's isolator mount is used to align and separate 1/4" tubing or brake lines. Easy to assemble, the isolator dampens vibrations and can be used with up to four brake lines. Mounting the isolator can be accomplished with HellermannTyton's standard cable ties, button head ties and any of HellermannTyton's heavy equipment mounts. Mounting is optional, but recommended for long runs. The isolator is durable, chemical and abrasion resistant, and remains flexible in low temperatures.



Material Data	
Material	Thermoplastic Vulcanizate (TPV)
Operating Temperature	-50 °F to +329 °F (-45 °C to +200 °C) continuous
Flammability	UL94 HB



Product Selection				Max Bundle Ø	Mounting Ø	Overall Ø	Spacing Between Clips	Width (W)	Color	Pkg. Qty.
Article No.	Part No.	Type	Cable Tie Series	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)		
151-00455	ISO4X250H1	ISO4X250	T50 - T250	.25" (6.4)	1.34" (34)	1.44" (36.6)	.51" (13)	.92" (23.4)	Black	500

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



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

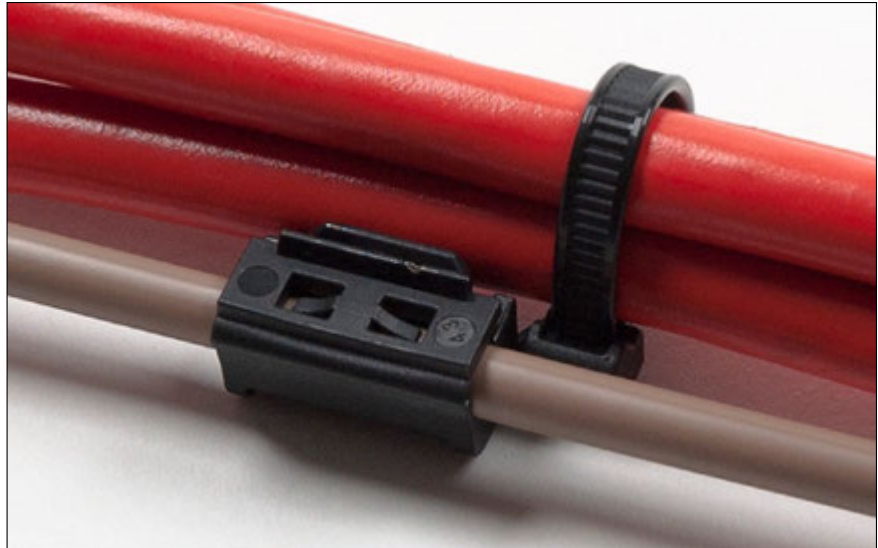


Product Selection									
Article No.	Part No.	Type	Tensile Strength	Length (L)	Maximum Bundle Ø	Attaches to Diameter	Color	Pkg. Qty.	Drawing
			lbs (N)	in. (mm)	in. (mm)	in. (mm)			
156-00036	156-00036	T50ROC1A	50 (225)	7.9 (200)	1.8 (45)	0.16 - 0.40 (4.0 - 10.0)	Black	500	
156-00306	156-00306	T50ROC1B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

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.

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	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	Tensile Strength		Length (L)		Maximum Bundle Ø		Attaches to Diameter		Color	Pkg. Qty.	Drawing
			lbs	(N)	in.	(mm)	in.	(mm)	in.	(mm)			
148-00089	148-00089	T50SOSWA1.8E	50	(225)	6	(150)	1.4	(35)	.07	(1.8)	Black	500	
148-00088	148-00088	T50SOSWA2.0E	50	(225)	6	(150)	1.4	(35)	.09	(2.18)	Black	500	
148-00095	148-00095	T50SOSWA3.4E	50	(225)	6	(150)	1.4	(35)	.13	(3.4)	Black	500	
148-00092	148-00092	T50SOSWA4.3E	50	(225)	6	(150)	1.4	(35)	.17	(4.3)	Black	500	
148-00090	148-00090	T50SOSWB1.8E	50	(225)	6	(150)	1.4	(35)	.07	(1.8)	Black	500	
148-00093	148-00093	T50SOSWB2.0E	50	(225)	6	(150)	1.4	(35)	.09	(2.18)	Black	500	
148-00096	148-00096	T50SOSWB3.4E	50	(225)	6	(150)	1.4	(35)	.13	(3.4)	Black	500	
148-00091	148-00091	T50SOSWB4.3E	50	(225)	6	(150)	1.4	(35)	.17	(4.3)	Black	500	

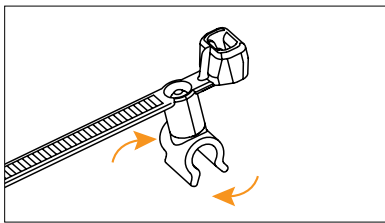
Installation tools - MK7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

Wire and Hose Swivel Clip Ties

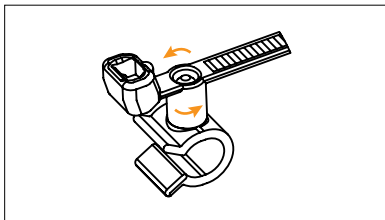
These simple to use inside serrated ties provide the opportunity to attach an additional wire or hose to an existing harness. Offering a full 360 degrees of rotation, the wire/hose can be oriented in any direction in relation to the main harness. It is ideally suited for any application in which the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



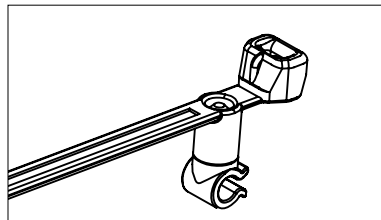
T50SVC rotates in any direction.



T50SVC4/T50SVC5



T50SVC6.5



T50SVC3.5

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	Tensile Strength		Hose Clip Ø	Maximum Bundle Ø	Length (L)	Width (W)	Color	Pkg. Qty.
			lbs	(N)	in.	(mm)	in.	(mm)		
156-00791	156-00791	T50SVC3.5	50 lbs	(222)	.13 - .17 (3.4 - 3.6)	1.4 (35)	6.35 (163)	.18 (4.6)	Black	1000
156-00318	156-00318	T50SVC4	50 lbs	(225)	.15 - .17 (3.8 - 4.2)	1.38 (35)	6.1 (155)	.19 (4.7)	Black Natural	500
155-31202	155-31202	T50SVC5	50 lbs	(222)	.17 - .20 (4.5 - 5.2)	1.4 (35)	6.35 (163)	.18 (4.6)	Black	500
156-00155	156-31202	T50SVC6.5	50 lbs	(222)	.26 - .32 (6.5 - 8.0)	1.38 (35)	6.1 (155)	.19 (4.7)	Black	500

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.

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: ½", ⅝" and ¾". The H-mounts have three bundle mounting locations, each accommodating ties up to ½" wide.

Application

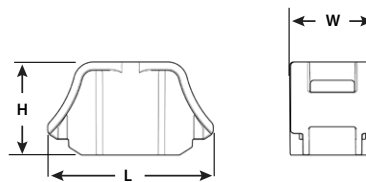
The preferred mount method is to use the specially designed drill bit to spin the H-mount onto the bolt. The bit fits all ¼" drills and has tapered sides to secure the H-mount during installation.

Benefits

- The H-mounts utilize existing frame bolts which reduces component costs and improves 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 positions the bundles adjacent to the bolt yet away from the frame.



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



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	151-00812	HM5	.5" (12.7)	1.97" (50.0)	1.02" (25.98)	1.1" (28.0)	Black	900
151-00813	151-00813	HM6	.625" (15.9)	1.97" (50.0)	1.02" (25.98)	1.1" (28.0)	Black	900
151-00814	151-00814	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

Accessory				
Article No.	Part No.	Type	Color	Pkg. Qty.
904-00284	904-00284	HBIT	Black	1



H Bit in the H Mount

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

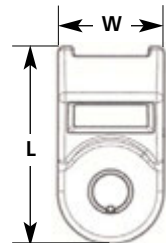
Material Data	
Material	Polyamide 6.6 impact modified, Heat Stabilized, UV Resistant (PA66HIRHS)
Operating Temperature	-40 °F to +230 °F (-40 °C to +110 °C) continuous
Flammability	UL94 HB



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	HDM190HIRC2	HDM19	.1875 (4.8)	115 lb. - in.	.73" (18.5)	1.43" (36.32)	.76" (19.3)	Black	100
151-00436	HDM190HIRH4	HDM19	.1875 (4.8)	115 lb. - in.	.73" (18.5)	1.43" (36.32)	.76" (19.3)	Black	500
151-00437	HDM250HIRC2	HDM25	.25" (6.4)	115 lb. - in.	.73" (18.5)	1.43" (36.32)	.76" (19.3)	Black	100
151-00438	HDM250HIRH4	HDM25	.25" (6.4)	115 lb. - in.	.73" (18.5)	1.43" (36.32)	.76" (19.3)	Black	500
151-00439	HDM3120HIRC2	HDM312	.3125" (8)	115 lb. - in.	.73" (18.5)	1.43" (36.32)	.76" (19.3)	Black	100
151-00440	HDM3120HIRH4	HDM312	.3125" (8)	115 lb. - in.	.73" (18.5)	1.43" (36.32)	.76" (19.3)	Black	500

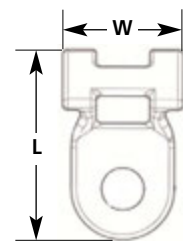


Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

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.

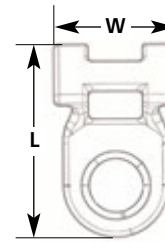
Product Selection		Type	Mounting	Max Torque	Max Ø for Washer/Socket	Length (L)	Width (W)	Color	Pkg. Qty.
Article No.	Part No.		in. (mm)	lb. - ft.	in. (mm)	in. (mm)	in. (mm)		
151-00441	HDM321HIHSUVC2	HDM321	.3125" (8)	40 lb. - ft.	.90" (23)	1.8" (46)	.96" (24)	Black	100
151-07100	HDM321HIHSUVH4	HDM321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

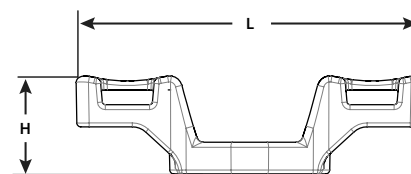
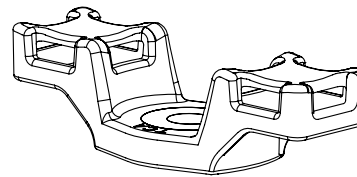


Product Selection									
Article No.	Part No.	Type	Mounting	Max Torque	Max Ø for Washer/Socket	Length (L)	Width (W)	Color	Pkg. Qty.
			in. (mm)	lb. - ft.	in. (mm)	in. (mm)	in. (mm)		
151-00444	HDM320BHIHSUVC2	HDM320	.3125" (8)	114 lb. - ft.	.9" (23)	1.85" (47)	.99" (25)	Black	100
151-07000	HDM320BHIHSUVH4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

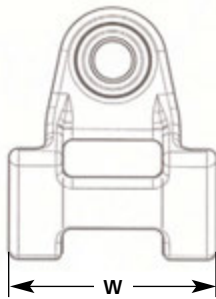
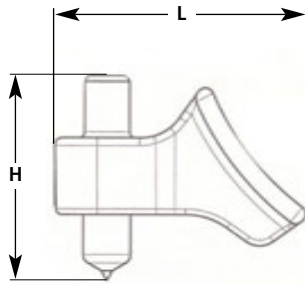


Product Selection									
Article No.	Part No.	Type	Mounting	Max Torque	Max Ø for Washer/Socket	Length (L)	Height (H)	Color	Pkg. Qty.
			in. (mm)	lb. - ft.	in. (mm)	in. (mm)	in. (mm)		
151-00756	151-00756	HDM375	.375" (9.5)	114 lb. - ft.	1.27" (32.5)	3.43" (87)	.99" (25.2)	Black	100

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

Weld Stud Mount

Used in conjunction with a cable tie, the weld stud mount eliminates all sizes of p-clamps, nuts, and bolts. Designed to significantly save time and labor, the weld stud mount can be welded onto a painted frame rail without having to grind the surface in preparation. Contact HellermannTyton for information on suitable welding equipment for this product.



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



Product Selection

Article No.	Part No.	Type	Cable Tie Series	Max Bundle Ø	Stud Ø	Length (L)	Width (W)	Height (H)	Color	Pkg. Qty.
				in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)		
151-00146	WSM60IMHSUVH1	WSM60	T50 - T250	6" (152.4)	.24" (6)	1.32" (33.5)	1.07" (27.2)	1.06" (27)	Black	500

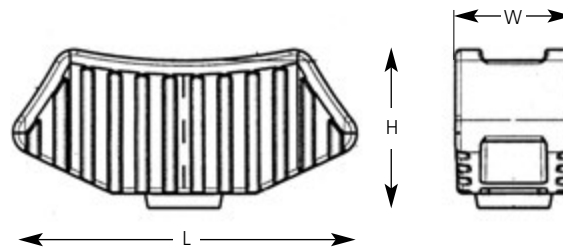
Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

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 tie on p. 41



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



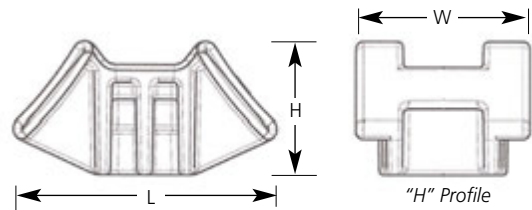
Product Selection			Mounting Hole Ø	Panel Thickness	Standoff Height	Length (L)	Width (W)	Height (H)	Max Bundle Ø		Color	Pkg. Qty.
Article No.	Part No.	Type							Center in. (mm)	Sides in. (mm)		
151-29301	MSBT1200HIRHSH1	MSBT120	.440" - .820" (11.18 - 20.83)	.160" - .75" (4.06 - 19.05)	.875" (22.23)	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.

Two Way Saddle Mounts

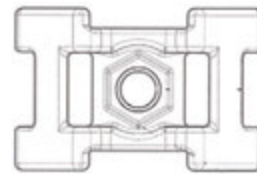
This saddle mount is installed between two bundles (such as wires, cables, hoses, tubing, conduit, etc.) to separate them and prevent chafing and wear. Fastened to a frame rail or mounting bracket, the "H" profile on the saddle mount provides a tight circumferential loop on large and small bundles. Cable 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	Polyamide 6.6 impact modified, Heat Stabilized, UV Resistant (PA66HIRHS)
Operating Temperature	-40 °F to +230 °F (-40 °C to +110 °C) continuous
Flammability	UL94 HB



S2HM25

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

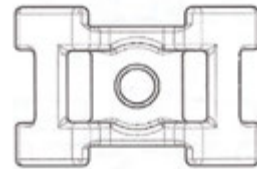


Product Selection										
Article No.	Part No.	Type	Cable Tie Series	Max Bundle Ø (each side)	Stud Ø	Length (L)	Width (W)	Height (H)	Color	Pkg. Qty.
				in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)		
151-29403	S2HM250HIRSH1	S2HM25	T50 - T250	3.5" (89)	.25" (6.35)	1.76" (44.8)	1.17" (29.7)	.90" (22.9)	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.

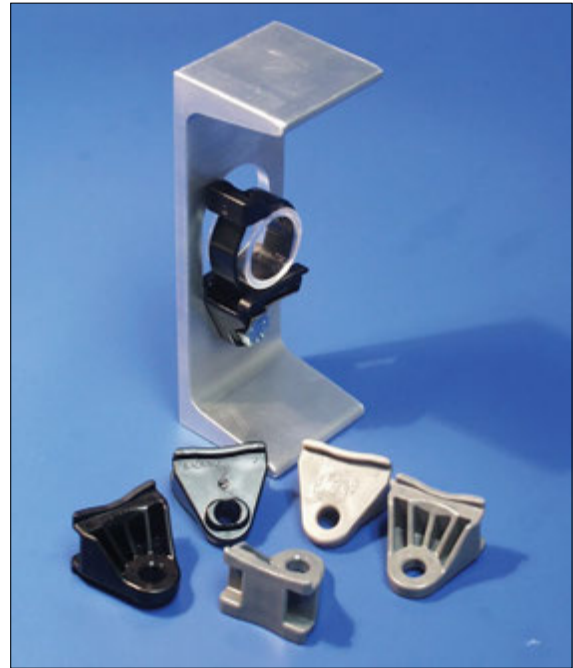
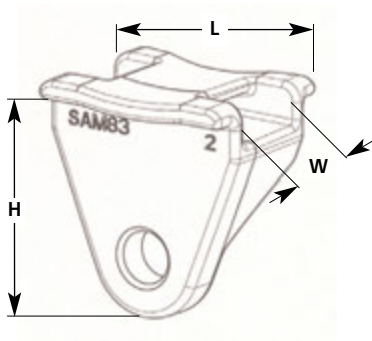


Product Selection										
Article No.	Part No.	Type	Cable Tie Series	Max Bundle Ø (each side)	Stud Ø	Length (L)	Width (W)	Height (H)	Color	Pkg. Qty.
				in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)		
151-29400	S2CM258HIRSH1	S2CM25	T50 - T250	3.5" (89)	.25" (6.35)	1.76" (44.8)	1.17" (29.7)	.90" (22.9)	Gray	500

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

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



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.

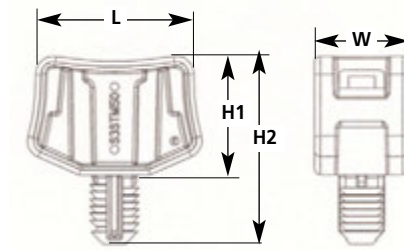
Fir Tree Saddle Mounts

The fir tree saddle mount is designed for use with HellermannTyton cable ties up to 1/2" wide. The saddle mounts act as a standoff, elevating bundles above bolt protrusions commonly found in frame rails and panels. A tension tab on the mount allows cable ties to be pre-assembled in a ready position prior to bundles being brought to the mount. The mount can secure up to 4 separate bundles, providing parallel spacing between the frame rail and adjacent bundles.



Patents Pending

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



Product Selection			Mounting Hole Ø	Panel Thickness	Extraction Force	Length (L)	Width (W)	Height (H1)	Height (H2)	Max Bundle Ø		Color	Pkg. Qty.
Article No.	Part No.	Type								in. (mm)	in. (mm)		
151-29500	S3STM500HIRHSC2	S3STM50	.50" (12.70)	.075" - .515" (1.91 - 13.08)	>200	1.98" (50.29)	.86" (21.84)	1.36" (34.54)	2.16" (54.86)	5.0" (127.0)	5.0" (127.0)	Black	100
151-29501	S3STM500HIRHSF1	S3STM50	.50" (12.70)	.075" - .515" (1.91 - 13.08)	>200	1.98" (50.29)	.86" (21.84)	1.36" (34.54)	2.16" (54.86)	5.0" (127.0)	5.0" (127.0)	Black	250

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

Bundling Clips

Bundling clips are designed to provide simple and easy methods of 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	Polyamide 6.6 heat stabilized (PA66HS)
Operating Temperature	-40 °F to +221 °F (-40 °C to +105 °C) continuous
Flammability	UL94 V2



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



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	151-00663	TC6FT6	1.55" (39.3)	.03" (.07)	.22" (5.7)	.24 - .27" (6.2 - 6.8)	PA66HIRHS	Black	2000	
151-00651	151-00651	TC6FT6LG	1.55" (39.3)	.03" (.07)	.71" (18)	.24 - .27" (6.2 - 6.8)	PA66HIRHS	Natural	2000	
155-30802	155-30802	TC2FT6LG	2.17" (55)	.02" (0.6)	.2" (5.1)	.25 - .28" (6.5 - 7.0)	PA66HIRHS	Black	500	
150-95500	150-95500	TC5FT6S	1.46" (37)	.03" (0.75)	.06" (1.5)	.26 - .28" (6.5 - 7.0)	PA66HIRHS	Black	1000	
151-02901	151-02901	CHA2	2.13" (54)	.03" (0.8)	.08" (2)	.26 - .28" (6.5 - 7.0)	PA66	Black	500	
151-00605	151-00605	TCOP6 2x122	2.17" (55)	.02" (.6)	.24" (6)	.24 x .48" (6.2 x 12.2)	PA66HIRHS	Black	5000	
151-00029	151-00029	TCOP7 0x120	2.17" (55)	.02" (.6)	.24" (6)	.28 x .47" (7.0 x 12)	PA66HIRHS	Black	5000	
155-11601	155-11601	CLIP	2.17" (55)	.06" (1.5)	.12" (3.0)	.25 - .28" (6.3 - 7.0)	PA66HIRHS	Black	500	
150-08110	150-08110	CHA1	2.13" (54)	.02" (.05)	.05" (1.2)	.25 - .28" (6.3 - 7.0)	PA66	Black	500	
151-00790	151-00790	BCOW FT6M	1.46" (37)	.02" (.6)	.14" (3.5)	.26 - .28" (6.5 - 7.0)	PA66HIRHS	Black	2000	
102-69068	102-69068	ATSBC2 KSFT6,5	1.5" (39)	.06" (1.7)	.09" (2.3)	.25 - .27" (6.3 - 6.7)	PA66HIRHS	Black	500	
102-69067	102-69067	ATSBC2 KSFT6,5	1.5" (39)	.03" (.7)	.05" (1.3)	.25 - .27" (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.

Bundling Clips (continued)

Standoff Bundling Clips






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

Product Selection		Type	Tape Bar Length (L)	Panel Thickness Minimum	Panel Thickness Maximum	Distance Hole to Bundle	Mounting Hole Ø	Material	Color	Pkg. Qty.	Drawing
Article No.	Part No.		in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)				
151-00623	151-00623	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	151-00629	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	151-00650	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	155-30902	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	151-00074	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	150-09201	COW2 ODP7	1.7" (42)	.03" (0.8)	.18" (4.5)	.79" (20)	.25 - .28" (6.3 - 7.0)	PA66	Brown	500	
151-00080	151-00080	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	151-00665	SOC8 FT6LG	1.6" (40)	.03" (0.7)	.23" (5.75)	.276" (7)	.26 - .28" (6.5 - 7.0)	PA66HIRHS	Black	1000	
155-01600	155-01600	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	150-45397	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	151-02600	CH20D7	2.0" (50)	.03" (0.8)	.06" (1.6)	.79" (20)	.28" (7.0)	PA66	Black	100	
151-00903	151-00903	SOC10 FT6LG	2.3" (58)	.02" (.6)	.24" (6.7)	.58" (14.5)	.24 - .27" (6.1 - 6.9)	PA66HIRHS	Natural	3000	
151-00932	151-00932	SOC11 FTOVAL	2" (50)	.02" (.06)	.27" (6.8)	.79" (20)	.26 x .49" (6.5 x 12.5)	PA66HIRHS	Natural	3000	
151-00282	151-00282	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		Type	Length (L)	Recommended Weld Stud Size	Distance Weld Stud to Bundle	Material	Color	Pkg. Qty.	Drawing
Article No.	Part No.		in. (mm)	in. (mm)	in. (mm)				
151-00664	151-00664	BCOS5	2.3" (59)	.2" (5)	–	PA66HIRHS	Black	500	
151-00281	151-00281	BCOS6	2.3" (59)	.24" (6)	–	PA66HIRHS	Black	500	
151-26101	151-26101	TCSB5C-SD	2.2" (55)	.2" (5)	.49" (12.5)	PA66HS	Black	500	
151-00017	151-00017	Tape Bar	2.2" (55)	.2" (5)	.90" (22.8)	PA66HIRHS	Black	500	
151-00016	151-00016	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	
Material	Polyamide 6.6 heat stabilized (PA66)
Operating Temperature	-40 °F to +185 °F (-40 °C to +85 °C) continuous
Flammability	UL94 V2





















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



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	151-00785	CCFT6LG	.03" (.07)	.16" (4.0)	.24 - .26" (6.0 - 6.7)	PA66HIRHS	Black	5000	
151-00786	151-00786	CCFT6XLG	.03" (.07)	.43" (11.0)	.24 - .26" (6.0 - 6.7)	PA66HIRHS	Black	5000	
151-00775	151-00775	CCSFT6.5	.07" (1.7)	.09" (2.3)	.24 - .26" (6.0 - 6.7)	PA66HIRHS	Black	5000	
155-32602	155-32602	FT6LG.M.ST. AUFN.II	.03" (.075)	.20" (5.0)	.26 - .28" (6.5 - 7.0)	PA66HIRHS	Black	500	

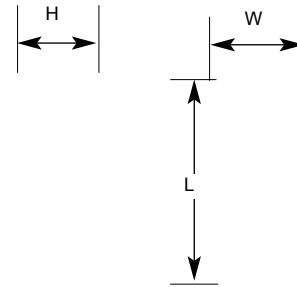
Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

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	155-30702	FT6LG.YAZ. CONNECT-TS	.03" (.07)	.20" (5.1)	.25 - .28" (6.3 - 7.0)	PA66HIRHS	Black	500	
151-00925	151-00925	CCOVAL	.02" (0.6)	.24" (6.0)	.24 x .48" (6.2 x 12.2)	PA66HIRHS	Black	5000	
151-00765	151-00765	CC09	.02" (0.6)	.25" (6.35)	.35 x .67" (9.0 x 17.0)	PA66HIRHS	Black	1000	
151-00704	151-00704	YCCFT82x185	.06" (1.5)	.18" (4.5)	.322 x .728" (8.5 x 18.5)	PA66HIRHS	Black	1000	
151-00675	151-00675	YCCKSFT6.5	.03" (.07)	.05" (1.3)	.25 - .26" (6.3 - 6.7)	PA66HIRHS	Black	500	
151-00792	151-00792	YCCKSFT 6.5-PT1.7-2.3	.07" (1.7)	.09" (2.3)	.25 - .26" (6.3 - 6.7)	PA66HIRHS	Black	500	
151-00835	151-00835	YCCKSFT62x122 PT0.7-1.3	.03" (.07)	.05" (1.3)	.24 x .48" (6.2 x 12.2)	PA66HS	Black	10000	
151-00836	151-00836	YCCKSFT62x122 PT1.7-2.3	.07" (1.7)	.09" (2.3)	.24 x .48" (6.2 x 12.2)	PA66HS	Black	10000	
151-00833	151-00833	YCCKSFT62x122 PT0.7-1.3 90	.03" (.07)	.05" (1.3)	.24 x .48" (6.2 x 12.2)	PA66HS	Black	10000	
151-00834	151-00834	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	151-00513	YCCSFT 62122	.02" (.06)	.04" (1.0)	.24 x .48" (6.2 x 12.2)	PA66HIRHS	Black	500	
155-31102	155-31102	YAZ-CONN- TAPE-CLIP	-	-	-	PA66HS	Black	500	
156-00507	156-00507	T50RYCCA	-	-	-	PA66HS PA66HIRHS	Black	100	
156-00521	156-00521	T50RYCCB	-	-	-	PA66HS PA66HIRHS	Black	100	
155-36002	155-36002	STECKERHALTER SITZ	.02" (0.6)	.12" (3.0)	.26 - .28" (6.7 - 7.0)	PA66HIRHS	Black	1000	
155-03800	155-03800	FT6 LG-AMP	.03" (.07)	.24" (6.0)	.26 x .28" (6.7 - 7.0)	PA66HIRHS	Black	500	
151-00429	151-00429	EC42	.06" (1.5)	.16" (4.0)	-	PA66HIRHS	Black	500	
151-00430	151-00430	EC43	.06" (1.5)	.16" (4.0)	-	PA66HIRHS	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	Polyamide 6.6 (PA66)
Operating Temperature	-40 °F to +185 °F (-40 °C to +85 °C) continuous
Flammability	UL94 V2 (excluding adhesive)

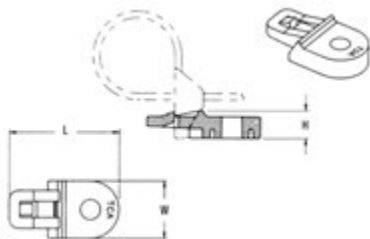


Product Selection									
Article No.	Part No.	Type	Cable Tie Series	Length (L)	Width (W)	Height (H)	Mounting Hole Ø	Color	Pkg. Qty.
				in. (mm)	in. (mm)	in. (mm)	in. (mm)		
151-27010	151-27010	LKC	T50 - T250	.98" (76.2)	.67" (17)	.53" (13.5)	.21" (8)	Black	100
151-27019	151-27019	LKC	T50 - T250	1.6"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

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	
Material	Polyamide 6.6 UV-resistant (PA66UV)
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	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

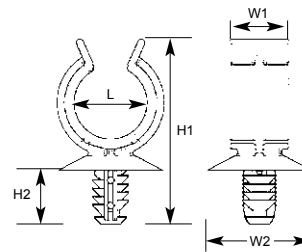
Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

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



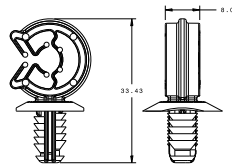
Product Selection											
Article No.	Part No.	Type	Dimensions in. (mm)					Mounting Hole Ø in. (mm)	Panel Thickness in. (mm)	Color	Pkg. Qty.
			H1	H2	W1	W2	L				
151-14303	PC15FT7	PC15FT7	1.07" (27.1)	.44" (11.1)	.47" (12)	.85" (21.6)	.62" (15.7)	.25" (6.5)	.12" (3.055)	Black	100

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

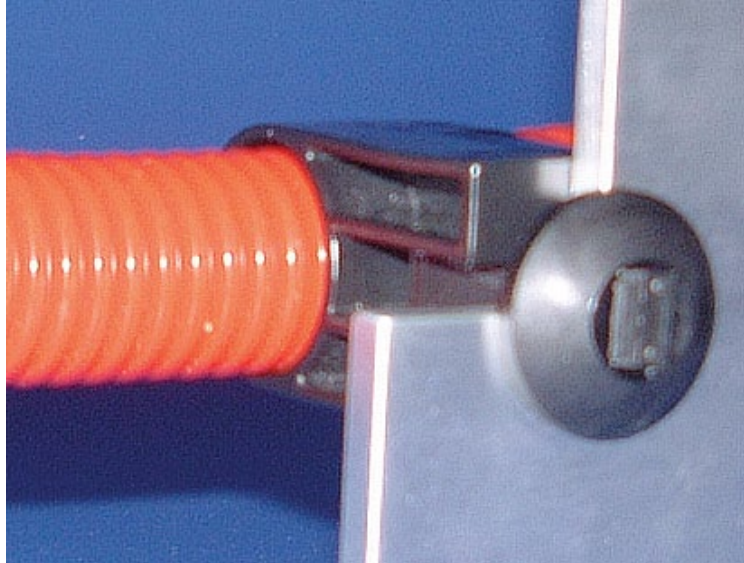


Product Selection									
Article No.	Part No.	Type	Panel Thickness Minimum	Panel Thickness Maximum	Bundle Ø Maximum	Mounting Hole Ø	Material	Color	Pkg. Qty.
			in. (mm)	in. (mm)	in. (mm)	in. (mm)			
151-00927	151-00927	SC6.6	.03" (.70)	.25" (6.35)	.30" (7.6)	.26" (6.6)	PA66HIRHSUV	Black	100

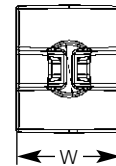
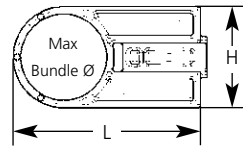
Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

Cable Guide Standoff

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



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



Product Selection

Article No.	Part No.	Type	Max Bundle Ø	Length (L)	Width (W)	Height (H)	Color	Pkg. Qty.
			in. (mm)	in. (mm)	in. (mm)	in. (mm)		
151-00006	151-00006	CGS1	1.02" (25.9)	2.23" (56.6)	1.00" (25.4)	1.20" (30.5)	Black	250

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

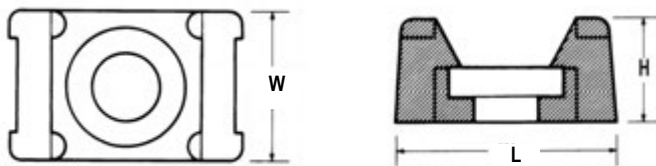
This product for use with the button head tie on p. 34

Cable Tie Mounts

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



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File# E64139

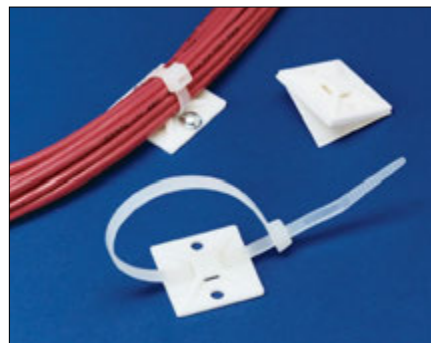
Product Selection		Type	Cable Tie Series	Mounting	Length (L)	Width (W)	Height (H)	Color	Pkg. Qty.	
Article No.	Part No.				in. (mm)	in. (mm)	in. (mm)			
151-30303	CTM010C2	CTM0	T18 - T50	# 6 Screw	.578" (14.68)	.375" (9.52)	.266" (6.76)	White	100	
151-30305	CTM010M4				.578" (14.68)	.375" (9.52)	.266" (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 - T120		# 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.

Cable Tie Mounting Bases

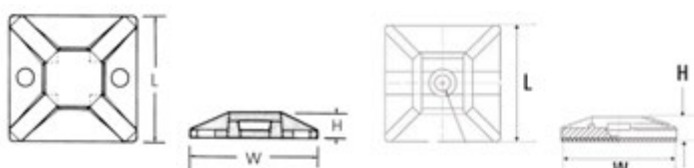
HellermannTyton's 4-way mounting bases are available in four sizes to accommodate T18 through T150 series cable ties. Insertion of ties can be made from all four sides. Each mount may be secured with two screws (four screws for the MB2.5 mount), with adhesive backing, or both, for ease of application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

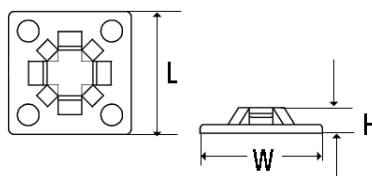
Material Data	
Material	Polyamide 6.6 heat stabilized (PA66)
Operating Temperature	-40 °F to +185 °F (-40 °C to +85 °C) continuous
Flammability	UL94 V2



4-way, MB3, MB4 and MB5 mounts

2-way mount

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



4-way, MB2.5 mount

RU
US
File# E64139

Cable Tie Mounting Bases - Screw Mount

Product Selection					Length (L)	Width (W)	Height (H)	Color	Pkg. Qty.
Article No.	Part No.	Type	Cable Tie Series	Mounting					
2-Way Screw Mount									
151-29104	MB4SH10C2	MB4SH	T18 - T50	# 6 Screw	1.115" (28.32)	1.115" (28.32)	.202" (5.13)	White	100
151-00323	MB4SH10H4	MB4SH			1.115" (28.32)	1.115" (28.32)	.202" (5.13)	White	500
151-29100	MB4SH0C2	MB4SH			1.115" (28.32)	1.115" (28.32)	.202" (5.13)	Black	100
151-29101	MB4SH0H4	MB4SH			1.115" (28.32)	1.115" (28.32)	.202" (5.13)	Black	500
4-Way Screw Mount									
151-28901	MB2.510C2	MB2.5	T18	# 3 Screw	.625" (15.88)	.625" (15.88)	.130" (3.3)	White	100
151-28902	MB2.510M4	MB2.5			.625" (15.88)	.625" (15.88)	.130" (3.3)	White	1000
151-00285	MB2.50C2	MB2.5			.625" (15.88)	.625" (15.88)	.130" (3.3)	Black	100
151-00286	MB2.50M4	MB2.5			.625" (15.88)	.625" (15.88)	.130" (3.3)	Black	1000
151-28302	MB310C2	MB3	T18, T30	#4 Screw	.75" (19.0)	.75" (19.0)	.15" (3.8)	White	100
151-28305	MB310M4	MB3			.75" (19.0)	.75" (19.0)	.15" (3.8)	White	1000
151-00136	MB30C2	MB3			.75" (19.0)	.75" (19.0)	.15" (3.8)	Black	100
151-28301	MB30M4	MB3			.75" (19.0)	.75" (19.0)	.15" (3.8)	Black	1000
151-28802	MB410C2	MB4	T18 - T50	#8 Screw	1.12" (28.5)	1.12" (28.5)	.19" (4.8)	White	100
151-00319	MB410H4	MB4			1.12" (28.5)	1.12" (28.5)	.19" (4.8)	White	500
151-00320	MB40C2	MB4			1.12" (28.5)	1.12" (28.5)	.19" (4.8)	Black	100
151-28801	MB40H4	MB4			1.12" (28.5)	1.12" (28.5)	.19" (4.8)	Black	500
151-00324	MB510C2	MB5	T18 - T150	#8 Screw	1.485" (37.7)	1.485" (37.7)	.245" (6.2)	White	100
151-28504	MB510F4	MB5			1.485" (37.7)	1.485" (37.7)	.245" (6.2)	White	250
151-28500	MB50C2	MB5			1.485" (37.7)	1.485" (37.7)	.245" (6.2)	Black	100
151-28501	MB50F4	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)		
2- Way Mount with Rubber - Based Adhesive									
151-29203	MB4SHA10C2	MB4SHA	T18 - T50	Adhesive	1.115" (28.32)	1.115" (28.32)	.232" (5.89)	White	100
151-29206	MB4SHA10H4	MB4SHA			1.115" (28.32)	1.115" (28.32)	.232" (5.89)	White	500
151-29200	MB4SHA0C2	MB4SHA			1.115" (28.32)	1.115" (28.32)	.232" (5.89)	Black	100
4- Way Mount with Rubber - Based Adhesive									
151-29002	MB2.5A10C2	MB2.5A	T18	Adhesive	.625" (15.88)	.625" (15.88)	.160" (4.1)	White	100
151-00298	MB2.5A10M4	MB2.5A			.625" (15.88)	.625" (15.88)	.160" (4.1)	White	1000
151-29000	MB2.5A0C2	MB2.5A			.625" (15.88)	.625" (15.88)	.160" (4.1)	Black	100
151-29001	MB2.5A0M4	MB2.5A			.625" (15.88)	.625" (15.88)	.160" (4.1)	Black	1000
151-28718	MB3A10C2	MB3A	T18, T30	Adhesive	.75" (19.0)	.75" (19.0)	.18" (4.6)	White	100
151-28721	MB3A10M4	MB3A			.75" (19.0)	.75" (19.0)	.18" (4.6)	White	1000
151-28710	MB3A0C2	MB3A			.75" (19.0)	.75" (19.0)	.18" (4.6)	Black	100
151-28713	MB3A0M4	MB3A			.75" (19.0)	.75" (19.0)	.18" (4.6)	Black	1000
151-28421	MB4A10C2	MB4A	T18 - T50	Adhesive	1.12" (28.0)	1.12" (28.0)	.22" (5.6)	White	100
151-00321	MB4A10H4	MB4A			1.12" (28.0)	1.12" (28.0)	.22" (5.6)	White	500
151-28403	MB4A0C2	MB4A			1.12" (28.0)	1.12" (28.0)	.22" (5.6)	Black	100
151-28406	MB4A0H4	MB4A			1.12" (28.0)	1.12" (28.0)	.22" (5.6)	Black	500
151-28529	MB5A10C2	MB5A	T18 - T150	Adhesive	1.485" (37.7)	1.485" (37.7)	.275" (6.9)	White	100
151-00427	MB5A10F4	MB5A			1.485" (37.7)	1.485" (37.7)	.275" (6.9)	White	250
151-28602	MB5A0C2	MB5A			1.485" (37.7)	1.485" (37.7)	.275" (6.9)	Black	100
151-28605	MB5A0F4	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.



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)		
4 - Way Screw Mount Acrylic Adhesive									
151-00331	MB3A10A2C2	MB3A	T18, T30	Adhesive	.75" (19.0)	.75" (19.0)	.18" (4.6)	White	100
151-28717	MB3A10A2H4	MB3A			.75" (19.0)	.75" (19.0)	.18" (4.6)	White	500
151-28711	MB3A0A2C2	MB3A			.75" (19.0)	.75" (19.0)	.18" (4.6)	Black	100
151-28709	MB3A0A2H4	MB3A			.75" (19.0)	.75" (19.0)	.18" (4.6)	Black	500
151-28420	MB4A10A2C2	MB4A	T18 - T50	Adhesive	1.12" (28.5)	1.12" (28.5)	.23" (5.9)	White	100
151-00322	MB4A10A2H4	MB4A			1.12" (28.5)	1.12" (28.5)	.23" (5.9)	White	500
151-28402	MB4A0A2C2	MB4A			1.12" (28.5)	1.12" (28.5)	.23" (5.9)	Black	100
151-28405	MB4A0A2H4	MB4A			1.12" (28.5)	1.12" (28.5)	.23" (5.9)	Black	500
151-28607	MB5A10A2C2	MB5A	T18 - T150	Adhesive	1.485" (37.7)	1.485" (37.7)	.275" (6.9)	White	100
151-28610	MB5A10A2F4	MB5A			1.485" (37.7)	1.485" (37.7)	.275" (6.9)	White	250
151-28600	MB5A0A2C2	MB5A			1.485" (37.7)	1.485" (37.7)	.275" (6.9)	Black	100
151-28604	MB5A0A2F4	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 Temp/Heavy Bond Adhesive

For extreme heavy duty applications, our high temp/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	151-00432	MB3APT	T18, T30	Adhesive	.75" (19.0)	.75" (19.0)	.15" (3.8)	Black	100
151-00433	151-00433	MB4APT	T18 - T50		1.12" (28.0)	1.12" (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.

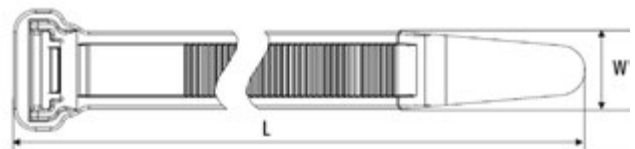
Wide Strap Heavy Duty Cable Ties

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



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)				
111-12300	111-12300	WSS	120 lbs (534)	9.1" (231.14)	2.25" (57.15)	.5" (12.7)	Black	300				
111-12301	111-12301	WSI	120 lbs (534)	12.1" (307.34)	3.25" (82.55)	.5" (12.7)	Black	300				
111-12302	111-12302	WSR	120 lbs (534)	15.1" (383.54)	4.125" (104.78)	.5" (12.7)	Black	300				

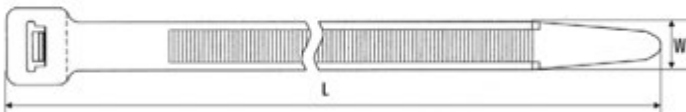
Installation tools - MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

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



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)				
111-25500	T255S0HIRX2	T255S	250 lbs (1115)	8.86" (225)	2.16" (55)	.49" (12.5)	Black	25				
111-25400	T255R0HIRX2	T255R	250 lbs (1115)	20.28" (520)	5.71" (145)	.49" (12.5)	Black	25				
111-25300	T255M0HIRX2	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.

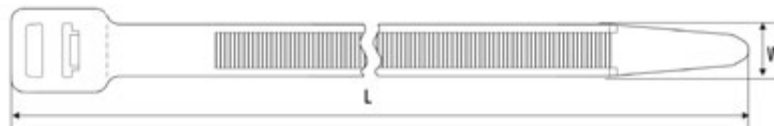
Heavy Duty Cable Ties T250 Series

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 LTM, lashing tie mounts.



T250 heavy duty cable tie and lashing tie mount application

Material Data	
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	Min. Tensile Strength		Length (L)		Max. Ø Bundle		Width (W)		Color	Pkg. Qty.
			lbs.	(N)	in.	(mm)	in.	(mm)	in.	(mm)		
T250S												
111-24702	T250S9X2	T250S	250 lbs	(1115)	9.05"	(230)	2.17"	(55)	.49"	(12.5)	Natural	25
111-24700	T250S0X2	T250S	250 lbs	(1115)	9.05"	(230)	2.17"	(55)	.49"	(12.5)	Black	25
T250R												
111-24803	T250R9X2	T250R	250 lbs	(1115)	20.47"	(520)	5.71"	(145)	.49"	(12.5)	Natural	25
111-24801	T250R0X2	T250R	250 lbs	(1115)	20.47"	(520)	5.71"	(145)	.49"	(12.5)	Black	25
T250M												
111-25002	T250M9X2	T250M	250 lbs	(1115)	22.24"	(565)	5.90"	(150)	.49"	(12.5)	Natural	25
111-25001	T250M0X2	T250M	250 lbs	(1115)	22.24"	(565)	5.90"	(150)	.49"	(12.5)	Black	25
T250I												
111-25219	T250I9X2	T250I	250 lbs	(1115)	28.54"	(725)	8.00"	(203)	.49"	(12.5)	Natural	25
111-00507	T250I0X2	T250I	250 lbs	(1115)	28.54"	(725)	8.00"	(203)	.49"	(12.5)	Black	25
T250L												
111-00436	T250L9X2	T250L	250 lbs	(1115)	34.65"	(880)	10.00"	(254)	.49"	(12.5)	Natural	25
111-24601	T250L0X2	T250L	250 lbs	(1115)	34.65"	(880)	10.00"	(254)	.49"	(12.5)	Black	25
T250XL												
111-00466	T250XL9X2	T250XL	250 lbs	(1115)	40.55"	(1030)	12.00"	(305)	.49"	(12.5)	Natural	25
111-25200	T250XL0X2	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.

Button Head Ties

The button head tie is a two piece tie providing for parallel entry and exit through the head. The strap contains serrations on both sides and has two opposed pawls recessed within a domed head. This design allows the strap to be directed clockwise or counter-clockwise prior to insertion into the head, enabling bi-directional looping.



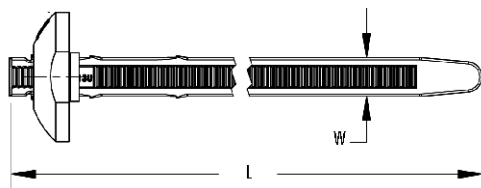
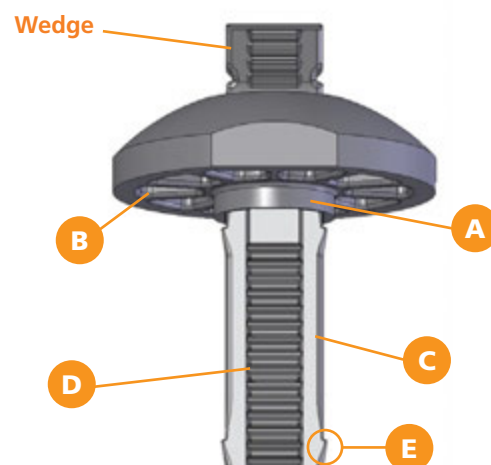
New and Improved Features

The button head tie offers many improved features for added durability and installation ease.

- A. Pilot bushing** - protects the strap from abrasion on the mounting hole edge
- B. Ribs** - increased ribs added to the bottom of the head for added durability
- C. Strap** - more radiused edges for added flexibility
- D. Serrations** - redesigned serrations and wedge provide optimal strength when seated in the head
- E. Retainers** - lower retainers on BT130 hold HellermannTyton's MSBT120 saddle mounts in place during assembly.

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

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



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 91

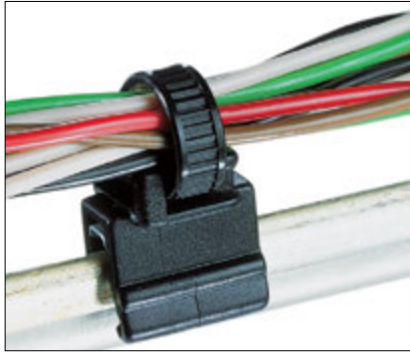
Product Selection			Min. Tensile Strength	Length (L)	Max. Ø Bundle	Width (W)	Color	Pkg. Qty.
Article No.	Part No.	Type						
BT105 Button Head Ties								
132-00010	132-00010	BT105R	105 lbs (467)	9.63" (244.4)	2.62" (66.7)	.22" (5.6)	Black	50
132-00011	132-00011	BT105L	105 lbs (467)	15" (381.5)	4.33"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

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 Piece Edge Clip and Cable Tie Assemblies



T50ROSEC4A - the cable bundle runs parallel with the edge.

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

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

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

Installation tools - MK7, 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	
Material	Polyamide 6.6 heat stabilized (PA66HS)
Color	Black
Operating Temperature	-40 °F to +221 °F (-40 °C to +105 °C) continuous
Flammability	UL94 V2



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



Product Selection

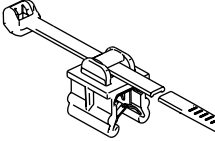
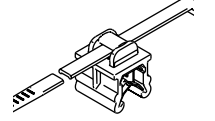

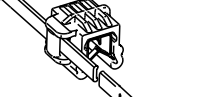

Article No.	Part No.	Type	Min. Tensile Strength		Length (L)		Max. Ø Bundle		Pkg. Qty.	Drawing
			lbs.	(N)	in.	(mm)	in.	(mm)		
Panel Thickness, — .039" - .117" (1-3mm)										
155-37104	155-37104	T18REC9	18 lbs	(80)	3.9"	(100)	.75"	(19)	500	
156-00019	156-00019 *	T50SOSEC9	50 lbs	(225)	5.9"	(150)	1.2"	(31)	500	
156-05903	156-05903	T50ROSEC9	50 lbs	(225)	7.9"	(200)	1.8"	(45)	500	
155-38304	155-38304	T18R-EC10	18 lbs	(80)	3.9"	(100)	.79"	(20)	500	
156-05904	156-05904 *	T50ROSEC10	50 lbs	(225)	7.9"	(200)	1.8"	(45)	500	
156-00017	156-00017	T50SOSEC21	50 lbs	(225)	5.9"	(150)	1.3"	(33)	500	
156-00010	156-00010	T50ROSEC21	50 lbs	(225)	7.9"	(200)	1.8"	(45)	500	
156-00018	156-00018	T50SOSEC22	50 lbs	(225)	5.9"	(150)	1.3"	(33)	500	
156-00011	156-00011	T50ROSEC22	50 lbs	(225)	7.9"	(200)	1.8"	(45)	500	
156-01601	156-01601	CBTO-50R	50 lbs	(225)	8"	(202)	1.85"	(47)	500	

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.

* outside serrated cable tie

SD in the **Type** indicates the edge clip is designed to accommodate small bundle diameters

Two Piece Edge Clip and Cable Tie Assemblies (continued)

Product Selection			Min. Tensile Strength	Length (L)	Max. Ø Bundle	Pkg. Qty.	Drawing
Article No.	Part No.	Type					
Panel Thickness — .117" - .234" (3-6 mm)							
156-04600	156-04600	T18ROSEC19	18 lbs (80)	3.9" (100)	.79" (20)	500	
156-04601	156-04601	T50SOSEC19	50 lbs (225)	5.9" (150)	1.2" (31)	500	
156-04602	156-04602	T50ROSEC19	50 lbs (225)	7.9" (200)	1.8" (45)	500	
156-00016	156-00016	T50SOSEC20	50 lbs (225)	5.9" (150)	1.3" (33)	500	
156-00873	156-00873	T50ROSEC20	50 lbs (225)	7.9" (200)	1.8" (45)	500	
156-00006	156-00006	T50ROSEC23	50 lbs (225)	7.9" (200)	1.8" (45)	500	
156-00007	156-00007	T50ROSEC24	50 lbs (225)	7.9" (200)	1.8" (45)	500	

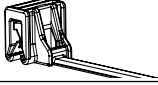


Installation tools - MK7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

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			Min. Tensile Strength	Length (L)	Max. Ø Bundle	Pkg. Qty.	Drawing
Article No.	Part No.	Type					
Panel Thickness, — .039" .117" (1-3mm)							
126-00036	126-00036	T50SOSEC34E	40 lbs (155)	6" (150)	1.8" (45)	500	
156-00858	156-00858	T50SOSEC4A	50 lbs (225)	5.9" (150)	1.2" (31)	500	
156-00539	156-00539	T50REC4A	50 lbs (225)	8" (202)	1.8" (45)	500	

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.

Edge Clip and Tape Clip Combination

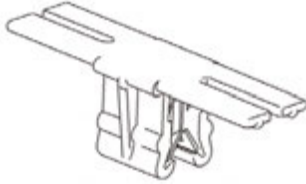
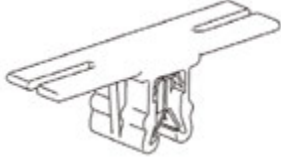
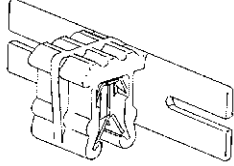
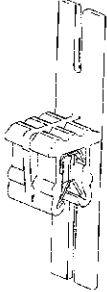
These clips can be secured to cables with cable ties or tape.

Material Data - Cable Tie and Tape Clip Combination



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

Product Selection

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

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.



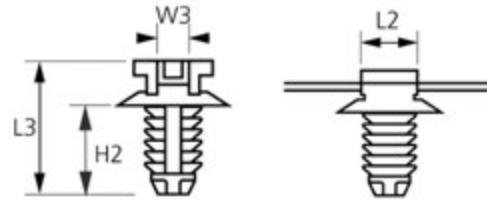
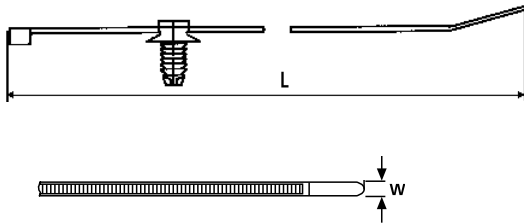
Material Data - All Cable Ties/
FT7, FT8 and FT10 Mounts

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



Material Data - FT5, FT6 and FT6LG Mounts

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

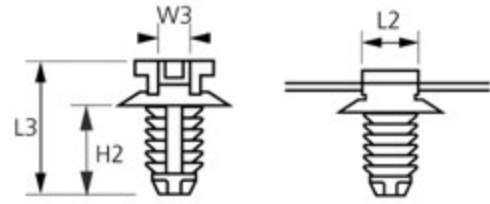
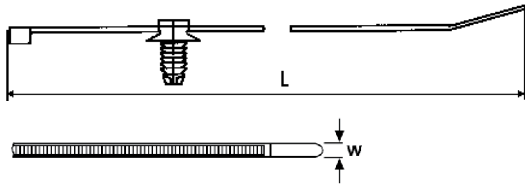


Product Selection

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)	
FT5 - Mounting Hole Ø: .177" - .197" (4.5-5.0mm) - Panel Thickness: .028" - .193" (0.7 - 3.0mm)												
150-55850	150-55850	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	156-00025	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
FT5.5 - Mounting Hole Ø: .196" - .224" (5.0-5.7mm) - Panel Thickness: .028" - .177" (0.7 - 4.5mm)												
156-00882	156-00882	T50RFT5.5SD	50 lbs (225)	1.75" (44.5)	8" (203.2)	.18" (4.6)	.63" (16.0)	.38" (9.6)	.69" (17.5)	.24" (6.1)	.39" (9.9)	500
FT6 - Mounting Hole Ø: .252" - .28" (6.4-7.1mm) - Panel Thickness: .028" - .193" (0.75 - 3.0mm)												
150-77940	150-77940	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	156-00156	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	156-00157	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	156-00066	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 - MK7, 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)

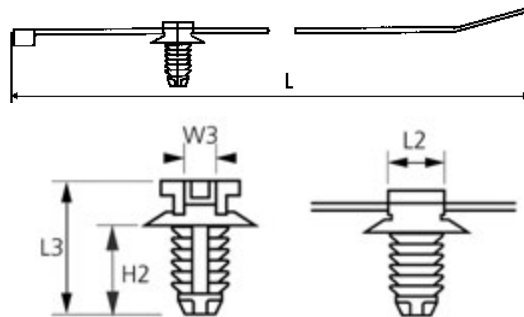


Product Selection												
Article No.	Part No.	Type	Min. Tensile Strength lbs. (N)	Max. Ø Bundle in. (mm)	Cable Tie		Mount					Pkg. Qty.
					Length (L) in. (mm)	Width (W) in. (mm)	Disc Ø in. (mm)	Length (L2) in. (mm)	Length (L3) in. (mm)	Width (W3) in. (mm)	Height (H2) in. (mm)	
FT6LG - Mounting Hole Ø: .256" - .276" (6.4-7.1mm) - Panel Thickness: .03" - .24" (0.75 - 6.0mm)												
150-31090	150-31090	T3ORFT6LG	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	150-31093	T5OSFT6LG	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	150-31091	T5ORFT6LG	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	156-00054	T5OIFT6LG	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
FT7 - Mounting Hole Ø: .256" - .276" (6.5-7.0mm) - Panel Thickness: .031" - .276" (0.8 - 7.0mm)												
156-00057	156-00057	T3ORFT7	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	156-00056	T5OSFT7	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	111-85871	T5ORFT7	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	111-05350	T5OIFT7	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	156-00055	T5OLFT7	50 lbs (225)	4.33" (110)	15" (380)	.18" (4.7)	.63" (16)	.46" (11.6)	.75" (19)	.20" (5)	.5" (12.7)	500
FT8 - Mounting Hole Ø: .3" - .31" (7.7-8.0mm) - Panel Thickness: .03" - .31" (0.8 - 8.0mm)												
156-00375	156-00375	T3ORFT8	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	156-00376	T5ORFT8	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	156-00377	T5OIFT8	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	156-00378	T5OLFT8	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
FT10 - Mounting Hole Ø: .38" - .39" (9.7-10.0mm) - Panel Thickness: .031" - .236" (0.8 - 5.0mm)												
156-00089	156-00089	T3ORFT10	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	156-00090	T5OSFT10	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	156-00091	T5ORFT10	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	156-00092	T5OIFT10	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	156-00093	T5OLFT10	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 - MK7, 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) 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)	
FT5 - Mounting Hole Ø : .177" - .197" (4.5 - 5.0mm) - Panel Thickness: .028" - .12" (0.7 - 3.0mm)											
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
FT6 - Mounting Hole Ø : .25" - .28" (6.4 - 7.1mm) - Panel Thickness: .03" - .12" (0.75 - 3.0mm)											
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
FT6LG - Mounting Hole Ø : .25" - .28" (6.4 - 7.1mm) - Panel Thickness: .03" - .24" (0.75 - 6.0mm)											
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
FT7HD - Mounting Hole Ø : .244" - .284" (6.2 - 7.2mm) - Panel Thickness: .03" - .276" (0.8 - 7.0mm)											
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
FT8G - Mounting Hole Ø : .32" - .33" (8.0 - 8.5mm) - Panel Thickness: .06" - .16" (1.5 - 4.0mm)											
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 - MK7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

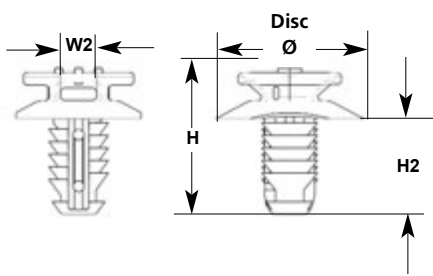
Fir Tree Mount For Automatic Cable Tie Tool System

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



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.
FT7AT - Mounting Hole Ø: .24" - .28" (6.0 - 7.0mm) - Panel Thickness: .03" - .276" (0.8 - 7.0mm)							
151-00492	151-00492	FT7AT	.73" (18.6)	.18" (4.5)	.72" (18.34)	.47" (11.9)	100

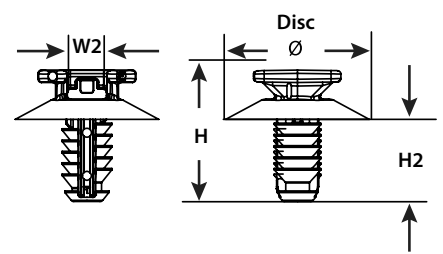
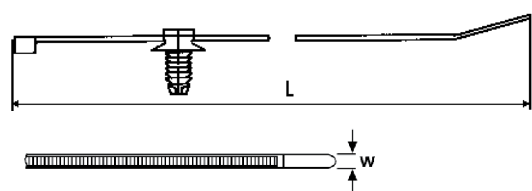


Installation tools - MK7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

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



Product Selection			Min. Tensile Strength lbs. (N)	Max. Ø Bundle in. (mm)	Cable Tie		Mount				Pkg. Qty.
Article No.	Part No.	Type			Length (L) in. (mm)	Width (W) in. (mm)	Disc Ø in. (mm)	Width (W2) in. (mm)	Height (H) in. (mm)	Height (H2) in. (mm)	
FT7HD - Mounting Hole Ø: .24" - .28" (6.2 - 7.2mm) - Panel Thickness: .03" - .276" (0.8 - 7.0mm)											
156-00329	156-00329	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	156-00282	T50LFT7HD	50 lbs (225)	3.35" (85)	11.8" (300)	.18" (4.6)					

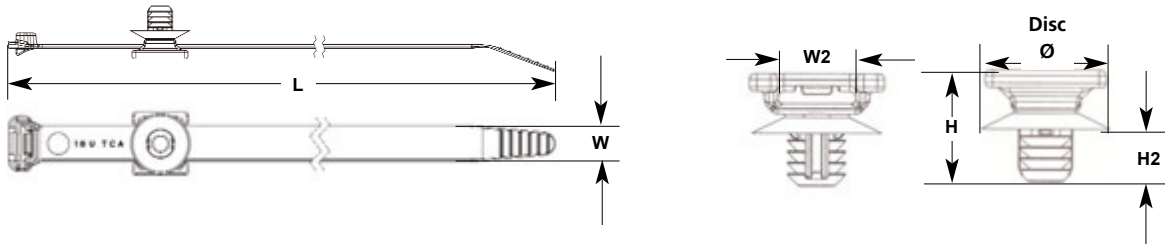
Installation tools - MK7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

Heavy Duty Fir Tree Mounts and Cable Tie Assemblies

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

Material Data - T120R Cable Tie	
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 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)	
FT9A - Mounting Hole Ø: .343" - .363" (8.75 - 9.25mm) - Panel Thickness: .04" - .26" (1.0 - 6.5mm)											
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 - MK7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

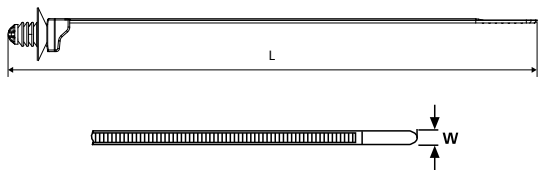
Product Selection

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)	
FT9B - Mounting Hole Ø: .343" - .363" (8.75 - 9.25mm) - Panel Thickness: .04" - .62" (1.0 - 15.8 mm)											
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 - MK7, 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	Polyamide 6.6 heat stabilized (PA66HS)
Operating Temperature	-40 °F to +221 °F (-40 °C to +105 °C) continuous
Flammability	UL94 V2

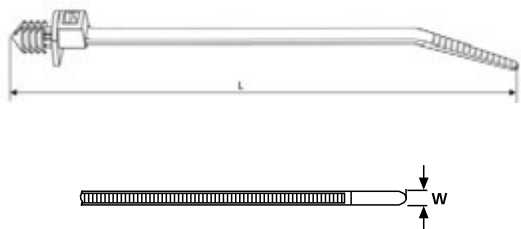


Product Selection										
Article No.	Part No.	Type	Min. Tensile Strength	Mounting Hole Ø	Panel Thickness	Length (L)	Max. Ø Bundle	Width (W)	Color	Pkg. Qty.
			lbs. (N)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)		
157-00108	157-00108	T50SOSFT6E2	40 lbs. (180)	.25 - .28" (6.3 - 7.0)	.02 - .16" (.6 - 4.2)	6.3" (161)	1.4" (35)	.18" (4.6)	Black	1000
157-00097	157-00097	T50SOSFT6LG-E	40 lbs. (180)	.25 - .28" (6.3 - 7.0)	.03 - .28" (.7 - 7.0)	6.5" (165)	1.4" (35)	.18" (4.6)	Black	1000

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.

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



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



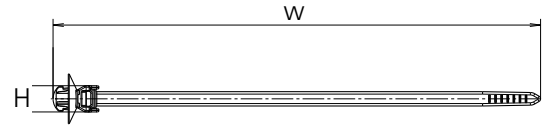
Product Selection										
Article No.	Part No.	Type	Min. Tensile Strength	Mounting Hole Ø	Panel Thickness	Length (L)	Max. Ø Bundle	Width (W)	Color	Pkg. Qty.
			lbs. (N)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)		
Heat Stabilized Material										
126-03501	T50RTM250HSM4	T50RTM25	50 lbs (225)	.25" - .26" (6.5 - 6.6)	.052" - .28" (1.32 - 7.0)	8.27" (210)	1.97" (50.0)	.19" (4.7)	Black	1000
Impact Modified Heat Stabilized, UV Resistant Material										
126-03504	T50RTM25E8HM4	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 - MK7, MK7HT, MK7P, MK9, MK9HT, MK9P. 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	T50SOSSFT6.5S2-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 - MK7, 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 - MK7, 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	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	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)		
T30RSF											
111-85603	T30RSF9C2	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	T30RSF9M4	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	T30RSF0C2	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	T30RSF0M4	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
T50SSF											
126-00043	126-00043	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	126-00044	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	126-00045	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	126-00046	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
T50RSF											
111-85789	T50RSF9C2	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	T50RSF9M4	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	T50RSF0C2	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	T50RSF0M4	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 - MK7, 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	Polyamide 6.6 (PA66)
Operating Temperature	-40 °F to +185 °F (-40 °C to +85 °C) continuous
Flammability	UL94 V2



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



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



File# E64139

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	Material	Pkg. Qty.
			lbs. (N)	in. (mm)	in. (mm)						
T18RWPM											
126-00041	126-00041	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	T18RWPM9M4	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	126-00042*	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
T50SSFm											
126-00049	126-00049	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	126-00069	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
T50SL6											
111-85469	T50SL6.NN6P	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
T50SL7											
111-85479	T50SL7.NN6P	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 - MK7, 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.

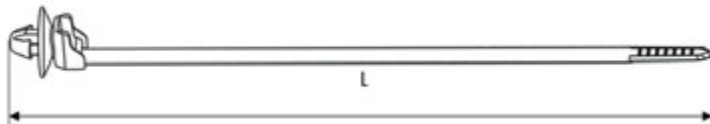
* UL listing applies to 126-00042.

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	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		Mounting Hole Ø	Panel Thickness	Length (L)	Max. Ø Bundle	Width (W)	Color	Pkg. Qty.
			lbs. (N)	in. (mm)							
126-03100	126-03100	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	156-00264	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*	126-00065	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	156-00444	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	

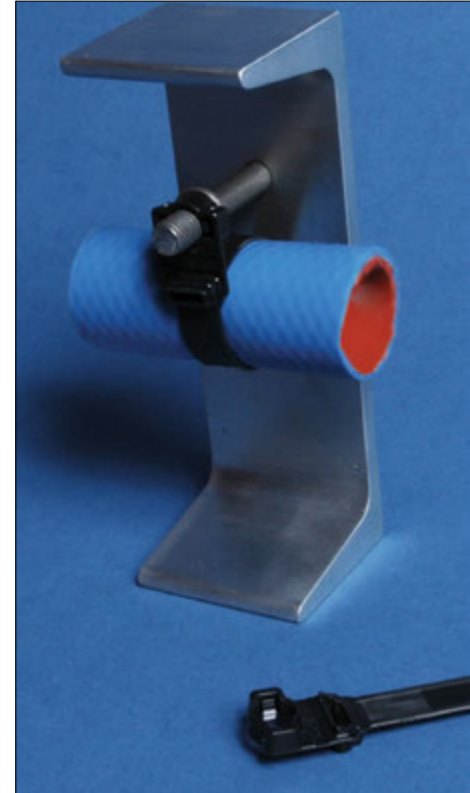
Installation tools - MK7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

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

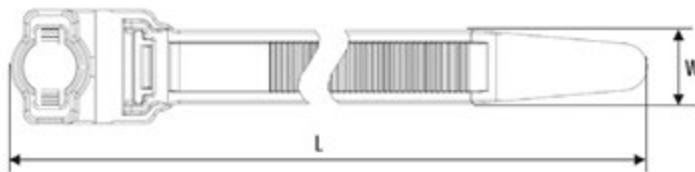
Wide Strap Heavy Duty Stud Mount Cable Ties

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



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

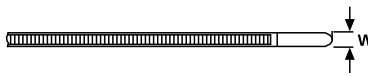
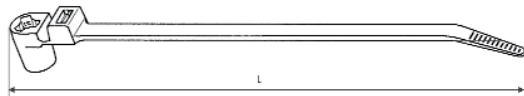
Installation tools - MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

Stud Mount Ties

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



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

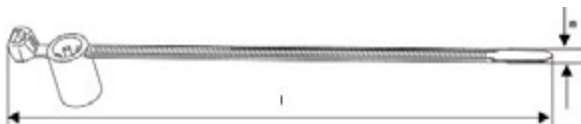
Installation tools - MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

Standoff Stud Mount Tie

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

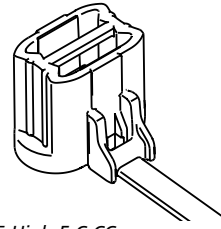


Product Selection			Stud Ø	Min. Tensile Strength	Length (L)	Max. Ø Bundle	Width (W)	Color	Pkg. Qty.
Article No.	Part No.	Type							
155-30602	155-30602	T50SSBS50TE	.20 " (5)	45 lbs (200)	6.30" (160)	1.38" (35)	.181" (4.6)	Black	500
157-00083	157-00083	T50SSBS60TE	.24 " (6)	45 lbs (200)	6.30" (160)	1.38"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

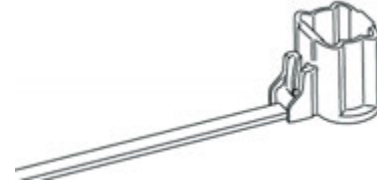
Installation tools - MK7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

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

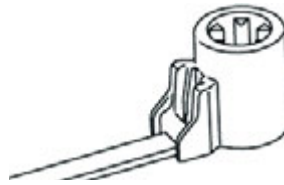


Product Selection		Type	Stud Ø		Min. Tensile Strength		Length (L)		Max. Ø Bundle		Width (W)		Color	Pkg. Qty.
Article No.	Part No.		in.	(mm)	lbs.	(N)	in.	(mm)	in.	(mm)	in.	(mm)		
157-00105	157-00105	T50SOSSB5-High-E-C-CC	20"/24"	(5)/(6)	50 lbs	(225)	6.6"	(167)	1.4"	(35)	.20"	(5.0)	Black	1000
157-00106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

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.

Stud Mount Tie 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.



T50SOSSBS5E

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	Stud Ø		Min. Tensile Strength		Length (L)		Max. Ø Bundle		Width (W)		Color	Pkg. Qty.
Article No.	Part No.		in.	(mm)	lbs.	(N)	in.	(mm)	in.	(mm)	in.	(mm)		
155-12300	155-12300	T50SOSSBS5E	.20 "	(5)	50 lbs	(225)	6.30"	(160)	1.38"	(35)	.18"	(4.6)	Black	500

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.

Flexible Head Stud Mount Tie

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



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



Article No.	Part No.	Type	Stud Ø	Min. Tensile Strength	Length (L)	Max. Ø Bundle	Width (W)	Color	Pkg. Qty.
			in.	lbs. (N)	in. (mm)	in. (mm)	in. (mm)		
111-07110	T50RS5.NB3P	T50RS5	#10-24"	50 lbs (225)	(190)	1.5" (40)	.18" (4.6)	Black	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.

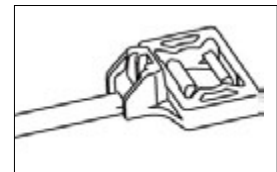
Stud Mount Lateral Adjustment Tie

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.



T50S0SWSP5E, parallel installation using two stud mount lateral ties.

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			Stud Ø	Min. Tensile Strength	Length (L)	Max. Ø Bundle	Width (W)	Color	Pkg. Qty.
Article No.	Part No.	Type	in. (mm)	lbs. (N)	in. (mm)	in. (mm)	in. (mm)		
155-23601	155-23601	T50S0SWSP5E	.20" (5)	50 lbs (225)	6.35" (163)	1.4" (35)	.18" (4.6)	Black	500

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.

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.	
T18MR										
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	
T30MR										
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	
T50MR										
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	
T50MI										
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	
T50ML										
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	
T120MR										
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 - MK7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

Screw Mount Ties With Metal Bushing

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.	
T50MRT										
113-05101	T50MRT9C2	T50MRT	#6-32 tap thru screw	50 lbs (225)	8.47" (215)	1.77" (45)	.19" (4.7)	Natural	100	
113-05102	T50MRT9M4	T50MRT		50 lbs (225)	8.47" (215)	1.77" (45)	.19" (4.7)	Natural	1000	
113-05100	T50MRT0C2	T50MRT		50 lbs (225)	8.47" (215)	1.77" (45)	.19" (4.7)	Black	100	
113-00037	T50MRT0M4	T50MRT		50 lbs (225)	8.47" (215)	1.77" (45)	.19" (4.7)	Black	1000	

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.

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		RoHS
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		RoHS
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	



RoHS
File# E64139

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

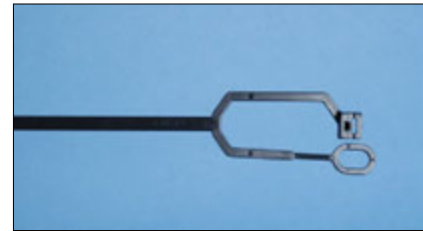
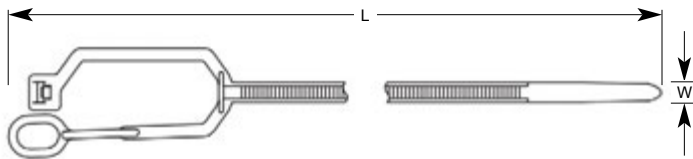
Installation tools - MK7, MK7HT, MK7P, MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

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	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	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	115-00042	YT200	.63” – 1.57”	(16 - 40)	.59” – 1.18”	(15 - 30)	33 lbs	(147)	7.87”	(200)	.18”	(4.7)	Black	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.

Kabelrap Bundling System

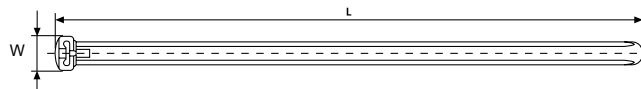
The patented Kabelrap bundling system offers a very high bundling strength and is particularly resistant to saltwater, oils, greases, and hydraulic fluids. Special hand tool required for installation.



Required Tool - 121-00680

Kabelrap Application

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

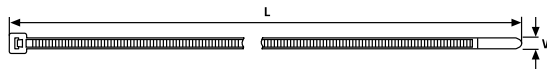


Product Selection												
Article No.	Part No.	Type	Min. Tensile Strength		Length (L)		Max. Ø Bundle		Width (W)		Color	Pkg. Qty.
			lbs.	(N)	in.	(mm)	in.	(mm)	in.	(mm)		
121-61860	121-61860	KR6/18	110 lbs	(490)	7.25”	(183)	1.5”	(39)	.24”	(6)	Black	50
121-63560	121-63560	KR6/35	110 lbs	(490)	14”	(356)	3.75”	(93)	.25”	(6)	Black	50
121-82160	121-82160	KR8/21	175 lbs	(785)	8.25”	(210)	1.75”	(47)	.31”	(8)	Black	50
121-83360	121-83360	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.

Standard Cable Ties T18 - T30 Series - Natural and Black

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	US Gov. Designation	Min. Tensile Strength		Length (L)		Max. Ø Bundle		Width (W)		Color	Pkg. Qty.
				lbs.	(N)	in.	(mm)	in.	(mm)	in.	(mm)		
T18S													
111-02805	T18S9C2	T18S	-	18 lbs	(80)	3.27"	(83)	.63"	(16)	.09"	(2.3)	Natural	100
111-02809	T18S9M4	T18S	-	18 lbs	(80)	3.27"	(83)	.63"	(16)	.09"	(2.3)		1000
111-02810	T18S0C2	T18S	-	18 lbs	(80)	3.27"	(83)	.63"	(16)	.09"	(2.3)	Black	100
111-02811	T18S0M4	T18S	-	18 lbs	(80)	3.27"	(83)	.63"	(16)	.09"	(2.3)		1000
T18R													
112-01819	T18R9C2	T18R	MS3367-4-9	18 lbs	(80)	4"	(100)	.87"	(22)	.10"	(2.5)	Natural	100
111-01872	T18R9M4	T18R	MS3367-4-9	18 lbs	(80)	4"	(100)	.87"	(22)	.10"	(2.5)		1000
111-00405	T18R0C2	T18R	*	18 lbs	(80)	4"	(100)	.87"	(22)	.10"	(2.5)	Black	100
111-01841	T18R0M4	T18R	*	18 lbs	(80)	4"	(100)	.87"	(22)	.10"	(2.5)		1000
T18I													
111-02311	T18I9C2	T18I	-	18 lbs	(80)	5.51"	(140)	1.38"	(35)	.10"	(2.5)	Natural	100
111-02322	T18I9M4	T18I	-	18 lbs	(80)	5.51"	(140)	1.38"	(35)	.10"	(2.5)		1000
111-02308	T18I0C2	T18I	-	18 lbs	(80)	5.51"	(140)	1.38"	(35)	.10"	(2.5)	Black	100
111-02315	T18I0M4	T18I	-	18 lbs	(80)	5.51"	(140)	1.38"	(35)	.10"	(2.5)		1000
T18L													
111-02189	T18L9C2	T18L	-	18 lbs	(80)	8.0"	(205)	2.17"	(55)	.10"	(2.5)	Natural	100
111-02026	T18L9M4	T18L	-	18 lbs	(80)	8.0"	(205)	2.17"	(55)	.10"	(2.5)		1000
111-00401	T18L0C2	T18L	-	18 lbs	(80)	8.0"	(205)	2.17"	(55)	.10"	(2.5)	Black	100
111-02015	T18L0M4	T18L	-	18 lbs	(80)	8.0"	(205)	2.17"	(55)	.10"	(2.5)		1000
T30R													
112-03019	T30R9C2	T30R	MS3367-5-9	30 lbs	(135)	5.9"	(150)	1.38"	(35)	.14"	(3.5)	Natural	100
111-03047	T30R9M4	T30R	MS3367-5-9	30 lbs	(135)	5.9"	(150)	1.38"	(35)	.14"	(3.5)		1000
111-00438	T30R0C2	T30R	*	30 lbs	(135)	5.9"	(150)	1.38"	(35)	.14"	(3.5)	Black	100
111-03034	T30R0M4	T30R	*	30 lbs	(135)	5.9"	(150)	1.38"	(35)	.14"	(3.5)		1000
T30L													
111-03325	T30L9C2	T30L	-	30 lbs	(135)	7.48"	(190)	1.97"	(50)	.14"	(3.5)	Natural	100
111-03327	T30L9M4	T30L	-	30 lbs	(135)	7.48"	(190)	1.97"	(50)	.14"	(3.5)		1000
111-03313	T30L0C2	T30L	-	30 lbs	(135)	7.48"	(190)	1.97"	(50)	.14"	(3.5)	Black	100
111-03315	T30L0M4	T30L	-	30 lbs	(135)	7.48"	(190)	1.97"	(50)	.14"	(3.5)		1000
T30LL													
111-03515	T30LL9C2	T30LL	-	30 lbs	(135)	11.42"	(290)	3.15"	(80)	.14"	(3.5)	Natural	100
111-03517	T30LL9M4	T30LL	-	30 lbs	(135)	11.42"	(290)	3.15"	(80)	.14"	(3.5)		1000
111-03501	T30LL0C2	T30LL	-	30 lbs	(135)	11.42"	(290)	3.15"	(80)	.14"	(3.5)	Black	100
111-03511	T30LL0M4	T30LL	-	30 lbs	(135)	11.42"	(290)	3.15"	(80)	.14"	(3.5)		1000
T30XL													
111-02900	T30XL9C2	T30XL	-	30 lbs	(135)	14.37"	(365)	4.13"	(105)	.14"	(3.5)	Natural	100
111-02907	T30XL9M4	T30XL	-	30 lbs	(135)	14.37"	(365)	4.13"	(105)	.14"	(3.5)		1000
111-02901	T30XL0C2	T30XL	-	30 lbs	(135)	14.37"	(365)	4.13"	(105)	.14"	(3.5)	Black	100
111-02903	T30XL0M4	T30XL	-	30 lbs	(135)	14.37"	(365)	4.13"	(105)	.14"	(3.5)		1000

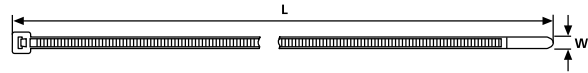
Installation tools - MK7, MK7HT, MK7P, MK9, MK9HT, MK9P. MK9 and MK9P cannot be used with T18S cable ties.

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



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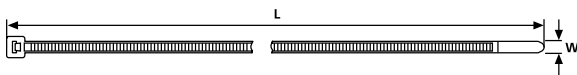
Product Selection													
Article No.	Part No.	Type	US Gov. Designation	Min. Tensile Strength		Length (L)		Max. Ø Bundle		Width (W)	Color	Pkg. Qty.	
				lbs.	(N)	in.	(mm)	in.	(mm)	in.			(mm)
T40R													
112-04019	T40R9C2	T40R(U)	-	40 lbs	(180)	8.27"	(210)	2.16"	(55)	.16"	(4.0)	Natural	100
111-04131	T40R9M4	T40R(U)	-	40 lbs	(180)	8.27"	(210)	2.16"	(55)	.16"	(4.0)		1000
112-04060	T40R0C2	T40R(U)	-	40 lbs	(180)	8.27"	(210)	2.16"	(55)	.16"	(4.0)		Black
111-04122	T40R0M4	T40R(U)	-	40 lbs	(180)	8.27"	(210)	2.16"	(55)	.16"	(4.0)	1000	
T40I													
111-04609	T40I9C2	T40I	-	40 lbs	(180)	11.42"	(290)	3.15"	(80)	.16"	(4.0)	Natural	100
111-04612	T40I9M4	T40I	-	40 lbs	(180)	11.42"	(290)	3.15"	(80)	.16"	(4.0)		1000
111-04600	T40I0C2	T40I	-	40 lbs	(180)	11.42"	(290)	3.15"	(80)	.16"	(4.0)		Black
111-04604	T40I0M4	T40I	-	40 lbs	(180)	11.42"	(290)	3.15"	(80)	.16"	(4.0)	1000	
T40L													
111-04300	T40L9C2	T40L	-	40 lbs	(180)	14.4"	(365)	4.13"	(105)	.16"	(4.0)	Natural	100
111-04311	T40L9M4	T40L	-	40 lbs	(180)	14.4"	(365)	4.13"	(105)	.16"	(4.0)		1000
111-04301	T40L0C2	T40L	-	40 lbs	(180)	14.4"	(365)	4.13"	(105)	.16"	(4.0)		Black
111-04305	T40L0M4	T40L	-	40 lbs	(180)	14.4"	(365)	4.13"	(105)	.16"	(4.0)	1000	
T50S													
111-05811	T50S9C2	T50S	-	50 lbs	(225)	5.9"	(150)	1.38"	(35)	.18"	(4.6)	Natural	100
111-05813	T50S9M4	T50S	-	50 lbs	(225)	5.9"	(150)	1.38"	(35)	.18"	(4.6)		1000
111-05806	T50S0C2	T50S	-	50 lbs	(225)	5.9"	(150)	1.38"	(35)	.18"	(4.6)		Black
111-05808	T50S0M4	T50S	-	50 lbs	(225)	5.9"	(150)	1.38"	(35)	.18"	(4.6)	1000	
T50R													
112-05019	T50R9C2	T50R	MS3367-1-9	50 lbs	(225)	7.9"	(200)	1.97"	(50)	.18"	(4.6)	Natural	100
111-04862	T50R9M4	T50R	MS3367-1-9	50 lbs	(225)	7.9"	(200)	1.97"	(50)	.18"	(4.6)		1000
111-04878	T50R0C2	T50R	*	50 lbs	(225)	7.9"	(200)	1.97"	(50)	.18"	(4.6)		Black
111-04846	T50R0M4	T50R	*	50 lbs	(225)	7.9"	(200)	1.97"	(50)	.18"	(4.6)	1000	
T50I													
112-05219	T50I9C2	T50I	MS3367-7-9	50 lbs	(225)	11.8"	(300)	3.35"	(85)	.18"	(4.6)	Natural	100
111-05230	T50I9M4	T50I	MS3367-7-9	50 lbs	(225)	11.8"	(300)	3.35"	(85)	.18"	(4.6)		1000
111-00444	T50I0C2	T50I	*	50 lbs	(225)	11.8"	(300)	3.35"	(85)	.18"	(4.6)		Black
111-05216	T50I0M4	T50I	*	50 lbs	(225)	11.8"	(300)	3.35"	(85)	.18"	(4.6)	1000	
T50L													
112-05419	T50L9C2	T50L	MS3367-2-9	50 lbs	(225)	15.35"	(390)	4.33"	(110)	.18"	(4.6)	Natural	100
111-05449	T50L9M4	T50L	MS3367-2-9	50 lbs	(225)	15.35"	(390)	4.33"	(110)	.18"	(4.6)		1000
111-00445	T50L0C2	T50L	*	50 lbs	(225)	15.35"	(390)	4.33"	(110)	.18"	(4.6)		Black
111-00504	T50L0M4	T50L	*	50 lbs	(225)	15.35"	(390)	4.33"	(110)	.18"	(4.6)	1000	

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.

* Military black available. Contact HellermannTyton for more information.

Heavy Duty 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



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)
T120S													
111-12819	T120S9K2	T120S	-	120 lbs	(535)	8.85"	(225)	2.17"	(55)	.30"	(7.6)	Natural	50
111-12813	T120S9H4	T120S	-	120 lbs	(535)	8.85"	(225)	2.17"	(55)	.30"	(7.6)		500
111-12803	T120S0K2	T120S	-	120 lbs	(535)	8.85"	(225)	2.17"	(55)	.30"	(7.6)	Black	50
111-12808	T120S0H4	T120S	-	120 lbs	(535)	8.85"	(225)	2.17"	(55)	.30"	(7.6)		500
T120I													
111-12211	T120I9K2	T120I	-	120 lbs	(535)	11.81"	(300)	3.15"	(80)	.30"	(7.6)	Natural	50
111-12213	T120I9H4	T120I	-	120 lbs	(535)	11.81"	(300)	3.15"	(80)	.30"	(7.6)		500
111-12201	T120I0K2	T120I	-	120 lbs	(535)	11.81"	(300)	3.15"	(80)	.30"	(7.6)	Black	50
111-12206	T120I0H4	T120I	-	120 lbs	(535)	11.81"	(300)	3.15"	(80)	.30"	(7.6)		500
T120R													
112-12019	T120R9K2	T120R	MS3367-3-9	120 lbs	(535)	15.24"	(387)	4.13"	(105)	.30"	(7.6)	Natural	50
111-12036	T120R9H4	T120R	MS3367-3-9	120 lbs	(535)	15.24"	(387)	4.13"	(105)	.30"	(7.6)		500
112-12060	T120R0K2	T120R	*	120 lbs	(535)	15.24"	(390)	4.13"	(105)	.30"	(7.6)	Black	50
111-12013	T120R0H4	T120R	*	120 lbs	(535)	15.24"	(387)	4.13"	(105)	.30"	(7.6)		500
T120L													
111-12419	T120L9K2	T120L	MS3367-6-9	120 lbs	(535)	30.0"	(760)	8.85"	(225)	.30"	(7.6)	Natural	50
111-12405	T120L0K2	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)
T150R													
111-15203	T150R9X2	T150R(U)	-	175 lbs	(780)	15.35"	(390)	4.13"	(105)	.35"	(8.8)	Natural	25
111-15200	T150R0X2	T150R(U)	-	175 lbs	(780)	15.35"	(390)	4.13"	(105)	.35"	(8.8)	Black	25
T150M													
111-15619	T150M9X2	T150M	-	175 lbs	(780)	21.00"	(530)	5.91"	(150)	.35"	(8.9)	Natural	25
111-00124	T150M0X2	T150M	-	175 lbs	(780)	21.00"	(530)	5.91"	(150)	.35"	(8.9)	Black	25
T150L													
111-15419	T150L9X2	T150L	-	175 lbs	(780)	32.28"	(820)	9.65"	(245)	.35"	(8.9)	Natural	25
111-15405	T150L0X2	T150L	-	175 lbs	(780)	32.28"	(820)	9.65"	(245)	.35"	(8.9)	Black	25
T150LL													
111-15719	T150LL9X2	T150LL	-	175 lbs	(780)	36.42"	(925)	10.83"	(275)	.35"	(8.9)	Natural	25
111-15700	T150LL0X2	T150LL	-	175 lbs	(780)	36.42"	(925)	10.83"	(275)	.35"	(8.9)	Black	25
T150XL													
111-15519	T150XL9X2	T150XL	-	175 lbs	(780)	43.11"	(1095)	13.00"	(330)	.35"	(8.9)	Natural	25
111-15500	T150XL0X2	T150XL	-	175 lbs	(780)	43.11"	(1095)	13.00"	(330)	.35"	(8.9)	Black	25
T150XLL													
111-15304	T150XLL9X2	T150XLL	-	175 lbs	(780)	52.17"	(1325)	15.95"	(405)	.35"	(8.9)	Natural	25
111-15300	T150XLL0X2	T150XLL	-	175 lbs	(780)	52.17"	(1325)	15.95"	(405)	.35"	(8.9)	Black	25

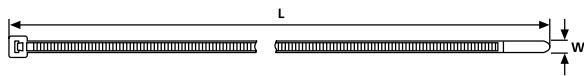
Installation tools - MK9, MK9HT, MK9P. Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

For product information visit or www.hellermanntyton.com or call **800-537-1512**

Standard Cable Ties- Specialty Materials T18 - T120 Series - Heat Stabilized

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

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



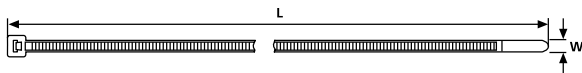
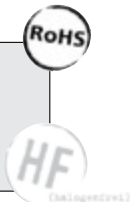
Product Selection												
Article No.	Part No.	Type	Min. Tensile Strength		Length (L)		Max. Ø Bundle		Width (W)		Color	Pkg. Qty.
			lbs.	(N)	in.	(mm)	in.	(mm)	in.	(mm)		
T18S												
111-02815	T18S0HSM4	T18S	18 lbs	(80)	3.27"	(83)	.63"	(16)	.09"	(2.3)	Black	1000
T18R												
111-01905	T18R0HSC2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

Installation tools - MK7, MK7HT, MK7P, MK9, MK9HT, MK9P. MK9, MK9HT, and MK9P tools 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- Specialty Materials T18 -T50 Series - Flame Retardant

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

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



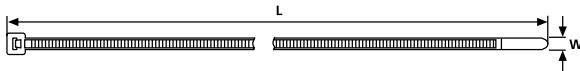
Product Selection		Type	Min. Tensile Strength	Length (L)	Max. Ø Bundle	Width (W)	Color	Pkg. Qty.	
Article No.	Part No.		lbs. (N)	in. (mm)	in. (mm)	in. (mm)			
T18R									
111-01834	T18R9VOC2	T18R	18 lbs (80)	4" (100)	.87" (22)	.10" (2.5)	White	100	
111-01835	T18R9VOM4	T18R	18 lbs (80)	4" (100)	.87"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

Standard Cable Ties- Specialty Materials T18 - T120 Series - Polypropylene

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

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



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

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.

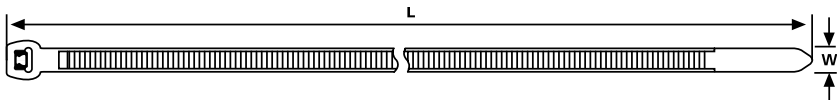
PEEK Tie For High Temperature Applications

HellermannTyton's high performance PEEK material withstands temperatures up to +500°F (+260°C) and highly resistant to chemicals. The cable ties are 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 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. 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.

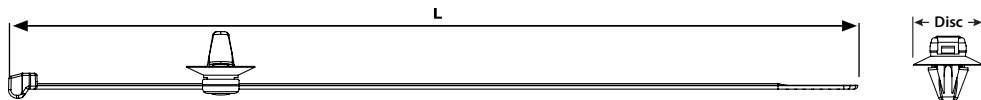


The contoured head takes up less space, gives a low insertion force, and offers high strength.

Material Data		RoHS
Material	Polyetheretherketone (PEEK)	
Operating Temperature	-67 °F to +500 °F (-55 °C to +260 °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	118-00032	PT2A	52 lbs. (230)	1.38" (35)	5.7" (145)	.13" (3.4)	-	-	-	Beige	100
111-01235	111-01235	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	156-00455	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	156-00456	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



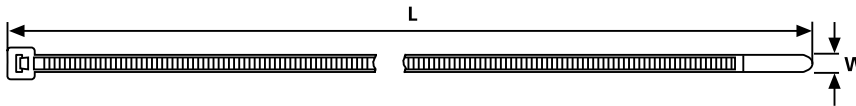
Product Selection										
Article No.	Part No.	Type	Cable Tie Series	Mounting	Length (L)	Width (W)	Height (H)	Color	Pkg. Qty.	
					in. (mm)	in. (mm)	in. (mm)			
Mounts										
151-00757	151-00757	CTAM1	T18 - T50	#10 Screw	.81" (20.5)	.40" (10.2)	.22" (5.5)	Beige	100	
151-00758	151-00758	CTAM2	T18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

Cable Ties/High Temperature 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.



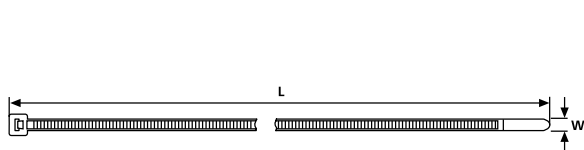
Material Data	
Material	Polyamide 4.6 (PA46)
Operating Temperature	-40 °F to +275 °F (-40 °C to +135 °C) continuous
Flammability	UL94 V2



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)		
116-01811	T18R1STNLM5	T18R1STNLM5	18 lbs. (80)	4" (100)	.87" (22)	.10" (2.5)	Brown	100
116-03011	T30R1STNLM4	T30R1STNLM4	30 lbs. (135)	5.9" (150)	1.38" (35)	.14" (3.5)	Brown	100
116-05011	T50R1STNLM5	T50R1STNLM5	50 lbs. (225)	7.9" (200)	1.97" (50)	.18" (4.6)	Brown	100
111-05443	T50L1STNLM4	T50L1STNLM4	50 lbs. (225)	15.3" (390)	4.33" (110)	.18" (4.6)	Brown	100

E/TFE Cable Ties

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



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

Tefzel is a registered trademark of E.I. DuPont Corporation. 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.

Outside Serrated Cable Ties

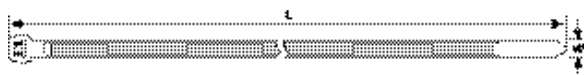
The outside serrated cable ties are for specific applications where thin walled or soft insulation is used (such as in aircraft, trains, etc.) and for applications that are very sensitive to the amount of force applied to the cable.



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



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



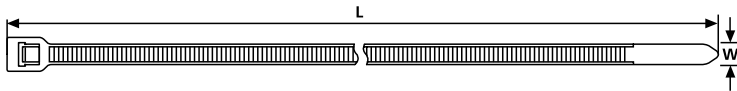
Product Selection			Min. Tensile Strength	Length (L)	Max. Ø Bundle	Width (W)	Color	Pkg. Qty.
Article No.	Part No.	Type						
118-04700	118-04700	T18ROS	18 lbs (80)	3.94" (100)	.79" (20)	.10" (2.5)	Black	100
118-04800	118-04800	T30ROS	30 lbs (135)	5.71" (145)	1.34" (35)	.13" (3.4)	Black	100
118-04900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

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



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						
RT40R								
115-06219	RT40R9C2	RT40R	40 lbs (80)	8.46" (215)	2.0" (51)	.16" (4.0)	Natural	100
115-06204	RT40R9M4	RT40R	40 lbs (80)	8.46" (215)	2.0" (51)	.16" (4.0)		1000
115-06200	RT40R0C2	RT40R	40 lbs (80)	8.46" (215)	2.0" (51)	.16" (4.0)	Black	100
115-06202	RT40R0M4	RT40R	40 lbs (80)	8.46" (215)	2.0" (51)	.16" (4.0)		1000
RT50S								
115-06319	RT50S9C2	RT50S	50 lbs (225)	6.5" (165)	1.38" (35)	.18" (4.6)	Natural	100
115-06304	RT50S9M4	RT50S	50 lbs (225)	6.5" (165)	1.38" (35)	.18" (4.6)		1000
115-06300	RT50S0C2	RT50S	50 lbs (225)	6.5" (165)	1.38" (35)	.18" (4.6)	Black	100
115-00035	RT50S0M4	RT50S	50 lbs (225)	6.5" (165)	1.38" (35)	.18" (4.6)		1000
RT50LL								
115-06102	RT50LL9C2	RT50LL	50 lbs (225)	15" (380)	3.98" (101)	.18" (4.6)	Natural	100
115-06104	RT50LL9M4	RT50LL	50 lbs (225)	15" (380)	3.98" (101)	.18" (4.6)		1000
115-00039	RT50LL0C2	RT50LL	50 lbs (225)	15" (380)	3.98" (101)	.18" (4.6)	Black	100
115-06101	RT50LL0M4	RT50LL	50 lbs (225)	15" (380)	3.98" (101)	.18" (4.6)		1000

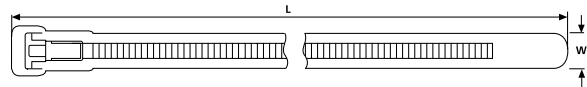
Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

REL Releasable Ties

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



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	Min. Tensile Strength		Length (L)		Max. Ø Bundle		Width (W)		Color	Pkg. Qty.
			lbs.	(N)	in.	(mm)	in.	(mm)	in.	(mm)		
REL50R												
115-00503	REL50R9C2	REL50R	50 lbs	(225)	5.5"	(140)	1.38"	(35)	.29"	(7.4)	Natural	100
115-00505	REL50R9L4	REL50R	50 lbs	(225)	5.5"	(140)	1.38"	(35)	.29"	(7.4)		200
115-00500	REL50R0C2	REL50R	50 lbs	(225)	5.5"	(140)	1.38"	(35)	.29"	(7.4)		Black
115-00502	REL50R0L4	REL50R	50 lbs	(225)	5.5"	(140)	1.38"	(35)	.29"	(7.4)	200	
REL50L												
115-00605	REL50L9C2	REL50L	50 lbs	(225)	9.84"	(250)	2.76"	(70)	.29"	(7.4)	Natural	100
115-00607	REL50L9L4	REL50L	50 lbs	(225)	9.84"	(250)	2.76"	(70)	.29"	(7.4)		200
115-00600	REL50L0C2	REL50L	50 lbs	(225)	9.84"	(250)	2.76"	(70)	.29"	(7.4)		Black
115-00602	REL50L0L4	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	Polyamide 6.6 (PA66)
Operating Temperature	-40 °F to +185 °F (-40 °C to +85 °C) continuous
Flammability	UL94 V2



Product Selection

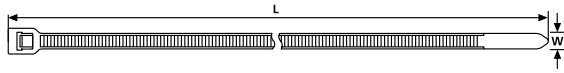
Article No.	Part No.	Type	Min. Tensile Strength		Length (L)		Max. Ø Bundle		Width (W)		Color	Pkg. Qty.
			lbs.	(N)	in.	(mm)	in.	(mm)	in.	(mm)		
115-40200	REZ200.NB3P	REZ200	30 lbs	(135)	7.88"	(200)	1.97"	(50)	.19"	(4.7)	Black	100
115-40300	REZ300.NB3P	REZ300	30 lbs	(135)	12.00"	(305)	3.15"	(80)	.19"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



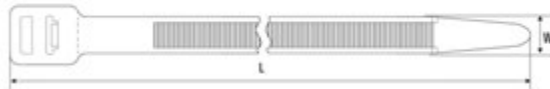
Material Data	
Material	Polyamide 6.6 (PA66)
Operating Temperature	-40 °F to +185 °F (-40 °C to +85 °C) continuous
Flammability	UL94 V2



Product Selection			Min. Tensile Strength	Length (L)	Max. Ø Bundle	Width (W)	Color	Pkg. Qty.
Article No.	Part No.	Type						
115-00036	RT150REPOX2	RT150REP	175 lbs (780)	15.35" (390)	4" (105)	.346" (8.8)	Black	25
115-00037	RT150MEPOX2	RT150MEP	175 lbs (780)	21.06" (535)	5.90" (150)	.346" (8.8)	Black	25
115-00038	RT150LEPOX2	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	Polyamide 6.6 (PA66)
Operating Temperature	-40 °F to +185 °F (-40 °C to +85 °C) continuous
Flammability	UL94 V2



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

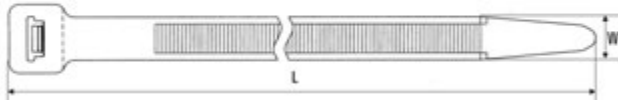
Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

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File# E64139

Heavy Duty Releasable Cable Ties

RT255 Heavy Duty Releasable Ties

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



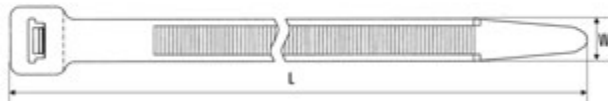
Product Selection			Min. Tensile Strength	Length (L)	Max. Ø Bundle	Width (W)	Color	Pkg. Qty.
Article No.	Part No.	Type						
115-01200	RT255S0HIRX2	RT255S	250 lbs (1112)	8.86" (225)	2.16" (55)	.49" (12.5)	Black	25
115-01300	RT255R0HIRX2	RT255R	250 lbs (1112)	20.28" (515)	5.71" (145)	.49" (12.5)	Black	25
115-01400	RT255M0HIRX2	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	Polyamide 6.6 impact modified, Heat Stabilized, UV Resistant (PA66HIRHS)
Operating Temperature	-40 °F to +230 °F (-40 °C to +110 °C) continuous
Flammability	UL94 HB



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

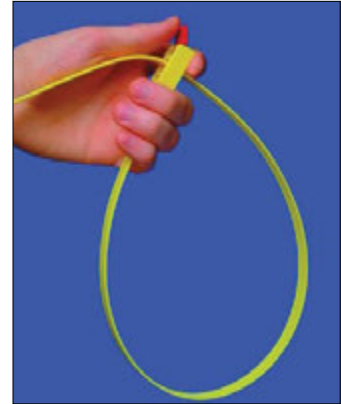
Speedy Tie

An entirely new design in cable management, the SpeedyTie is a fully re-usable, easily releasable lashing tie. The SpeedyTie'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 SpeedyTie is a versatile tool for countless applications, including:

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



SpeedyTie - Quick and easy.

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



Packaging Configurations

Distributor Packs

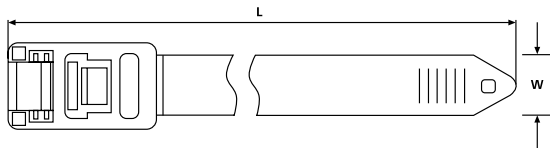
- Printed bag with a hang hole
- Display box
- 60 SpeedyTies - 12 bags of 5

OEM Packs

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



Distributor Pack - point of purchase display for the SpeedyTie.



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

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

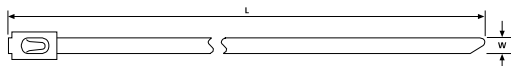
304 Material

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		RoHS
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					
150 lb. Stainless Steel Ties							
111-93058	MBT5S-S	MBT5SS	150 lbs (670)	5.0" (127)	1" (25)	.18" (4.6)	100
111-93088	MBT8S-S	MBT8SS	150 lbs (670)	7.9" (201)	2" (50)	.18" (4.6)	100
111-93148	MBT14S-S	MBT14SS	150 lbs (670)	14.3" (362)	4" (102)	.18" (4.6)	100
111-93208	MBT20S-S	MBT20SS	150 lbs (670)	20.5" (521)	6" (152)	.18" (4.6)	100
111-93278	MBT27S-S	MBT27SS	150 lbs (670)	26.8" (681)	8" (203)	.18" (4.6)	100
111-93338	MBT33S-S	MBT33SS	150 lbs (670)	33" (838)	10" (254)	.18" (4.6)	100
250 lb. Stainless Steel Ties							
111-94088	MBT8H-S	MBT8HS	250 lbs (1115)	7.9" (201)	2" (50)	.31" (7.9)	50
111-94148	MBT14H-S	MBT14HS	250 lbs (1115)	14.3" (362)	4" (102)	.31" (7.9)	50
111-94208	MBT20H-S	MBT20HS	250 lbs (1115)	20.5" (521)	6" (152)	.31" (7.9)	50
111-94278	MBT27H-S	MBT27HS	250 lbs (1115)	26.8" (681)	8" (203)	.31" (7.9)	50
111-94338	MBT33H-S	MBT33HS	250 lbs (1115)	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)

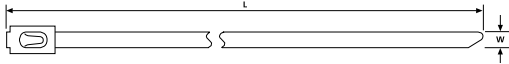
316 Material

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 nylon 11 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

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					
150 lb. Stainless Steel Ties							
111-93959	MBT5S	MBT5S	150 lbs (670)	5.0" (127)	1.0" (25.4)	.18" (4.6)	100
111-93089	MBT8S	MBT8S	150 lbs (670)	7.9" (201)	2.0" (50)	.18" (4.6)	100
111-93149	MBT14S	MBT14S	150 lbs (670)	14.3" (362)	4.0" (102)	.18" (4.6)	100
111-93209	MBT20S	MBT20S	150 lbs (670)	20.5" (521)	6.0" (152)	.18" (4.6)	100
111-93279	MBT27S	MBT27S	150 lbs (670)	26.8" (681)	8.0" (203)	.18" (4.6)	100
111-93339	MBT33S	MBT33S	150 lbs (670)	33.0" (838)	10.0" (254)	.18" (4.6)	100
250 lb. Stainless Steel Ties							
111-94089	MBT8H	MBT8H	250 lbs (1115)	7.9" (201)	2.0" (50.8)	.31" (7.9)	50
111-94149	MBT14H	MBT14H	250 lbs (1115)	14.3" (362)	4.0" (102)	.31" (7.9)	50
111-94209	MBT20H	MBT20H	250 lbs (1115)	20.5" (521)	6.0" (152)	.31" (7.9)	50
111-94279	MBT27H	MBT27H	250 lbs (1115)	26.8" (681)	8.0" (203)	.31" (7.9)	50
111-94339	MBT33H	MBT33H	250 lbs (1115)	33.0" (838)	10.0" (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.

Snapper Hose Clamps

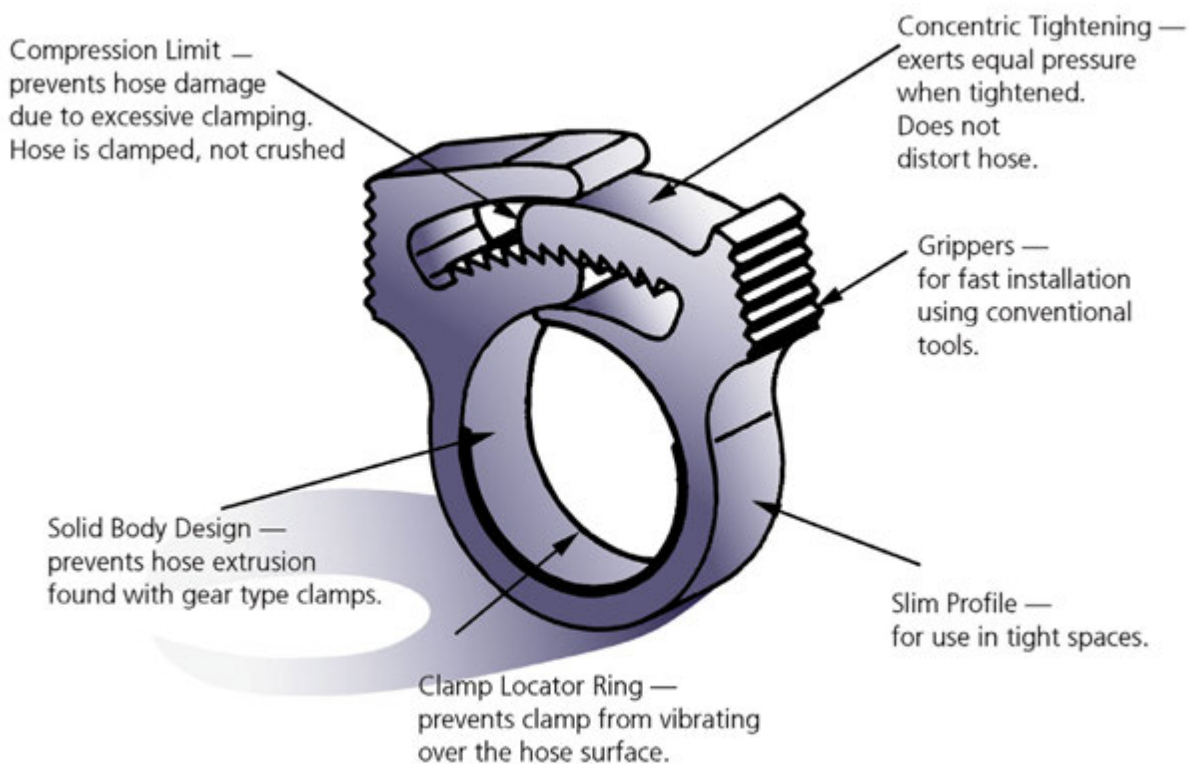
HellermannTyton's Snapper is a lightweight, corrosion resistant hose clamp manufactured from high performance, thermoplastic materials selected to work well in a variety of diverse environments. A quick, ratchet closure provides for reduced application time and allows for application after connection 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

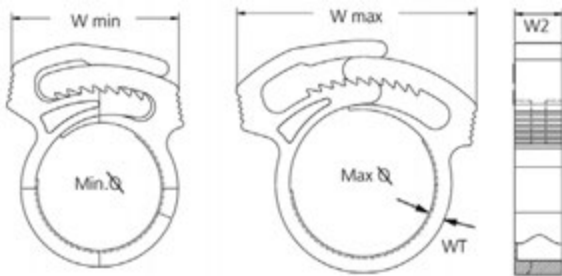
Snapper installation tools are available in both pneumatic and mechanical versions. They are specifically developed to increase reliability, reduce operator fatigue and installation time.



Product Selection			Tool Description			
Article No.	Part No.	Type	Type	Use	Stroke	Snapper Range
191-00010	PHSNP2-36	PHSNP2-36	Pneumatic	Production	Horizontal	2-36
191-00012	PHSNP38-100	PHSNP38-100				38-100
191-00014	PSNP2-22	PSNP2-22			Vertical	2-22
191-00019	PSNP24-70	PSNP24-70				24-70
191-02220	ASNP2-22	ASNP2-22	Mechanical	Production	Vertical	2-22
191-24700	ASNP24-70	ASNP24-70				24-70
191-01700	MSNP1-70	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	Polyamide 6.6 glass filled impact modified heat stabilized (PA66GF13%)
Operating Temperature	-40 °F to +221 °F (-40 °C to +105 °C)
Color	Black
Flammability	UL94 HB

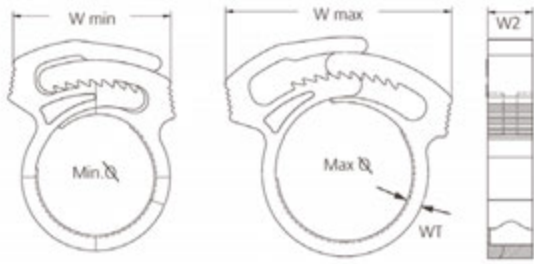


Product Selection

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	Polyamide 6.6 glass filled impact modified heat stabilized (PA66GF13%)
Operating Temperature	-40 °F to +221 °F (-40 °C to +105 °C)
Color	Black
Flammability	UL94 HB

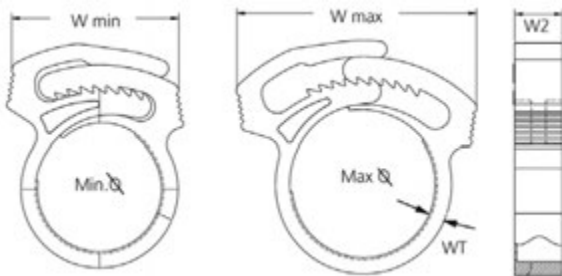


Product Selection

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	SNP19GHS0C2	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	SNP19GHS0M4		0.878 " (22.28)	1.011 " (25.652)	0.234" (5.959)	0.071 " (1.818)	0.908"(23.028)	1.423" (36.158)	1000
192-10220	SNP22GHS0C2	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	SNP22GHS0M4		0.948 " (24.119)	1.096 " (27.798)	0.236" (5.959)	0.071 " (1.818)	0.941"(23.937)	1.488" (37.774)	1000
192-10240	SNP24GHS0C2	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	SNP24GHS0H4		1.007 " (25.55)	1.16 " (29.434)	0.295" (7.474)	0.07 " (1.818)	0.973"(24.745)	1.538" (39.087)	500
190-00127	SNP28GHS0C2	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	SNP28GHS0H4		1.148 " (29.127)	1.325 " (33.624)	0.291" (7.373)	0.069 " (1.717)	1.018"(25.856)	1.647" (41.814)	500
192-10320	SNP32GHS0K2	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	SNP32GHS0H4		1.245 " (31.58)	1.436 " (36.485)	0.29" (7.373)	0.069 " (1.717)	1.075" (27.27)	1.741" (44.238)	500
190-00244	SNP33GHS0K2	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	SNP33GHS0H4		1.311 " (33.317)	1.63 " (41.391)	0.293" (7.474)	0.068 " (1.717)	1.58" (9.797)	2.542" (64.539)	500
190-00149	SNP34GHS0K2	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	SNP34GHS0H4		1.367 " (34.748)	1.6 " (40.676)	0.295" (7.474)	0.069 " (1.717)	1.198"(30.401)	1.986" (50.399)	500
192-10360	SNP36GHS0K2	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	SNP36GHS0H4		1.504 " (38.223)	1.762 " (44.764)	0.29" (7.373)	0.068 " (1.717)	1.274" (32.32)	2.113" (53.631)	500
192-10380	SNP38GHS0K2	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	SNP38GHS0H4		1.629 " (41.391)	1.903 " (48.341)	0.294" (7.474)	0.069 " (1.717)	1.362"(34.643)	2.261" (57.469)	500
191-00005	SNP42NGHS0K2	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	SNP42NGHS0C2		1.768 " (44.866)	2.054 " (52.224)	0.358" (9.09)	0.069 " (1.717)	1.383"(35.148)	2.325" (59.085)	100
192-10500	SNP50GHS0C2	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	SNP60GHS0C2	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	SNP70GHS0C2	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	SNP76GHS0C2	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	SNP80GHS0C2	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	SNP90GHS0C2	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	SNP100GHS0X2	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	SNP101GHS0X2	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	Polyacetal (POM)
Operating Temperature	-40 °F to +185 °F (-40 °C to +85 °C)
Color	White
Flammability	UL94 HB



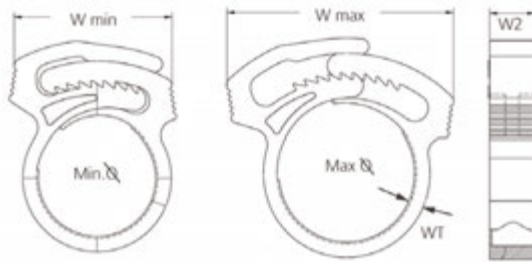
Product Selection

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	SNP110C2	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	SNP110M4		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	SNP1.2510C2	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	SNP1.2510M4		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	SNP1.510C2	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	SNP1.510M4		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	SNP210C2	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	SNP210M4		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	SNP310C2	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	SNP310M4		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	SNP410C2	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	SNP410M4		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	SNP610C2	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	SNP610M4		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	SNP710C2	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	SNP710M4		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	SNP810C2	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	SNP810M4		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	SNP1010C2	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	SNP1010M4		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	SNP12A10C2	SNP12A	.615 " (15.62)	.704 " (17.88)	.233" (5.92)	.070 " (1.78)	.802" (20.37)	1.152" (29.26)	100
190-00253	SNP12A10M4		.615 " (15.62)	.704 " (17.88)	.233" (5.92)	.070 " (1.78)	.802" (20.37)	1.152" (29.26)	1000
190-00302	SNP14A10C2	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	SNP14A10M4		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	SNP1610C2	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	SNP1610M4		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	SNP18A10C2	SNP18A	.790 " (20)	.933 " (23.7)	.239" (6.07)	.067 " (1.7)	.940" (23.9)	1.391" (35.3)	100
190-00257	SNP18A10M4		.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	Polyacetal (POM)
Operating Temperature	-40 °F to +185 °F (-40 °C to +85 °C)
Color	White
Flammability	UL94 HB



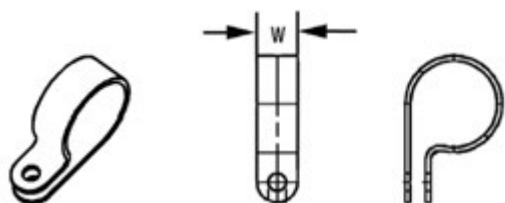
Product Selection		Type	Min. Ø	Max. Ø	Width (W2)	Wall Thickness (WT)	Width (W) Min.	Width (W) Max.	Pkg. Qty.
Article No.	Part No.				in. (mm)	in. (mm)	in. (mm)	in. (mm)	
190-0094	SNP1910C2	SNP19	0.859 " (21.8)	0.989 " (25.1)	0.232" (5.9)	0.07 " (1.8)	0.899" (22.8)	1.409" (35.8)	100
190-0095	SNP1910M4		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
190-0113	SNP2210C2	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
190-0114	SNP2210M4		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
190-0121	SNP2410C2	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
190-0122	SNP2410H4		0.985 " (25)	1.135 " (28.8)	0.292" (7.4)	0.069 " (1.8)	0.963" (24.5)	1.523" (38.7)	500
190-0124	SNP2810C2	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
190-0125	SNP2810H4		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
190-0142	SNP3210K2	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
190-0143	SNP3210H4		1.218 " (30.9)	1.405 " (35.7)	0.287" (7.3)	0.068 " (1.7)	1.064" (27)	1.724" (43.8)	500
190-0146	SNP3310K2	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
190-0147	SNP3310H4		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
190-0151	SNP3410K2	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
190-0152	SNP3410H4		1.338 " (34)	1.566 " (39.8)	0.292" (7.4)	0.068 " (1.7)	1.186" (30.1)	1.966" (49.9)	500
190-0157	SNP3610K2	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
190-0156	SNP3610H4		1.472 " (37.4)	1.724 " (43.8)	0.287" (7.3)	0.067 " (1.7)	1.261" (32)	2.092" (53.1)	500
190-0162	SNP3810K2	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
190-0245	SNP3810H4		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
190-0247	SNP42N10K2	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
190-0246	SNP42N10C2		1.73 " (43.9)	2.01 " (51.1)	0.354" (9)	0.068 " (1.7)	1.369" (34.8)	2.302" (58.5)	100
190-0248	SNP5010C2	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
190-0196	SNP6010C2	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	SNP7010C2	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	SNP7610C2	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	SNP8010C2	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	SNP9010C2	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	SNP10010X2	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	SNP10110X2	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	Polyamide 6.6 heat stabilized (PA66HS)
Color	Black
Operating Temperature	-40 °F to +221 °F (-40 °C to +105 °C)
Flammability	UL94 V2



Product Selection

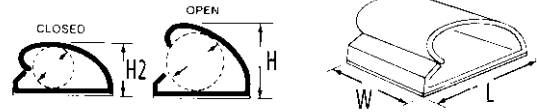
Article No.	Part No.	Type	Max. Ø Bundle	Width (W)	Mounting Hole Centers	Mounting Hole Ø	Radius	Pkg. Qty.
			in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	
211-60000	211-60000	H1P	.125" (3.2)	.393" (10.0)	.3346" (8.5)	.1654" (4.2)	.01969" (0.5)	100
211-60010	211-60010	H1P	.125" (3.2)	.393" (10.0)	.3346" (8.5)	.1654" (4.2)	.01969" (0.5)	1000
211-60001	211-60001	H2P	.196" (5.0)	.3937" (10.0)	.375" (9.5)	.1654" (4.2)	.03937" (1.0)	100
211-60020	211-60020	H2P	.196" (5.0)	.3937" (10.0)	.375" (9.5)	.1654" (4.2)	.03937" (1.0)	1000
211-60002	211-60002	H3P	.255" (6.5)	.3937" (10.0)	.3937" (10.0)	.1654" (4.2)	.03937" (1.0)	100
211-60040	211-60040	H3P	.255" (6.5)	.3937" (10.0)	.3937" (10.0)	.1654" (4.2)	.03937" (1.0)	1000
211-60003	211-60003	H4P	.314" (8.0)	.3937" (10.0)	.3937" (10.0)	.1654" (4.2)	.03937" (1.0)	100
211-60050	211-60050	H4P	.314" (8.0)	.3937" (10.0)	.3937" (10.0)	.1654" (4.2)	.03937" (1.0)	1000
211-60005	211-60005	H6P	.433" (11.0)	.3937" (10.0)	.5118" (13.0)	.1654" (4.2)	.03937" (1.0)	100
211-60061	211-60061	H6P	.433" (11.0)	.3937" (10.0)	.5118" (13.0)	.1654" (4.2)	.03937" (1.0)	1000
211-60006	211-60006	H7P	.492" (12.5)	.3937" (10.0)	.5512" (14.0)	.1654" (4.2)	.05906" (1.5)	100
211-60078	211-60078	H7P	.492" (12.5)	.3937" (10.0)	.5512" (14.0)	.1654" (4.2)	.05906" (1.5)	1000
211-60007	211-60007	H8P	.55" (14.0)	.3937" (10.0)	.5906" (15.0)	.1654" (4.2)	.05906" (1.5)	100
211-60090	211-60090	H8P	.55" (14.0)	.3937" (10.0)	.5906" (15.0)	.1654" (4.2)	.05906" (1.5)	1000
211-60098	211-60098	H9P	.629" (16.0)	.3937" (10.0)	.63" (16.0)	.1654" (4.2)	.05906" (1.5)	1000
211-60110	211-60110	H10P	.688" (17.5)	.3937" (10.0)	.6693" (17.0)	.1654" (4.2)	.05906" (1.5)	1000
211-60120	211-60120	H11P	.748" (19.0)	.3937" (10.0)	.7087" (18.0)	.1654" (4.2)	.07874" (2.0)	1000
211-60130	211-60130	H12P	.807" (20.5)	.3937" (10.0)	.748" (19.0)	.1654" (4.2)	.07874" (2.0)	1000
211-60140	211-60140	H13P	.866" (22.0)	.4724" (12.0)	.8071" (20.5)	.2047" (5.2)	.07874" (2.0)	1000
211-60150	211-60150	H14P	.944" (24.0)	.4724" (12.0)	.8465" (21.5)	.2047" (5.2)	.07874" (2.0)	1000
211-60160	211-60160	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.

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)



Product Selection			Min. Ø Bundle	Max. Ø Bundle	Length (L)	Width (W)	Height (H)	Height (H2)	Pkg. Qty.
Article No.	Part No.	Type	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	
151-00667	151-00667	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	151-00668	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.

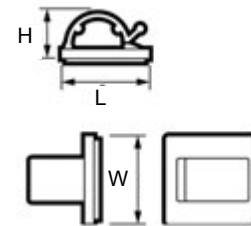
RB Clips

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)



Product Selection			Max. Ø Bundle	Length (L)	Width (W)	Height (H)	Pkg. Qty.
Article No.	Part No.	Type	in. (mm)	in. (mm)	in. (mm)	in. (mm)	
151-14005	RB5H4	RB5	.1969" (5.0)	.75" (19.0)	.75" (19.0)	.24" (6.0)	500
151-13608	RB8L4	RB8	.315" (8.0)	1" (25.0)	1" (25.0)	.45" (11.5)	200
151-00506	RB14L4	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.

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.

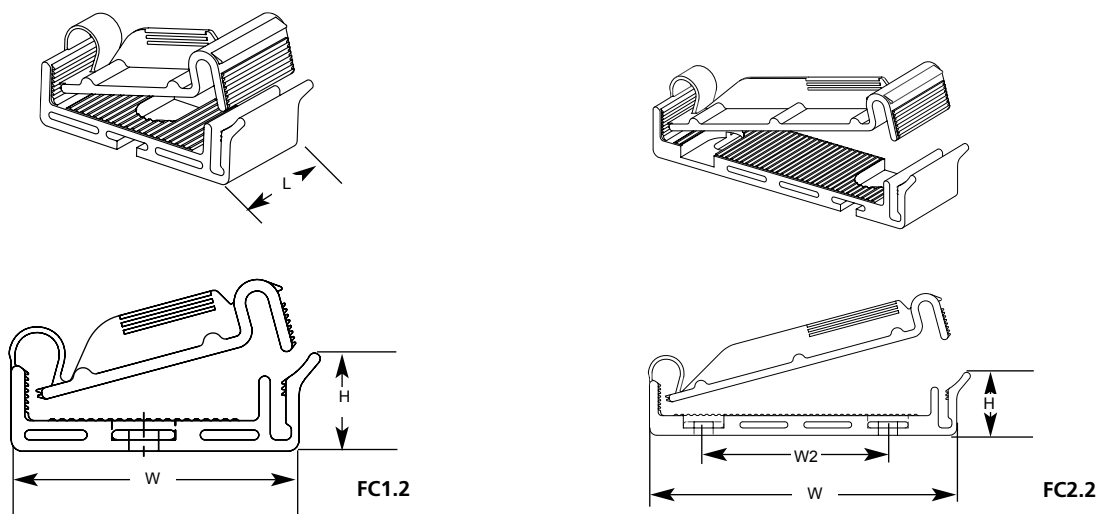
The clamp is adjustable so that single or stacked cable can be routed. The “snap clamp” design of this flat ribbon clamp makes it an excellent choice for specification and installation.

Both adhesive backed and non-adhesive screw mount versions are available.



Material Data

Material	Polyamide 6.6 (PA66)
Color	Telecom Gray
Operating Temperature	-40 °F to +185 °F (-40 °C to +85 °C)
Flammability	UL94 V2 (excluding adhesive)



Product Selection

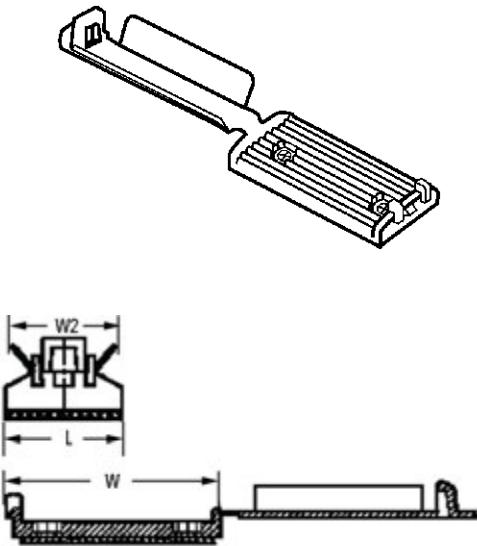
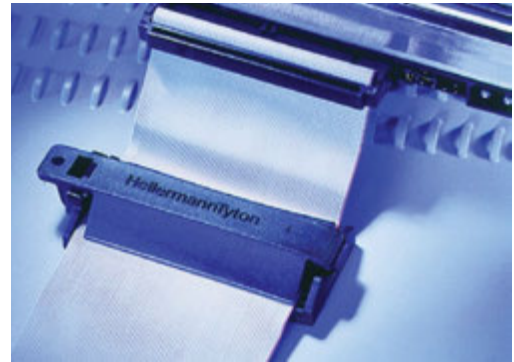
Article No.	Part No.	Type	Length (L)	Width (W)	Width (W2)	Height (H)	Mounting Hole Ø		Max Cable Width	Pkg. Qty.
			in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	
Adhesive										
154-00013	FC1.2AK2	FC1.2A	.75" (19)	1.5" (38.1)	n/a n/a	.51" (13.1)	n/a n/a	1.2" (30.48)	50	
154-00012	FC1.2AH4	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	FC2.2AK2	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	FC2.2AH4	FC2.2A	.75" (19)	2.5" (63.5)	n/a n/a	.51" (12.75)	n/a n/a	2.0" (50.8)	500	
Non-Adhesive										
154-00011	FC1.2K2	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	FC1.2H4	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	FC2.2K2	FC2.2	.75" (19)	2.5" (63.5)	1.5" (38.1)	.51" (12.95)	.138" (6.0)	2.0" (50.8)	50	
154-00014	FC2.2H4	FC2.2	.75" (19)	2.5" (63.5)	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.

Flat Ribbon Cable Clamps

HellermannTyton's flat ribbon cable clamps secure and route flat cable, ideal for automotive and household appliance applications. Available in adhesive backed and non-adhesive screw mount versions.

- Performs well in very dry, air-conditioned areas
- The rounded edges and soft wings protect and hold the cable securely
- Clamps are offered in four sizes that are easy to fasten and unfasten



Material Data	
Material	Polyamide 6.6 high impact modified (PA66HIR)
Color	Black
Operating Temperature	-40 °F to +230 °F (-40 °C to +110 °C)
Flammability	UL94 HB (only clamp without adhesive)



Product Selection			Length (L)	Width (W)	Width (W2)	Mounting Hole Ø		Pkg. Qty.
Article No.	Part No.	Type	in. (mm)	in. (mm)	in. (mm)	in. (mm)		
Adhesive								
151-15250	151-15250	FKH25A	1.22" (31.0)	.98" (25.0)	.86" (22.0)	n/a	n/a	100
151-15300	151-15300	FKH30A	1.37" (35.0)	.98" (25.0)	.86" (22.0)	n/a	n/a	100
151-15500	151-15500	FKH50A	2.22" (56.6)	.98" (25.0)	.86" (22.0)	n/a	n/a	100
151-15800	151-15800	FKH80A	3.38" (86.0)	.98" (25.0)	.86" (22.0)	n/a	n/a	100
Non-Adhesive								
151-16250	151-16250	FKH25	1.22" (31.0)	.98" (25.0)	.86" (22.0)	.122"	(3.1)	100
151-16300	151-16300	FKH30	1.37" (35.0)	.98" (25.0)	.86" (22.0)	.122"	(3.1)	100
151-16500	151-16500	FKH50	2.22" (56.6)	.98" (25.0)	.86" (22.0)	.122"	(3.1)	100
151-16800	151-16800	FKH80	3.38" (86.0)	.98" (25.0)	.86" (22.0)	.122"	(3.1)	100

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

Mechanical Cable Tie Tools



Ranging from the high performance Mark 7 and Mark 9 series tools to pocket-sized twist tools, HellermannTyton offers a range 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.

MARK 7 AND MARK 9 TOOLS

Specifically developed for maximum ergonomic and performance values, the Mark 7 and Mark 9 series tools combine reduced hand effort and durable components to ensure efficient assembly and a longer life cycle. The Mark 7 tools are used with T18 through T50 series HellermannTyton cable ties. The Mark 9 tools can be used with nearly every HellermannTyton cable tie. Able to accommodate ties to .530" in width, the Mark 9 is used with HellermannTyton's T18 series cable ties to the heavy duty ties, including the T250 series, Wide Strap series and EL-TY. High tension versions of both the Mark 7 and Mark 9 tools (MK7HT and MK79HT) offer the same design features as their standard counterparts but with higher cut-off tension capabilities. The Mark 9 and Mark 7 high tension tools both offer a 5/8" stroke.



MK7 & MK9

Mark 7 and Mark 9 Features

- An easy to read display speeds adjustment and verification.
- Thumb tab on larger tension knob for easy adjustment.
- On the Mark 7, a larger knob sets the three variable tension levels (minimum, intermediate, and standard). The smaller knob fine tunes within the tension range.
- The larger knob on the Mark 9 sets to two variable tension levels (standard and heavy). The smaller knob fine tunes the tension setting.
- Housings are manufactured from a high impact, glass reinforced nylon.
- A double wall linkage adds more strength.
- Tough chromium steel components ensure longevity.
- MK7 & MK9 are military specified.
- Single and dual lock-out features available for tensioning ranges.
- Cable tie tension and cut-off tools reduce operator fatigue and speed assembly.
- The Mark 7 features a one inch stroke, while the Mark 9 has a 5/8 inch stroke.
Both reduce trigger cycles required to install cable ties.
- Ergonomic design on both tools ideally fit the operator's hand. Removable padded hand grips further reduce impact to the hand.
- Low friction bearing mechanisms reduce hand effort and provide a smooth stroke.
- Extremely light, the Mark 7 weighs only 10 ounces. The Mark 9 weighs just 13 ounces.
- Quick tension adjustability for flush cut-off.



MK7

Mark 7 Tool

Product Selection					
Article No.	Part No.	Type	Description	Cable Tie Series	Pkg. Qty.
110-07500	MK7	MK7	Durable and lightweight, the Mark 7 tool is user friendly and adjustable, with top-of-the-line design features.	T18 thru T50 Series CTT20 thru CTT60 Series	1
110-07000	MK7HT	MK7HT	The Mark 7 High Tension tool has the same design features as the MK7, although this tool offers an increased tension range.	T30 thru T50 Series CTT20 thru CTT60 Series	1
110-08000	MK7LK	MK7LK	The Mark 7 Lock-Out tool has the same design features as the MK7, although this tool offers complete lock-out of tension settings.	T30 thru T50 Series CTT20 thru CTT60 Series	1
110-00448	MK7BLADEKIT	MK7BLADEKIT	Service kit for MK7 tool includes replacement blade, screw for nose piece, and instruction card.		1
110-00449	MK7-449	MK7-449	Replacement blade for MK7 series tools.		1

Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes. Minimum order quantity for the MK7-449 is 5.

Mark 9 Tool



MK9



MK9SST

Product Selection					
Article No.	Part No.	Type	Description	Cable Tie Series	Pkg. Qty.
110-09500	MK9	MK9	The Mark 9 tool has the same design features as the MK7 series tools. The MK9 accommodates heavy duty cable ties.	T18* thru T250 Series CTT20 thru CTT175 Series EL-TY Series Wide Strap Series	1
110-09000	MK9HT	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
110-09700	MK9RE	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	MK9REF	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	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.	All MBT Series for both 304 and 316 materials	1
110-00220	MK9BLADEKIT	MK9BLADEKIT	Service kit for the MK9 tool includes replacement blade, screw for nose piece, and instruction card.		1
110-00221	MK9-221	MK9-221	Replacement blade for MK9 series		1
110-05114	MK9SS-114	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 purposes. * Does not include T18S series ties .08" wide.

Other Mechanical Cable Tie Tools

Product Selection					
Article No.	Part No.	Type	Description	Cable Tie Series	Pkg. Qty.
110-21000	TWT1	TWT	The TytonTwyster is a lightweight and economical twist tool. Offers speed and efficiency. Fits into a pocket. (Color Orange)	T18 thru T50 Series CTT20 thru CTT60 Series	1
110-22000	TWT2	TWT	The TytonTwyster is a lightweight and economical twist tool. Offers speed and efficiency. Fits into a pocket. (Color Blue)	T120 thru T150 Series CTT175 Series	1
110-11150	T150	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
110-11250	T250	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 purposes.

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	60 to 170 N, adjustable

Product Selection					
Article No.	Part No.	Type	Description	Cable Tie Series	Pkg. Qty.
110-07101	MK7P	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	MK7P-342	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 available.

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

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	60 to 170 N, adjustable



MK9PUA (Upper Air)



MK9P

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. Included is a 1/8" flow quick disconnect fitting and a 10" whip and 1/8" make fitting. 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 with upper air option for top air connection. Supplied with a 1/8" flow quick disconnect fitting and a 10" whip and 1/8" quick disconnect fitting. 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 (CO₂) 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.
110-09002	MKPCOKIT	MKPCOKIT	MKPCOKIT is a complete kit that includes the belt, holster, hose/regulator, pouch and 16oz air tank.	1
110-09003	MKPCOTANK	MKPCOTANK	Standard 16oz air tank for CO ₂ air supply to tool.	1
110-09004	MKPCOTANK20	MKPCOTANK20	Special 20oz canister tank for CO ₂ feature.	1
110-09005	MKPCOHOSE	MKPCOHOSE	Hose attachment from air tank to the tool with regulator.	1
110-09006	MKPCOBELT	MKPCOBELT	Adjustable belt for air tank and pouch and tool holster for MK7P or MK9P 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 - Providing Valuable Operator Feedback

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

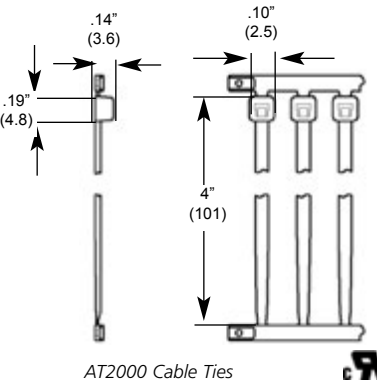
Article No.	Part No.	Max. Ø Bundle
120-00000	AT2000	.75" (20 mm)
103-00000	AT2060	1.25" (31 mm)
102-00000	ATS3080	3.14" (80 mm)

AT2000
For bundles up to 3/4"

HellermannTyton's AT2000 completely installs cables 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		AT2000 Cable Tie Specifications	
Power Supply	Electrical, with Power Pack or Battery Pack	Operating Temperature	
Cycle Time	0.8 s	Natural Polyamide 6.6	-40 °F to +185 °F (-40 °C to +85 °C) continuous
Weight	2.6lbs	Heat stabilized, black Polyamide 6.6	-40 °F to +221 °F (-40 °C to +105 °C) continuous
Installation	Handheld, bench mount or overhead	Natural, Stanyl Polyamide 4.6	-40 °F to +275 °F (-40 °C to +135 °C) continuous
Tension Force	Adjustable	Reel Diameter	17.7 " (450)
		Reel Width	5.20 " (132)



Product Selection						
Article No.	Part No.	Type	Description	Min. Tensile Strength	Max. Ø Bundle	Pkg. Qty.
				lbs. (N)	in. (mm)	
120-00000	AT2000	Autotool 2000	Includes AT2000 tool, power supply, power cord, tool cord, and manual			1
120-00060	120-00060	Control Box	Control Box for linking AT2000 to automation			1
Natural Cable Ties						
120-40009	T18RA50	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
120-46009	T18RA3500	T18RA3500-N66-NA	Cable ties on reel for use with the AT2000	18 lbs (80)	.75" (20)	14,000 per carton includes: 3,500 per reel 4 reels per carton
120-05009	T18RA5000	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						
120-40010	T18RA50HSW	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
120-05010	T18RA5000HSW	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						
120-04609	T18RA5000HR	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

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 91-92.
For information on Wire Retainers for Harness Boards and AT2000's battery pack see page 93.

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.

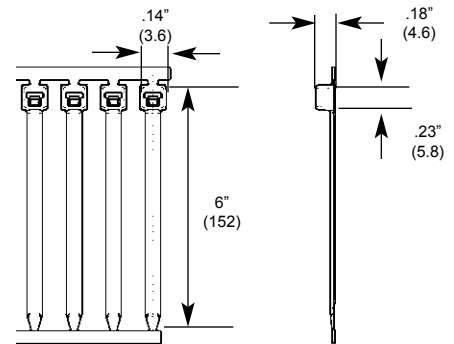


AT2060 Technical Specifications

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

AT2060 Cable Tie Specifications

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



Product Selection

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

Natural Cable Ties

103-00002	T30RA30	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	T30RA3000	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	T30RA300HS	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	T30RA3000HS	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 91-92.

For information on Wire Retainers for Harness Boards see page 93.

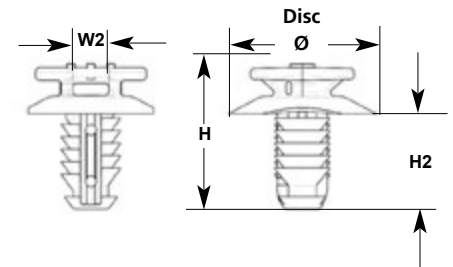
AT2000 and AT2060 Accessories

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

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.
FT7AT - Mounting Hole Ø: .24" - .8" (6.2 - 7.2mm) - Panel Thickness: .03" - .276" (0.8 - 7.0mm)							
151-00492	151-00492	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.



AT2000 and AT2060 Bench Mount System

Product Selection				
Article No.	Part No.	Type	Description	Pkg. Qty.
120-00040	AT2BENCHMOUNT	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 or 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.



The picture shows just one configuration of an overhead assembly.

The HellermannTyton team of tool systems specialists will assist in the custom design of a system to specially accommodate individual manufacturing sites and production needs. The modular features and inherent ergonomic benefits improve production and make operation more efficient.

Contact HellermannTyton for more information. Fasteners for unit assembly are included. Permanent mounting fasteners are not included.



Mobile Trolley Unit Configuration

AT2000 Battery Pack

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

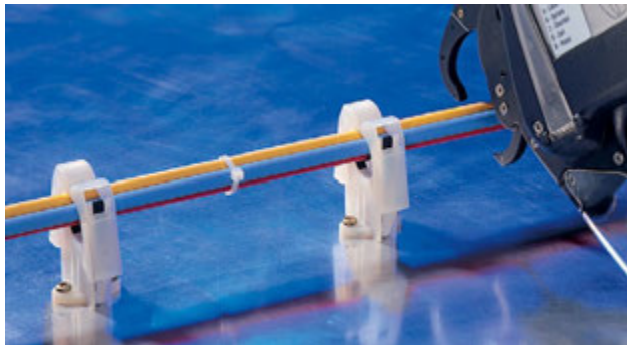


Product Selection				
Article No.	Part No.	Type	Description	Pkg. Qty.
120-00030	AT06500030	Battery Pack	Battery with belt clip and connector cord	1
120-00010	AT06500020	Battery Charger	Charging unit for battery	1

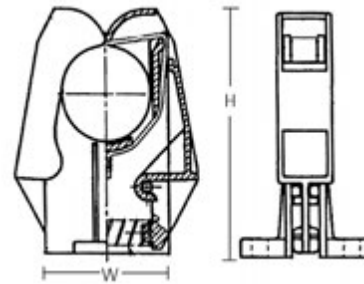
Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

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	HH-20	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	Electrical
Cycle Time	approx. 1.3 sec. (50 mm jaw)
Weight	3.2lbs
Installation	Mobile, bench mount or overhead
Tension Force	Adjustable



Closures and strap for ATS3080



ATS3080 Cable Tie Specifications	
Material	Polyamide 6.6 high impact modified, heat and UV stabilized (PA66HIRHSUV)
Operating Temperature	-40 °C to +95 °C continuous, (+105 °C for 5000 h)
Flammability	UL94 HB
Strap Reel Dimensions	
Reel Diameter	15.25" (387 mm)
Reel Width	3.5" (88.9 mm)
Reel Weight	6lbs (2.72 kg)
Closure Reel Dimensions	
Reel Diameter	15.25" (387 mm)
Reel Width	3.5" (88.9 mm)
Reel Weight	3.5lbs (1.58 kg)





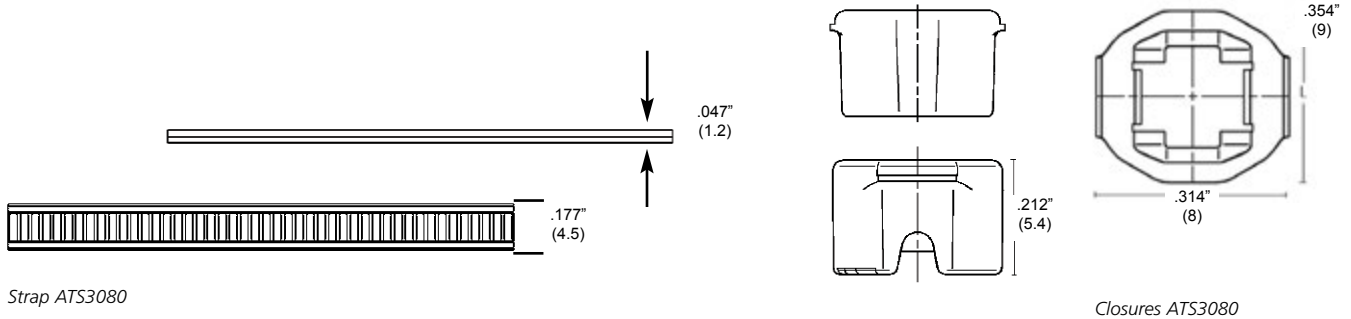
ATS3080 with mobile trolley unit



ATS3080 with overhead



ATS3080 with bench mount



Strap ATS3080

Closures ATS3080

Product Selection

Article No.	Part No.	Type	Description	Min Tensile Unlocking Strength (lbs)	Pkg. Qty. ft. (m)
102-00000	ATS3080	ATS3080	Includes ATS3080 tool, power cord, tool cord, and maintenance and operation manual. Does not include power supply.		1
102-00010	ATS10200010	Power Pack ATS3080	Power Supply Unit for ATS3080 Input: 230/115 VAC, 50-60 Hz Output: 48 VDC, max. 50W		1
Natural Strap and Closures					
102-66109	ATS10266109	Strap Natural ATS3080	ATS3080 Strap	50 lbs	1640 ft. (500)
102-66209	ATS10266209	Closures Natural ATS3080	ATS3080 Closure	50 lbs	5000 pcs
Black Strap and Closures					
102-66110	ATS10266110	Strap Black ATS3080	ATS3080 Strap	50 lbs	1640 ft. (500)
102-66210	ATS10266210	Closures Black ATS3080	ATS3080 Closures	50 lbs	5000 pcs
102-00040	ATS10200040	Bench Mount Kit	Bench Mount Kit for ATS 3080 Integrated pneumatic system that coordinates tool and reels. Foot pedal application, other actuation options available		1
102-00050	ATS10200050	Overhead Suspender	Overhead Suspender ATS 3080		1
102-00030	ATSTROLLEY	Trolley ATS 3080	Trolley		1

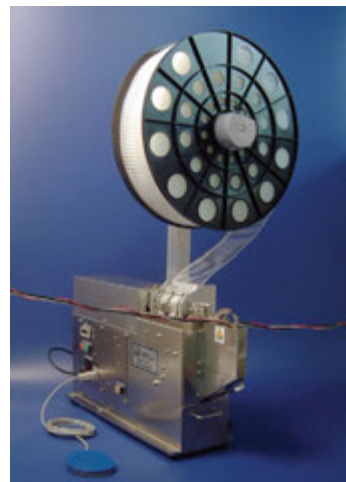
Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

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



QS101 Technical Specifications	
Max. Ø Bundle	0.630" (16.00 mm)
Wattage	70W
Power Supply	Electrical/Pneumatic Power
Cycle Time	1.2 Seconds
Weight	40 lbs.
Installation	Bench
Tension Force	Adjustable (9.92 lbs - 19.84 lbs)

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	QS101	QS101	Includes Quick Tool, power cord, maintenance and operation manual and foot pedal.					1
Natural Cable Ties								
105-00006	QTTIE9	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
Black Heat Stabilized Cable Ties								
105-00001	QTTIEOHS	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.**

SwiftMark Automatic Label Printer and Applicator

HellermannTyton's SwiftMark prints and applies labels automatically to wire and cable. With the largest wire range in the industry, the SwiftMark has uncompromising application speed and easily marks within .5" of the end of the cable or connector.

Product Features

- Fastest cycle time in the industry
- Touch screen LCD
- WYSIWYG touch screen LCD
- Marks to within .5" of the end of the cable
- Labels cables from .06" to .75" (1.52 mm to 19 mm) in diameter
- Print repeat
- Works with various sizes of self-laminating adhesive labels
- Print label sets
- Ribbon save feature minimizes ribbon usage by up to 85%
- Download large sequential databases immediately
- 300 d.p.i. thermal transfer printer
- Stores label files on removable SD card
- USB, parallel port, and serial connections
- Accommodates various types of cable and cable bundles
- 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
- Prints and applies up to 5,000 labels in eight hours
- Ethernet Ready

SwiftMark Includes

- 1 SwiftMark
- 1 Foot pedal
- 1 External power supply
- 1 Manual
- 1 Tagprint Pro V2.0 label printing software.
- 1 Driver disk



Specifications	
Width	20"
Height	15"
Depth	31"
Weight	60 lbs.
Wire Range	.060" - .75"
Label Widths	.5" - 2"
Power	Electric universal power supply
Storage Temperature	-30 °F to +160 °F (-34 °C to +71 °C)
Connections	USB, RS-232, Serial, Parallel, SD/MMC secure digital card interface, Ethernet

Product Selection				
Article No.	Part No.	Type	Description	Pkg. Qty.
558-00060	556-00060	SMLA1	SwiftMark Automatic Label Printer and Applicator	1

Contact HellermannTyton for details and label information. Use **Part No.** for ordering and **Type** for specification purposes.

TagPrint™ Pro Professional Label Creation Software

TagPrint™ Pro label creation and printing software is powerful, multi-functional and extremely easy to use. Used to provide solutions for industrial identification, TagPrint™ Pro speeds production and offers many options for a wide variety of labeling requirements. “What You See Is What You Get” (WYSIWYG) label creation, bar coding, serialization, label sets, wire lists, graphics and text choices are just some capabilities of TagPrint™ Pro software. TagPrint™ Pro can be utilized with HellermannTyton’s wide array of label options including laser, ink jet, dot matrix and thermal transfer printable labels.

New Features for Version 2.0

- Alphanumeric sequences
- Print to multiple printers at one time
- Print later feature allows user to save jobs in queue and print all at one time
- Print faster
- Connect or import directly from other databases including Excel, Access, text files
- More bar code types
- Inverse, flip, and mirror image options for graphic images
- Multi-lingual
- Print log available
- Manually adjust font size to 1/10 of a point
- Customize height and width of characters
- Customize line spacing
- Compatible with all TagPrint Pro version 1.0 files
- And much more!



- A** Easily import a variety of image types into the label design
- B** Use any Windows based font in the label design for complete customization
- C** Layer objects like professional page layout programs
- D** Rulers on top and side allow for exact placement of objects
- E** Easily change text color, fill color and border color to make text stand out and accomplish “full reverse” printing
- F** Allow text characters to be stretched or compressed to almost any height or width
- G** Draw lines, circles and boxes on the label as a simple way of making the label look more professional



Product Selection				
Article No.	Part No.	Type	System Requirements	Pkg. Qty.
556-00022	556-00022	TAGPRINTPRO Version 2.0 - Full	Windows 98se, ME, NT4.0, 2000 or XP	1
556-00024	556-00024*	TAGPRINTPRO Version 2.0 - Upgrade	Windows 98se, ME, NT4.0, 2000 or XP	1

*Existing owners of previous versions of TagPrint can qualify for an upgrade at a reduced cost with proof of purchase and a valid serial number. Contact HellermannTyton for details. Use **Part No.** for ordering and **Type** for specification purposes.

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				Description	Pkg. Qty.
Article No.	Part No.	Type			
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	BC10	BC10	Battery Charger	1
557-00002	2100CASE	2100CASE	Spirit Carrying Case	1
557-00004	2100CABLE	2100CABLE	SpiritLink interface cable.	1
557-00003	RBP1	RBP1	Battery Pack	1
557-00005	2100PEN	2100PEN	Cleaning Pen	1
557-00006	TS3003039	TS3003039	Spirit label Spindle Roll	1
557-00007	TS3003040	TS3003040	Spirit label Spindle cap	1
557-00008	2100CARD	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*	HHIGR	HHIGR	Replacement ribbon cartridge	2.0	(50.8)	2.50	(63.5)	131 ft (40 m)
557-00092	HHHST	HHHST	Ribbon cartridge	2.0	(50.8)	2.50	(63.5)	131 ft (40 m)
557-00075**	HHDTH	HHDTH	Replacement Durattach ribbon	2.0	(50.8)	2.50	(63.5)	131 ft (40 m)

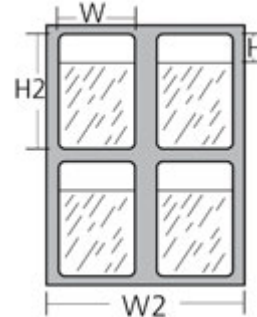
Dimensions are approximate and subject to technical changes. Use **Part No.** for ordering and **Type** for specification purposes.

* HHIGR works on all materials

** HHDTH 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.



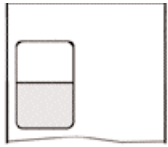
Product Selection

Article No.	Part No.	Type	Drawing Reference (page 101)	Color	Width (W)		Height of Printable Area (H)		Height of Label (H2)		Width of Liner (W2)		Pkg. Qty.
					In.	(mm.)	In.	(mm.)	In.	(mm.)	In.	(mm.)	
100 Material													
557-00026	TAGH26-100	TAGH26	A	White	.5"	(12.7)	.35"	(8.8)	.75"	(19.05)	.875"	(22.22)	500
557-00011	TAGH2-100	TAGH2	B	White	.5"	(12.7)	.5"	(12.7)	1.435"	(36.5)	.875"	(22.22)	250
557-00025	TAGH25-100	TAGH25	C	White	.75"	(19.05)	.5"	(12.7)	1.75"	(44.45)	.875"	(22.22)	175
557-00027	TAGH51-100	TAGH51	D	White	1.0"	(25.4)	.35"	(8.8)	.75"	(19.05)	1.125"	(28.57)	500
557-00021	TAGH22-100	TAGH22	E	White	1.0"	(25.4)	.5"	(12.7)	1.435"	(36.5)	1.125"	(28.57)	250
557-00018	TAGH9-100	TAGH9	F	White	1.0"	(25.4)	.75"	(19.05)	2.25"	(57.1)	1.125"	(53.97)	100
557-00013	TAGH3-100	TAGH3	G	White	1.0"	(25.4)	1.0"	(25.4)	3.75"	(95.25)	1.125"	(28.57)	100
557-00028	TAGH95-100	TAGH95	H	White	1.5"	(38.1)	1.0"	(25.4)	3.75"	(95.25)	1.625"	(41.25)	100
557-00010	TAGH1-100	TAGH1	I	White	1.9"	(48.26)	.75"	(19.05)	3.19"	(81.02)	2.025"	(51.43)	100
557-00024	TAGH24-100	TAGH24	J	White	2.0"	(50.8)	.5"	(12.7)	1.435"	(36.5)	2.125"	(53.97)	250
557-00020	TAGH10-100	TAGH10	K	White	2.0"	(50.8)	.75"	(19.05)	2.25"	(57.1)	2.125"	(53.97)	100
557-00015	TAGH6-100	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*

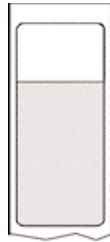
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TAG26-100
A



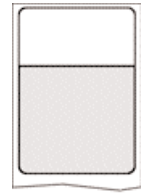
TAGH2-100
B



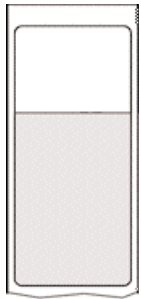
TAGH25-100
C



TAGH51-100
D



TAGH22-100
E



TAGH9-100
F



TAGH3-100
G



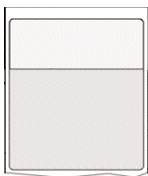
TAGH95-100
H



TAGH1-100
I



TAGH24-100
J



TAGH10-100
K



TAGH6-100
L

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	556-00230	TT230SM	TT230SM Printer	1
556-00231	556-00231	CASE230SM	Carrying Case for TT230SM Printer	1
556-00236	556-00236	TT230BATTERY	TT230SM Rechargeable Battery Pack	1

TT230SM Thermal Transfer Ribbons

Product Selection

Article No.	Part No.	Type	Color	Label Material										Width (W)		Length (L)	
				Paper	100	250	795	822	822C	900	1500	DTH	ShrinkTrak	In. (mm)	Ft. (M)		
556-00147**	TT822OUTSM2	TT822OUTSM2	Red	•	•	•	•					•			4.33 (110)	242 (74)	
556-00148**	TT822OUTSM3	TT822OUTSM3	Orange	•	•	•	•	•	•			•			4.33 (110)	242 (74)	
556-00149**	TT822OUTSM4	TT822OUTSM4	Yellow	•	•	•	•	•	•			•			4.33 (110)	242 (74)	
556-00150**	TT822OUTSM5	TT822OUTSM5	Green	•	•	•	•	•	•			•			4.33 (110)	242 (74)	
556-00151**	TT822OUTSM6	TT822OUTSM6	Blue	•	•	•	•	•	•			•			4.33 (110)	242 (74)	
556-00152**	TT822OUTSM7	TT822OUTSM7	Purple	•	•	•	•	•	•			•			4.33 (110)	242 (74)	
556-00153* **	TT822OUTSM8	TT822OUTSM8	Silver Gray									•	•		4.33 (110)	242 (74)	
556-00143***	TTDTHOUTSM	TTDTHOUTSM	Black									• (5)	• (5)		4.33 (110)	242 (74)	
556-00145	TT822OUTSM	TT822OUTSM	Black	•	(1)	•	• (1,2)	• (1,2)	•			•	• (4)		4.33 (110)	242 (74)	
556-00163	TTTHSTOUTSM	TTTHSTOUTSM	Black		° (1)	°							• (4)		4.33 (110)	242 (74)	
556-00169	TT100OUTSM	TT100OUTSM	Black	•	° (1)	°							• (4)		4.33 (110)	242 (74)	
556-00190	TTWHITEOUTSM	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

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	Polyolefin, cross laminated
Operating Temperature	-58 °F to +221 °F (-50 °C to +105 °C) continuous
Certification	Meets SAE-AS81531, Mil-Std 202G Method 215J, and BS 4G 198-3, Type 11a



Product Selection							
Article No.	Part No.	Type	Marker Size		Printable Area		Pkg. Qty.
			in.	(mm)	in.	(mm)	
556-26008	556-26008	TIPTAGVA15X65YEW	2.59" X .68"	(65 X 17.4)	2.58" X .59"	(65 X 15)	500
556-26006	556-26006	TIPTAGVA10X65YEW	2.59" X .50"	(65 X 12.7)	2.58" X .39"	(65 X 10)	500
556-26007	556-26007	TIPTAGVA10X90YEW	3.54" X .50"	(90 X 12.7)	3.54" X .40"	(90 X 10)	500
556-26009	556-26009	TIPTAGVA15X90YEW	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

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



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.
111-02809	T18S9M4	T18S	-	18 lbs	(80)	3.27"	(83)	.63"	(16)	.09"	(2.3)	Natural	1000
111-02811	T18S0M4	T18S	-	18 lbs	(80)	3.27"	(83)	.63"	(16)	.09"	(2.3)	Black	1000
111-01872	T18R9M4	T18R	MS3367-4-9	18 lbs	(80)	4"	(100)	.87"	(22)	.10"	(2.5)	Natural	1000
111-01841	T18R0M4	T18R	*	18 lbs	(80)	4"	(100)	.87"	(22)	.10"	(2.5)	Black	1000
111-02322	T18I9M4	T18I	-	18 lbs	(80)	5.51"	(140)	1.38"	(35)	.10"	(2.5)	Natural	1000
111-02315	T18I0M4	T18I	-	18 lbs	(80)	5.51"	(140)	1.38"	(35)	.10"	(2.5)	Black	1000
111-02026	T18L9M4	T18L	-	18 lbs	(80)	8.0"	(205)	2.17"	(55)	.10"	(2.5)	Natural	1000
111-02015	T18L0M4	T18L	-	18 lbs	(80)	8.0"	(205)	2.17"	(55)	.10"	(2.5)	Black	1000
111-03047	T30R9M4	T30R	MS3367-5-9	30 lbs	(135)	5.9"	(150)	1.38"	(35)	.14"	(3.5)	Natural	1000
111-03034	T30R0M4	T30R	*	30 lbs	(135)	5.9"	(150)	1.38"	(35)	.14"	(3.5)	Black	1000
111-03327	T30L9M4	T30L	-	30 lbs	(135)	7.48"	(190)	1.97"	(50)	.14"	(3.5)	Natural	1000
111-03315	T30L0M4	T30L	-	30 lbs	(135)	7.48"	(190)	1.97"	(50)	.14"	(3.5)	Black	1000
111-03517	T30LL9M4	T30LL	-	30 lbs	(135)	11.42"	(290)	3.15"	(80)	.14"	(3.5)	Natural	1000
111-03511	T30LL0M4	T30LL	-	30 lbs	(135)	11.42"	(290)	3.15"	(80)	.14"	(3.5)	Black	1000
111-02907	T30XL9M4	T30XL	-	30 lbs	(135)	14.37"	(365)	4.13"	(105)	.14"	(3.5)	Natural	1000
111-02903	T30XL0M4	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.

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

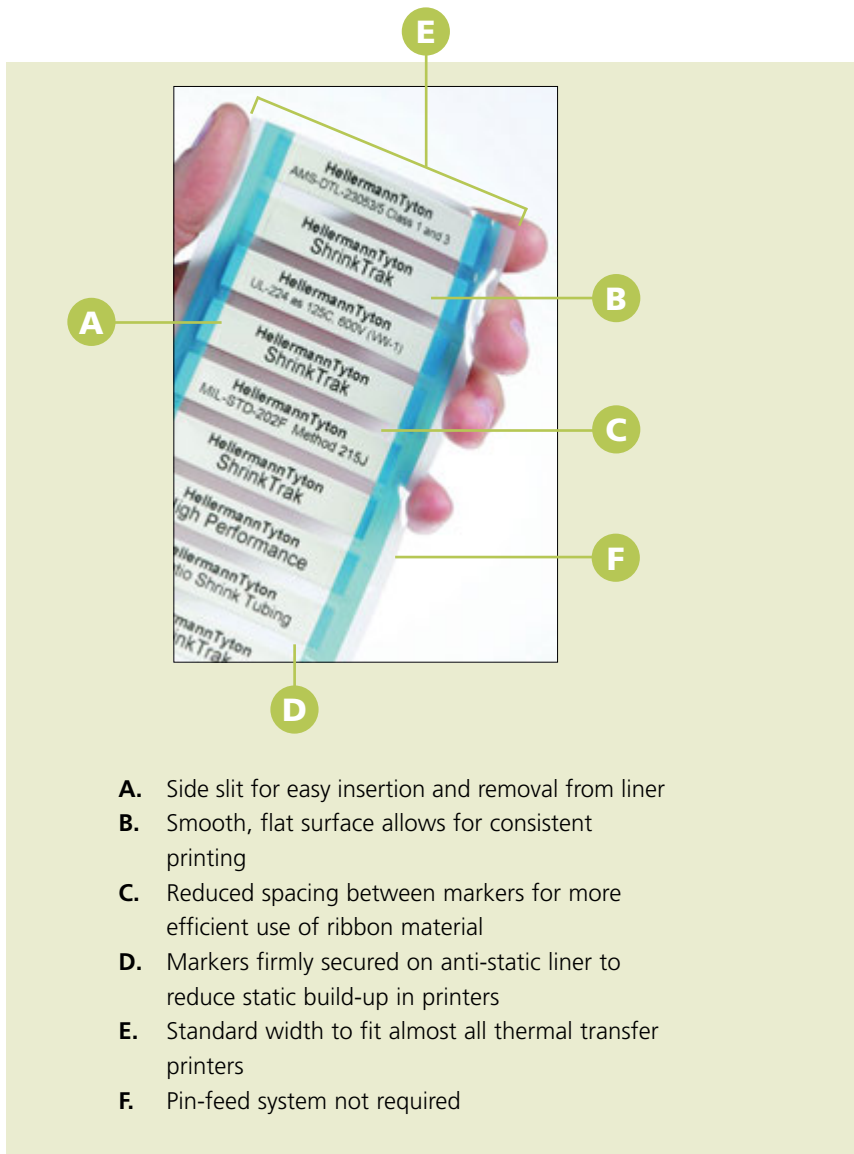
- Flexible, flame retardant, heat shrinkable polyolefin tubing meets all military specifications
- 3:1 shrink ratio
- Standard colors - yellow, white and black
- Larger packaging options result in less box changes

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



- A.** Side slit for easy insertion and removal from liner
- B.** Smooth, flat surface allows for consistent printing
- C.** Reduced spacing between markers for more efficient use of ribbon material
- D.** Markers firmly secured on anti-static liner to reduce static build-up in printers
- E.** Standard width to fit almost all thermal transfer printers
- F.** Pin-feed system not required

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	Polyolefin, cross-linked (POX)
Product Thickness	3 mil total thickness
Shrink Temperature (nominal)	+194 °F (+90 °C)
Operating Temperature	-67 °F to +275 °F (-55 °C to +135 °C)
Flame Retardant	Yes
Flammability	UL224 VW1
Flexibility	flexible
Abrasion Resistance	Good
Solvent Resistance	Good
Standard Colors	White, Yellow & Black
*For other colors, contact HellermannTyton	
UL Rating	Meets UL-224 as +257 °F (+125 °C), 600V (VW-1)
Certification	AMS-DTL-23053/5 Class 1 and 3, SAE-AS81531, MIL-STD-202G Method 215K



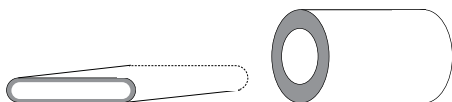
Recommended Thermal Transfer Ribbons

TT230SM Printer	TTM430/TTM460
TTDTHOUTSM	or other thermal transfer printers
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 +/- 0.004 (.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)							



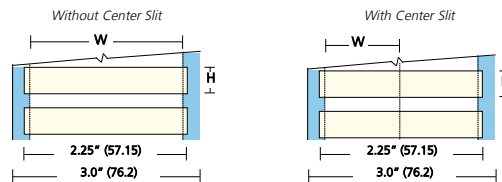
*As supplied

**Recovered

* 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*

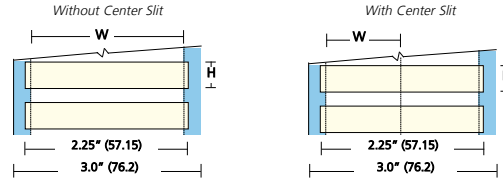


Product Selection

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	553-50001	HST3-1BK	THS-610BM	Black	-	1.9"	(48.26)	.235"	(5.97)	250
553-50002	553-50002	HST3-1WH	THS-610W	White	-	1.9"	(48.26)	1.90"	(48)	250
553-50003	553-50003	HST3-1WH	THS-610W10C	White	-	1.9"	(48.26)	1.90"	(48)	1000
553-50078	553-50078	HST3-1WH	THS-610W25C	White	-	1.9"	(48.26)	.235"	(5.97)	2500
553-50004	553-50004	HST3-1WH-S	THS-610WP	White	Single	.95"	(24.1)	.235"	(5.97)	500
553-50074	553-50074	HST3-1WH-S	THS-610WP10C	White	Single	.95"	(24.1)	.235"	(5.97)	2000
553-50067	553-50067	HST3-1WH-S	THS-610WP25C	White	Single	.95"	(24.1)	.235"	(5.97)	5000
553-50070	553-50070	HST3-1WH-2S	THS-610W2P	White	Double	.63"	(16.08)	.235"	(5.97)	750
553-50075	553-50075	HST3-1WH-2S	THS-610W2P10C	White	Double	.63"	(16.08)	.235"	(5.97)	3000
553-50063	553-50063	HST3-1WH-3S	THS-610W3P	White	Triple	.475"	(12.07)	.235"	(5.97)	1000
553-50088	553-50088	HST3-1WH-3S	THS-610W3P10C	White	Triple	.475"	(12.07)	.475"	(12)	4000
553-50006	553-50006	HST3-1YE	THS-610Y10C	Yellow	-	1.9"	(48.26)	.235"	(5.97)	1000
553-50005	553-50005	HST3-1YE	THS-610Y	Yellow	-	1.9"	(48.26)	.235"	(5.97)	250
553-50007	553-50007	HST3-1YE-S	THS-610YP	Yellow	Single	.95"	(24.1)	.235"	(5.97)	500
553-50076	553-50076	HST3-1YE-S	THS-610YP10C	Yellow	Single	.95"	(24.1)	.235"	(5.97)	2000
553-50071	553-50071	HST3-1YE-2S	THS-610Y2P	Yellow	Double	.63"	(16.08)	.235"	(5.97)	750
553-50077	553-50077	HST3-1YE-2S	THS-610Y2P10C	Yellow	Double	.63"	(16.08)	.235"	(5.97)	3000
0.187" (4.74 mm) - Outside Diameter										
553-50008	553-50008	HST4.8-1.6BK	THS-615BM	Black	-	1.9"	(48.26)	.312"	(7.92)	250
553-50009	553-50009	HST4.8-1.6WH	THS-615W	White	-	1.9"	(48.26)	.312"	(7.92)	250
553-50010	553-50010	HST4.8-1.6WH	THS-615W10C	White	-	1.9"	(48.26)	.312"	(7.92)	1000
553-50177	553-50177	HST4.8-1.6WH	THS-615W30C	White	-	1.9"	(48.26)	.312"	(7.92)	3000
553-50079	553-50079	HST4.8-1.6WH	THS-615W50C	White	-	1.9"	(48.26)	.312"	(7.92)	5000
553-50011	553-50011	HST4.8-1.6WH-S	THS-615WP	White	Single	.95"	(24.1)	.312"	(7.92)	500
553-50080	553-50080	HST4.8-1.6WH-S	THS-615WP10C	White	Single	.95"	(24.1)	.312"	(7.92)	2000
553-50068	553-50068	HST4.8-1.6WH-2S	THS-615W2P	White	Double	.633"	(16.08)	.312"	(7.92)	750
553-50072	553-50072	HST4.8-1.6WH-2S	THS-615W2P10C	White	Double	.633"	(16.08)	.312"	(7.92)	3000
553-50064	553-50064	HST4.8-1.6WH-3S	THS-615W3P	White	Triple	.475"	(12.07)	.312"	(7.92)	1000
553-50081	553-50081	HST4.8-1.6WH-3S	THS-615W3P10C	White	Triple	.475"	(12.07)	.312"	(7.92)	4000
553-50013	553-50013	HST4.8-1.6YE	THS-615Y10C	Yellow	-	1.9"	(48.26)	.312"	(7.92)	1000
553-50012	553-50012	HST4.8-1.6YE	THS-615Y	Yellow	-	1.9"	(48.26)	.312"	(7.92)	250
553-50014	553-50014	HST4.8-1.6YE-S	THS-615YP	Yellow	Single	.95"	(24.1)	.312"	(7.92)	500
553-50069	553-50069	HST4.8-1.6YE-2S	THS-615Y2P	Yellow	Double	.633"	(16.08)	.312"	(7.92)	750
553-50073	553-50073	HST4.8-1.6YE-2S	THS-615Y2P10C	Yellow	Double	.633"	(16.08)	.312"	(7.92)	3000
553-50176	553-50176	HST4.8-1.6WH-S	THS-615Y2P10C	White	Double	.633"	(16.08)	.312"	(7.92)	3000
0.25" (6.35mm) - Outside Diameter										
553-50015	553-50015	HST6-2BK	THS-620BM	Black	-	1.9"	(48.26)	.420"	(10.67)	250
553-50016	553-50016	HST6-2WH	THS-620W	White	-	1.9"	(48.26)	.420"	(10.67)	250
553-50017	553-50017	HST6-2WH	THS-620W10C	White	-	1.9"	(48.26)	.420"	(10.67)	1000
553-50018	553-50018	HST6-2WH	THS-620W50C	White	-	1.9"	(48.26)	.420"	(10.67)	5000
553-50019	553-50019	HST6-2WHC	THS-620WP	White	Single	.95"	(24.1)	.420"	(10.67)	500
553-50020	553-50020	HST6-2YE-S	THS-620YP10C	Yellow	-	1.9"	(48.26)	.420"	(10.67)	2000
553-50021	553-50021	HTS6-2YE-2S	THS-620Y2P	Yellow	-	1.9"	(48.26)	.420"	(10.67)	1000
553-50022	553-50022	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*



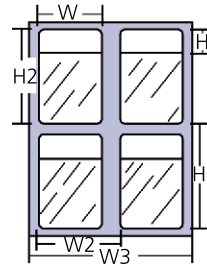
Product Selection

Article No.	Part No.	Type	Cross Ref to Former Part No.	Color	Center Slit	Width (W)		Height (H)		Pkg. Qty.
						In.	(mm.)	In.	(mm.)	
0.25" (6.35mm) - Outside Diameter (continued)										
553-50082	553-50082	HST6-2WH-2S	THS-620W2P	White	Double	.633"	(16.08)	.420"	(10.67)	750
553-50083	553-50083	HST6-2YE-2S	THS-620Y2P	Yellow	Double	.633"	(16.08)	.420"	(10.67)	750
553-50084	553-50084	HST6-2WH-S	THS-620WP10C	White	Single	.95"	(24.1)	.420"	(10.67)	2000
553-50085	553-50085	HST6-2YE-S	THS-620YP10C	Yellow	Single	.95"	(24.1)	.420"	(10.67)	2000
553-50089	553-50089	HST6-2WH-3S	THS-620W3P10C	White	Triple	.475"	(12.07)	.420"	(10.67)	4000
0.375" (9.52 mm) - Outside Diameter										
553-50023	553-50023	HST9-3BK	THS-625BM	Black	-	1.9"	(48.26)	.597"	(15.16)	250
553-50024	553-50024	HST9-3WH	THS-625W	White	-	1.9"	(48.26)	.597"	(15.16)	250
553-50025	553-50025	HST9-3WH-S	THS-625WP	White	Single	.95"	(24.1)	.597"	(15.16)	500
553-50066	553-50066	HST9-3WH-3S	THS-625W3P	White	Triple	.475"	(12.07)	.597"	(15.16)	1000
553-50026	553-50026	HST9-3YE	THS-625Y	Yellow	-	1.9"	(48.26)	.597"	(15.16)	250
553-50027	553-50027	HST9-3YE-S	THS-625YP	Yellow	Single	.95"	(24.1)	.597"	(15.16)	500
553-50192	553-50192	HST9-3WH	THS-625W10C	White	-	1.9"	(48.26)	.597"	(15.16)	1000
0.50" (12.7 mm) - Outside Diameter										
553-50028	553-50028	HST12-4BK	THS-630BM	Black	-	1.9"	(48.26)	.77"	(19.55)	250
553-50029	553-50029	HST12-4WH	THS-630W	White	-	1.9"	(48.26)	.77"	(19.55)	250
553-50030	553-50030	HST12-4WH-S	THS-630WP	White	Single	.95"	(24.1)	.77"	(19.55)	500
553-50086	553-50086	HST12-4WH-3S	THS-630W3P	White	Triple	.475"	(12.07)	.77"	(19.55)	1000
553-50031	553-50031	HST12-4YE	THS-630Y	Yellow	-	1.9"	(48.26)	.77"	(19.55)	250
553-50032	553-50032	HST12-4YE-S	THS-630YP	Yellow	Single	.95"	(24.1)	.77"	(19.55)	500
553-50087	553-50087	HST12-4YE-3S	THS-630Y3P	Yellow	Triple	.475"	(12.07)	.77"	(19.55)	1000
553-50231	553-50231	HST12-4WH	THS-630W10C	White	-	1.9"	(48.26)	.77"	(19.55)	1000
553-50232	553-50232	HST12-4WH-S	THS-630WP10C	White	Single	.95"	(24.1)	.77"	(19.55)	2000
0.75" (19.05 mm) - Outside Diameter										
553-50033	553-50033	HST18-6BK	THS-635BM	Black	-	1.9"	(48.26)	1.2"	(30.48)	250
553-50034	553-50034	HST18-6WH	THS-635W	White	-	1.9"	(48.26)	1.2"	(30.48)	250
553-50035	553-50035	HST18-6WH-S	THS-635WP	White	Single	.95"	(24.1)	1.2"	(30.48)	500
553-50036	553-50036	HST18-6YE	THS-635Y	Yellow	-	1.9"	(48.26)	1.2"	(30.48)	250
553-50037	553-50037	HST18-6YE-S	THS-635YP	Yellow	Single	.95"	(24.1)	1.2"	(30.48)	500
553-50233	553-50233	HST18-6WH	THS-635W10C	White	-	1.9"	(48.26)	1.2"	(30.48)	1000
553-50234	553-50234	HST18-6WH-S	THS-635WP10C	White	Single	.95"	(24.1)	1.2"	(30.48)	2000
1.0" (25.4mm) - Outside Diameter										
553-50038	553-50038	HST24-8BK	THS-640BM	Black	-	1.9"	(48.26)	1.69"	(42.93)	250
553-50039	553-50039	HST24-8WH	THS-640W	White	-	1.9"	(48.26)	1.69"	(42.93)	250
553-50040	553-50040	HST24-8WH-S	THS-640WP	White	Single	.95"	(24.1)	1.69"	(42.93)	500
553-50041	553-50041	HST24-8YE	THS-640Y	Yellow	-	1.9"	(48.26)	1.69"	(42.93)	250
553-50042	553-50042	HST24-8YE-S	THS-640YP	Yellow	Single	.95"	(24.1)	1.69"	(42.93)	500
1.5" (38.1mm) - Outside Diameter										
553-50226	553-50226	HFST39-13WH-S	THS-645WP	White	Single	.95"	(24.13)	2.26"	(57.40)	300
553-50209	553-50209	HST39-13WH	THS-645W	White	-	1.9"	(48.26)	2.26"	(57.40)	150
553-50225	553-50225	HFST39-13YE	THS-645Y	Yellow	-	1.9"	(48.26)	2.26"	(57.40)	150
553-50227	553-50227	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.

Thermal Transfer Self-Laminating Labels

HellermannTyton's self-laminating labels are used for marking wire and cable. The clear overlap protects printed information.



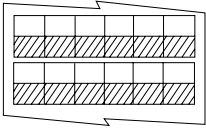
Product Selection

Article No.	Part No.	Type	Drawing Reference	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 171)	In. (mm)	In. (mm)	In. (mm)	In. (mm)	In. (mm)	In. (mm)		
100B Material											
596-00009	TAG26T6-100B	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	TAG2T5-100B	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	TAG51T3-100B	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	TAG22T2-100B	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	TAG22T3-100B	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	TAG9T3-100B	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	TAG3T3-100B	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	TAG38T4-100B*	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	TAG53T2-100B	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	TAG1T1-100B	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	TAG24T1-100B	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	TAG10T2-100B	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	TAG7T1-100B*	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	TAG6T1-100B	TAG6T1	N	2.0" (50.8)	1.5" (38.1)	3.75" (95.25)	4.0" (101.6)	2.0" (50.8)	2.20" (55.88)	1	1000

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

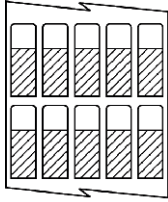
Thermal Transfer Self-Laminating Labels *continued*

(Not shown to scale)



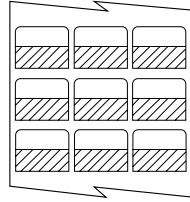
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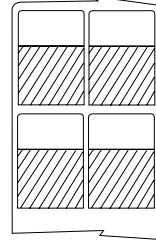
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B



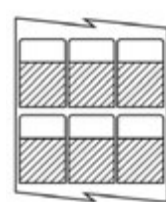
TAG51T3-100B

C



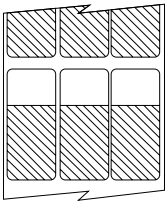
TAG22T2-100B

D



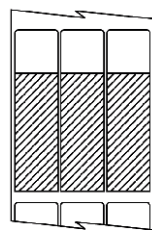
TAG22T3-100B

E



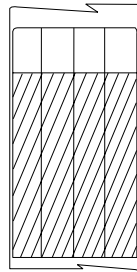
TAG9T3-100B

F



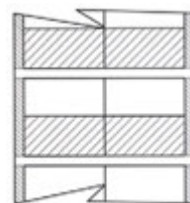
TAG3T3-100B

G



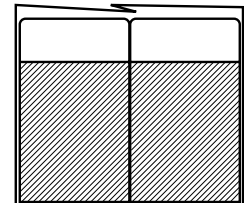
TAG38T4-100B

H



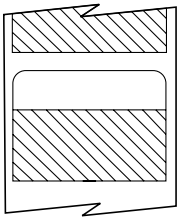
TAG53T2-100B

I



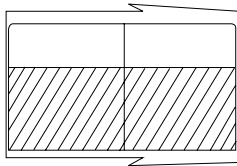
TAG1T1-100B

J



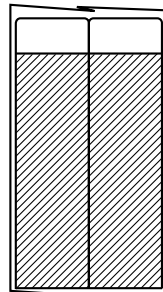
TAG24T1-100B

K



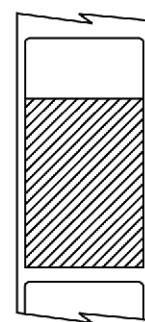
TAG10T2-100B

L



TAG7T1-100B

M

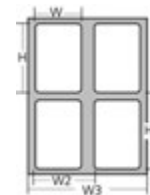


TAG6T1-100B

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.



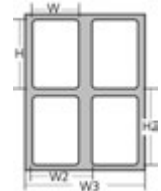
Product Selection

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 (168-169)	In.	(mm.)	In.	(mm.)	In.	(mm.)	In.	(mm.)	In.	(mm.)		
250 Material															
598-00277	TYHCT-250	TYHC	A	.250"	(6.35)	1.50"	(38.10)	1.625	41.27	.250"	6.35	4.120"	104.70	16	5000
596-21250	TAG21T6-250	TAG21T6	B	.5"	(12.7)	.75"	(19.05)	.875"	22.22	.5"	12.7	3.25"	82.55	6	10000
596-11250	TAG11T4-250	TAG11T4	C	.65"	(16.5)	.2"	(5.08)	.3"	7.62	.65"	16.5	2.6"	66.04	4	5000
596-28250	TAG28T4-250	TAG28T4	D	.80"	(20.3)	1.43"	(36.3)	1.62"	41.1	.80"	20.3	3.45"	87.6	4	5000
596-15250	TAG15T3-250	TAG15T3	E	1.0"	(25.4)	.5"	(12.7)	.6"	15.24	1.0"	25.4	3.35"	85.09	3	10000
596-00044	TAG35T2-250	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	TAG96T1-336	TAG96T1	G	1.875"	(47.6)	.25"	(6.35)	.375"	9.35	1.875"	47.6	2.0"	50.8	1	5000
596-00041	TAG69T1-336	TAG69T1	H	2.0"	(50.8)	.275"	(6.98)	.5"	12.7	2.0"	50.8	2.125"	53.97	1	10000
596-00040	TAG68T1-336	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	TAG15T3-795	TAG15T3	E	1.0"	(25.4)	.5"	(12.7)	.6"	15.24	1.0"	25.4	3.35"	85.09	3	10000
596-27795	TAG27T1-795	TAG27T1	J	1.5"	(38.11)	.75"	(19.05)	.875"	22.2	1.5"	38.11	2.20"	55.88	1	3000
596-75795	TAG75T1-795	TAG75T1	K	2.0"	(50.8)	.625"	(15.87)	.75"	19.05	2.0"	50.8	2.12"	53.8	1	2000
596-73795	TAG73T1-795	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	TAG76T1-795	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	TAG72T1-795	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	TAG78T1-795	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	TAG80T1-795	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	TAG79T1-795	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 TT10SM, TT210SM, TT230SM, TT300SM, TT310SM, and TT330SM printers. Use TAG82T2 instead.

Thermal Transfer Labels *continued*



Product Selection

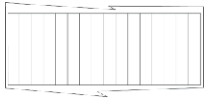
Article No.	Part No.	Type	Drawing Reference (pages 168-169)	Width (W)		Height (H)		Vertical Repeat (H2)		Horizontal Repeat (W2)		Width of Liner (W3)		Labels per Row	Pkg. Qty.
				In.	(mm.)	In.	(mm.)	In.	(mm.)	In.	(mm.)	In.	(mm.)		
822 Material															
596-27822	TAG27T1-822	TAG27T1	J	1.5"	(38.11)	.75"	(19.05)	.875"	22.2	1.5"	38.11	2.20"	55.88	1	3000
596-00019	TAG75T1-822	TAG75T1	K	2.0"	(50.8)	.625"	(15.87)	.75"	19.05	2.0"	50.8	2.12"	53.8	1	2000
596-70822	TAG70T12-822	TAG70T12	Q	.25"	(6.35)	.25"	(6.35)	.5"	12.7	.25"	6.35	3.2"	81.2	12	10000
596-00028	TAGPP1T6-822	TAGPP1T6	R	.625"	(15.87)	.333"	(8.45)	.75"	19.05	.625"	15.87	3.8"	96.52	6	1000
596-00082	TAGPP1T6-82210M	TAGPP1T6	R	.625"	(15.87)	.333"	(8.45)	.75"	19.05	.625"	15.87	3.8"	96.52	6	10000
596-11822	TAG11T4-822	TAG11T4	C	.65"	(16.5)	.2"	(5.08)	.3"	7.62	.65"	16.5	2.6"	66.04	4	5000
596-00046	TAGPP2T6-822	TAGPP2T6	T	.66"	(16.7)	.33"	(8.38)	.75"	19.05	.66"	16.7	4.125"	104.7	6	1000
596-00083	TAGPP3T4-822	TAGPP3T4	U	.688"	(17.4)	.25"	(6.35)	.375"	9.52	.688"	17.4	2.9"	73.66	4	1000
596-13822	TAG13T4-822	TAG13T4	V	.75"	(19.05)	.25"	(6.35)	.35"	8.89	.75"	19.05	3.35"	85.09	4	10000
596-15822	TAG15T3-822	TAG15T3	E	1.0"	(25.4)	.5"	(12.7)	.6"	15.24	1.0"	25.4	3.35"	85.09	3	1000
596-84822	TAG84T3-822	TAG84T3	S	1.25"	(31.75)	.375"	(9.53)	.50"	12.7	1.25"	31.75	4.0"	101.6	3	10000
596-00023	TAG83T1-822	TAG83T1	W	4.0"	(101.6)	.312"	(7.52)	.438"	11.13	4.0"	101.6	4.1"	104.14	1	5000
596-00022	TAG81T8-822	TAG81T8	X	.325"	(8.25)	.20"	(5.08)	.30"	7.62	.325"	8.25	2.6"	66.04	8	5000
596-16822	TAG16T3-822	TAG16T3	Y	.9"	(22.86)	.25"	(6.35)	.35"	8.89	.9"	22.86	3.35"	85.09	3	10000
596-17822	TAG17T2-822	TAG17T2	Z	1.5"	(38.11)	.25"	(6.35)	.35"	8.89	1.65"	41.98	3.35"	85.09	2	10000
596-73822	TAG73T1-822	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	TAG72T1-822	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	TAG71T5-822	TAG71T5	BB	.5"	(12.7)	.43"	(11.1)	.662"	16.81	.43"	11.1	3.35"	85.09	5	10000
596-82822	TAG82T2-822	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	TAGPP1T6-822C	TAGPP1T6	R	.625"	(15.87)	.333"	(8.45)	.75"	19.05	.625"	15.87	3.8"	96.52	6	1000
596-00030	TAGPP1T6-822C10M	TAGPP1T6	R	.625"	(15.87)	.333"	(8.45)	.75"	19.05	.625"	15.87	3.8"	96.52	6	10000
596-00003	TAG11T4-822C	TAG11T4	C	.65"	(16.5)	.2"	(5.08)	.3"	7.62	.65"	16.5	2.6"	66.04	4	5000
596-00047	TAGPP2T6-822C	TAGPP2T6	T	.66"	(16.7)	.33"	(8.38)	.75"	19.05	.66"	16.7	4.125"	104.7	6	1000
596-00084	TAGPP3T4-822C	TAGPP3T4	U	.688"	(17.4)	.25"	(6.35)	.375"	9.52	.688"	17.4	2.9"	73.66	4	1000
596-00001	TAG15T3-822C10M	TAG15T3	E	1.0"	(25.4)	.5"	(12.7)	.6"	15.24	1.0"	25.4	3.35"	85.09	3	10000
596-00043	TAG27T1-822C	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	TAG13T4-DTH	TAG13T4	V	.75"	(19.05)	.25"	(6.35)	.35"	8.89	.75"	19.05	3.35"	85.09	4	10000
596-00034	TAG16T3-DTH	TAG16T3	Y	.9"	(22.86)	.25"	(6.35)	.35"	8.89	.9"	22.86	3.35"	85.09	3	10000
596-00035	TAG15T3-DTH	TAG15T3	E	1.0"	(25.4)	.5"	(12.7)	.6"	15.24	1.0"	25.4	3.35"	85.09	3	10000
596-00036	TAG27T2-DTH	TAG27T2	J	1.5"	(38.11)	.75"	(19.05)	.875"	22.2	1.5"	38.11	2.20"	55.83	2	10000
596-00037	TAG99T1-DTH	TAG99T1	DD	2.0"	(50.8)	.25"	(6.35)	.375"	9.52	2.0"	50.8	2.2"	55.8	1	2500
596-00038	TAG73T1-DTH	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	TAG33T1-DTH	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	TAG74T2-PAP	TAG74T2	FF	1.75"	(44.45)	.375"	(9.53)	.562"	14.2	1.75"	44.45	3.5"	88.9	2	1000
596-00025	TAG82T2-PAP	TAG82T2	GG	2.0"	(50.8)	.396"	(10.05)	.562"	14.2	2.0"	50.8	4.05"	102.0	2	1000
596-00024	TAG85T1-PAP	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.

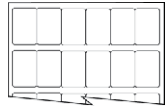
* Clear ** Not recommended for TT1210 printer *** For use with DTH ribbons only!

Thermal Transfer Labels continued

(Not shown to scale)



TYHCT-250
A



TAG21T6-250
B



TAG11T4-250,
TAG11T4-822,
TAG11T4-822C
C



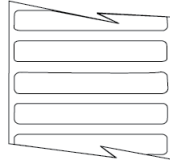
TAG28T4-250
D



TAG15T3-DTH,
TAG15T3-795,
TAG15T3-822,
TAG15T3-822C10M
TAG15T3-250
E



TAG35T2-250
F



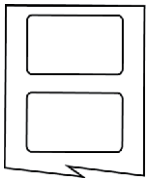
TAG96T1-336
G



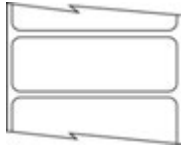
TAG69T1-336
H



TAG68T1-336
I



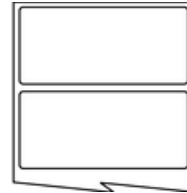
TAG27T1-822,
TAG27T1-795,
TAG27T1-822C,
TAG27T2-DTH
J



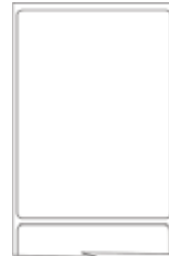
TAG75I-822
TAG75T1-795
K



TAG76T1-795
L



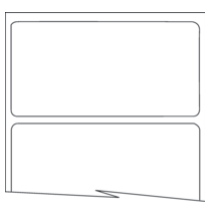
TAG72T1-795,
TAG72T1-822
M



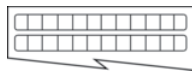
TAG78T1-795
N



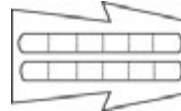
TAG80T1-795
O



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



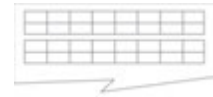
TAGPP3T4-822,
TAGPP3T4-822C
U



TAG13T4-822,
TAG13T4-900,
TAG13T4-DTH
V



TAG83T1-822
W



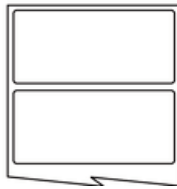
TAG81T8-822
X



TAG16T3-DTH,
TAG16T3-822,
Y



TAG17T2-822
Z



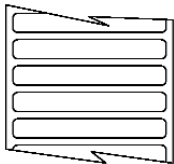
TAG73T1-822,
TAG73T1-DTH,
TAG73T1-795
AA



TAG71T5-822
BB



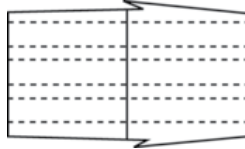
TAG82T2-822
CC



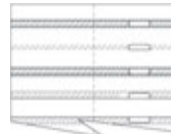
TAG99T1-DTH
DD



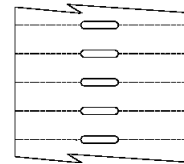
TAG33T1-DTH
EE



TAG74T2-PAP
FF



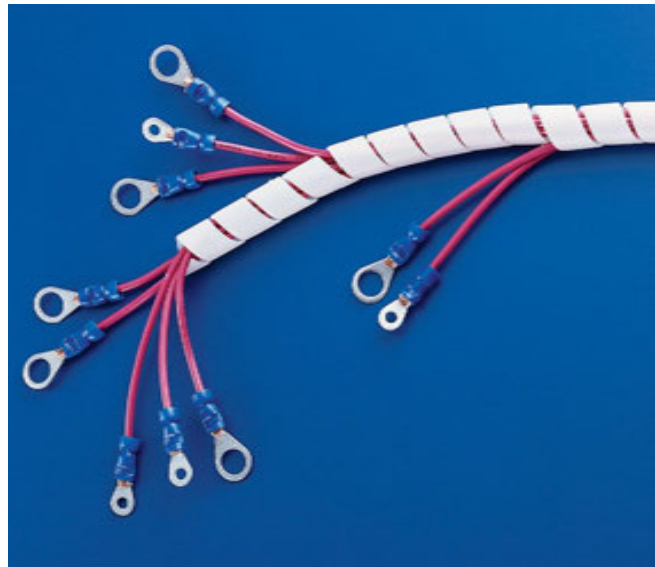
TAG82T2-PAP
GG



TAG85T1-PAP
HH

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:

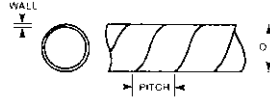
In a gapped installation, Spiralwrap is wrapped with space between the sheathing. This accommodates wire breakouts and also keeps the wire bundle flexible.

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

Article No.	Part No.	Type	Ø D	Wall Thickness	Pitch	Min. Ø Bundle	Max. Ø Bundle	Color	Pkg. Qty.	
			in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)			
Natural Polyethylene (PE)										
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	
Black Polyethylene (PE)										
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	
Natural Polyethylene (PE), flame-retardant										
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	
Black Polyethylene (PE), flame-retardant										
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	
Natural Polyamide 6 (PA6)										
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	
Black Polyamide 6 (PA6)										
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	
Natural Polytetrafluoroethylene -Teflon (PTFE)										
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
RoHS Polyethylene (PE)	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
RoHS Polyethylene (PE), flame-retardant	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	94V-1	
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	94V-1	
RoHS Polyamide 6 (PA6)	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
RoHS Polytetrafluorethylene -Teflon (PTFE)	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.

For product information visit or www.hellermannntyton.com or call 800-537-1512

Convolved Tubing

Convolved 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 convolved 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	
Material	Polyethylene (PE)
Operating Temperature	-40 °F to +200 °F (-40 °C to +93 °C)
Flammability	UL94 V2



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



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

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

Convolved Tubing Dispenser Box

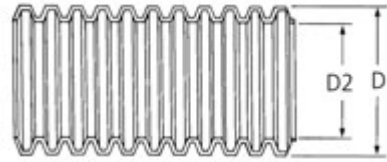
The convolved tubing dispenser boxes offer an efficient packaging option. The sturdy and compact dispenser boxes allow for easy storage and moving around in the work area. The reel inside the box allows for tangle free dispensing, making it much easier to work with the product. Convolved tubing in dispenser 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	169-60022	CTN140	1/4" Convolved Tubing, Slit - Polyamide 6, Black	100 ft
169-60018	169-60018	CTN380	3/8" Convolved Tubing, Slit - Polyamide 6, Black	100 ft
169-60019	169-60019	CTN120	1/2" Convolved Tubing, Slit - Polyamide 6, Black	100 ft
169-60020	169-60020	CTN340	3/4" Convolved Tubing, Slit - Polyamide 6, Black	100 ft
169-60021	169-60021	CTN10	1" Convolved 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.

Convulsed Tubing (continued)



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

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



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	151-00700	CTC4.5SBS6	.175"	(4.5)	M6	.39"	(10)	Black	500	
151-00701	151-00701	CTC7.5SBS6	.29"	(7.5)	M6	.39"	(10)	Black	500	
151-00702	151-00702	CTC10SBS6	.39"	(10)	M6	.39"	(10)	Black	500	
151-00703	151-00703	CTC13SBS6	.50"	(13)	M6	.39"	(10)	Black	500	
151-00010	151-00010	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	151-14314	CTC4.5FT6LG	.17"	(4.5)	.029" - .234"	(.75 - 6)	.25" - .27"	(6.5 - 7)	Black	500	
151-14313	151-14313	CTC7.5FT6LG	.29"	(7.5)	.029" - .234"	(.75 - 6)	.25" - .27"	(6.5 - 7)	Black	500	
151-00018	151-00018	CTC10FT6LG	.39"	(10)	.029" - .234"	(.75 - 6)	.25" - .27"	(6.5 - 7)	Black	500	
151-00019	151-00019	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.

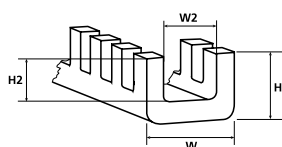
Flexiform Edge Protection Grommet Strip

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	
Material	Polyamide 6 (PA6)
Color	Natural
Operating Temperature	-76 °F to +203 °F (-60 °C to +95 °C)

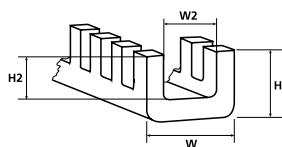


Product Selection

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)	
Polyamide 6 (PA6)								
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	
Material	Polyethylene (PE)
Color	Natural
Operating Temperature	-22 °F to +176 °F (-30 °C to +80 °C)

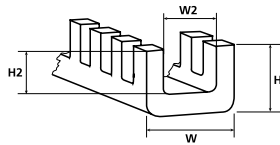


Product Selection

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)	
Polyethylene (PE)								
251-10009	FPA	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	
Material	Polytetrafluoroethylene -Teflon (PTFE)
Color	Natural
Operating Temperature	-76 °F to +500 °F (-60 °C to +260 °C)
Flammability	non-burning

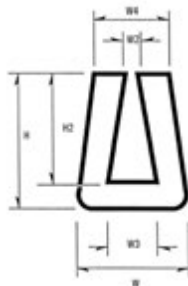


Product Selection									
Article No.	Part No.	Type	Panel Thickness	Width (W)	Width (W2)	Height (H)	Height (H2)	Pkg. Qty.	
			in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	ft.
Polytetrafluoroethylene -Teflon (PTFE)									
251-30109	FTA	G51TA	.015" - .059" (0.4 - 1.5)	.153" (3.9)	.059" (1.5)	.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	
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)
Flexible Polyvinyl Chloride, cadmium free (PVC)										
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.

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.
170-03000	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												
170-03041	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

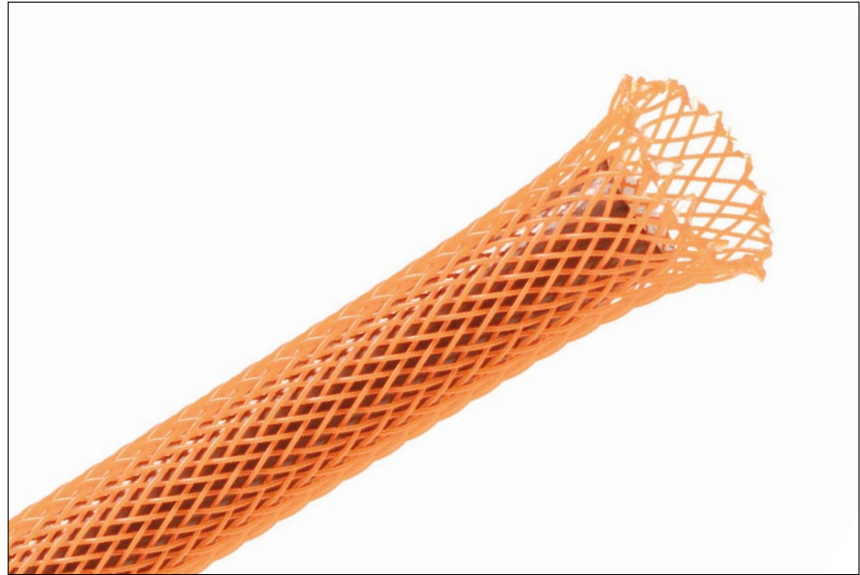
Orange PET braided sleeving is an extremely flexible, general purpose option for bundling and protecting wires and cables in abrasive type applications. Its color makes it ideal for systematic color coding of complex wiring installations.

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

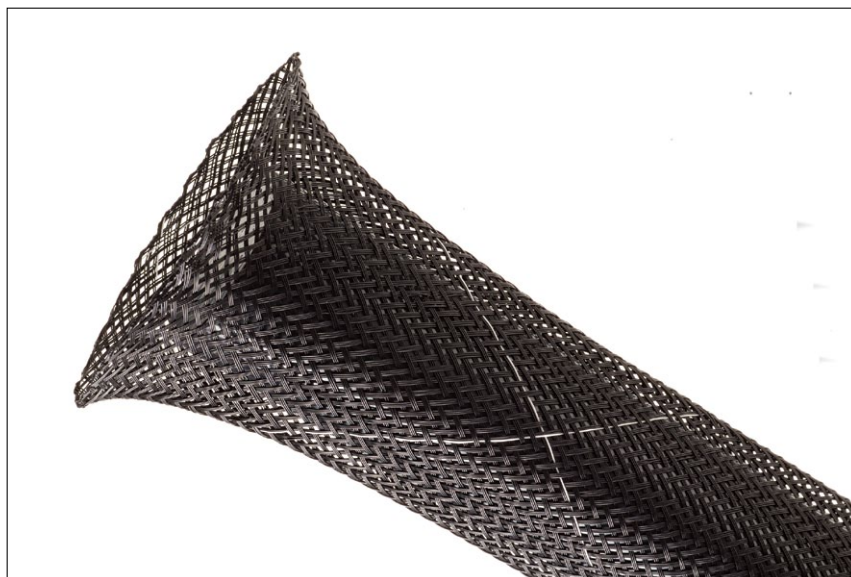
A flame retardant woven (threaded) polyester sleeving that is resistant to cuts and abrasion, and contains a combustion inhibitor allowing it to achieve a UL and CSA flame-resistance rating of VW-1.

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
Bulk Sized Reels												
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
Bulk Sized Reels												
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	Expansion Range		Color	Reel Length		Weight	
	in.	mm.		(Min.) in.	(Max.) 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.

Installation Tool on page 23.



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

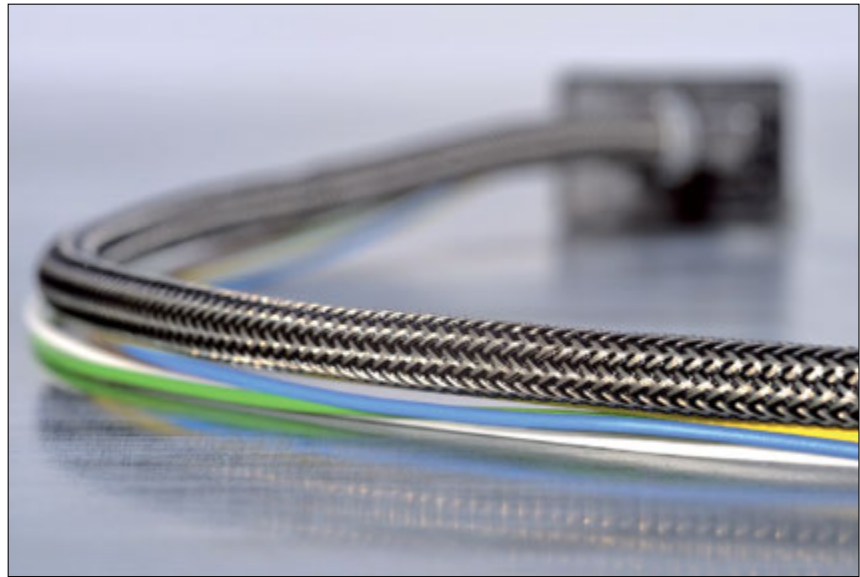
Helagaine (HEGEMIP) is a sleeving created from tin-plated copper and polyester threads that offers not only secure cable bundling but electromagnetic protection as well. The formulated mix of materials offers inside and outside abrasion resistance.

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
Bulk Sized Reels												
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.

Need gray nylon color sleeving? Please ask about our Helagain PA66 series.

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
170-21200	5/16	12	HEGPA6612	.32	.55	8.1	14.0	Gray	328	100.0	2.4	1.1
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

Installation Tool on page 23.



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
Bulk Box										
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
Large Bulk Sized Reels										
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.

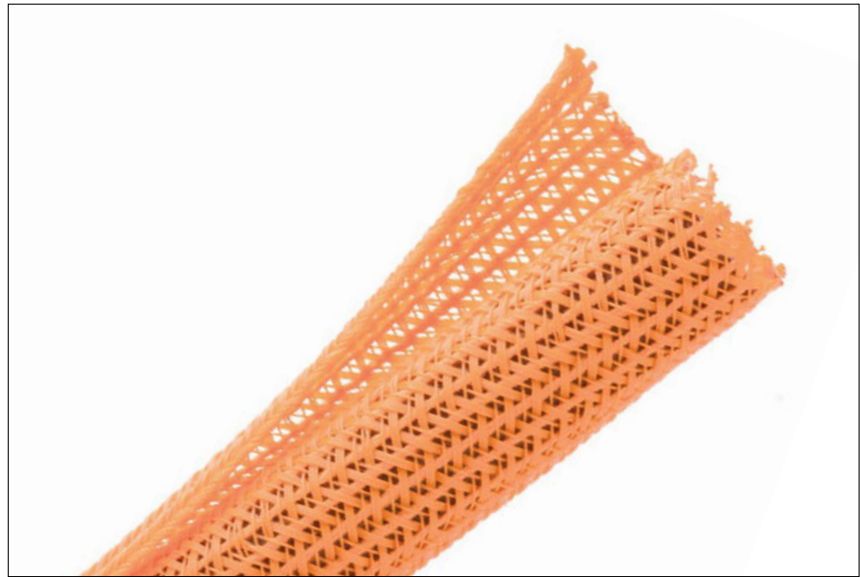
Application

A non-expandable product that is the 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.

Installation Tool on page 23.



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.

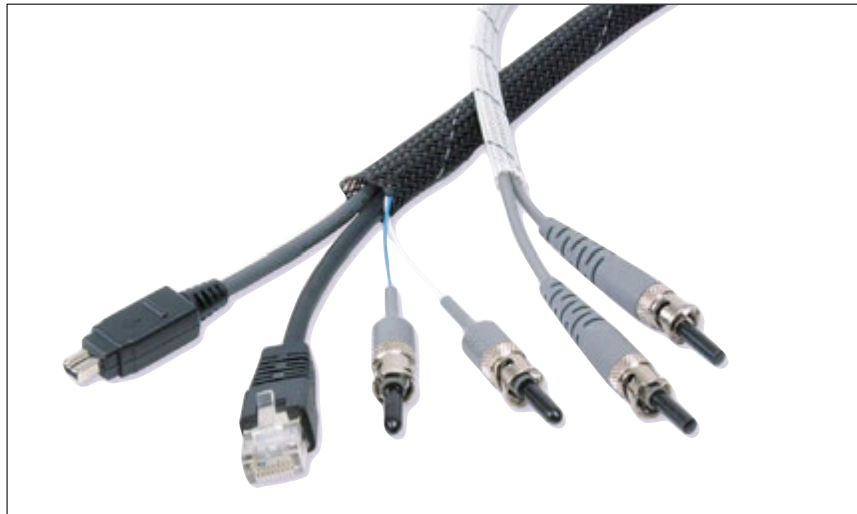


Plenum Rated Halar® Expandable Braided Sleeving

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 Solvay 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
Bulk Sized Reels												
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



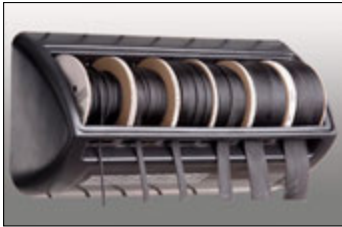
Product Selection

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.
170-03062	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
Bulk Sized Reels												
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 loom tube. Eases addition and removal of wires quickly and easily while protecting installer hands from cuts.



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

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.

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