

## • Capacity on mould design, processing, assembly, checking, and maintainance

- Moulds, in longhua, there is the experienced mould team dated back to the year of the company started, with their experience on the cable ties and related wiring products, we are on keeping a stable quality of the mould, serving to the production.
- in 2012, longhua got a new team of mould, and who are experienced with the latest mould technic "hot runner". With the combination of the old and new team, longhua has got more strength of the mould design, processing, assembling, and control, by absorbing the experienced of the old team, and using the newest technic from the new team.
- in 2013, we finished our in-house mould processing workshop, and we have built the new team of the mould processing from CNC engraving and milling, Grinding, Wire Cut, WEDM-LS, electro-Spark. All of our mould processing is in-house work now.
- The dimensions will be controlled more precise according to our drawing, and the mould will be more stable after our own mould processing.
- At the same time, we use the "3D" machine to inspect the mould design after the first shot, in order to approve the finally come mould are complying with the design.



CNC Engraving & milling



Electro-Spark



Wire Cut



WEDM-LS



Grinding

- Remarks: welcome your new products, and we could develop the mould for you. Also we could sell mould per your request.

## • Material guaranteed for production of Cable ties

- In order to provide the best quality for our customer, from 2005, we promise to use the top brand nylon 66 material for our customers. They are from the brand of Dupont, Ascend in USA. We promise to use 100% of those brand material if there is no special note from customer.
- We have set up the "Central material supplying" system for our material drying and transferring to each injection machines. With this system, the material moisture percent for injection, and the material consistent quality will be guaranteed.



## • Ability of technic on plastic injection and packaging processing

- Injection, in this team, most of the people are together with the company in a long time, the people are familiar with the machines, and could keep the machines in the best status of the production with the right parameter, and know well of how to maintain the machines.
- The machines, we limited to use the brand of Haitian, and FCS.
- Till today, all of our machines has been applied with the auto-robot for the production, this way will give the people a safety working environment and the quality of the products during the production will be more stable.
- Packing, we developed the auto packaging machines by ourselves, which including the function of air-out, water in, and sealing. Our way of the packaging, it could bring the cable ties bear the right moisture, and seal the products in good condition.





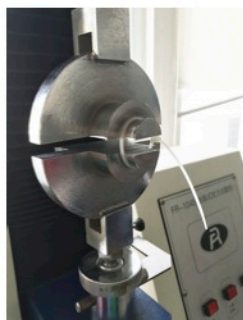


## • Quality Controlling and Assurance

- Quality Control, our company is an ISO9001:2008 approved company. We follow the quality control system, and together with the factory actual processing. From the incoming, till the goods shipped, and also after service, we are in response to customers by every second.
- We have set up the professional testing lab including the testing machines for tensile, insertion force, moisture, high-low temperature, and UV resistance. Also we are following the testing standard of UL62275, EN62275 for our cable ties and stainless steel ties.
- Simple example of our internal quality control of the Raw material and Tensile, the way like below,
  - Raw material, we will ask our supplier to have the material certificate for us of each lot. we will test the quantity, appearance, moisture as well.
  - The tensile of the products, we take some full cavity of the production from every machines each day and packed. We test in dry, moistured. Also there will be some samples kept from the mass production, and we test till the ties absorbed the moisture.
- During our quality control, if there is any problem, we will stop the processing, or will inform the customers about the defective parts if it has been delivered, and stop to use.
- The quality of our products, it is in 1 year warranty, and our Response for the defective products, we will return and make up or replace with the new one!



Insertion Force Testing



Tensile Strength Testing



Punching Testing



Moisture Testing



Frozen Testing

**UL  
APPROVED  
LAB**

- UL approved lab for Cable Ties testing (the only lab in China)



Keeping Force Test



High-Low Temp Test



Ultra Light Test



Aging Test



Extreme Cold Test



Smoke Amount Test



Flammability Test



Shock Test



Rust Test

## • Main Equipment Listing

### • Mould Processing

Name	Quantity
CNC engraving and milling	1 set
Grinding	4 sets
Wire Cut	10 sets
WEDM-LS	2 sets
Electro-Spark	5 sets

### • Packing

Name	Quantity
Automatic water adding and sealing machine	>30 sets

### • Plastic Injection

Name	Quantity
Plastic injection machine 150 Tons	1 set
Plastic injection machine 160 Tons	2 sets
Plastic injection machine 250 Tons	30 sets
Plastic injection machine 300 Tons	3 sets
Plastic injection machine 320 Tons	27 sets
Plastic injection machine 330 Tons	9 sets
Plastic injection machine 380 Tons	1 set
Plastic injection machine 400 Tons	2 sets
Plastic injection machine 480 Tons	3 sets
Plastic injection machine 500 Tons	2 sets
Plastic injection machine 600 Tons	5 sets
Plastic injection machine 800 Tons	2 sets
Plastic injection machine 1250 Tons	1 set





- Before you source cable ties or related nylon products, please make a choice according to different application purpose

Application Area	Material	Function	Flam Class	Min Install Temp.	Operation Temp.
General Purpose	Nylon 66(PA66)	General	UL-94,V2	-10°C(14°F)	-40°C~-+85°C(-40°F~+185°F)
Heat Stabilized	Nylon 66(PA66)	Heat Stabilized	UL-94,V2	-10°C(14°F)	-40°C~-+115°C(-40°F~+239°F)
Extremely High Temp	Nylon 46(PA46)	High Temp Resistant	UL-94,V2	-10°C(14°F)	-40°C~-+135°C(-40°F~+275°F)
Strong UV Light	Nylon 66(PA66)	Strong Weather Resistant	UL-94,V2	-10°C(14°F)	-40°C~-+85°C(-40°F~+185°F)
Cold Area	Nylon 66(PA66)	Low Temp Resistant	UL-94,HB	-20°C(0°F)	-40°C~-+85°C(-40°F~+185°F)
Extremely Cold Area	Nylon 66(PA66)	Extreme Low Temp Resistant	UL-94,HB	-40°C(-40°F)	-40°C~-+85°C(-40°F~+185°F)
Better Flam. Ability	Nylon 66(PA66)	Better Flam Class	UL-94,V0	-10°C(14°F)	-40°C~-+85°C(-40°F~+185°F)



### How to choose a right cable ties?

The most important characteristics of a cable tie are:

- The raw-material they are made of (chemicals, weather, and heat resistance, low temperature resistance, the flammability rating)
- The tensile strength they can stand
- The max diameter they can bundle
- The shape of the tie in case of particular applications
- Smoke and heat generation (Suitable for use in air-handling spaces (plenums))

### Chemical Resistant

- please ask for information about the chemical resistance, if you need to apply the cable ties into a special area

### UV Resistant

- All polymers including the polyamides used for the production of cable ties are sensitive to UV radiation. The most common additive used for protecting polyamides from UV radiation is carbon powder commonly known as "carbon black".
- Natural Cable Ties have low resistance to UV radiation, but natural color usually can reflect the sunlight, so it could be used for general purpose outdoor. But not suggested for outdoor application.
- Black Cable Ties are additivated with carbon black. They have improved weather and UV radiation resistance and are better suitable for outdoor applications, but this is not enough to protect the material from the damage due to the UV-radiation for a long time.
- For these needs the weather resistance cable ties could be used, and if for a long term of outdoor use, we strongly suggest you to choose Strong UV resistance (weather resistance) material and our strong UV resistance material, it has been tested by UL as an available long term outdoor application.(supposed to be >7 years)

Polymers are also sensitive to temperatures.

### Temperature resistance

- Normally, the polyamide material without any additive, it only can be installed under the temperature of -10°C (14°F), and the material will become very brittle with the temperature of lower than -10°C (14°F). So for the normal grade polyamide material, we do not suggest you to still install the cable ties if the temperature is lower than -10°C (14°F).
- Many people are doubting that "what's the operation temp" means? usually it means the temperature the cable ties still could be worked after installation.
- So if you need to install a cable tie under extremely low temperature, please ask for the correct material.
- The polyamide material is really sensitive to the moisture. If without moisture, the material will become brittle. So please do not open the bag for a long time before you use, and also after using, please close the bag immediately.
- In the dry and cold winter, please do not keep the cable ties in a cold and dry weather. We do not suggest you to move out the Cable Ties from the conditioned warehouse if you are not ready to use it.
- The best condition for storage of Cable Ties is 23°C (73.4°F), at the humidity of 50%.

### Flamability

- The UL 94 test, the Standard for Safety of Flammability of Plastic Materials for Parts in Devices and Appliances testing. The classifications relate to materials commonly used in manufacturing enclosures, structural parts and insulators found in consumer electronic products (V-0, V-1, V-2, HB, from the highest level to the lowest)

### New standard from UL 62275

- Loop tensile strength  
Type 1 or 11 based,  
No individual value shall be less than 50 % of the loop tensile strength declared after after heat aging, after temperature cycling.  
Type 2 or 21 based,  
No individual value shall be less than 100 % of the loop tensile strength declared after after heat aging, after temperature cycling.

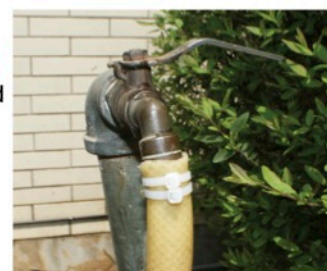
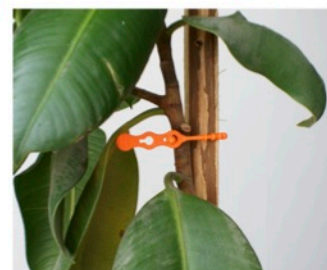
- Minimum installation temperature and operation temperature test

According to the new standard of UL62275, the minimum installation temperature, and operation temperature test should be made. Different factory they will declare different minimum installation temperature, and operation temperature as well. so new UL will show such information and to show the quality of the products, and the characters of the products.

- Smoke and heat generation

AH-1: Suitable for use in air-handling spaces – 1 (plenums) (for Metallic component, like stainless steel cable ties)

AH-2: Suitable for use in air-handling spaces – 2 (plenums) (for Non-metallic component and Composite component, like nylon cable ties, cable ties fixing, coated stainless steel cable ties)







## ● Standard Cable Ties

- Material:  
Natural: Polyamide 6.6 natural  
UV Black: Polyamide 6.6 + carbon black  
Colors: Polyamide 6.6 natural + Colorant
- Flammability of raw material : UL 94 - V2
- Humidity absorption: 2,7% - 2,8% (23°C -50%RH)
- Working (Operation) Temperature: -40°C - + 85°C (-40°F - + 185°F)
- Min Installation Temperature: -10°C (14°F)
- Max sustainable temperature for short time: +110°C (230°F)
- Good resistance to bases, oils, greases, oil derivatives, chloride solvents. Limited resistance to acids. Not resistant to phenols.
- UL (Underwriters Laboratories) : File E258930 based newest standard UL62275
- TUV Approval: EN62275:2015
- REACH, ROHS, PAHS Compliance.



**RoHS PAHs Reach**

Item No.	Size (mm)	Size (in)	Tensile Strength	Min Bundle Diameter (mm)	Max Bundle Diameter (mm)	Min Bundle Diameter (in)	Max Bundle Diameter (in)	UV Resistant	UL Type	Series
LH-M-080-3	2.5x80	3.2	80N(18lb)	3.00	14.00	0.12	0.55	Black Only	21	M Series
LH-M-100-4	2.5x100	4.0	80N(18lb)	3.00	20.50	0.12	0.81	Black Only	21	
LH-M-120-5	2.5x120	4.7	80N(18lb)	3.00	27.00	0.12	1.06	Black Only	21	
LH-M-130-5	2.5x130	5.0	80N(18lb)	3.00	30.00	0.12	1.18	Black Only	21	
LH-M-150-6	2.5x150	6.0	80N(18lb)	3.00	36.50	0.12	1.44	Black Only	21	
LH-M-160-6	2.5x160	6.3	80N(18lb)	3.00	39.80	0.12	1.57	Black Only	21	
LH-M-200-8	2.5x200	8.0	80N(18lb)	3.00	52.50	0.12	2.07	Black Only	21	
LH-M-260-10	2.5x260	10.2	80N(18lb)	3.00	73.00	0.12	2.87	Black Only	21	
LH-M-380-15	2.5x380	15.0	80N(18lb)	3.00	110.00	0.12	4.33	Black Only	21	
LH-I-140-5	3.6x140	5.5	180N(40lb)	3.50	33.00	0.14	1.30	Black Only	21	I Series
LH-I-150-6	3.6x150	6.0	180N(40lb)	3.50	36.00	0.14	1.42	Black Only	21	
LH-I-180-7	3.6x180	7.0	180N(40lb)	3.50	46.00	0.14	1.81	Black Only	21	
LH-I-200-8	3.6x200	8.0	180N(40lb)	3.50	52.50	0.14	2.07	Black Only	21	
LH-I-250-10	3.6x250	10.0	180N(40lb)	3.50	68.00	0.14	2.68	Black Only	21	
LH-I-280-11	3.6x280	11.0	180N(40lb)	3.50	78.00	0.14	3.07	Black Only	21	
LH-I-300-12	3.6x300	11.8	180N(40lb)	3.50	84.00	0.14	3.31	Black Only	21	
LH-I-370-15	3.6x370	14.5	180N(40lb)	3.50	106.00	0.14	4.17	Black Only	21	
LH-S-120-5	4.6x120	4.7	230N(50lb)	3.50	23.80	0.14	0.94	Black Only	21	S Series
LH-S-160-6	4.6x160	6.3	230N(50lb)	3.50	36.60	0.14	1.44	Black Only	21	
LH-S-180-7	4.6x180	7.0	230N(50lb)	3.50	43.00	0.14	1.69	Black Only	21	
LH-S-190-8	4.6x190	7.5	230N(50lb)	3.50	46.00	0.14	1.81	Black Only	21	
LH-S-200-8	4.8x200	8.0	230N(50lb)	3.50	49.50	0.14	1.95	Black Only	21	
LH-S-250-10	4.8x250	10.0	230N(50lb)	3.50	65.00	0.14	2.56	Black Only	21	
LH-S-280-11	4.8x280	11.0	230N(50lb)	3.50	74.80	0.14	2.94	Black Only	21	
LH-S-300-12	4.8x300	11.8	230N(50lb)	3.50	81.00	0.14	3.19	Black Only	21	
LH-S-350-14	4.8x350	13.7	230N(50lb)	3.50	97.00	0.14	3.82	Black Only	21	
LH-S-360-14	4.8x360	14.0	230N(50lb)	3.50	100.00	0.14	3.94	Black Only	21	
LH-S-370-15	4.8x370	14.5	230N(50lb)	3.50	103.50	0.14	4.07	Black Only	21	
LH-S-380-15	4.8x380	15.0	230N(50lb)	3.50	106.70	0.14	4.20	Black Only	21	
LH-S-390-16	4.8x390	15.3	230N(50lb)	3.50	110.00	0.14	4.33	Black Only	21	
LH-S-400-16	4.8x400	15.7	230N(50lb)	3.50	113.00	0.14	4.44	Black Only	21	
LH-S-430-17	4.8x430	17.0	230N(50lb)	3.50	122.50	0.14	4.82	Black Only	21	
LH-S-450-18	4.8x450	17.7	230N(50lb)	3.50	129.00	0.14	5.08	Black Only	21	
LH-S-500-20	4.8x500	19.7	230N(50lb)	3.50	145.00	0.14	5.71	Black Only	21	
LH-S-550-21	4.8x550	21.6	230N(50lb)	3.50	160.00	0.14	6.30	Black Only	21	
LH-S-610-24	4.8x610	24.0	230N(50lb)	3.50	179.90	0.14	7.08	Black Only	21	
LH-S-740-29	4.8x740	29.0	230N(50lb)	3.50	220.00	0.14	8.66	Black Only	21	
LH-S-920-36	4.8x920	36.0	230N(50lb)	3.50	278.00	0.14	10.94	Black Only	21	





## ● Heavy-Duty Cable Ties

- Material:
  - Natural: Polyamide 6.6 natural
  - UV Black: Polyamide 6.6 + carbon black
  - Colors: Polyamide 6.6 natural + Colorant
- Flammability of raw material : UL 94 - V2
- Humidity absorption: 2,7% - 2,8% (23°C -50%RH)
- Working (Operation) Temperature: -40°C - + 85°C (-40°F - + 185°F)
- Min Installation Temperature: -10°C (14°F)
- Max sustainable temperature for short time: +110°C (230°F)
- Good resistance to bases, oils, greases, oil derivatives, chloride solvents. Limited resistance to acids. Not resistant to phenols.
- UL (Underwriters Laboratories) : File E258930 based newest standard UL62275
- TUV Approval: EN62275:2015
- REACH, ROHS, PAHS Compliance.



**RoHS PAHS Reach**

Item No.	Size (mm)	Size (in)	Tensile Strength	Min Bundle Diameter (mm)	Max Bundle Diameter (mm)	Min Bundle Diameter (in)	Max Bundle Diameter (in)	UV Resistant	UL Type	Series
LH-HD-150-6	7.6x150	6.0	540N(120lb)	8.50	35.00	0.33	1.38	Black Only	21	HD Series
LH-HD-200-8	7.6x200	8.0	540N(120lb)	8.50	50.90	0.33	2.00	Black Only	21	
LH-HD-220-8	7.6x220	8.6	540N(120lb)	8.50	56.00	0.33	2.20	Black Only	21	
LH-HD-250-10	7.6x250	10.0	540N(120lb)	8.50	66.80	0.33	2.63	Black Only	21	
LH-HD-300-12	7.6x300	11.8	540N(120lb)	8.50	82.80	0.33	3.26	Black Only	21	
LH-HD-350-14	7.6x350	13.7	540N(120lb)	8.50	98.50	0.33	3.88	Black Only	21	
LH-HD-365-14	7.6x365	14.0	540N(120lb)	8.50	103.50	0.33	4.07	Black Only	21	
LH-HD-380-15	7.6x380	15.0	540N(120lb)	8.50	108.00	0.33	4.25	Black Only	21	
LH-HD-400-16	7.6x400	15.7	540N(120lb)	8.50	114.50	0.33	4.51	Black Only	21	
LH-HD-450-18	7.6x450	18.0	540N(120lb)	8.50	130.50	0.33	5.14	Black Only	21	
LH-HD-540-21	7.6x540	21.0	540N(120lb)	8.50	159.00	0.33	6.26	Black Only	21	
LH-HD-550-22	7.6x550	21.6	540N(120lb)	8.50	162.50	0.33	6.40	Black Only	21	
LH-HD-610-24	7.6x610	24.0	540N(120lb)	8.50	181.50	0.33	7.15	Black Only	21	
LH-HD-750-30	7.6x750	29.5	540N(120lb)	8.50	226.00	0.33	8.90	Black Only	21	
LH-EHD-300-12	8.8x300	11.8	800N(175lb)	8.50	83.00	0.33	3.27	Black Only	21	EHD Series
LH-EHD-400-16	8.8x400	15.7	800N(175lb)	8.50	115.00	0.33	4.53	Black Only	21	
LH-EHD-450-18	8.8x450	18.0	800N(175lb)	8.50	130.50	0.33	5.14	Black Only	21	
LH-EHD-500-20	8.8x500	19.7	800N(175lb)	8.50	146.50	0.33	5.77	Black Only	21	
LH-EHD-550-21	8.8x550	21.6	800N(175lb)	8.50	163.50	0.33	6.44	Black Only	21	
LH-EHD-610-24	8.8x610	24.0	800N(175lb)	8.50	181.50	0.33	7.15	Black Only	21	
LH-EHD-710-28	8.8x710	28.0	800N(175lb)	8.50	195.00	0.33	7.68	Black Only	21	
LH-EHD-750-29	8.8x750	29.5	800N(175lb)	8.50	205.00	0.33	8.07	Black Only	21	
LH-EHD-760-30	8.8x760	30.0	800N(175lb)	8.50	229.50	0.33	9.04	Black Only	21	
LH-EHD-780-31	8.8x780	30.5	800N(175lb)	8.50	235.50	0.33	9.27	Black Only	21	
LH-EHD-810-32	8.8x810	32.0	800N(175lb)	8.50	245.00	0.33	9.65	Black Only	21	
LH-EHD-920-36	8.8x920	36.0	800N(175lb)	8.50	280.00	0.33	11.02	Black Only	21	
LH-EHD-1020-40	8.8x1020	40.1	800N(175lb)	8.50	295.00	0.33	11.61	Black Only	21	
LH-EHD-1168-46	8.8x1168	46.0	800N(175lb)	8.50	340.00	0.33	13.39	Black Only	21	
LH-EHD-1220-48	8.8x1220	48.0	800N(175lb)	78.00	375.50	3.07	14.78	Black Only	21	
LH-EHD-1530-60	8.8x1530	60.0	800N(175lb)	160.00	450.00	6.30	17.72	Black Only	21	
LH-HSD-230-9	12.4x230	9.1	1200N(250lb)	9.00	57.00	0.35	2.24	Black Only	21	HSD Series
LH-HSD-290-11	12.4x290	11.4	1200N(250lb)	9.00	76.00	0.35	2.99	Black Only	21	
LH-HSD-380-15	12.4x380	15.0	1200N(250lb)	9.00	103.50	0.35	4.07	Black Only	21	
LH-HSD-480-19	12.4x480	18.9	1200N(250lb)	9.00	136.00	0.35	5.35	Black Only	21	
LH-HSD-530-21	12.4x530	20.9	1200N(250lb)	10.00	156.00	0.39	6.14	Black Only	21	
LH-HSD-580-22	12.4x580	22.8	1200N(250lb)	9.00	168.00	0.35	6.61	Black Only	21	
LH-HSD-650-26	12.4x650	25.6	1200N(250lb)	14.00	195.00	0.55	7.68	Black Only	21	
LH-HSD-730-28	12.4x730	28.7	1200N(250lb)	9.00	216.00	0.35	8.50	Black Only	21	
LH-HSD-880-34	12.4x880	34.6	1200N(250lb)	9.00	263.00	0.35	10.35	Black Only	21	
LH-HSD-1000-34	12.4x1000	39.4	1200N(250lb)	18.00	315.00	0.71	12.40	Black Only	21	





## ● Magic Cable Ties

- Self-locking head and body design
  - Provides a fast and easy way of application
  - Material: Hook: Nylon, Loop: Polyester, Base: Synthetic Resin
  - Color available: Black, Green, Yellow, Red, Blue, White
  - Melt temperature: Hook: 230°C, Loop: 180°C
  - Working (Operation) Temperature -40°C - + 85°C (-40°F - + 185°F)
  - Min Installation Temperature: -20°C (0°F)
- Remarks: the tensile strength will be increased under the cold temperature, but the durability will be reduced.
- Water resistant: it could be used under the water, the tensile will be reduced 50%, but after dry it, the tensile will be recovered.
  - Chemical Resistant: Alkaline Soda (50%), Ammonia (28%), Hydrochloric Acid (2.5%), Nitric Acid (3.5%), can be still worked.
  - Tensile Strength: 1x1cm connection: 25N (5.6lb), Peeling force: 1x1cm connection: 3N (0.67lb)



### ● Hook-Loop Type

Item No.	Size (mm)	Size (in)	Max Bundle Diameter (mm)	Max Bundle Diameter (in)	UV Resistant
LH-VT-(1/2)-130-5	12,5x130	5.1	35.00	1.38	Black Only
LH-VT-(1/2)-180-7	12,5x180	7.0	51.00	2.00	Black Only
LH-VT-(1/2)-200-8	12,5x200	8.0	59.00	2.32	Black Only
LH-VT-(1/2)-300-12	12,5x300	11.8	89.00	3.50	Black Only
LH-VT-(2/3)-300-12	17,0x310	12.0	92.00	3.60	Black Only



### ● In Roll Type

- Can be cut to use with the length as requested
- Available with the ties of perforated in a fixed length (should be upon request)
- Except for following sizes, whole range size available upon request from width 9.5-150mm

Item No.	Size	Size
LH-VT-(3/8)-25yd	9.5mmx22.8m	3/8"x25yd
LH-VT-(1/2)-25yd	12.5mmx22.8m	1/2"x25yd
LH-VT-(3/4)-25yd	19.0mmx22.8m	3/4"x25yd
LH-VT-(3/8)-25m	10.0mmx25.0m	2/5"x27.3yd
LH-VT-(5/8)-25m	16.0mmx25.0m	2/3"x27.3yd
LH-VT-(13/16)-25m	20.0mmx25.0m	4/5"x27.3yd
LH-VT-(1)-25m	25.0mmx25.0m	1"x27.3yd



### ● Roll Type of Male & Female

- Can be cut to use with the length as requested
- Except for following sizes, whole range size available upon request from width 9.5-150mm

Item No.	Size (mm)	Size (in)
LH-VTM-(1)-25m	25.0mmx25.0m	1"x27.3yd
LH-VTF-(1)-25m	25.0mmx25.0m	1"x27.3yd



## ● Below Characters is applied for the cable ties made from Nylon 66, except for extra mentioned

- Material:
  - Natural: Polyamide 6.6 natural
  - UV Black: Polyamide 6.6 + carbon black
  - Colors: Polyamide 6.6 natural + Colorant
- Flammability of raw material : UL 94 - V2
- Humidity absorption: 2,7% - 2,8% (23°C -50%RH)
- Working (Operation) Temperature: -40°C - + 85°C (-40°F - + 185°F)
- Min Installation Temperature: -10°C (14°F)
- Max sustainable temperature for short time: +110°C (230°F)
- Good resistance to bases, oils, greases, oil derivatives, chloride solvents. Limited resistance to acids. Not resistant to phenols.
- REACH, ROHS, PAHS Compliance.

## ● L(ST) High Performance Cable Ties

Item No.	Size (mm)	Size (in)	Tensile Strength	Min Bundle Diameter (mm)	Max Bundle Diameter (mm)	Min Bundle Diameter (in)	Max Bundle Diameter (in)
LH-M-100-4-LST	2.5x100	4.0	180N (40lb)	3.00	20.50	0.12	0.80
LH-M-160-6-LST	2.5x160	6.3	180N (40lb)	3.00	39.80	0.12	1.56
LH-M-200-8-LST	2.5x200	8.0	180N (40lb)	3.00	52.50	0.12	2.06
LH-I-140-5-LST	3.6x140	5.5	250N (55lb)	3.50	33.00	0.14	1.30
LH-I-200-8-LST	3.6x200	8.0	250N (55lb)	3.50	52.50	0.14	2.06
LH-I-300-12-LST	3.6x300	11.8	250N (55lb)	3.50	84.00	0.14	3.30
LH-I-370-15-LST	3.6x370	14.5	250N (55lb)	3.50	106.00	0.14	4.17
LH-S-200-8-LST	4.8x200	8.0	360N (80lb)	3.50	49.50	0.14	1.94
LH-S-250-10-LST	4.8x250	10.0	360N (80lb)	3.50	65.00	0.14	2.55
LH-S-300-12-LST	4.8x300	11.8	360N (80lb)	3.50	81.00	0.14	3.18
LH-S-370-15-LST	4.8x370	14.5	360N (80lb)	3.50	103.50	0.14	4.07
LH-HD-220-8-LST	7.6x220	8.6	780N (175lb)	8.50	57.20	0.33	2.25
LH-HD-300-12-LST	7.6x300	11.8	780N (175lb)	8.50	82.80	0.33	3.25
LH-HD-370-14-LST	7.6x370	14.5	780N (175lb)	8.50	103.50	0.33	4.07
LH-HD-460-18-LST	7.6x460	18.0	780N (175lb)	8.50	130.50	0.33	5.13
LH-HD-620-24-LST	7.6x620	24.4	780N (175lb)	8.50	181.50	0.33	7.14



**Steel Pawl Locking**  
Optimal resistance to corrosion  
extremely high mechanical strength

## ● UL 94V-0 Grade Cable Ties

- Flammability of raw material: UL 94-V0

Item No.	Size (mm)	Size (in)	Tensile Strength	Min Bundle Diameter (mm)	Max Bundle Diameter (mm)	Min Bundle Diameter (in)	Max Bundle Diameter (in)
LH-M-100-4-V0	2.5x100	4.0	80N (18lb)	3.00	20.50	0.12	0.80
LH-I-150-6-V0	3.6x150	6.0	180N (40lb)	3.50	36.00	0.14	1.41
LH-I-200-8-V0	3.6x200	8.0	180N (40lb)	3.50	52.50	0.14	2.06
LH-S-200-8-V0	4.8x200	8.0	230N (50lb)	3.50	49.50	0.14	1.94
LH-S-300-12-V0	4.8x300	11.8	230N (50lb)	3.50	81.00	0.14	3.18
LH-S-380-15-V0	4.8x380	15.0	230N (50lb)	3.50	106.70	0.14	4.20
LH-HD-380-15-V0	7.6x380	15.0	540N (120lb)	8.50	108.00	0.33	4.25



**Better Flame Retardance**  
 **UL 94V-0**

## ● Metal Detectable Cable Ties

- made of detectable nylon (PA66) compounds (the "Products"). These products are intended for use in the proximity of food processing, handling, and packaging operations. In addition, these products are used for cable management on food processing and packaging equipment, and inside electrical control panels found in food processing and packaging operations

Item No.	Size (mm)	Size (in)	Tensile Strength	Min Bundle Diameter (mm)	Max Bundle Diameter (mm)	Min Bundle Diameter (in)	Max Bundle Diameter (in)
LH-M-100-4-MD	2.5x100	4.0	80N (18lb)	3.00	20.50	0.12	0.80
LH-I-150-6-MD	3.6x150	6.0	180N (40lb)	3.50	36.00	0.14	1.41
LH-I-200-8-MD	3.6x200	8.0	180N (40lb)	3.50	52.50	0.14	2.06
LH-S-200-8-MD	4.8x200	8.0	230N (50lb)	3.50	49.50	0.14	1.94
LH-S-300-12-MD	4.8x300	11.8	230N (50lb)	3.50	81.00	0.14	3.18
LH-S-380-15-MD	4.8x380	15.0	230N (50lb)	3.50	106.70	0.14	4.20
LH-HD-380-15-MD	7.6x380	15.0	540N (120lb)	8.50	108.00	0.33	4.25



**Metal Detectable**  
 **Food Safe and Dependable**





## ● Extreme Cold Resistant Cable Ties

- Minimum Installation Temp: -20°C (0°F)

Item No.	Size (mm)	Size (in)	Tensile Strength	Min Bundle Diameter (mm)	Max Bundle Diameter (mm)	Min Bundle Diameter (in)	Max Bundle Diameter (in)
LH-M-100-4-ECR	2.5x100	4.0	80N (18lb)	3.00	20.50	0.12	0.80
LH-I-150-6-ECR	3.6x150	6.0	180N (40lb)	3.50	36.00	0.14	1.41
LH-I-200-8-ECR	3.6x200	8.0	180N (40lb)	3.50	52.50	0.14	2.06
LH-S-200-8-ECR	4.8x200	8.0	230N (50lb)	3.50	49.50	0.14	1.94
LH-S-300-12-ECR	4.8x300	11.8	230N (50lb)	3.50	81.00	0.14	3.18
LH-S-380-15-ECR	4.8x380	15.0	230N (50lb)	3.50	106.70	0.14	4.20
LH-HD-380-15-ECR	7.6x380	15.0	540N (120lb)	8.50	108.00	0.33	4.25

- Minimum Installation Temp: -40°C (-40°F)

Item No.	Size (mm)	Size (in)	Tensile Strength	Min Bundle Diameter (mm)	Max Bundle Diameter (mm)	Min Bundle Diameter (in)	Max Bundle Diameter (in)
LH-M-100-4-LCR	2.5x100	4.0	80N (18lb)	3.00	20.50	0.12	0.80
LH-I-150-6-LCR	3.6x150	6.0	180N (40lb)	3.50	36.00	0.14	1.41
LH-I-200-8-LCR	3.6x200	8.0	180N (40lb)	3.50	52.50	0.14	2.06
LH-S-200-8-LCR	4.8x200	8.0	230N (50lb)	3.50	49.50	0.14	1.94
LH-S-300-12-LCR	4.8x300	11.8	230N (50lb)	3.50	81.00	0.14	3.18
LH-S-380-15-LCR	4.8x380	15.0	230N (50lb)	3.50	106.70	0.14	4.20
LH-HD-380-15-LCR	7.6x380	15.0	540N (120lb)	8.50	108.00	0.33	4.25



## Extreme Cold Resistant No Worry of Cold



Min Installation Temp:-20 °C(-0 °F)  
Min Installation Temp:-40 °C(-40 °F)

## ● High Temperature Resistant Cable Ties

- Material:

Natural: Polyamide 46 natural

UV Black: Polyamide 46 + carbon black

- Flammability of raw material : UL 94 - V2
- Humidity absorption: 2,7% - 2,8% (23°C -50%RH)
- Working (Operation) Temperature: -40°C - + 130°C (-40°F - + 266°F)
- Min Installation Temperature: -10°C (14°F)
- Good resistance to bases, oils, greases, oil derivatives, chloride solvents.
- Limited resistance to acids. Not resistant to phenols.
- REACH, ROHS, PAHS Compliance.

Item No.	Size (mm)	Size (in)	Tensile Strength	Min Bundle Diameter (mm)	Max Bundle Diameter (mm)	Min Bundle Diameter (in)	Max Bundle Diameter (in)
LH-M-100-4-HTR	2.5x100	4.0	80N (18lb)	3.00	20.50	0.12	0.80
LH-I-150-6-HTR	3.6x150	6.0	180N (40lb)	3.50	36.00	0.14	1.41
LH-I-200-8-HTR	3.6x200	8.0	180N (40lb)	3.50	52.50	0.14	2.06
LH-S-200-8-HTR	4.8x200	8.0	230N (50lb)	3.50	49.50	0.14	1.94
LH-S-300-12-HTR	4.8x300	11.8	230N (50lb)	3.50	81.00	0.14	3.18
LH-S-380-15-HTR	4.8x380	15.0	230N (50lb)	3.50	106.70	0.14	4.20
LH-HD-380-15-HTR	7.6x380	15.0	540N (120lb)	8.50	108.00	0.33	4.25



## Extreme High Temp Resistant

Resistant Temp: 130°C(266 °F)

## ● Screw Mounted Cable Ties

- Material: Polyamide 6.6

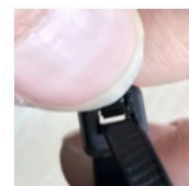
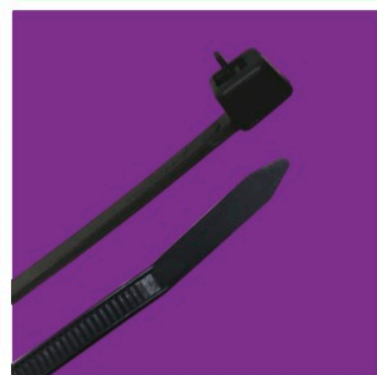
Item No.	Size (mm)	Size (in)	Tensile Strength	Min Bundle Diameter (mm)	Max Bundle Diameter (mm)	Min Bundle Diameter (in)	Max Bundle Diameter (in)	Fastener
LH-MT-M-110-4	2.5x110	4.3	80N (18lb)	3.00	19.00	0.12	0.75	M2.5 [4#]
LH-MT-I-150-6	3.6x150	6.0	180N (40lb)	3.50	35.50	0.14	1.40	M4 [8#]
LH-MT-S-160-6	4.8x160	6.3	230N (50lb)	3.50	36.80	0.14	1.45	M5 [10#]
LH-MT-S-200-8	4.8x200	8.0	230N (50lb)	3.50	49.80	0.14	1.96	M5 [10#]
LH-MT-S-300-12	4.8x300	12.0	230N (50lb)	3.50	82.80	0.14	3.26	M5 [10#]
LH-MT-S-370-15	4.8x370	14.5	230N (50lb)	3.50	103.80	0.14	4.09	M5 [10#]
LH-MT-HD-300-12	7.6x300	12.0	540N (120lb)	8.50	78.70	0.33	3.10	M6 [1/4#]
LH-MT-HD-400-16	7.6x400	15.7	540N (120lb)	8.50	109.20	0.33	4.30	M6 [1/4#]



## ● Releasable Cable Ties

- Material: Polyamide 6.6

Item No.	Size (mm)	Size (in)	Tensile Strength	Min Bundle Diameter (mm)	Max Bundle Diameter (mm)	Min Bundle Diameter (in)	Max Bundle Diameter (in)
LH-R-I-100-4	3.6x100	4.0	180N(40lb)	3.50	22.60	0.14	0.89
LH-R-S-160-6	4.8x160	6.3	230N(50lb)	3.50	41.90	0.14	1.65
LH-R-S-200-8	4.8x200	8.0	230N(50lb)	3.50	54.80	0.14	2.16
LH-R-S-305-12	4.8x305	12.0	230N(50lb)	3.50	88.10	0.14	3.47
LH-R-S-380-15	4.8x380	15.0	230N(50lb)	3.50	111.00	0.14	4.39







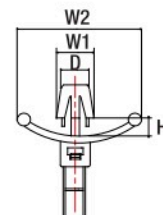
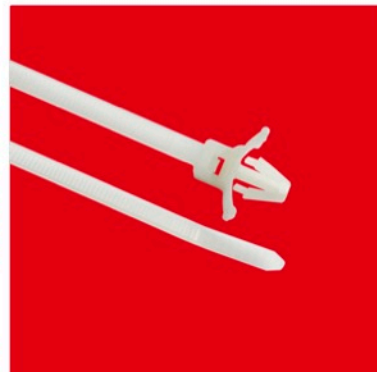
## ● Wing Push Mount Cable Ties

### ● Material: Polyamide 6.6

Item No.	Size (mm)	Size (in)	Tensile Strength	Min Bundle Diameter (mm)	Max Bundle Diameter (mm)	Min Bundle Diameter (in)	Max Bundle Diameter (in)
LH-WPT-M-100-4	2.5x100	4.0	80N(18lb)	3.00	21.00	0.12	0.83
LH-WPT-M-110-4	2.5x110	4.3	80N(18lb)	3.00	24.50	0.12	0.97
LH-WPT-I-155-6	3.6x155	6.1	180N(40lb)	3.50	36.90	0.14	1.45
LH-WPT-S-100-4	4.8x100	4.0	230N(50lb)	3.50	21.00	0.14	0.83
LH-WPT-S-130-5	4.8x130	6.1	230N(50lb)	3.50	30.20	0.14	1.19
LH-WPT-S-200-8	4.8x200	8.0	230N(50lb)	3.50	49.60	0.14	1.96

Item No.	W1 (mm)	W2 (mm)	D (mm)	H (Max Panel Thickness) (mm)	Min Hole Size (mm)	W1 (in)	W2 (in)	D (in)	H (Max Panel Thickness) (in)	Min Hole Size (in)
LH-WPT-M-100-4	5.5	18.2	5.2	3.2	4.6	0.216	0.716	0.203	0.126	0.181
LH-WPT-M-110-4	5.4	13.1	3.2	2.6	3.7	0.212	0.516	0.126	0.102	0.145
LH-WPT-I-155-6	5.4	11.5	3.1	2.4	3.5	0.212	0.453	0.122	0.094	0.138
LH-WPT-S-100-4	8.7	19.8	4.5	2.7	6.0	0.343	0.780	0.177	0.106	0.236
LH-WPT-S-130-5	8.7	19.8	4.5	2.7	6.0	0.343	0.780	0.177	0.106	0.236
LH-WPT-S-200-8	7.6	17.8	4.5	2.5	5.9	0.299	0.700	0.177	0.098	0.232

Remarks: LH-WPT-S-200-8 has the style of "releasable" available.

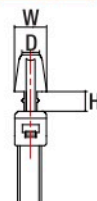


## ● Push Mount Cable Ties

### ● Material: Polyamide 6.6

Item No.	Size (mm)	Size (in)	Tensile Strength	Min Bundle Diameter (mm)	Max Bundle Diameter (mm)	Min Bundle Diameter (in)	Max Bundle Diameter (in)
LH-PT-150-6	3.6x155	6.0	180N(40lb)	3.50	37.90	0.14	1.49
LH-PT-200-8	4.8x200	8.0	230N(50lb)	3.50	50.80	0.14	2.00

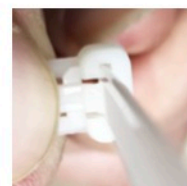
Item No.	W (mm)	D (mm)	H (Max Panel Thickness) (mm)	Min Hole Size (mm)	W (in)	D (in)	H (Max Panel Thickness) (in)	Min Hole Size (in)
LH-PT-150-6	5.8	3.5	2.5	4.5	0.228	0.138	0.098	0.177
LH-PT-200-8	7.0	4.3	3.9	4.9	0.275	0.169	0.153	0.193



## ● Reusable Cable Ties

### ● Material: Polyamide 6.6

Item No.	Size (mm)	Size (in)	Tensile Strength	Min Bundle Diameter (mm)	Max Bundle Diameter (mm)	Min Bundle Diameter (in)	Max Bundle Diameter (in)
LH-R-SH-150-6	7.6x150	6.0	230N(50lb)	10.00	40.30	0.39	1.59
LH-R-SH-200-8	7.6x200	8.0	230N(50lb)	10.00	55.60	0.39	2.19
LH-R-SH-250-10	7.6x250	10.0	230N(50lb)	10.00	66.70	0.39	2.63
LH-R-SH-300-12	7.6x300	11.8	230N(50lb)	10.00	82.00	0.39	3.23
LH-R-SH-370-14	7.6x370	14.5	230N(50lb)	10.00	104.30	0.39	4.11



## ● Double Loop Cable Ties

### ● Material: Polyamide 6.6

Item No.	Size (mm)	Size (in)	Tensile Strength	Min Bundle Diameter (mm)	Max Bundle Diameter (mm)	Min Bundle Diameter (in)	Max Bundle Diameter (in)
LH-D-S-200-8	4.8x200	8.0	230N(50lb)	3.50	57.10	0.14	2.15
LH-D-S-300-12	4.8x300	11.8	230N(50lb)	3.50	85.30	0.14	3.36







- **Marker Cable Ties**
  - Material:Polyamide 6.6

Item No.	Size (mm)	Size (in)	Tensile Strength	Min Bundle Diameter (mm)	Max Bundle Diameter (mm)	Min Bundle Diameter (in)	Max Bundle Diameter (in)
LH-M-M-100-4	2.5x100	4.0	80N(18lb)	3.00	22.00	0.12	0.86
LH-M-M-200-8	2.5x200	8.0	80N(18lb)	3.00	53.90	0.12	2.12
LH-M-S-190-8	4.8x190	7.0	230N(50lb)	3.50	50.90	0.14	2.00
LH-M-S-300-12	4.8x300	11.8	230N(50lb)	3.50	84.40	0.14	3.32
LH-M-S-370-14	4.8x370	14.5	230N(50lb)	3.50	106.70	0.14	4.20
LH-M-M-110-4	2.5x110	4.3	80N(18lb)	3.00	22.60	0.12	0.89

Item No.	Type	Write Area (mm)	Write Area (in)
LH-M-M-100-4	Horizontal	7.75x24.5	0.30x0.95
LH-M-M-200-8	Horizontal	7.75x24.5	0.30x0.95
LH-M-S-190-8	Vertical	12.9x27	0.50x1.05
LH-M-S-300-12	Vertical	12.9x27	0.50x1.05
LH-M-S-370-14	Vertical	12.9x27	0.50x1.05
LH-M-M-110-4	Flag	9.0x20	0.35x0.78

- **Extra Stronger Cable Ties**
  - Material:Polyamide 6.6

Item No.	Size (mm)	Size (in)	Tensile Strength	Min Bundle Diameter (mm)	Max Bundle Diameter (mm)	Min Bundle Diameter (in)	Max Bundle Diameter (in)
LH-75S-200-8	4.8x200	8.0	334N(75lb)	3.00	50.00	0.12	1.97
LH-75S-280-11	4.8x280	11.0	334N(75lb)	3.00	70.00	0.12	2.76
LH-75S-360-14	4.8x360	14.0	334N(75lb)	3.00	102.00	0.12	4.02

- **Extern Cable Ties**

- Material:Polyamide 12, Polyamide 6.6 or **Polyamide 6.6 in High Impact Grade**  
**High Impact Grade Polyamide 6.6, is an unreinforced, super tough for injection molding and extrusion, it offers outstanding impact resistance over a wide temperature and humidity range.**

Item No.	Size (mm)	Size (in)	Tensile Strength	Min Bundle Diameter (mm)	Max Bundle Diameter (mm)	Min Bundle Diameter (in)	Max Bundle Diameter (in)
LH-E-HD-180-7	9.0x180	7.0	400N(88lb)	20.00	40.00	0.79	1.57
LH-E-HD-265-10	9.0x265	10.4	540N(120lb)	20.00	62.00	0.79	2.44
LH-E-HD-300-12	9.0x300	11.8	540N(120lb)	20.00	80.00	0.79	3.14
LH-E-HD-360-14	9.0x360	14.0	540N(120lb)	20.00	93.00	0.79	3.66
LH-E-HD-510-20	9.0x510	20.0	540N(120lb)	20.00	140.00	0.79	5.51
LH-E-HD-760-30	9.0x760	30.0	540N(120lb)	20.00	220.00	0.79	8.66

- **POLYPROPYLENE Cable Ties**

- Material:Polypropylene  
Flammability of raw material : UL 94HB
- High impact strength
- Excellent resistance to low temperature brittleness
- Good stiffness
- Resin meets the FDA requirements in the Code of Federal Regulations in 21 CFR 177.1520 for food contact.
- Working (Operation) Temperature: -20°C - + 75°C (0°F - + 167°F)

Item No.	Size (mm)	Size (in)	Tensile Strength	Min Bundle Diameter (mm)	Max Bundle Diameter (mm)	Min Bundle Diameter (in)	Max Bundle Diameter (in)
LH-M-100-4-PP	2.5x100	4.0	50N (11lb)	3.00	20.50	0.12	0.80
LH-I-150-6-PP	3.6x150	6.0	80N (18lb)	3.50	36.00	0.14	1.41
LH-I-200-8-PP	3.6x200	8.0	80N (18lb)	3.50	52.50	0.14	2.06
LH-S-200-8-PP	4.8x200	8.0	135N (30lb)	3.50	49.50	0.14	1.94
LH-S-300-12-PP	4.8x300	11.8	135N (30lb)	3.50	81.00	0.14	3.18
LH-S-380-15-PP	4.8x380	15.0	135N (30lb)	3.50	106.70	0.14	4.20
LH-HD-380-15-PP	7.6x380	15.0	230N (50lb)	8.50	108.00	0.33	4.25







## ● UL 181B Listed HVAC Cable Ties

- Material: Polyamide 6.6
- UL Type: 21, UL 181B
- Black are in UV Resistant

Item No.	Size (mm)	Size (in)	Tensile Strength	Min Bundle Diameter (mm)	Max Bundle Diameter (mm)	Min Bundle Diameter (in)	Max Bundle Diameter (in)
LH-HVAC-610-24	9.0x610	24.0	780N(175lb)	8.50	181.50	0.33	7.15
LH-HVAC-920-36	9.0x920	36.0	780N(175lb)	8.50	280.00	0.33	11.02
LH-HVAC-1220-48	9.0x1220	48.0	780N(175lb)	78.00	375.50	3.07	14.78



**LISTED**  
**181B-C**  
**MH60770**

## ● Lashing Cable Ties

- Material: Polyamide 6.6

Item No.	Size (mm)	Size (in)	Tensile Strength	Min Bundle Diameter (mm)	Max Bundle Diameter (mm)	Min Bundle Diameter (in)	Max Bundle Diameter (in)
LH-L-HSD-590-23	12.4x590	23.2	1200N(250lb)	9.00	165.00	0.35	6.50

## ● Clamp Head Cable Ties

- Material: Polyamide 6.6

Item No.	Size (mm)	Size (in)	Tensile Strength	Min Bundle Diameter (mm)	Max Bundle Diameter (mm)	Min Bundle Diameter (in)	Max Bundle Diameter (in)
LH-CH-M-100-4	2.5x100	4.0	80N(18lb)	3.00	20.50	0.12	0.81
LH-CH-S-200-8	4.8x200	8.0	230N(50lb)	3.50	49.50	0.14	1.95

## ● Fir-tree Cable Ties

- Material: Polyamide 6.6 in heat stabilised

Item No.	Size (mm)	Size (in)	Tensile Strength	Min Bundle Diameter (mm)	Max Bundle Diameter (mm)	Min Bundle Diameter (in)	Max Bundle Diameter (in)
LH-FT-S-210-8	4.8x210	8.0	230N(50lb)	3.50	49.50	0.14	1.95
LH-FT-S-200-8	4.8x200	8.0	230N(50lb)	3.50	49.50	0.14	1.95

### • Remarks

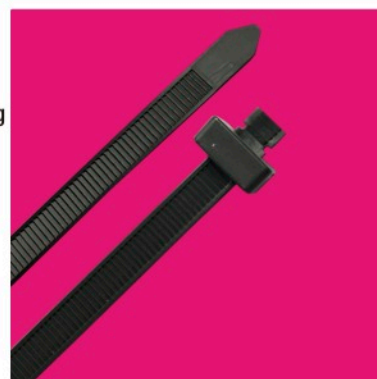
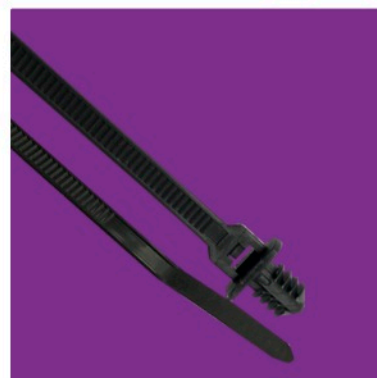
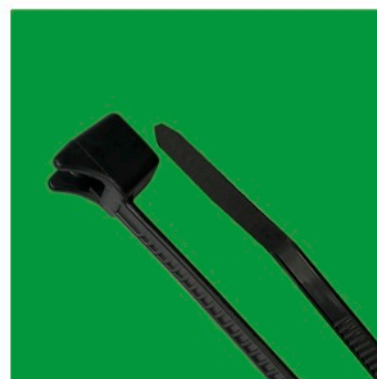
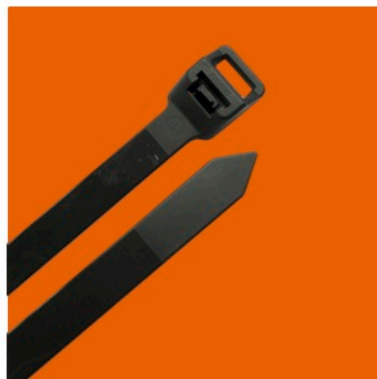
LH-FT-S-210-8 is in one piece, Min Hole size: 6.35mm (0.25in), Panel thickness is from 1.25~6.35mm (0.05~0.25in)

LH-FT-S-200-8 is in two piece, Min Hole size: 6.35mm (0.25in), Panel thickness is from 1.25~7.50mm (0.05~0.30in)

## ● Button Head Cable Ties

- Material: Polyamide 6.6
- Button style head sits on reverse of panel and allows tie to be secured forming a loop. Allows pipe or cable bundles to be fixed to a panel using a single hole.

Item No.	Button	Size (mm)	Size (in)	Tensile Strength	Min Bundle Diameter (mm)	Max Bundle Diameter (mm)	Min Bundle Diameter (in)	Max Bundle Diameter (in)
LH-BTR-S-200-8	Round	7.6x200	8.0	650N(145lb)	8.50	50.90	0.33	2.00
LH-BTR-S-300-12	Round	7.6x300	11.8	650N(145lb)	8.50	82.80	0.33	3.26
LH-BTR-S-370-14	Round	7.6x370	14.0	650N(145lb)	8.50	103.50	0.33	4.07
LH-BTS-S-370-14	Square	7.6x370	14.0	650N(145lb)	8.50	103.50	0.33	4.07







## ● Edge Clip Cable Ties

### • Features

- Pre-assembled 2-piece fixing tie with EdgeClip
- Cable tie head can be moved after bundling
- For edges of 1 – 3 mm

### • Application

These cable ties and EdgeClip assemblies are ideal for use where holes are not acceptable or where due to temperature problems adhesives will fail. These assemblies are widely used for fixing and bundling cables, pipes and hoses within the automotive industry, harness making, panel building and electrical industry.

### • Material: Polyamide 6.6 UV-stabilized (PA66UV)

Suggested material:

Cable Ties: Polyamide 6.6, heat stabilised (PA66HS)

Foot part: Polyamide 6.6, high impact modified, heat stabilised (PA66HIRHS)

### • Operation Temperature

Polyamide 6.6 UV-stabilized (PA66UV): -40°C to +85°C (-40°F to +185°F)

Heat stabilised (PA66HS): -40°C to +115°C (-40°F to +239°F)

Item No.	Size (mm)	Size (in)	Tensile Strength	Min Bundle Diameter (mm)	Max Bundle Diameter (mm)	Min Bundle Diameter (in)	Max Bundle Diameter (in)	UV Resistant
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LH-EC-S-200-8	4.8x200	8.0	230N(50lb)	3.50	49.50	0.14	1.95	Black Only
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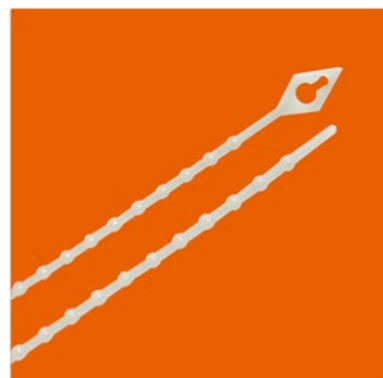


## ● Beaded Cable Ties

### • Material: Polyamide 6.6

Item No.	Size (mm)	Size (in)	Tensile Strength	Min Bundle Diameter (mm)	Max Bundle Diameter (mm)	Min Bundle Diameter (in)	Max Bundle Diameter (in)
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LH-BD-100-4	100	4.0			25.00		0.98
LH-BD-150-6	150	6.0			36.00		1.41
LH-BD-200-8	200	8.0			51.90		2.04



## ● Double Loop Beaded Cable Ties

### • Material: Polyamide 6.6

Item No.	Size (mm)	Size (in)	Tensile Strength	Min Bundle Diameter (mm)	Max Bundle Diameter (mm)	Min Bundle Diameter (in)	Max Bundle Diameter (in)
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LH-DBL-210-8	4.5x210	8.0	230N(50lb)	8.00	53.50	0.31	2.11
LH-DBL-310-12	4.5x310	12.0	230N(50lb)	8.00	83.80	0.31	3.30
LH-DBL-460-18	6.5x460	18.0	540N(120lb)	8.00	129.50	0.31	5.10
LH-DBL-610-24	6.5x610	24.0	540N(120lb)	8.00	175.20	0.31	6.90



## ● Double Loop Beaded Cable Ties

### • Material: Polyethylene

Flammability of raw material : UL 94HB

- Excellent resistance to low temperature brittleness
- Good stiffness
- Working (Operation) Temperature: -20°C - + 60°C (0°F - + 140°F)

Item No.	Size (mm)	Size (in)	Tensile Strength	Min Bundle Diameter (mm)	Max Bundle Diameter (mm)	Min Bundle Diameter (in)	Max Bundle Diameter (in)
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LH-DBLPE-185-7	5.0x185	7.3	160N(35lb)	8.00	46.10	0.31	1.81
LH-DBLPE-235-9	5.0x235	9.3	160N(35lb)	8.00	62.10	0.31	2.44
LH-DBLPE-315-12	5.0x315	12.4	160N(35lb)	8.00	87.60	0.31	3.45
LH-DBLPE-500-19	7.5x500	19.7	350(80lb)	8.00	136.90	0.31	5.39
LH-DBLPE-650-26	7.5x650	25.6	350(80lb)	8.00	184.70	0.31	7.27







### ● Cable Ties Mounts Pad in Nylon

- Material: Polyamide 6.6
- 3M adhesive is available upon special request.
- Can be screwed if without adhesive

Item No.	Size (mm)	Size (in)	For Cable Ties width (mm)	For Cable Ties width (lb)
LH-MP-12.5-1/2	12.5x12.5	1/2	3.60	40.00
LH-MP-20-3/4	19x19	3/4	3.60	40.00
LH-MP-30-1	28x28	1.0	4.80	50.00
LH-MP-40-1.5	40x40	1-1/2	9.00	175.00

### ● Cable Ties Mounts Pad in ABS

- Material: Acrylonitrile Butadiene Styrene
- 3M adhesive is available upon special request.

Item No.	Size (mm)	Size (in)	For Cable Ties width (mm)	For Cable Ties width (lb)
LH-MPABS-20-3/4	19x19	3/4	3.60	40.00
LH-MPABS-25-1	25x25	1.0	4.80	50.00
LH-MPABS-30-1.2	30x30	1-1/5	7.60	120.00
LH-MPABS-40-1.5	40x40	1-1/2	9.00	175.00

### ● Cable Ties Mount Plug

- Material: Polyamide 6.6

Item No.	Type	Size (mm)	Size (in)	For Cable Ties width (mm)	For Cable Ties width (lb)
LH-CTP-81381	A	8.1x38.1	0.318x1.5	7.60	120.00
LH-CTP-81381E	B	8.1x38.1	0.318x1.5	7.60	120.00
LH-CTP-10643	A	10.6x43.6	0.417x1.7	7.60	120.00

### ● Cable Ties Screw Mount

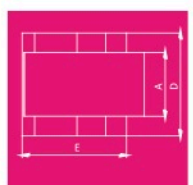
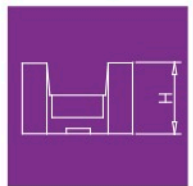
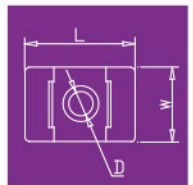
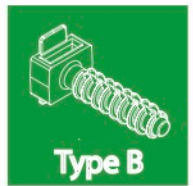
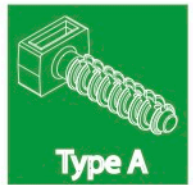
- Material: Polyamide 6.6

Item No.	Dimensions (mm)				Dimensions (in)				Screw	For ties width
	L	W	H	D	L	W	H	D		
LH-SC-M3S	15.00	9.65	6.85	7.10	0.59	0.38	0.27	0.28	#6 (M3)	3.6mm (40lb)
LH-SC-M3	17.80	12.70	8.15	7.10	0.70	0.50	0.32	0.28	#6 (M3)	4.8mm (50lb)
LH-SC-M4	22.30	16.00	9.65	8.10	0.88	0.63	0.38	0.32	#8 (M4)	7.6mm (120lb)
LH-SC-M5S	22.30	16.00	9.65	10.10	0.88	0.63	0.38	0.40	#10 (M5)	7.6mm (120lb)
LH-SC-M5	25.40	16.00	10.80	10.10	1.00	0.63	0.43	0.40	#10 (M5)	9.0mm (175lb)

### ● Adhesive Cable Clamp

- Material: Polyamide 6.6
- 3M adhesive is available upon special request.

Item No.	Dimensions (mm)					Dimensions (in)					Max Dia of Cable
	A	B	C	D	E	A	B	C	D	E	
LH-CC-06-1/4	9.50	7.80	6.00	18.50	18.50	0.37	0.31	0.24	0.73	0.73	5mm
LH-CC-12-1/2	12.00	11.50	11.90	26.00	26.00	0.47	0.45	0.47	1.02	1.02	8mm
LH-CC-12-3/4	15.40	17.10	18.10	25.00	25.00	0.61	0.67	0.71	0.98	0.98	16mm







## ● Ball Lock Stainless Steel Cable Ties

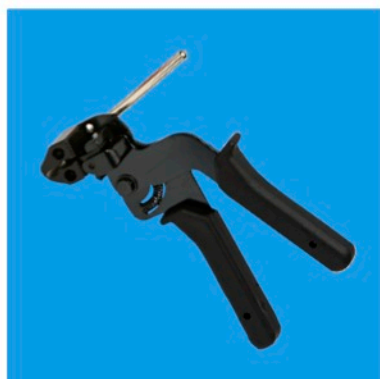
- Self-locking head design speeds installation and locks into place at any length along tie body
- Provides a strong, durable method of cable bundling
- Can be used in a wide range of indoor, outdoor, and underground (including direct burial)
- Smooth surfaces and rounded edges assures cable protection and worker safety
- Provide the ultimate support for network cables
- Material:
  - 304 stainless steel for general-purpose applications
  - 316 stainless steel for the most corrosive environments
- Working (Operation) Temperature: -80°C - + 538°C (-112°F - + 1000°F)
- Min Installation Temperature: -60°C (-76°F)
- Any Length is available
- Water absorption: none
- Flammability: non-flammable
- Ultraviolet resistance: excellent, Chemical resistance: excellent
- UL (Underwriters Laboratories) : File E258930 based newest standard UL62275



Item No.	Size (mm)	Size (in)	Tensile Strength	Min Bundle Diameter (mm)	Max Bundle Diameter (mm)	Min Bundle Diameter (in)	Max Bundle Diameter (in)	UL Type	Series
LH-SS-S-125-5	4.6x125	5.0	890N(200lb)	15.00	38.00	0.59	1.49	2	S Series
LH-SS-S-150-6	4.6x150	6.0	890N(200lb)	15.00	46.00	0.59	1.81	2	
LH-SS-S-200-8	4.6x200	8.0	890N(200lb)	15.00	61.90	0.59	2.43	2	
LH-SS-S-260-10	4.6x260	10.0	890N(200lb)	15.00	81.00	0.59	3.19	2	
LH-SS-S-290-11	4.6x290	11.5	890N(200lb)	15.00	90.60	0.59	3.56	2	
LH-SS-S-360-14	4.6x360	14.0	890N(200lb)	15.00	112.80	0.59	4.44	2	
LH-SS-S-520-21	4.6x520	20.5	890N(200lb)	15.00	163.80	0.59	6.45	2	
LH-SS-S-680-27	4.6x680	27.0	890N(200lb)	15.00	214.80	0.59	8.45	2	
LH-SS-S-840-33	4.6x840	33.0	890N(200lb)	15.00	265.70	0.59	10.46	2	
LH-SS-H-200-8	7.9x200	8.0	1600N(350lb)	15.00	61.90	0.59	2.43	2	H Series
LH-SS-H-260-10	7.9x260	10.0	1600N(350lb)	15.00	81.00	0.59	3.19	2	
LH-SS-H-290-11	7.9x290	11.5	1600N(350lb)	15.00	90.60	0.59	3.56	2	
LH-SS-H-360-14	7.9x360	14.0	1600N(350lb)	15.00	112.80	0.59	4.44	2	
LH-SS-H-520-21	7.9x520	20.5	1600N(350lb)	15.00	163.80	0.59	6.45	2	
LH-SS-H-680-27	7.9x680	27.0	1600N(350lb)	15.00	214.80	0.59	8.45	2	
LH-SS-H-840-33	7.9x840	33.0	1600N(350lb)	15.00	265.70	0.59	10.46	2	
LH-SS-EH-290-11	12x290	11.5	2300N(500lb)	15.00	90.60	0.59	3.56	2	EH Series
LH-SS-EH-360-14	12x360	14.0	2300N(500lb)	15.00	112.80	0.59	4.44	2	
LH-SS-EH-520-21	12x520	20.5	2300N(500lb)	15.00	163.80	0.59	6.45	2	
LH-SS-EH-680-27	12x680	27.0	2300N(500lb)	15.00	214.80	0.59	8.45	2	
LH-SS-EH-840-33	12x840	33.0	2300N(500lb)	15.00	265.70	0.59	10.46	2	



- Item No.: TSSTG01
- for SS tie up to 7.9mm (350lb)



- Item No.: TSSTG02
- for SS tie up to 7.9mm (350lb)





## ● Ball Lock Coated Stainless Steel Cable Ties

- Self-locking head design speeds installation and locks into place at any length along tie body
- Provides a strong, durable method of cable bundling
- Can be used in a wide range of indoor, outdoor, and underground (including direct burial)
- Smooth surfaces and rounded edges assures cable protection and worker safety
- Provide the ultimate support for network cables
- Material:
  - 304 stainless steel for general-purpose applications
  - 316 stainless steel for the most corrosive environments
  - Coated with Polyester for insulation purpose, and a better outdoor application
- Working (Operation) Temperature: -40°C - + 150°C (-40°F - + 302°F)
- Min Installation Temperature: -40°C (-40°F)
- Any Length is available
- Water absorption: none
- Flammability: non-flammable
- Ultraviolet resistance: excellent, Chemical resistance: excellent
- UL (Underwriters Laboratories) : File E258930 based newest standard UL62275
- Available color: Black, Yellow, Green, Red, Blue, White



**LISTED**  
POSITIONING DEVICE  
33AS  
**E258930**  
**TYPE 21**

Item No.	Size (mm)	Size (in)	Tensile Strength	Min Bundle Diameter (mm)	Max Bundle Diameter (mm)	Min Bundle Diameter (in)	Max Bundle Diameter (in)	UL Type	Series
LH-SSC-S-125-5	4.6x125	5.0	450N(100lb)	15.00	38.00	0.59	1.49	21	S Series
LH-SSC-S-150-6	4.6x150	6.0	450N(100lb)	15.00	46.00	0.59	1.81	21	
LH-SSC-S-200-8	4.6x200	8.0	450N(100lb)	15.00	61.90	0.59	2.43	21	
LH-SSC-S-260-10	4.6x260	10.0	450N(100lb)	15.00	81.00	0.59	3.19	21	
LH-SSC-S-290-11	4.6x290	11.5	450N(100lb)	15.00	90.60	0.59	3.56	21	
LH-SSC-S-360-14	4.6x360	14.0	450N(100lb)	15.00	112.80	0.59	4.44	21	
LH-SSC-S-520-21	4.6x520	20.5	450N(100lb)	15.00	163.80	0.59	6.45	21	
LH-SSC-S-680-27	4.6x680	27.0	450N(100lb)	15.00	214.80	0.59	8.45	21	
LH-SSC-S-840-33	4.6x840	33.0	450N(100lb)	15.00	265.70	0.59	10.46	21	
LH-SSC-H-200-8	7.9x200	8.0	800N(175lb)	15.00	61.90	0.59	2.43	21	H Series
LH-SSC-H-260-10	7.9x260	10.0	800N(175lb)	15.00	81.00	0.59	3.19	21	
LH-SSC-H-290-11	7.9x290	11.5	800N(175lb)	15.00	90.60	0.59	3.56	21	
LH-SSC-H-360-14	7.9x360	14.0	800N(175lb)	15.00	112.80	0.59	4.44	21	
LH-SSC-H-520-21	7.9x520	20.5	800N(175lb)	15.00	163.80	0.59	6.45	21	
LH-SSC-H-680-27	7.9x680	27.0	800N(175lb)	15.00	214.80	0.59	8.45	21	
LH-SSC-H-840-33	7.9x840	33.0	800N(175lb)	15.00	265.70	0.59	10.46	21	
LH-SSC-EH-290-11	12x290	11.5	1600N(350lb)	15.00	90.60	0.59	3.56	21	EH Series
LH-SSC-EH-360-14	12x360	14.0	1600N(350lb)	15.00	112.80	0.59	4.44	21	
LH-SSC-EH-520-21	12x520	20.5	1600N(350lb)	15.00	163.80	0.59	6.45	21	
LH-SSC-EH-680-27	12x680	27.0	1600N(350lb)	15.00	214.80	0.59	8.45	21	
LH-SSC-EH-840-33	12x840	33.0	1600N(350lb)	15.00	265.70	0.59	10.46	21	

## ● Plain L lock Stainless Steel Cable Ties

- The unique buckle design provides quick, easy application which can be easily be unfastened for reusing.
- Material: 304 Grade Stainless Steel (Plain Ties)

Item No.	Size (mm)	Size (in)	Max Bundle Diameter (mm)	Max Bundle Diameter (in)
LH-PLST-152-6	6.3x152	6.0	25.00	0.98
LH-PLST-225-9	6.3x225	9.0	63.00	2.48
LH-PLST-300-12	6.3x300	12.0	86.00	3.39
LH-PLST-450-18	6.3x450	18.0	137.00	5.39
LH-PLST-610-24	6.3x610	24.0	185.00	7.28

