

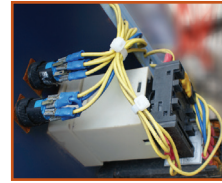
# K-SPEC® CABLE TIES

## Standard Nylon Cable Ties (General Purpose)

- Material with Pure Nylon 6,6, UL 94V-2, Operation temp. -40°F ~+185°F (-40°C~+85°C)
- Suggested Installation temp. 14°F~185°F (-10°C~+85°C)
- Products listed with:



**RoHS PAHs Reach**



|     | Part no. | Color   | Width mm [Inch] | Length mm [Inch] | Max Bundle Diameter mm [inch] | Min Loop Tensile Kgs [lb] | Std. Pk. Qty. |
|-----|----------|---------|-----------------|------------------|-------------------------------|---------------------------|---------------|
| EHD | E201750C | Black   | 8.8 [.345]      | 500 [19.7]       | 146.5 [5.76]                  | 80 [175]                  | 100           |
|     | E201759C | Natural | 8.8 [.345]      | 500 [19.7]       | 146.5 [5.76]                  | 80 [175]                  | 100           |
|     | E221750L | Black   | 8.8 [.345]      | 550 [21.6]       | 163.5 [6.43]                  | 80 [175]                  | 50            |
|     | E221759L | Natural | 8.8 [.345]      | 550 [21.6]       | 163.5 [6.43]                  | 80 [175]                  | 50            |
|     | E241750L | Black   | 8.8 [.345]      | 610 [24.0]       | 181.5 [7.14]                  | 80 [175]                  | 50            |
|     | E241759L | Natural | 8.8 [.345]      | 610 [24.0]       | 181.5 [7.14]                  | 80 [175]                  | 50            |
|     | E281750C | Black   | 8.8 [.345]      | 710 [28.0]       | 213.3 [8.40]                  | 80 [175]                  | 100           |
|     | E281759C | Natural | 8.8 [.345]      | 710 [28.0]       | 213.3 [8.40]                  | 80 [175]                  | 100           |
|     | E301750C | Black   | 8.8 [.345]      | 780 [30.5]       | 235.5 [9.27]                  | 80 [175]                  | 100           |
|     | E301759C | Natural | 8.8 [.345]      | 780 [30.5]       | 235.5 [9.27]                  | 80 [175]                  | 100           |
|     | E321750C | Black   | 9.0 [.350]      | 810 [32.0]       | 245.0 [9.64]                  | 80 [175]                  | 100           |
|     | E321759C | Natural | 9.0 [.350]      | 810 [32.0]       | 245.0 [9.64]                  | 80 [175]                  | 100           |
|     | E361750L | Black   | 9.0 [.350]      | 920 [36.0]       | 280.0 [11.0]                  | 80 [175]                  | 50            |
|     | E361759L | Natural | 9.0 [.350]      | 920 [36.0]       | 280.0 [11.0]                  | 80 [175]                  | 50            |
|     | E411750L | Black   | 9.0 [.350]      | 1020 [40.1]      | 312.0 [12.2]                  | 80 [175]                  | 50            |
|     | E411759L | Natural | 9.0 [.350]      | 1020 [40.1]      | 312.0 [12.2]                  | 80 [175]                  | 50            |
|     | E481750L | Black   | 9.0 [.350]      | 1220 [48.0]      | 375.5 [14.7]                  | 80 [175]                  | 50            |
|     | E481759L | Natural | 9.0 [.350]      | 1220 [48.0]      | 375.5 [14.7]                  | 80 [175]                  | 50            |
| HSD | E202500C | Black   | 12.4 [.490]     | 530 [20.9]       | 156.0 [5.90]                  | 110 [250]                 | 100           |
|     | E202509C | Natural | 12.4 [.490]     | 530 [20.9]       | 156.0 [5.90]                  | 110 [250]                 | 100           |
|     | E242500C | Black   | 12.4 [.490]     | 650 [25.6]       | 195.0 [7.60]                  | 110 [250]                 | 100           |
|     | E242509C | Natural | 12.4 [.490]     | 650 [25.6]       | 195.0 [7.60]                  | 110 [250]                 | 100           |
|     | E322500C | Black   | 12.4 [.490]     | 880 [34.6]       | 263.9 [10.4]                  | 110 [250]                 | 100           |
|     | E322509C | Natural | 12.4 [.490]     | 880 [34.6]       | 263.9 [10.4]                  | 110 [250]                 | 100           |

- Item with " \* ", the tooling is not available yet

### Cable Ties Tension Tool

- Use the right tool for the job
- Help install cable ties to the correct tension



**QC100**  
For ties up to 4.8mm (50Lb)



**L200**  
For ties up to 4.8mm (50Lb)



**L300**  
For Heavy Duty ties up to 9.0mm (175Lb)

# K-SPEC® CABLE TIES

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

| The Cable Ties will be applied to: | Material        | Function | Flam Class | Main Material Type            | Application Temp.             |
|------------------------------------|-----------------|----------|------------|-------------------------------|-------------------------------|
| General Purpose                    | Nylon 66 (PA66) | General  | UL-94V2    | Dupont 101F, Ascend 21 SPF(C) | -40°F~+185°F<br>(-40°C~+85°C) |

### How to choose the right cable tie

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

### Chemicals resistance

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

### UV (Weather resistance)

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, and 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.

### Temperature resistance

Polymers are also sensitive to temperatures.

All the material type above mentioned (except for Dupont MT409 & Ascend 41(47)), application of polyamide 6.6 cable ties is possible 26°F (-10°C), the polyamide becomes very brittle at temperatures below -40°F (-40°C). So for continuous use of low temperature, suggested with 26°F (-10°C). But Dupont MT409 & Ascend 41(47) could be applied with -40°F(-40°C) for a long term. The polyamide which can resistant and be applied with a high temperature, please read the related characters, and application temperature from the above table.

### 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)

### Some Instructions for new UL standard 62275, and for your right choose of a cable ties.

#### • 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)

Tensile Strength, max bundle diameter, and other characteristics are listed in each table.

