

## PLT2S-C186



- Metal impregnated material allows identification by metal detectors or x-ray inspection to meet food, beverage and pharmaceutical safety standards by helping to reduce product contamination
- One-piece design with locking wedge provides low thread force and reliable installation to improve productivity and reduce operator fatigue
- Distinct blue color per common industry practices provides easy identification on conveyor belts and in finished products, reducing waste due to product contamination
- Excellent chemical resistance for food and pharmaceutical processing equipment manufacturing applications
- For use in processing and packaging areas where aggressive acid and alkaline chemicals are used to clean the equipment
- For indoor use

|                                |                                                                                             |
|--------------------------------|---------------------------------------------------------------------------------------------|
| ▣ Part Number                  | PLT2S-C186                                                                                  |
| ▣ RoHS Compliancy Status       | Compliant                                                                                   |
| ▣ Part Description             | Cable Tie, 7.3"L (186mm), Metal Detectable Polypropylene, Standard cross section, Dark Blue |
| ▣ Product Type                 | Cable Ties                                                                                  |
| ▣ Material                     | Metal Impregnated Polypropylene                                                             |
| ▣ Color                        | Dark Blue                                                                                   |
| ▣ CSA Certified                | No                                                                                          |
| ▣ UL Listed (File #E56854)     | No                                                                                          |
| ▣ UL Recognized (File #E56854) | No                                                                                          |
| ▣ Length (In.)                 | 7.3                                                                                         |
| ▣ Length (mm)                  | 186                                                                                         |
| ▣ Width (In.)                  | 0.190                                                                                       |
| ▣ Width (mm)                   | 4.8                                                                                         |
| ▣ CE Compliant                 | No                                                                                          |
| ▣ Cross Section                | Standard                                                                                    |
| ▣ Head Height (In.)            | 0.240                                                                                       |
| ▣ Head Height (mm)             | 6.1                                                                                         |
| ▣ Head Width (In.)             | 0.320                                                                                       |
| ▣ Head Width (mm)              | 8.1                                                                                         |
| ▣ Locking Style                | Locking                                                                                     |

|                                     |                                                                               |
|-------------------------------------|-------------------------------------------------------------------------------|
| ▪ Material Flammability Rating      | UL 94-HB                                                                      |
| ▪ Max. Bundle Diameter (In.)        | 1.85                                                                          |
| ▪ Max. Bundle Diameter (mm)         | 47                                                                            |
| ▪ Max. Continuous Use Temperature   | 239°F (115°C)                                                                 |
| ▪ Min. Loop Tensile Strength (Lbs.) | 30                                                                            |
| ▪ Min. Loop Tensile Strength (N)    | 133                                                                           |
| ▪ Pricing Description               | Cable Tie, 7.3"L (186mm), Standard, Metal Detectable Polypropylene, Dark Blue |
| ▪ Thickness (In.)                   | 0.057                                                                         |
| ▪ Thickness (mm)                    | 1.4                                                                           |
| ▪ Tool                              | GTS, GTSL, GS2B, GTH, GS4H, STS2, STH2                                        |
| ▪ Min. Order UOM                    | PC                                                                            |
| ▪ Min. Order Qty.                   | 100                                                                           |

# Metal Detectable Cable Ties and Mounts

Pan-Ty® Metal Detectable Cable Ties and Mounts are designed to help the food, beverage, and pharmaceutical industries meet product manufacturing safety standards. Featuring metal impregnated material, these metal detectable products are identifiable by metal detectors and x-ray inspection equipment. Panduit metal detectable products help companies comply with the U.S. Food and Drug Administration HACCP\* standards and the European Union (EU) hygiene monitoring regulations. Additionally, the distinct blue color facilitates quick visual detection. Metal detectable cable ties and mounts are available in either nylon material for general purpose applications or polypropylene material which provides superior resistance to harsh cleaning chemicals. The GT series of tools captures the cut-off tips of ties to help further prevent process stream contamination. The Pan-Ty® Metal Detectable Cable Ties, Cable Tie Mounts, and Installation Tools deliver a complete bundling solution to help reduce product contamination and loss.



\*HACCP = Hazard Analysis and Critical Control Points – a systematic preventive approach to food and pharmaceutical safety that addresses hazards as a means of prevention rather than finished product inspection.

## Key Features

## Benefits

### Cable Ties and Mounts

|                                                  |                                                                                                                                                                              |
|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Metal impregnated material</b>                | Allows a cable tie or cable tie mount to be identified by metal detectors or x-ray inspection equipment helping to reduce contamination in finished products                 |
|                                                  | Contributes to compliance of manufacturing standards and HACCP regulations to demonstrate due diligence for consumer safety and quality inspections                          |
| <b>Choice of polypropylene or nylon material</b> | Suitable for use in a variety of environments, including areas subjected to harsh cleaning solvents providing long term durability (see material properties chart on page 2) |
| <b>Blue color</b>                                | Distinct color per common industry practices provides easy identification on conveyor belts and in finished products, reducing waste due to product contamination            |

### Cable Ties

|                                                      |                                                                                                                                         |
|------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| <b>One-piece cable tie design with locking wedge</b> | Provides low thread force for easy and reliable installation which improves productivity and reduces the potential for operator fatigue |
| <b>Curved tip</b>                                    | Easy to pick up tie from flat surfaces; allows faster initial threading                                                                 |
| <b>Smooth, round edges</b>                           | Safe and easy for installers to use, won't damage cable                                                                                 |

### **NEW!** Mounts

|                                 |                                                                             |
|---------------------------------|-----------------------------------------------------------------------------|
| <b>Cradle design mount</b>      | Holds cables securely in place; provides maximum stability for cable bundle |
| <b>Low profile design mount</b> | Keeps bundle close to mounting surface and conserves space                  |

# Metal Detectable Cable Ties and Mounts

## Ordering Information

**NEW!**

### Polypropylene Metal Detectable Products

- For use in processing and packaging areas where aggressive acid and alkaline chemicals are used to clean the equipment
- Excellent chemical resistant cable tie and mount solution for food and pharmaceutical processing equipment manufacturing applications

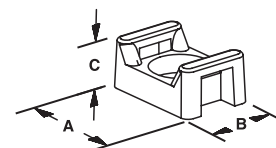


#### Cable Ties

| Part Number                              | Length<br>In. (mm) | Width<br>In. (mm) | Thickness<br>In. (mm) | Head<br>Height<br>In. (mm) | Head<br>Width<br>In. (mm) | Max.<br>Bundle<br>Diameter<br>In. (mm) | Min. Loop<br>Tensile<br>Strength<br>Lbs. (N) | Recommended<br>Tools | Std.<br>Pkg.<br>Qty.* |
|------------------------------------------|--------------------|-------------------|-----------------------|----------------------------|---------------------------|----------------------------------------|----------------------------------------------|----------------------|-----------------------|
| Miniature Cross Section                  |                    |                   |                       |                            |                           |                                        |                                              |                      |                       |
| PLT1M-C186                               | 3.9 (100)          | .098 (2.5)        | .044 (1.1)            | .186 (4.8)                 | .188 (4.8)                | .87 (22)                               | 15 (67)                                      | GTS, GTSL            | 100                   |
| Intermediate Cross Section               |                    |                   |                       |                            |                           |                                        |                                              |                      |                       |
| PLT2I-C186                               | 8.0 (203)          | .135 (3.4)        | .047 (1.2)            | .180 (4.6)                 | .240 (6.1)                | 2.00 (51)                              | 24 (107)                                     | GTS, GTSL            | 100                   |
| Standard Cross Section                   |                    |                   |                       |                            |                           |                                        |                                              |                      |                       |
| PLT2S-C186                               | 7.3 (186)          | .190 (4.8)        | .057 (1.4)            | .240 (6.1)                 | .320 (8.1)                | 1.85 (47)                              | 30 (133)                                     | GTS, GTSL,<br>GTH    | 100                   |
| PLT3S-C186                               | 11.5 (291)         |                   |                       |                            |                           | 3.00 (76)                              |                                              |                      | 100                   |
| PLT4S-C186                               | 14.4 (366)         |                   |                       |                            |                           | 4.00 (102)                             |                                              |                      | 100                   |
| Light-Heavy Cross Section (Straight Tip) |                    |                   |                       |                            |                           |                                        |                                              |                      |                       |
| PLT3H-L186                               | 11.1 (282)         | .300 (7.6)        | .075 (1.9)            | .360 (9.1)                 | .480 (12.2)               | 3.00 (76)                              | 60 (267)                                     | GTH                  | 50                    |
| PLT4H-L186                               | 14.4 (366)         |                   |                       |                            |                           | 4.00 (102)                             |                                              |                      | 50                    |

#### **NEW!** Cable Tie Mounts

| Part Number | Used With<br>Cable Ties | A<br>Width<br>In. (mm) | B<br>Length<br>In. (mm) | C<br>Height<br>In. (mm) | Counterbore<br>Diameter<br>In. (mm) | Mounting<br>Method | Std.<br>Pkg.<br>Qty.* |
|-------------|-------------------------|------------------------|-------------------------|-------------------------|-------------------------------------|--------------------|-----------------------|
| TM2S8-C186  | Min., Int.,<br>Std.     | .630 (16.0)            | .422 (10.7)             | .275 (7.0)              | .325 (8.3)                          | #8 (M4) screw      | 100                   |
| TM3S8-C186  | Std.,                   | .867 (22.0)            | .614 (15.6)             | .373 (9.5)              | .325 (8.3)                          | #8 (M4) screw      | 100                   |
| TM3S10-C186 | Lt. Hvy.                |                        |                         |                         | .385 (9.8)                          | #10 (M5) screw     | 100                   |



\*Order number of pieces required in multiples of standard package quantity.

#### Technical Information Chart

| Material Properties                                     | Nylon 6.6               | Polypropylene                      |
|---------------------------------------------------------|-------------------------|------------------------------------|
| Max. Continuous Use Temperature per Test Method UL 746B | 185°F (85°C)            | 239°F (115°C)                      |
| Tensile Strength                                        | High**                  | Moderate**                         |
| Water Absorption (24 hours) per ASTM D570               | 1.2%<br>(absorbs water) | 0.1%<br>(resists water absorption) |
| Chemical Resistance                                     |                         |                                    |
| Inorganic and Organic Acids                             | Good                    | Excellent                          |
| Alkaline Cleaners                                       | Good                    | Excellent                          |
| Disinfectants and Sanitizers                            | Good                    | Excellent                          |
| Color                                                   | Light Blue              | Dark Blue                          |

Note: Polypropylene material is recommended for use with strong alkaline and acid based cleaners that are used in high concentrations and where extended cleaning soak times are the norm. In applications where temperatures run over 239°F (115°C), stainless steel ties and mounts are recommended (see back page).

\*\*For exact Minimum Loop Tensile Strength information for each part number, please refer to table (above and on next page).

# Metal Detectable Cable Ties and Mounts

## Ordering Information

### Nylon Metal Detectable Products

- Excellent solution for general purpose maintenance and repair applications
- Ideal for use in control panels and overhead cable runs

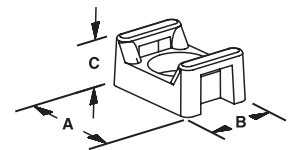


### Cable Ties

|                                          | Length<br>In. (mm) | Width<br>In. (mm) | Thickness<br>In. (mm) | Head<br>Height<br>In. (mm) | Head<br>Width<br>In. (mm) | Max.<br>Bundle<br>Diameter<br>In. (mm) | Min. Loop<br>Tensile<br>Strength<br>Lbs. (N) | Recommended<br>Tools | Std.<br>Pkg.<br>Qty.* |
|------------------------------------------|--------------------|-------------------|-----------------------|----------------------------|---------------------------|----------------------------------------|----------------------------------------------|----------------------|-----------------------|
| Miniature Cross Section                  |                    |                   |                       |                            |                           |                                        |                                              |                      |                       |
| PLT1M-C86                                | 3.9 (100)          | .098 (2.5)        | .044 (1.1)            | .186 (4.8)                 | .188 (4.8)                | .87 (22)                               | 18 (80)                                      | GTS, GTSL            | 100                   |
| Intermediate Cross Section               |                    |                   |                       |                            |                           |                                        |                                              |                      |                       |
| PLT2I-C86                                | 8.0 (203)          | .135 (3.4)        | .047 (1.2)            | .180 (4.6)                 | .240 (6.1)                | 2.00 (51)                              | 40 (178)                                     | GTS, GTSL            | 100                   |
| Standard Cross Section                   |                    |                   |                       |                            |                           |                                        |                                              |                      |                       |
| PLT2S-C86                                | 7.3 (186)          | .190 (4.8)        | .057 (1.4)            | .240 (6.1)                 | .320 (8.1)                | 1.85 (47)                              | 50 (222)                                     | GTS, GTSL,<br>GTH    | 100                   |
| PLT3S-C86                                | 11.5 (291)         |                   |                       |                            |                           | 3.00 (76)                              |                                              |                      | 100                   |
| PLT4S-C86                                | 14.4 (366)         |                   |                       |                            |                           | 4.00 (102)                             |                                              |                      | 100                   |
| Light-Heavy Cross Section (Straight Tip) |                    |                   |                       |                            |                           |                                        |                                              |                      |                       |
| PLT3H-L86                                | 11.1 (282)         | .300 (7.6)        | .075 (1.9)            | .360 (9.1)                 | .480 (12.2)               | 3.00 (76)                              | 120 (534)                                    | GTH                  | 50                    |
| PLT4H-L86                                | 14.4 (366)         |                   |                       |                            |                           | 4.00 (102)                             |                                              |                      | 50                    |

### **NEW!** Cable Tie Mounts

| Part Number | Used With<br>Cable Ties | A<br>Width<br>In. (mm) | B<br>Length<br>In. (mm) | C<br>Height<br>In. (mm) | Counterbore<br>Diameter<br>In. (mm) | Mounting<br>Method | Std.<br>Pkg.<br>Qty.* |
|-------------|-------------------------|------------------------|-------------------------|-------------------------|-------------------------------------|--------------------|-----------------------|
| TM2S8-C86   | Min., Int.,<br>Std.     | .630 (16.0)            | .422 (10.7)             | .275 (7.0)              | .325 (8.3)                          | #8 (M4) screw      | 100                   |
| TM3S8-C86   | Std.,                   | .867 (22.0)            | .614 (15.6)             | .373 (9.5)              | .325 (8.3)                          | #8 (M4) screw      | 100                   |
| TM3S10-C86  | Lt. Hvy.                |                        |                         |                         | .385 (9.8)                          | #10 (M5) screw     | 100                   |



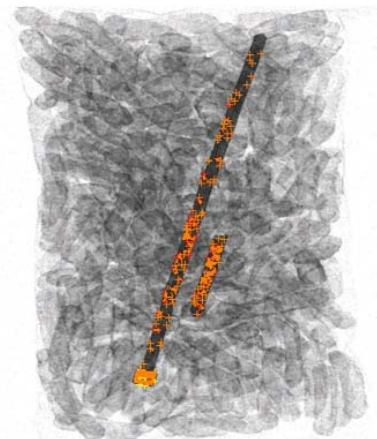
\*Order number of pieces required in multiples of standard package quantity.

Panduit cable ties and mounts are detectable by a variety of methods to help reduce product contamination and associated recall risks:

- Metal detectors
- X-ray inspection equipment
- Visual detection

### Quality Assurance

All cable tie and mount packages contain a quality control number for complete product traceability; each lot passes metal detection as part of final product verification.

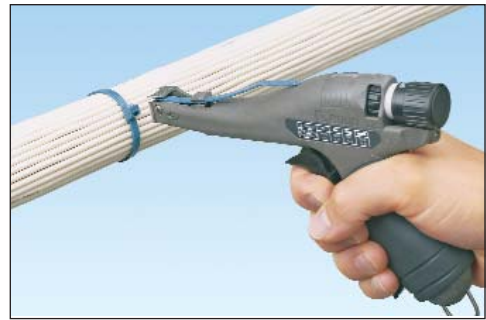


Example x-ray image of metal detectable cable tie in finished product

# Metal Detectable Cable Ties and Mounts

## Cable Tie Installation Tools

Pan-Ty® Metal Detectable Cable Ties can be installed using Panduit GT series of ergonomic hand tools that capture cut-off tips of the ties during installation to help prevent product contamination. Panduit cable tie installation tools provide consistent results and speed installation to reduce installed cost.



### Additional Benefits:

- Flush tie cut-off eliminates sharp edges and improves worker safety
- Lightweight, ergonomic, comfortable and easy to use



**GTS**

Installs PLT1M, PLT2I, PLT2S, PLT3S, PLT4S cable ties.



**GTSL**

Installs PLT1M, PLT2I, PLT2S, PLT3S, PLT4S cable ties.



**GTH**

Installs PLT2S, PLT3S, PLT4S, PLT3H, PLT4H cable ties.

## Related Products

### Stainless Steel Cable Ties and Mounts

When strength, vibration, corrosion and temperature extremes are a factor, Pan-Steel® Stainless Steel Cable Ties and Mounts provide a strong, reliable system for cable bundling and mechanical fastening applications in harsh environments.

- Available in 304 and 316 grade stainless steel
- Cable tie loop tensile strength up to 1,200 Lbs.
- Continuous working temperatures up to 1000°F (538°C)



### WORLDWIDE SUBSIDIARIES AND SALES OFFICES

PANDUIT CANADA  
Markham, Ontario  
cs-cdn@panduit.com  
Phone: 800.777.3300

PANDUIT EUROPE LTD.  
London, UK  
cs-emea@panduit.com  
Phone: 44.20.8601.7200

PANDUIT SINGAPORE PTE. LTD.  
Republic of Singapore  
cs-ap@panduit.com  
Phone: 65.6305.7575

PANDUIT JAPAN  
Tokyo, Japan  
cs-japan@panduit.com  
Phone: 81.3.6863.6000

PANDUIT LATIN AMERICA  
Jalisco, Mexico  
cs-la@panduit.com  
Phone: 52.33.3777.6000

PANDUIT AUSTRALIA PTY. LTD.  
Victoria, Australia  
cs-aus@panduit.com  
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