chanhvinh.com

# Nylon 612 Cable Ties

PANDUIT®
SPECIFICATION SHEET

## SPECIFICATIONS

The black, weather-resistant cable tie shall be manufactured from Nylon 612 and shall provide resistance to ultraviolet (UV) light and chemical exposure, including salts, hydrocarbons, chlorinated solvents, bases, and acid rain.

The cable tie shall have a maximum continuous use temperature of 194°F (90°C) and shall be suitable for cold environments down to -76°F (-60°C). Installation shall occur at temperatures above 32°F (0°C).

The Nylon 612 cable ties are hygroscopic in nature and shall be moisture-conditioned and sealed in protective packaging to maintain flexibility and installation performance.



| *Miniature Cross Section 20lbs (89N) Min. Loop Tensile* | |
|---|---|
| **Black weather resistant:** | **PLT1M-M6120** |
| *Intermediate Cross Section 25lbs (111N) Min. Loop Tensile* | |
| **Black weather resistant:** | **PLT1.5I-M6120** |
| *Standard Cross Section 50lbs (222N) Min. Loop Tensile* | |
| **Black weather resistant:** | **PLT2S-M6120<br>PLT2.5S-M6120<br>PLT3S-M6120<br>PLT4S-M6120** |
| *Light-Heavy Cross Section 120lbs (534N) Min. Loop Tensile* | |
| **Black weather resistant:** | **PLT4H-TL6120<br>PLT7LH-C6120<br>PLT8LH-C6120** |
| *Recommended Installation Tools* | |
| **Hand tools: Tool controlled tension and cut-off:** | **GTS-E, GTH-E, GS2B-E, GS4H-E, GS4EH-E** |
| **Hand tools: Installer controlled tension and cut-off:** | **STS2, STH2, ST3EH** |
| **Pneumatic tools:** | **PTS, PPTS, PTH** |

## TECHNICAL INFORMATION

| | |
|---|---|
| **Tensile @ yield @ 73°F (psi):** | 9,300 per ISO 527 |
| **Water absorption (24 hours):** | 0.4% per ASTM D570 |
| **Weathering life expectancy (years)/UV resistance*:** | 20 |
| **Max. continuous use temperature:** | 194°F (90°C) per UL 746B |
| **Min. installation temperature:** | 32°F (0°C) |
| **Halogen-free:** | Yes |
| **Heat deflection temperature @ 1.8 Mpat:** | 158°F (70°C) per ASTM D648 ISO 75 - 1/-2 |
| **Chemical resistance:** | High |
| **Salts:** | High |
| **Hydrocarbons (gas, oil, lubricants):** | Excellent |
| **Chlorinated hydrocarbons:** | High |
| **Base:** | High |
| **Acid rain:** | High |
| **Impact resistance:** | Good |

*This is an estimated life expectancy and not a guarantee of life in an application

## KEY FEATURES AND BENEFITS

| | |
|---|---|
| **Nylon 612 material:** | Resist chemical attack when exposed to salts, hydrocarbons, chlorinated hydrocarbons, bases, and corrosive (zinc chloride, and diluted acids), and low temperature indoor or outdoor applications |
| **Black UV resistant properties:** | Allows ties to withstand exposure to sunlight; contributes to weathering life expectancy of 20 years* |
| **One-piece design with locking wedge:** | Provides low thread force for easy and reliable installation; improves productivity and reduces operator fatigue |
| **Curved, tapered tip:** | Threads easily into head; installs quickly for improved productivity |

chanhvinh.com

# Nylon 612 Cable Ties

## APPLICATIONS

Nylon 612 cable ties are ideal for outdoor wire and cable management, including use on galvanized surfaces and in environments with exposure to chemicals or extreme temperatures. With an expected weathering life of up to 20 years*, they provide long-term durability in challenging conditions.

To ensure optimal performance, follow proper installation and storage procedures. Store ties in sealed packaging at 73°F/20°C (+/- 15°F/8°C) and 50% relative humidity. Avoid installation below 32°F (0°C), as low temperatures may reduce flexibility due to moisture loss which can impact cable tie performance. Nylon 612 products are moisture conditioned and sealed in heavy-wall, polyethylene heatsealed bags during manufacturing to ensure optimal performance during installation.

*This is an estimated life expectancy and not a guarantee of life in an application

## ORDERING INFORMATION

| Part Number | Length In. (mm) | Width In. (mm) | Thickness In. (mm) | Max. Bundle Dia. In. (mm) | Min. Loop Tensile Strength Lbs. (N) | Recommended Installation Tool | Pkg. Qty.* | Bulk Ctn. Qty. |
|---|---|---|---|---|---|---|---|---|
| **MINIATURE CROSS SECTION** | | | | | | | | |
| **PLT1M-M6120** | 3.9 (99) | .098 (2.5) | 0.043 (1.1) | 0.87 (22) | 20 (89) | GTS-E, GS2B-E, PTS, PPTS, STS2 | 1,000 | 50,000 |
| **PLT1M-C6120** | | | | | | | 100 | 1,000 |
| **INTERMEDIATE CROSS SECTION** | | | | | | | | |
| **PLT1.5I-M6120** | 5.6 (142) | 0.142 (3.6) | 0.045 (1.1) | 1.38 (35) | 25 (111) | GTS-E, GS2B-E, PTS, PPTS, STS2 | 1,000 | 25,000 |
| **PLT1.5I-C6120** | | | | | | | 100 | 1,000 |
| **STANDARD CROSS SECTION** | | | | | | | | |
| **PLT2S-M6120** | 7.4 (188) | 0.19 (4.8) | 0.047 (1.2) | 1.88 (48) | 50 (222) | GTS-E, GS2B-E, GTH-E, GS4H-E, PTS, PTH, PPTS, STS2, STH2 | 1,000 | 10,000 |
| **PLT2S-C6120** | | | | | | | 100 | 1,000 |
| **PLT2.5S-M6120** | 9.8 (249) | | 0.052 (1.3) | 2.5 (64) | | | 1,000 | 10,000 |
| **PLT2.5S-C6120** | | | | | | | 100 | 1,000 |
| **PLT3S-M6120** | 11.5 (292) | | | 3.0 (76) | | | 1,000 | 10,000 |
| **PLT3S-C6120** | | | | | | | 100 | 1,000 |
| **PLT4S-M6120** | 14.5 (368) | | | 4.0 (102) | | | 1,000 | 5,000 |
| **PLT4S-C6120** | | | | | | | 100 | 1,000 |
| **LIGHT-HEAVY CROSS SECTION** | | | | | | | | |
| **PLT4H-TL6120** | 14.5 (368) | 0.3 (7.6) | 0.075 (1.9) | 4.0 (102) | 120 (534) | GTH-E, GS4H-E, GS4EH-E, PTH, STH2, ST3EH | 250 | 1,000 |
| **PLT7LH-C6120** | 24.7 (627) | | | 7.0 (178) | | | 100 | 2,000 |
| **PLT8LH-C6120** | 27.6 (701) | | | 8.0 (203) | | | | |

*Order number of pieces required, in multiples of packages quantity

chanhvinh.com

# Nylon 612 Cable Ties

## ORDERING INFORMATION

| Part Number | Used with Nylon 612 Cable Ties | Description | Std. Pkg. Qty. |
|---|---|---|---|
| **TOOL CONTROLLED TENSION AND CUT-OFF TOOLS** | | | |
| **GTS-E, GS2B-E** | Miniature, Intermediate, Standard | Tool controlled tension tool consistently provide flush tie cut-offs to speed installation | 1 |
| **GS4H-E, GTH-E** | Standard, Light-Heavy | | |
| **GS4EH-E** | Light-Heavy | | |
| **INSTALLER CONTROLLED TENSION AND CUT-OFF TOOLS** | | | |
| **STS2** | Miniature, Intermediate, Standard | Installer controlled tension tools are economical and ideal for low volume applications | 1 |
| **STH2** | Standard, Light-Heavy | | |
| **ST3EH** | Light-Heavy | | |
| **PNEUMATIC TOOLS** | | | |
| **PTS, PPTS** | Miniature, Intermediate, Standard | Pneumatic, push button operation tools tension and cut-off excess tie in a fraction of a second | 1 |
| **PTH** | Standard, Light-Heavy | | |








chanhvinh.com



©2025 Panduit Corp. ALL RIGHTS RESERVED. FRSP41-WW-ENG 6/2025