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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.



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

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 PLT2.5S-M6120 PLT3S-M6120 PLT4S-M6120**
Light-Heavy Cross Section 120lbs (534N) Min. Loop Tensile	
Black weather resistant:	**PLT4H-TL6120 PLT7LH-C6120 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**

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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.

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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

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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		







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