PANDUIT®
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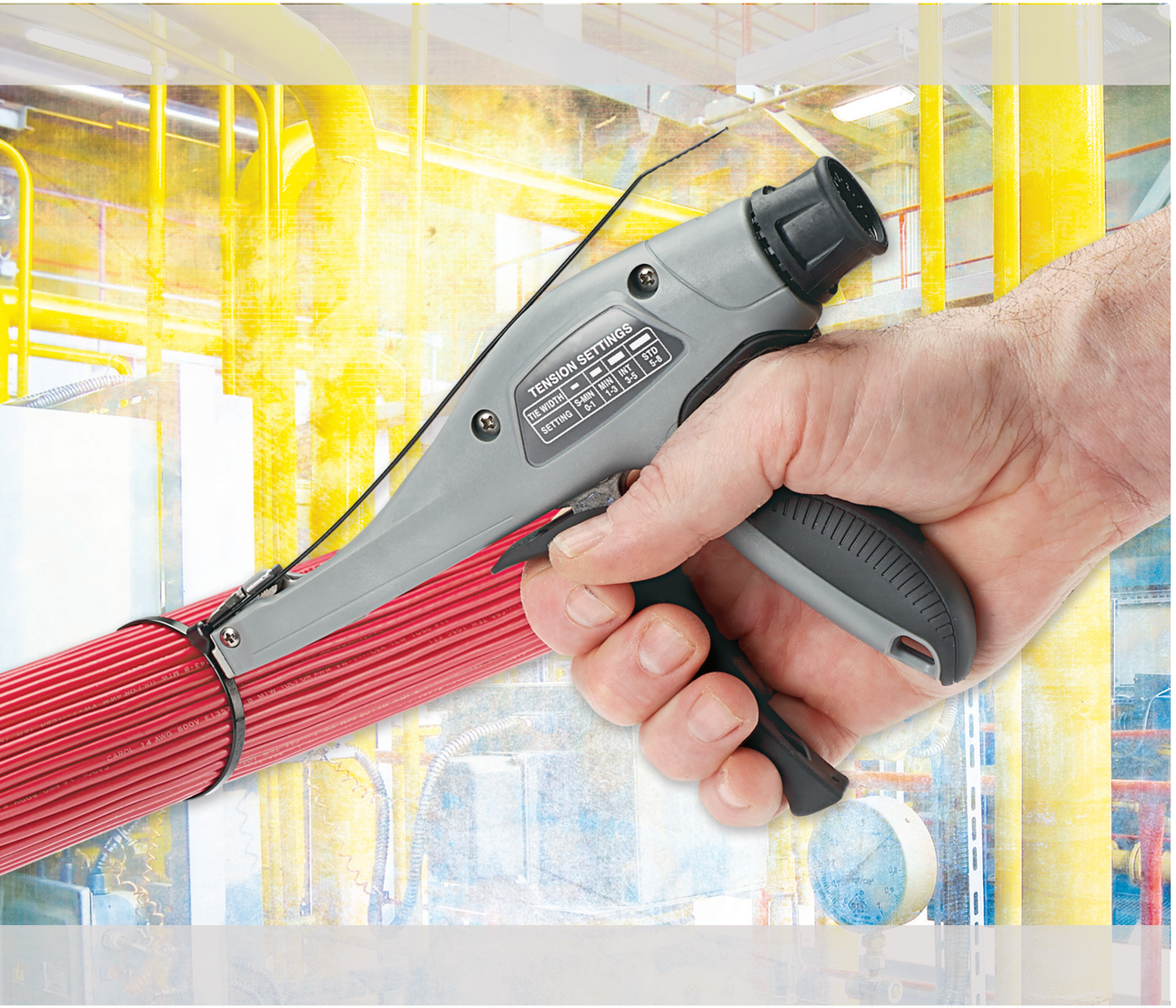
Cable Ties
Product Selection Guide



Comprehensive Cable Tie Solutions

Panduit offers a broad selection of industry approved styles, sizes, and materials to meet a full range of electrical, industrial, and networking applications.

PLT **Pan-Ty® Cable Ties**
Most comprehensive product offering

SG **Super-Grip® Cable Ties**
Withstand rough installations

BT **Dome-Top® Barb Ty Cable Ties**
Metal locking barb; infinite adjustability

PLWS **Pan-Ty® Wide Strap Cable Ties**
Ideal for Heavy Duty applications

DT **Dura-Ty® Cable Ties**
Acetal material; 20+ years outdoor service life

CBR **Contour-Ty® Cable Ties**
Low profile head, parallel-entry, outside teeth

HV **Hyper-V™ Cable Ties**
Teeth on both sides; 2-wedge locking design

SST **Sta-Strap® Cable Ties**
Two-piece design, low thread force, lightweight

ERT **Elastomeric Cable Ties**
Flexible, elastic material, UL 94V-0, releasable

PLDC **Pan-Ty® Double Clamp Cable Ties**
Ideal for Heavy Duty application

	Product Family	PLT	SG	BT	DT	CBR	HV	SST	ERT	PLWS	PLDC
Styles	Locking	✓	✓	✓	✓	✓	✓	✓		✓	✓
	Releasable	✓							✓		
	Marker	✓		✓				✓			
	Clamp	✓		✓				✓			
	Push Mount	✓		✓							
	Specialty	✓		✓				✓			
Cross Sections	Miniature	✓	✓	✓		✓		✓			
	Intermediate	✓	✓	✓		✓		✓			
	Standard	✓	✓	✓		✓		✓			
	Heavy-Standard					✓					
	Light-Heavy	✓	✓	✓		✓	✓				
	Heavy	✓	✓		✓			✓			
	Extra-Heavy	✓			✓						
	Extra-Heavy (thin)									✓	✓

Cable Tie Industry Approvals

Agency	Spec/Approval	Requirement	Products
UL (Underwriters Laboratory	UL 62275 (File E56854)	Types 1, 11, 2, 2S, 21, 21S (Note 1)	Select PLT, BT, SG, SST, and CBR Series
CSA (Canadian Standards Association)	CSA-C22.2 No. 62275 (File 31212)	Types 1, 11, 2, 2S, 21, 21S (Note 1)	Select PLT, BT, SG, SST, and CBR Series
ABS (American Bureau of Shipping)	05-HS463235-PDA	2005 Steel Vessel Rules 1-1-4/7.7,4-8-4/21.9.32001 MODU Rules 4-3-3/5.9.1	PLT and BT Series
Bureau Veritas	Cert 05968/C0, BV File ACE 14/601/01 Product Code: 2535H	Bureau Veritas Rules for the Classification of Steel Ships	PLT, PRT, BT and CBR Series
Det Norske Veritas	E-6405	Det Norske Veritas' Rules for Classification of Ships and Mobile Offshore Units	PLT, PLC, PLM, PRT, PLWP, PRWP and PRST Series
Lloyd's Register of Shipping	89/60111 (E3)	Lloyd's Register Type Approval	PLT, PLC, PLP, PLWP, PLM, PRT, SST, SSC, SSM, BT, BC, BM, BF, B2M, B3M, BM, BW, BP, ILT and CBR Series
Russian Maritime Register of Shipping	11130200	Russian Maritime Type Approval Certificate	PLT, PLC, PLM, PLF, SG, BT, BF, BM, BC, DT and CBR Series
NRC (Nuclear Regulatory Commission)	NRC 10CFR50	Quality Assurance Criteria for Nuclear	All cable tie products
US Military Aerospace Standard	QPL-AS23190	SAE spec AS23190	Select PLT, BT, SST, and CBR Series

Material Selection Criteria

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	Material	Test Method	Nylon 6.6	Weather Resistant Nylon 6.6	Impact Modified Weather Resistant Nylon 6.6	Heat Stabilized Nylon 6.6	Heat Stabilized Nylon 6.6	Heat Stabilized Weather Resistant Nylon 6.6	Impact Modified Heat Stabilized Weather Resistant Nylon 6.6	Flame Retardant Nylon 6.6	Flame Retardant Nylon 6.6	Weather Resistant Nylon 12	Polypropylene	Weather Resistant Polypropylene	TEFZEL®	HALAR®	PEEK	Metal Detectable Nylon	Metal Detectable Polypropylene	DT Weather Resistant Acetal	ERT Flame Retardant TPU
	Color	—	Natural (other colors available)	Black	Black	Black	Natural	Black	Black	Black	Natural Ivory	Black	Green	Black	Aqua Blue	Maroon	Translucent Brown	Lt. Blue	Dark Blue	Black	Black
	Part Number Suffix (Material Designation)	—	No Suffix	0	0	30	39	300	350	60	69	120	109	100	76	702Y	71	86	186	N/A	20
Mechanical Properties	Tensile @ Yield @ 73°F (psi)	ISO 527	12,000	12,000	9,700	12,000	12,000	12,000	8,700	11,000	11,000	6,700	4,100	4,100	7,500	7,000	15,200	—	—	6,500	4,300
Mechanical Properties	Water Absorption (24 Hours)	ASTM D570	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%	1.1%	1.1%	0.3%	0.1%	0.1%	<0.03%	<0.05%	0.5%	1.2%	0.1%	<0.45%	0.25%
Mechanical Properties	Radiation Resistance (Rads)	—	1 x 10^5	1 x 10^5	1 x 10^5	1 x 10^5	1 x 10^5	1 x 10^5	1 x 10^5	1 x 10^5	1 x 10^5	3.5 x 10^6	1 x 10^6	1 x 10^6	2 x 10^8	2 x 10^8	1 x 10^9	—	1 x 10^6	6 x 10^5	—
Mechanical Properties	Weathering Life Expectancy (Years)/UV Resistance	—	1 – 2	7 – 9	7 – 9	4 – 5	1 – 2	7 – 9	7 – 9	1 – 2	1 – 2	12 – 15	1	7 – 9	>15	>15	—	—	1	>20	7 – 9
Mechanical Properties	Impact Resistance	—	Acceptable	Acceptable	High	Acceptable	Acceptable	Acceptable	High	Low	Low	Acceptable	High	High	Highest	Highest	Highest	Acceptable	High	High	Highest
Chemical Resistance	Salts	—	Low	Low	Low	Low	Low	Low	Low	Low	Low	High	Highest	Highest	Highest	Highest	Highest	Low	Highest	Acceptable	Highest
Chemical Resistance	Hydrocarbons (Oil, Lubricants)	—	Highest	Highest	Highest	Highest	Highest	Highest	Highest	Highest	Highest	Highest	Acceptable	Acceptable	Highest	Highest	Highest	Highest	Acceptable	Highest	Acceptable
Chemical Resistance	Chlorinated Hydrocarbons	—	High	High	High	High	High	High	High	High	High	High	Acceptable	Acceptable	Highest	Highest	Highest	High	Acceptable	High	Lowest
Chemical Resistance	Acids	—	Lowest	Lowest	Lowest	Lowest	Lowest	Lowest	Lowest	Lowest	Lowest	Lowest	Highest	Highest	Highest	Highest	Acceptable	Lowest	Highest	Lowest	Low
Chemical Resistance	Bases	—	High	High	High	High	High	High	High	High	High	High	Highest	Highest	Highest	Highest	Highest	High	Highest	Lowest	Low
Chemical Resistance	Acid Rain	—	Low	Low	Low	Low	Low	Low	Low	Low	Low	High	Highest	Highest	Highest	Highest	High	Low	Highest	Low	Low
Thermal Properties	Continuous Use Temperature Range	UL 746B	-76°F – 185°F -60°C – 85°C	-76°F – 185°F -60°C – 85°C	-76°F – 185°F -60°C – 85°C	-76°F – 239°F -60°C – 115°C	-76°F – 239°F -60°C – 115°C	-76°F – 239°F -60°C – 115°C	-76°F – 239°F -60°C – 115°C	-76°F – 212°F -60°C – 100°C	-76°F – 212°F -60°C – 100°C	-76°F – 194°F -60°C – 90°C	-76°F – 239°F -60°C – 115°C	-76°F – 239°F -60°C – 115°C	-76°F – 338°F -60°C – 170°C	-76°F – 257°F -60°C – 125°C	-76°F – 500°F -60°C – 260°C (Note 2)	-40°F – 185°F -40°C – 85°C	-40°F – 239°F -40°C – 115°C	76°F – 185°F -60°C – 85°C	-40°F – 122°F -40°C – 50°C
Thermal Properties	Minimum Installation Temperature	UL 62275	-4°F or +32°F -20°C or 0°C (Note 1)	-4°F or +32°F -20°C or 0°C (Note 1)	-4°F or +32°F -20°C or 0°C (Note 1)	-4°F or +32°F -20°C or 0°C (Note 1)	-4°F or +32°F -20°C or 0°C (Note 1)	-4°F or +32°F -20°C or 0°C (Note 1)	-4°F or +32°F -20°C or 0°C (Note 1)	-4°F or +32°F -20°C or 0°C (Note 1)	-4°F or +32°F -20°C or 0°C (Note 1)	-4°F or +32°F -20°C or 0°C (Note 1)	-4°F or +32°F -20°C or 0°C (Note 1)	-4°F or +32°F -20°C or 0°C (Note 1)	-4°F or +32°F -20°C or 0°C (Note 1)	-4°F or +32°F -20°C or 0°C (Note 1)	-4°F or +32°F -20°C or 0°C (Note 1)	-4°F or +32°F -20°C or 0°C (Note 1)	-4°F or +32°F -20°C or 0°C (Note 1)	-4°F or +32°F -20°C or 0°C (Note 1)	-4°F or +32°F -20°C or 0°C (Note 1)
Thermal Properties	Flammability Rating	UL 94	V-2	V-2	V-2	V-2	V-2	V-2	HB	V-0	V-0	HB	HB	HB	V-0	V-0	V-0	HB	HB	HB	V-0
Thermal Properties	Low Smoke	ASTM E662	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	—	—	—	—	—	PASS	—	—	PASS	—
Thermal Properties	Oxygen Index	BS ISO 4589	28	28	—	28	28	28	22	34	34	—	—	—	30	52	35	—	—	—	26
Thermal Properties	Halogen-Free	IEC 61249-2-21	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes*	No	Yes	Yes	Yes	Yes	Yes
Thermal Properties	Burning Fume Toxicity	BSS-7239	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	—	—	—	—	—	—	—	—	—	—
Thermal Properties	Heat Deflection Temperature @ 1.8 Mpa	ASTM D648 ISO 75 -1/-2	158°F 70°C	158°F 70°C	145°F 63°C	158°F 70°C	158°F 70°C	158°F 70°C	145°F 63°C	145°F 63°C	154°F 68°C	122°F 50°C	122°F 50°C	122°F 50°C	—	149°F 65°C	313°F 156°C	—	—	147°F 64°C	—
	Relative Price	—	Low	Low	Low	Low	Low	Med	Med	Med	Med	Med	Med	Med	High	High	High	Low	Med	Med	High

	Product Family			Cross Sections																	
Material Availability	Pan-Ty® Cable Ties	PLT	✓	SM, M, I, S	LH, H, EH	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Material Availability	Super-Grip® Cable Ties	SG	✓	M, I, S, LH	H	✓															
Material Availability	Dome-Top® Barb Ty Cable Ties	BT	✓	M, I, S	LH	✓	✓	✓			✓										
Material Availability	Dura-Ty™ Cable Ties	DT																		✓	
Material Availability	Contour-Ty® Cable Ties	CBR	✓	M, I, S, HS, LH		✓	✓				✓										
Material Availability	Hyper-V™ Cable Ties	HV			LH																
Material Availability	Sta-Strap® Cable Ties	SST	✓	M, I, S, H		✓															
Material Availability	Elastomeric Cable Ties	ERT																			✓
Material Availability	Double Clamp Cable Ties	PLDC							✓												
Material Availability	Wide Strap Cable Ties	PLWS							✓												

Recommendation Legend				
Highest	High	Acceptable	Low	Lowest
● (red)	◒ (half red)	○	◓ (half black)	● (black)

Check mark indicates material availability in that product family for all cross sections.

Cross Sections: SM = Subminiature, M = Miniature, I = Intermediate, S = Standard, HS = Heavy-Standard, LH = Light-Heavy, H = Heavy, EH = Extra-Heavy

Note 1: Check UL file for specific part number rating
Note 2: Based upon UL RTI for electrical properties; mechanical without impact carries a 240° C (464° F) RTI rating

®TEFZEL is a registered trademark of The Chemours Company.

®HALAR is a registered trademark of Ausimont USA, Inc.

*Tefzel material contains Flourine, but in accordance to IEC 61249-2-21, which calls out Chlorine and Bromine, but not Flourine, meets the definition of Halogen-Free.

Cable Tie Installation Tools

Panduit offers the most preferred hand-operated tools in the industry. These versatile tools can be used for production, maintenance or construction applications. Panduit cable tie installation tools promote worker safety, help reduce downtime, improve productivity and provide the lowest total installed cost. As with all Panduit products, quality in design and production along with customer service excellence, are assured.

Cable Tie Tools

GTS-E

- Used with SM, M, I, and S cable ties
- Ergonomic design lowers the risk of repetitive motion injuries. Lowest activation and impact force to installer's hand

GS2B-E

- Used with SM, M, I, and S cable ties
- Metal tool with a durable powder coat finish
- Ergonomic design lowers the risk of repetitive motion injuries. Lowest activation and impact force to installer's hand

GTH-E

- Used with S, HS, LH, and H cable ties
- Ergonomic design lowers the risk of repetitive motion injuries. Lowest activation and impact force to installer's hand

GS4H-E

- Used with S, HS, LH, and H cable ties
- Metal tool with a durable powder coat finish
- Ergonomic design lowers the risk of repetitive motion injuries. Lowest activation and impact force to installer's hand

GS4EH-E

- Used with LH, H, and EH cable ties
- Metal tool with a durable powder coat finish
- Ergonomic design lowers the risk of repetitive motion injuries. Lowest activation and impact force to installer's hand

Pneumatic Hand Tools

PTS

- Used with SM, M, I, and S cable ties
- Ergonomic design with impact resistant resin housing and black knob; replacement parts can be part of a scheduled maintenance program

PTH

- Used with S, HS, LH, and H cable ties
- Ergonomic design with impact resistant resin housing and red knob; replacement parts can be part of a scheduled maintenance program

Pneumatic Tool Accessories

- Visit www.panduit.com for our complete line of pneumatic tool accessories

Complete Your Bundling System

Tools

Manual Cable Tie Installation Tools

- Designed to speed installation for lower installed cost
- Flush tie cut-off limits exposure to sharp edges
- A full line of lightweight, ergonomic hand tools available
- Panduit leads the industry in reliability and performance

Automatic Cable Tie Installation Systems

- An efficient solution for high volume harnessing, assembly, fastening and packaging applications
- High speed tools lower installed cost and reduce operator fatigue
- Wrap, tension, and cut off cable ties in less than one second
- Microprocessor based controller monitors system performance for production data and reporting

Services

Custom Imprinting Service

- Products available for custom imprinting include cable ties, marker plates, marker and flag ties, hook and loop wrap ties
- Results in a professional, high quality appearance for identification and labeling as well as promotional purposes
- Options include company logos, website addresses, sequential numbering, phone numbers, graphics and text

Related Products

Cable Accessories

- Comprehensive line of mounts, clips, and clamps that organizes and routes cables, speeds and simplifies installations, and lowers overall installed cost Installation methods include adhesive backed, user applied adhesive, screws, rivets and push barb
- Accessories provide long term reliability while cable clips and clamps offer a one-piece solution to save time and reduce inventory

Stainless Steel Cable Ties

- Durable method of bundling, fastening and permanent identification in applications where severe environmental conditions exist
- Engineered for safety, productivity and durability by providing round edges and smooth surfaces, easy threading, high loop tensile strength and tight clamping

PANDUIT®

For more information

Visit us at www.panduit.com/cableties

Contact Customer Service by email: cs@panduit.com or by phone: 800-777-3300

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Replaces CTSG04--SA-ENG
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