

Wire and Cable

Heat-shrink Tubing

Non-shrink Tubing

Braided Sleeving

Screening Braids

Moulded Parts

Terminals and Splices

Wire and Cable Markers

Accessories

Connectors

Backshells

Bonding Leads

Metal Braids

Relays and Contactors

Switches and Grips

Adhesives and Tapes

Application Equipment

Added Value Services

INTRODUCTION

Everything to Manage, Bundle and Route your Wiring

We offer a vast range of cable management accessories, from a select range of manufacturers. Products include: Cable Glands and Feedthroughs, to Cable Ties and Clips, Lacing Tapes and Cords.

With access to a considerable portfolio of cable management products, a solution can be sourced and matched to your specific requirements.

- **Comprehensive solutions**
- **World class quality and reliability**
- **Innovative products and tools**
- **Unmatched Technical support**

Cable Ties

A wide range of cable tie products are available from Nylon to Stainless Steel, used extensively across a broad range of industries and environments to secure and aesthetically enhance wire and cable systems.

Protective Binding and Edging

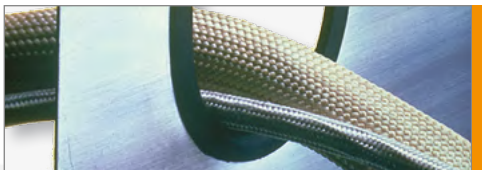
For managing wire and cable runs through bulkheads utilising high performance materials for demanding applications and environments.

Lacing Tapes and Cords

Lacing tapes and cords are commonly used to secure cable bundles, typically in the Aerospace industry. Available in a wide range of specifications, colours and sizes to meet specific customer requirements.

Specialist Interest

The range of products portrayed on the following pages represents just the most common types that we supply, for more specialist or alternative solutions please contact us.



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Protective Binding and Edging			
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Cable Tie Selection

Material and Colour Criteria
Selection Table

Characteristic	Test Method	Standard Cable Tie Nylon 6.6	Weather Resistant Nylon 6.6 MIL spec	Heat Stabilised Nylon 6.6	Flame Retardant Nylon 6.6	Weather Resistant Nylon 12
Part No. Suffix	-	-	00	30	60	120
Standard Colour	-	Natural*	Black	Black	Black/Ivory	Black
Mechanical Properties						
Tensile Yield @ 23°C (psi)	ISO 527	12,000	12,000	12,000	11,000	6,700
Water Absorption (24hrs)	ASTM D570	1.2%	1.2%	1.2%	1.1%	0.3%
Radiation Resist' (Rads)	-	1 x 10 ⁵	1 x 10 ⁵	1 x 10 ⁵	1 x 10 ⁵	3.5 x 10 ⁶
Weathering (Years)	-	1 - 2	7 - 9	4 - 5	1 - 2	12 - 15
Impact Resistance	-	Good	Good	Good	Low	Good
Chemical Resistance						
Salts Resistance	-	Low	Good	Low	Low	High
Hydrocarbons Resistance	-	Excellent	Excellent	Excellent	Excellent	Excellent
Acids Resistance	-	Low	Low	Low	Low	Low
Thermal Properties						
Max. Continuous Temp.	UL 746B	85°C	85°C	115°C	100°C	90°C
Min. Continuous Temp.	EN 50146	-60°C	-60°C	-60°C	-40°C	-60°C
Flammability Rating	UL 94	V-2	HB	V-2	V-0	HB
Low Smoke	ASTM E662	Pass	Pass	Pass	Pass	-
Oxygen Index	BS ISO 4589	28	-	28	34	-
Halogen Free	IEC 60754-2	Yes	Yes	Yes	Yes	Yes
Burning Fume Toxicity	BSS-7239	Pass	Pass	Pass	Pass	-
Material Availability by Product Family						
Pan-Ty® Cable Ties	PLT	•	•	•	•	•
Dome-Top® Barb Ty	BT	•	•	•	Ivory only	
Contour-Ty® Cable Ties	CBR	•	•	•	Ivory only	

* Available in other colour choices, including Green, Red, Yellow and Blue.



PLT Series
Low threading force and multiple locking tooth design providing strength and reliability

BT Series
Dome top design with stainless steel locking barb



Cable Ties Selection

Material and Colour Criteria
Selection Table

Polypropylene	Weather Resistant Polypropylene	TEFZEL®	HALAR®	PEEK	Metal Detectable Nylon 6.6	Metal Detectable Polypropylene
109	100	76	702Y	71	86	186
Green	Black	Aqua Blue	Maroon	Brown	Lt Blue	Blue
4,100	4,100	7,500	7,000	15,200	-	-
0.1%	0.1%	<0.03%	<0.05%	0.5%	1.2%	0.1%
1 x 10 ⁶	1 x 10 ⁶	2 x 10 ⁸	2 x 10 ⁸	1 x 10 ⁹	-	1 x 10 ⁶
1	7 - 9	>15	>15	-	-	1
High	High	Excellent	Excellent	Excellent	Good	High
Excellent	Excellent	Excellent	Excellent	Excellent	Low	Excellent
Good	Good	Excellent	Excellent	Excellent	Excellent	Good
Excellent	Excellent	Excellent	Excellent	Good	Low	Excellent
115°C	115°C	170°C	150°C	260°C	85°C	115°C
-60°C	-60°C	-60°C	-60°C	-60°C	-60°C	-60°C
HB	HB	V-0	V-0	V-0	HB	HB
-	-	-	-	Pass	-	-
-	-	30	52	35	-	-
Yes	Yes	No	No	Yes	Yes	Yes
-	-	-	-	-	-	-
•	•	•	•	•	•	•

CBR Series

Unique low profile head design avoids snags and reduces overall bundle size. Outside serrations and smooth round edges



protect cable bundle, making them ideal for high vibration applications

Please note that TEFZEL is a registered trademark of E.I. du Pont de Nemours and Company. HALAR is a registered trademark of Ausimont USA, Inc.

Accessories

PLT Series

Pan-Ty® Locking Nylon Cable Ties
Nylon Locking Barb

These cable ties can be used in countless applications wherever you need to bundle wire, cable, or hoses. Available in standard (Natural) and weather resistant (Black) Nylon, with other colours and materials available to special order. Low threading force and multiple locking tooth design providing strength and reliability.

Conforms to testing requirements of Aerospace standard SAE-A23190A and the dimensional requirements of Aerospace standard SAE-AS33671, see listing later in this section.

EN45545-2 approved material denoted by # see table 2 on opposite page.



1. Sizing Selection

Part Number	Length mm	Width mm	Thick mm	Max Bundle Ø	Min. Tensile
Sub-Miniature Cross Section Ties					
PLT.6SM-C-Colour	71	1.8	0.8	15mm	36N
Miniature Cross Section Ties					
PLT.7M-C-Colour	79	2.3	0.8	17mm	80N
PLT1M-C-Colour	99	2.5	1.1	22mm	80N
PLT1.5M-C-Colour	142	2.5	1.1	32mm	80N
PLT2M-C-Colour	203	2.5	1.1	51mm	80N
Intermediate Cross Section Ties					
PLT1.5I-C-Colour	142	3.6	1.1	35mm	178N
PLT2I-C-Colour	203	3.6	1.1	51mm	178N
PLT2.5I-C-Colour	246	3.7	1.3	64mm	178N
PLT3I-C-Colour	290	3.7	1.3	76mm	178N
PLT4I-C-Colour	368	3.7	1.3	102mm	178N
Standard Cross Section Ties					
PLT1S-C-Colour	122	4.8	1.3	25mm	222N
PLT1.5S-C-Colour	157	4.8	1.3	38mm	222N
PLT2S-C-Colour	188	4.8	1.3	48mm	222N
PLT2.5S-C-Colour	249	4.8	1.3	64mm	222N
PLT3S-C-Colour	292	4.8	1.3	76mm	222N
PLT4S-C-Colour	368	4.8	1.3	102mm	222N
PLT4.5S-C-Colour	394	4.8	1.3	114mm	222N
PLT5S-C-Colour	445	4.8	1.3	127mm	222N

For applicable hand held application tooling please refer to that section of the catalogue.

Features & Benefits

- One piece construction for consistent performance and reliability.
- Lowest threading force of any one-piece cable tie.
- Curved tip is easy to pick up from flat surfaces and allows faster initial threading to speed installation
- A variety of materials and colours are available for specific applications.
- UL Listed for use in plenum or air handling spaces per NEC (National Electrical Code) specification.

2. Colour / Material Selection

Suffix	Colour	Nylon 6.6
-#	Natural	
0#	Black	Weather resistant
00#	Black	Weather resistant Mil Spec
1#	Brown	
2#	Red	
3#	Orange	
4Y#	Yellow	
5#	Green	
6#	Blue	
7#	Purple	
8#	Grey	
10#	White	
14#	Grey	
20#	Black	
Suffix	Colour	Material
30#	Black	Heat stabilised Nylon 6.6
300#	Black	Heat stabilised, weather Nylon 6.6
60	Black	Flame retardant Nylon 6.6
69#	Ivory	Flame retardant Nylon 6.6
120	Black	Weather resistant Nylon 12
109	Green	Polypropylene
100	Black	Weather resistant Polypropylene
76	Aqua Blue	TEFZEL
702Y	Maroon	HALAR
71	Brown	PEEK

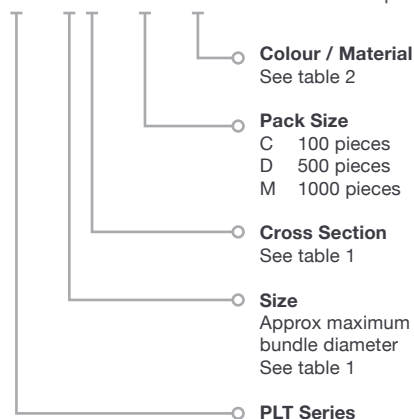
Part Number System

PLT Series cable ties benefit from being available in all colours and materials as identified on the previous page and listed in table 2 on this page.

To construct your part number please refer to the illustration below

PLT 1.5M - C - 00

Part No. example

**Supplementary Products**

Additional products also available in this range:

PRT	Releasable tie
PLC	Clamp tie
PLF	Flag tie
PLM	Marker tie
PLP	Push Mount tie
PLWP	Wing Push Mount tie
PRLWP	Releasable Ladder Wing Push Mount
PRWP	Releasable Wing Push Mount
PLUP	Umbrella Push Mount

Accessories

BT Series

Dome-Top® Barb-Ty Nylon Cable Ties
Steel Locking Barb

Non-serated cable tie with stainless steel barb for high performance applications where a semi-smooth cable tie binding surface is desired. Features a two piece design incl' a stainless steel locking barb (AISI 316 grade) in a nylon cable tie. Offering a high loop tensile strength that exceeds industry standards.

Conforms to testing requirements of Aerospace standard SAE-A23190A and the dimensional requirements of Aerospace standard SAE-AS33671, see listing later in this section.

EN45545-2 approved for all materials shown in table on the opposite page.



1. Sizing Selection

Part Number	Length mm	Width mm	Thick mm	Max Bundle Ø	Min Tensile
Miniature Cross Section Ties					
BT1M-C-Colour	102	2.4	0.9	23	80N
BT1.5M-C-Colour	160	2.4	1.2	38	80N
BT2M-C-Colour	201	2.4	1.2	51	80N
BT4M-C-Colour	361	2.4	1.2	105	80N
Intermediate Cross Section Ties					
BT1.5I-C-Colour	155	3.6	1.0	38	178N
BT2I-C-Colour	203	3.6	1.0	51	178N
BT3I-C-Colour	287	3.6	1.2	76	178N
BT4I-C-Colour	363	3.6	1.2	102	178N
Standard Cross Section Ties					
BT2S-C-Colour	203	4.7	1.1	51	222N
BT3S-C-Colour	305	4.7	1.3	76	222N
BT4S-C-Colour	384	4.7	1.3	102	222N
Light-Heavy Cross Section (straight tip) Ties					
BT2LH-L-Colour	221	7.0	1.7	51	534N
BT3LH-L-Colour	300	7.0	1.7	76	534N
BT4LH-L-Colour	378	7.0	1.7	102	534N
BT5LH-L-Colour	460	7.0	1.7	127	534N
BT6LH-L-Colour	538	7.0	1.7	152	534N
BT7LH-L-Colour	620	7.0	1.7	178	534N
BT8LH-L-Colour	699	7.0	1.7	203	534N
BT9LH-L-Colour	780	7.0	1.7	229	534N

For applicable hand held application tooling please refer to that section of the catalogue.

Features & Benefits

- Dome-Top head features unique patented design with round, smooth edges.
- Stainless steel locking barb, provides consistent performance, reliability and infinite adjustability
- Ribbed and stippled strap body helps prevent lateral movement on the bundle.
- Curved tip threads easily and installs faster. Finger grip ensures positive grip during threading of the tie.
- UL Listed for use in plenum or air handling spaces per NEC.

2. Colour / Material Selection

Suffix	Colour	Nylon 6.6
-	Natural	
0	Black	Weather resistant
00	Black	Weather resistant Mil Spec
1	Brown	
2	Red	
3	Orange	
4Y	Yellow	
5	Green	
6	Blue	
7	Purple	
8	Grey	
10	White	
14	Grey	
20	Black	
Suffix	Colour	Material
30	Black	Heat stabilised Nylon 6.6
300	Black	Heat stabilised, weather Nylon 6.6
69	Ivory	Flame retardant Nylon 6.6

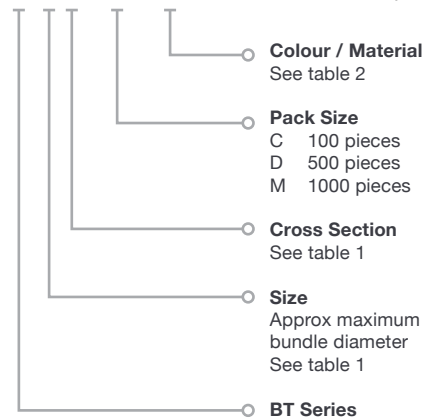
Part Number System

The BT Series of cable ties benefit from being available in numerous colours and materials as identified on earlier in this section and listed in table 2 on this page.

To construct your part number please refer to the illustration below

BT 3 S - C - 00

Part No. example

**Supplementary Products**

Additional products also available in this range:

BC	Clamp tie
BF	Flag tie
BM	Marker tie
BP	Push Mount tie
BW	Wing Push Mount tie
DT	Locking Tie

Accessories

CBR Series

Contour-Ty® Nylon Cable Ties
Parallel-Entry

A superior bundling solution for a wide variety of applications. The low profile head and the parallel-entry design along with outside teeth on tie body make it the ideal tie for use in high vibration applications. The product range includes a variety of materials, as well as several sizes and colours to accommodate a range of applications.

Meets testing requirements of Aerospace Standard SAE-AS23190A and dimensional requirements of SAE-AS33671.

EN45545-2 approved for all materials shown in table on the opposite page.



1. Sizing Selection

Part Number	Length mm	Width mm	Thick mm	Max Bundle Ø	Min Tensile
Miniature Cross Section Ties					
CBR1M-M-XX	104	2.5	1.0	25	80N
CBR1.5M-M-XX	142	2.5	1.1	38	80N
CBR2M-M-XX	183	2.5	1.1	51	80N
Intermediate Cross Section Ties					
CBR1.5I-M-XX	150	3.6	1.0	38	178N
CBR3I-M-XX	264	3.6	1.3	76	178N
CBR4I-M-XX	345	3.6	1.3	102	178N
Standard Cross Section Ties					
CBR2S-C-XX	193	4.8	1.1	51	222N
CBR3S-C-XX	274	4.8	1.3	76	222N
CBR4S-C-XX	356	4.8	1.3	102	222N
Heavy-Standard Cross Section					
CBR2HS-D	203	6.4	1.4	51	378N
Light-Heavy Cross Section (straight tip) Ties					
CBR4LH-TL-XX	371	7.6	1.8	102	534N
CBR6LH-C-XX	531	7.6	1.8	152	534N

For applicable hand held application tooling please refer to that section of the catalogue.

Features & Benefits

- Low profile head, reduces overall bundle size and avoids possible snags.
- Outside teeth, for cable protection, ideal for high vibration applications.
- Parallel entry design, results in lower profile on cable bundles, reduces size of cable tie head.
- Curved tip threads easily and installs faster. Finger grip ensures positive grip during threading of the tie.
- UL Listed for use in plenum or air handling spaces per NEC.

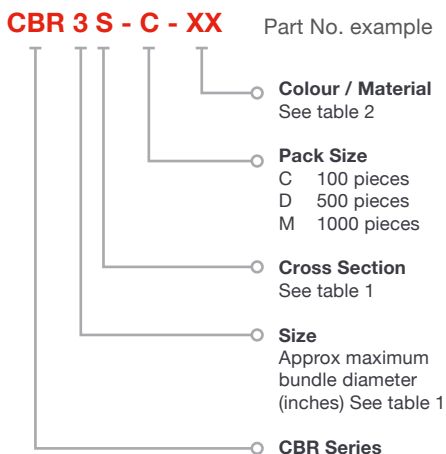
2. Colour / Material Selection

Suffix	Colour	Nylon 6.6
-	Natural	
0	Black	Weather resistant
00	Black	Weather resistant Mil Spec
1	Brown	
2	Red	
3	Orange	
4Y	Yellow	
5	Green	
6	Blue	
7	Purple	
8	Grey	
10	White	
Suffix	Colour	Material
30	Black	Heat stabilised Nylon 6.6
300	Black	Heat stabilised, weather Nylon 6.6
69	Ivory	Flame retardant Nylon 6.6

Part Number System

The CBR Series of cable ties benefit from being available in numerous colours and materials as identified on earlier in this section and listed in table 2 on this page.

To construct your part number please refer to the illustration below



MS3367 Spec Cross Reference
for PLT, BT and CBR Series Nylon Cable Ties
Cross Reference Guide

	MIL Ref	Colour	PLT Series	BT Series	CBR Series
1	MS3367-1-0	Black*	PLT2S-C00, -M00	-	-
2	MS3367-1-1	Brown	PLT2S-C1, -M1	BT2S-M1	-
	MS3367-1-2	Red	PLT2S-C2, -M2	BT2S-M2	-
	MS3367-1-3	Orange	PLT2S-C3, -M3	BT2S-M3	-
3	MS3367-1-4	Yellow	PLT2S-C4, -M4	BT2S-M4	-
	MS3367-1-5	Green	PLT2S-C5, -M5	BT2S-M5	-
	MS3367-1-6	Blue	PLT2S-C6, -M6	BT2S-M6	-
4	MS3367-1-7	Purple	PLT2S-C7, -M7	BT2S-M7	-
	MS3367-1-8	Grey	PLT2S-C8, -M8	BT2S-M8	-
	MS3367-1-9	Natural	PLT2S-C, -M, -VMR	BT2S-C, -M	-
5	MS3367-2-0	Black*	PLT4S-C00	-	-
	MS3367-2-1	Brown	PLT4S-M1	-	-
6	MS3367-2-2	Red	PLT4S-C2, -M2	BT4S-M2	-
	MS3367-2-3	Orange	PLT4S-C3, -M3	BT4S-M3	-
	MS3367-2-4	Yellow	PLT4S-C4Y, -M4Y	BT4S-M4Y	-
7	MS3367-2-5	Green	PLT4S-C5, -M5	BT4S-M5	-
	MS3367-2-6	Blue	PLT4S-C6, -M6	BT4S-M6	-
	MS3367-2-7	Purple	PLT4S-C7, -M7	BT4S-M7	-
8	MS3367-2-8	Grey	PLT4S-C8, -M8	BT4S-M8	-
	MS3367-2-9	Natural	PLT4S-C, -M	BT4S-C, -M	-
9	MS3367-3-0	Black*	PLT4H-L00, -TL00	-	-
	MS3367-3-1	Brown	PLT4H-TL1	-	-
	MS3367-3-2	Red	PLT4H-TL2	-	-
10	MS3367-3-3	Orange	PLT4H-TL3	-	-
	MS3367-3-4	Yellow	PLT4H-TL4	-	-
	MS3367-3-5	Green	PLT4H-TL5	-	-
11	MS3367-3-6	Blue	PLT4H-TL6	-	-
	MS3367-3-9	Natural	PLT4H-L, -C -TL	BT4LH-L, -TL	-
	MS3367-4-0	Black*	PLT1M-C00, M00, XMR00	-	-
12	MS3367-4-0	Black*	PLT1.5M-XMR00	-	-
	MS3367-4-1	Brown	PLT1M-C1, M1, -XMR1	BT1M-M1	-
	MS3367-4-2	Red	PLT1M-C2, M2, -XMR2	BT1M-M2	-
13	MS3367-4-3	Orange	PLT1M-C3, -M3, -XMR3	BT1M-M3	-
	MS3367-4-4	Yellow	PLT1M-C4Y, -M4Y, -XMR4Y	BT1M-M4Y	-
14	MS3367-4-5	Green	PLT1M-C5, -M5, -XMR5	BT1M-M5	-
	MS3367-4-6	Blue	PLT1M-C6, -M6, -XMR6	BT1M-M6	-
	MS3367-4-7	Purple	PLT1M-C7, -M7, -XMR7	BT1M-M7	-
15	MS3367-4-8	Grey	PLT1M-C8, -M8, -XMR8	BT1M-M8	-
	MS3367-4-9	Natural	PLT1M-C, -M, -XMR	BT1M-C, -M, -XMR	-
	MS3367-4-9	Natural	PLT7M-C, -M	-	-
16	MS3367-4-9	Natural	PLT1.5M-XMR	BT1.5M-XMR	-
	MS3367-5-0	Black*	PLT1.5I-M00	-	-
17	MS3367-5-1	Brown	PLT1.5I-C1, -M1	BT1.5I-M1	-
	MS3367-5-2	Red	PLT1.5I-C2, -M2	BT1.5I-M2	-
	MS3367-5-3	Orange	PLT1.5I-C3, -M3	BT1.5I-M3	-
18	MS3367-5-4	Yellow	PLT1.5I-C4Y, -M4Y	BT1.5I-M4Y	-
	MS3367-5-5	Green	PLT1.5I-C5, -M5	BT1.5I-M5	-

MS3367 Spec Cross Reference

for PLT, BT and CBR Series Nylon Cable Ties
Cross Reference Guide

MIL Ref	Colour	PLT Series	BT Series	CBR Series
MS3367-5-6	Blue	PLT1.5I-C6, -M6	BT1.5I-M6	-
MS3367-5-7	Purple	PLT1.5I-C7, -M7	BT1.5I-M7	-
MS3367-5-8	Grey	PLT1.5I-C8, -M8	BT1.5I-M8	-
MS3367-5-9	Natural	PLT1.5-C, -M	BT1.5-C, -M	-
MS3367-6-9	Natural	PLT8LH-L, -C	BT8LH-L, -C	-
MS3367-6-9	Natural	-	BT9LH-L, -C	-
MS3367-7-0	Black*	PLT1.5I-M00	-	-
MS3367-7-1	Brown	PLT3S-M1	-	-
MS3367-7-2	Red	PLT3S-C2, M2	BT3S-C2	-
MS3367-7-3	Orange	PLT3S-M3	-	-
MS3367-7-4	Yellow	PLT3S-M4Y	-	-
MS3367-7-5	Green	PLT3S-M5	-	-
MS3367-7-6	Blue	PLT3S-M6	-	-
MS3367-7-7	Purple	PLT3S-M7	-	-
MS3367-7-8	Grey	PLT3S-M8	-	-
MS3367-7-9	Natural	PLT3S-C, -M	BT3S-C, -M	-
MS3367-8-9	Natural	PLT5H-L, -C	-	-
MS3367-9-9	Natural	PLT6H-L, -C	-	-
MS3367-11-9	Natural	PLT8H-L, -C	-	-
MS3367-30-9	Natural	-	-	CBR1M-M
MS3367-31-9	Natural	-	-	CBR1.5M-M
MS3367-32-1	Brown	-	-	CBR2M-M1
MS3367-32-2	Red	-	-	CBR2M-M2
MS3367-32-3	Orange	-	-	CBR2M-M3
MS3367-32-4	Yellow	-	-	CBR2M-M4Y
MS3367-32-5	Green	-	-	CBR2M-M5
MS3367-32-6	Blue	-	-	CBR2M-M6
MS3367-32-7	Purple	-	-	CBR2M-M7
MS3367-32-9	Natural	-	-	CBR2M-M
MS3367-33-9	Natural	-	-	CBR1.5I-M
MS3367-34-1	Brown	-	-	CBR3I-M1
MS3367-34-2	Red	-	-	CBR3I-M2
MS3367-34-3	Orange	-	-	CBR3I-M3
MS3367-34-4	Yellow	-	-	CBR3I-M4Y
MS3367-34-5	Green	-	-	CBR3I-M5
MS3367-34-6	Blue	-	-	CBR3I-M6
MS3367-34-7	Purple	-	-	CBR3I-M7
MS3367-34-8	Grey	-	-	CBR3I-M8
MS3367-34-9	Natural	-	-	CBR3I-M
MS3367-35-9	Natural	-	-	CBR4I-M
MS3367-36-9	Natural	-	-	CBR2S-M
MS3367-37-9	Natural	-	-	CBR3S-M
MS3367-38-9	Natural	-	-	CBR4S-M
MS3367-39-9	Natural	-	-	CBR2HS-D
MS3367-40-9	Natural	-	-	CBR4LH-TL
MS3367-41-9	Natural	-	-	CBR6LH-C

* Denotes weather resistant to ASTM D 4066-94B

Accessories

Cable Tie Design Variations

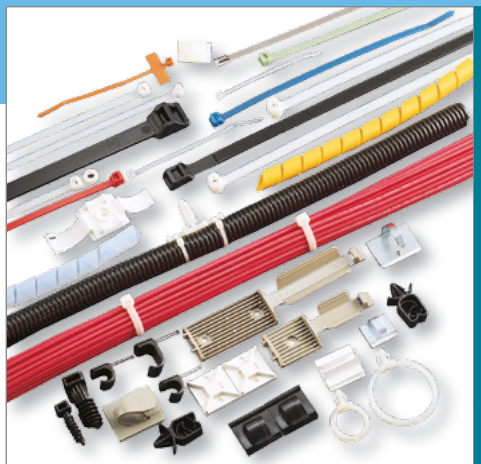
Complementary Product Options

Product Overview

Our range of Nylon cable ties are approved to various application standards, illustrating the quality and commitment to supply a quality product that is fit for purpose in the markets that we serve:

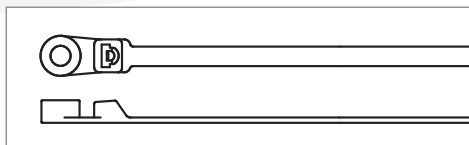
- UL Listed, E56854 and MH29590
- CE EN 50146
- Det Norske Veritas E-6405
- VG 95 387 - 100MS 3367F
- MIL QPL-AS23190-2

For full details please contact us.



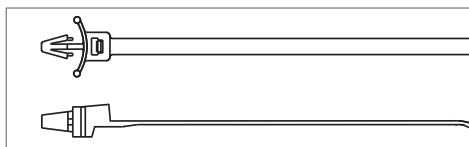
Clamp Ties

Allows for bundling before or after screwing clamp in place. Used to secure a cable bundle to another surface such as a control panel, communication rack, wall or ceiling.



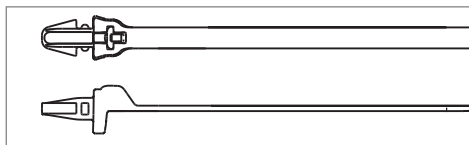
Wing Push Mount Ties

Attached bundles to flat panels, with the wings providing constant tension for a stable, secure and rattle free installation. Single piece moulding for performance and reliability.



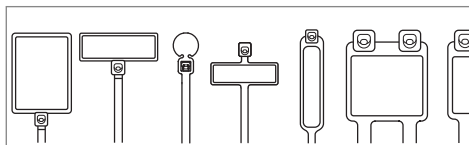
Push Mount Ties

Cable ties, mount and fastener in a single part, used to attach bundles to another surface such as a flat panel. Wingless design allows tie to be used in confined spaces.



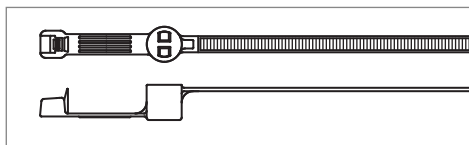
Marker and Flag Ties

Ideal for fastening and identifying bundles at the same time, with a one piece construction for consistent performance and reliability. Various designs available.



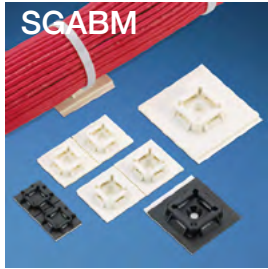
Stud Mounted Ties

Integrated mount pushes onto a threaded stud and tie wraps around bundle. Tie can be removed from the stud by turning counterclockwise. Also available as Mid-mount style and Releasable style.

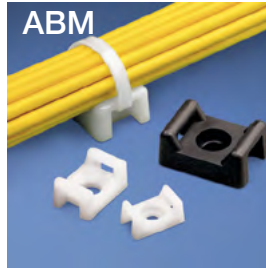


Cable Tie Mounts

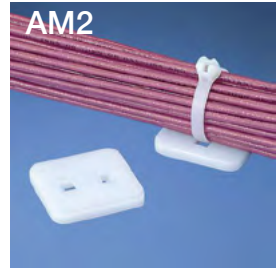
Brief Overview of Selected Accessories



Super Grip Adhesive Back



Screw Applied



Low Profile Hole Mount



Push Barb



Metal Edge Clip



Swivel Mounts



Stud Applied



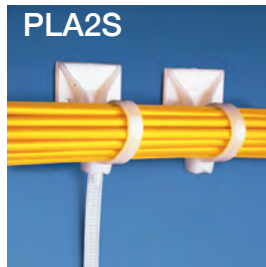
Connector Ring Spacers



Vertical Stand-off Post



Harness Push Barb Mount



Combination Mount



Tie Mount Heavy Duty

Harness Board Accessories

Brief Overview of Selected Accessories
Mounts for use Without Cable Ties

1 An extensive range of cable and wire bundling
2 together with harness routing accessories, that
3 we have outlined here as a brief overview of
4 what can be available.

5 Wiring accessories are an integral part of our
6 comprehensive selection of wire management
7 products. We are committed to continually
8 provide innovative, high quality products
9 engineered to speed installation and lower your
10 installed costs.



Wire Bundle Strap



Harness Clip



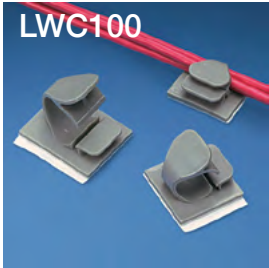
Wire Standoffs



Cable Clamp



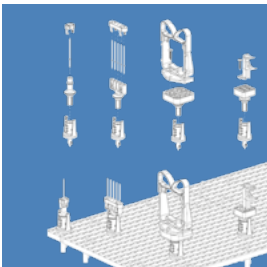
Wire Saddles



Latching Cable Clip



P Clips



Quick-Build™ Harness



Harness Edge Clip



Fibre Networks Saddle

Cable Tie Approvals



Logo (Symbol)	Agency	Spec/Approval	Requirement	Applicable Products
	Underwriters Laboratories, Inc.	File E56854 and MH29590	ZODZ(7), ZODZ(8), ALKW	Most miniature, intermediate, standard, light-heavy and heavy cross section ties are Recognized or Listed in the US and Canada
	Canadian Standards Association	File 031212	C22.2 No. 18.5-02 under the category "Fittings – Positioning Devices"	Most miniature, intermediate, standard, light-heavy and heavy cross section ties are Recognized or Listed in the US and Canada
	Conformity European	Low Voltage Directive 73/23/EEC (amended 93/68/EEC). <i>PAN-TY AND Dome-Top Barb Ty</i> cable ties also meet the requirements from EN50146	CE Marking is required for products sold within the European Union. CE Marking Directives specify the minimum performance of these products. Applying the CE mark signifies compliance with essential requirements of specific directives.	All cable tie products
	ABS (American Bureau of Shipping)	05-HS463235-PDA	2005 Vessel Rules 1-1-4/7.7, 4-8/421.9.3 2001 MODU Rules 4-3-3/5.9.1	PLT Series, BT Series
	Bureau Veritas	Cert 05968/C0 BV1178B/BVN/04 File ACE 14/601/01	Bureau Veritas Rules for the Classification of Steel Ships	PLT Series, BT Series, PRT Series, CBR Series
	Det Norske Veritas	E-6405	Det Norske Veritas' Rules for Classification of Ships and Mobile Offshore Units	PLT Series, PLC Series, PLM Series, PRT Series, PLWP Series, PRWP Series, PRST Series
	Germany (VG) Military	K17/97165	VG 95 387 – 100 MS 3367F	PLT Series, BT Series, SST Series
	Lloyd's Register of Shipping	89/60111 (E3)	Lloyd's Register Type Approval	PLT Series, BT Series, SST Series
	NRC (Nuclear Regulatory Commission)	NRC 10CFR50	Quality Assurance Criteria for Nuclear Plants and Reprocessing Plants	All cable tie products
	Plenum-Rated	Panduit logo	Panduit symbol indicates that the cable ties represented are suitable for use in plenum or air handling spaces in accordance with Sec. 300.22(C) and (D) of the National Electrical Code and Rules 12-010 (3), (4) and (5) and 12-020 of the Canadian Electrical Code, Part I.	Halar (702Y) and select Nylon 6.6 cable ties as noted throughout catalog
	US Military Aerospace Standard	QPL-AS23190-2	SAE spec AS23190	See Military Cross Reference Page B1.95
	AQA International	ISO/TS16949	AQA registration. Quality management system assessment certificate	Tinley Park, Illinois Manufacturing Operations (Cable Tie Division) Quality Management System.

Correct as of February 2017

Accessories

MLT Series

Pan-Steel® Steel Cable Ties
Features and Benefits

Perfect for indoor, outdoor, underground, offshore and RMT applications offering excellent resistance to abrasion, radiation, weathering, corrosion and extreme temperatures. Stainless Steel ties are self-locking for fast cabling and can be installed by hand or with tooling.

Manufactured with fully rounded sides and no sharp edges, making them safe to handle during installation. Strap goes through a secondary process which removes the top and bottom corners of the material.



LFH
Low Fire
Hazard

HALOGEN
FREE

RoHS
compliant

1. Sizing Selection

Part Number	Length mm	Width mm	Thick mm	Max. Bundle Ø	Min. Tensile
MLT - Standard Cross Section Ties - AISI 304 Stainless Steel					
MLT1S-CP	127	4.6	0.25	25	890N
MLT2S-CP	201	4.6	0.25	51	890N
MLT2.7S-CP	259	4.6	0.25	69	890N
MLT4S-CP	362	4.6	0.25	102	890N
MLT6S-CP	521	4.6	0.25	152	890N
MLT8S-CP	679	4.6	0.25	203	890N
MLT10S-CP	838	4.6	0.25	254	890N
MLT12S-Q	998	4.6	0.25	304	890N
MLT14S-Q	1156	4.6	0.25	355	890N
MLT15S-Q	1250	4.6	0.25	380	890N
MLT - Heavy Cross Section Ties - AISI 304 Stainless Steel					
MLT2H-LP	201	7.9	0.25	51	2000N
MLT2.7H-LP	259	7.9	0.25	69	2000N
MLT4H-LP	362	7.9	0.25	102	2000N
MLT6H-LP	521	7.9	0.25	152	2000N
MLT8H-LP	679	7.9	0.25	203	2000N
MLT10H-LP	838	7.9	0.25	254	2000N
MLT12H-Q	998	7.9	0.25	304	2000N
MLT14H-Q	1156	7.9	0.25	355	2000N

Minimum cable bundle diameter for all sizes is 12.7mm
For applicable hand held application tooling please refer to that section of the catalogue.

Features & Benefits

- Self-locking design can be fastened by hand requiring no fold over or additional installation steps.
- Features fully rounded edges to assure bundle protection and operator safety
- Material options of 304 or 316 grade stainless steel.
- Aggressive locking head provides quicker locking and tighter installation.

2. Colour / Material Selection

Suffix	
-	AISI 304 stainless steel - general purpose
316	AISI 316 stainless steel

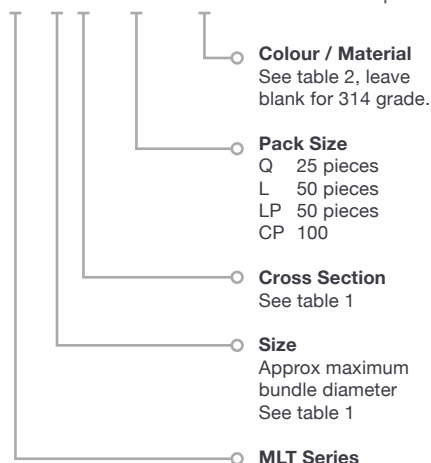
Approvals

- UL Listed E56854
- SAE AS 23190 (formerly MS23109E)
- Det Norske Cert E-6540, E-6539 (AISI 316)
- Lloyds Cert. # 89/60123
- MIL-STD-202
- MIL-STD-167 and MIL-S-901D for Extra heavy and super heavy cross sections.

Part Number System

The MLT Series of cable ties is available in two grades of stainless steel offering resistance for the most corrosive environments.

To construct your part number please refer to the illustration below

MLT 6 S - CP - 316 Part No. example**Additional Variants Available**

- LH. Light Heavy cross section, offering tensile strength up to 1112N.
- EH. Extra Heavy cross section, offering tensile strength up to 3115N.
- SH. Super Heavy cross section, offering tensile strength up to 4005N.

Available in broadly similar sizes as per table opposite. Other lengths are also available to special order.

For enquiries on standard or specials please contact us for further details.

Accessories

MLTFC and MLTC Series

Pan-Steel® Coated Steel Cable Ties

Features and Benefits

1 MLTFC Polyester Fully Coated.

Polyester coating provides additional edge protection and prevents corrosion between dissimilar metals.

Heavy cross-section is available in six colour options, providing visual indication for easy identification in colour coding applications

4 MLTC Nylon 11 Selectively Coated

Coating applied to underside and edges, overlapping outside for protective purposes. Black only

LFH
Low Fire
Hazard

HALOGEN
FREE

RoHS
compliant



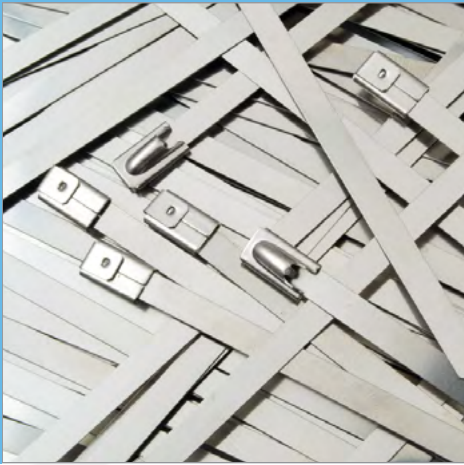
1. Sizing Selection

Part Number	Colour	Length mm	Width mm	Thick [#]	Max. Bundle Ø	Min. Tensile
MLTC - Heavy Cross Section Selectively Coated Ties - AISI 316 Stainless Steel						
MLTC2H-LP316	Black	201	7.9	0.25	51	1112
MLTC4H-LP316	Black	362	7.9	0.25	102	1112
MLTC6H-LP316	Black	521	7.9	0.25	152	1112
MLTFC - Heavy Cross Section Coated Ties - AISI 316 Stainless Steel						
MLTFC2H-LP316RD	Red	201	7.9	0.25	51	1112
MLTFC4H-LP316RD	Red	362	7.9	0.25	102	1112
MLTFC6H-LP316RD	Red	521	7.9	0.25	152	1112
MLTFC2H-LP316YL	Yellow	201	7.9	0.25	51	1112
MLTFC4H-LP316YL	Yellow	362	7.9	0.25	102	1112
MLTFC6H-LP316YL	Yellow	521	7.9	0.25	152	1112
MLTFC2H-LP316GR	Green	201	7.9	0.25	51	1112
MLTFC4H-LP316GR	Green	362	7.9	0.25	102	1112
MLTFC6H-LP316GR	Green	521	7.9	0.25	152	1112
MLTFC2H-LP316BU	Blue	201	7.9	0.25	51	1112
MLTFC4H-LP316BU	Blue	362	7.9	0.25	102	1112
MLTFC6H-LP316BU	Blue	521	7.9	0.25	152	1112
MLTFC2H-LP316WH	White	201	7.9	0.25	51	1112
MLTFC4H-LP316WH	White	362	7.9	0.25	102	1112
MLTFC6H-LP316WH	White	521	7.9	0.25	152	1112
MLTFC2H-LP316	Black	201	7.9	0.25	51	1112
MLTFC4H-LP316	Black	362	7.9	0.25	102	1112
MLTFC6H-LP316	Black	521	7.9	0.25	152	1112
MLTFC8H-LP316	Black	679	7.9	0.25	203	1112

For applicable hand held application tooling please refer to that section of the catalogue.

AS23190 Spec

Cross Reference
for MLT Series Steel Cable Ties



The products listed in the following table meet the various testing requirements of Aerospace Standard SAE-AS23190A (formerly MIL-S-23190E) and the temperature and shock requirements of MIL-STD-202 for details please contact us.

SAE-AS23190A Reference

Mil. Std. Number	MTL Series Pan-Steel®
AS23190/3-1	MLT2S-CP
AS23190/3-1	MLT2S-CP316
AS23190/3-2	MLT4S-CP
AS23190/3-2	MLT4S-CP316
AS23190/3-3	MLT6S-CP
AS23190/3-3	MLT6S-CP316
AS23190/3-4	MLT8S-CP
AS23190/3-4	MLT8S-CP316
AS23190/3-5	MLT2H-LP
AS23190/3-5	MLT2H-LP316
AS23190/3-6	MLT4H-LP
AS23190/3-6	MLT4H-LP316
AS23190/3-7	MLT6H-LP
AS23190/3-7	MLT6H-LP316
AS23190/3-8	MLT8H-LP
AS23190/3-8	MLT8H-LP316
AS23190/3-9	MLT10H-LP
AS23190/3-9	MLT10H-LP316

Accessories

M22529/2
SPRING-FAST®
Protective grommet edging

Spring-Fast® is a composite grommet edging, that provides a fast, safe and effective method of abrasion protection. Currently used throughout the aerospace market.

- No hazardous adhesives and solvents
- Vibration proof
- Abrasion and Chemical resistant
- Long life expectancy

Constructed from a composite of polymer encapsulated stainless steel, further enhanced by an additional polymer cushion. Mechanically locks on to any two axis contour with finger pressure in seconds.

Operating Temperature

- From -40°C to +85°C

Push
fit

RoHS
compliant

Specifications & Approvals

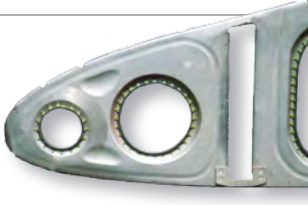
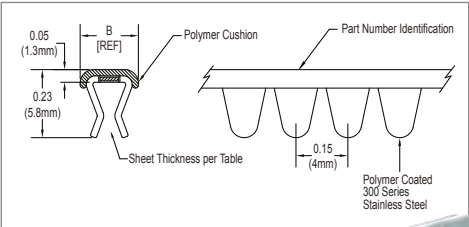
- FAA/CAA Recognised
- UL94 V0 Compliant
- NASM22529 qualified

Sheet Thickness (mm)	Spool Size (feet)	Cushion Width B (mm)	Part Number	
			25 ft Spools	100 ft Spools
0.6 - 0.9	25 or 100	5.1	M22529/2-1R-25	M22529/2-1R-100
0.9 - 1.6	25 or 100	5.1	M22529/2-2R-25	M22529/2-2R-100
1.5 - 1.9	25 or 100	5.1	M22529/2-3R-25	M22529/2-3R-100
1.8 - 2.4	25 or 100	6.1	M22529/2-4R-25	M22529/2-4R-100
2.3 - 2.8	25 or 100	6.1	M22529/2-5R-25	M22529/2-5R-100
2.7 - 3.4	25 or 100	6.1	M22529/2-6R-25	M22529/2-6R-100
4.5 - 5.0	25 or 100	8.1	M22529/2-7R-25	M22529/2-7R-100
6.1 - 6.6	25 or 100	9.7	M22529/2-8R-25	M22529/2-8R-100

Standard Colour: Green, with grey polymer

Properties	Test
Voltage breakdown	1500 Volts @ 60Hz
Flammability	FAR 25.601; FAR 25853 MIL-STD-202F (111A)
Vibration & shock	MIL-STD-1344 Method 2005.1 test condition 6, Letter J, Overall rms G 41.7
Salt spray	2000 Hours (minimum) MIL-STD-202F (101D)

For additional variations of the Spring-Fast® product range, please contact us.



GEPR

Silicone Rubber
Protective edgingPush
fitHALOGEN
FREERoHS
compliant

GEPR protective edging is manufactured from low smoke, low toxicity grade silicone rubber material, making it an ideal product for use in enclosed areas such as marine, defence and rail/mass transit applications.

The tough but very flexible profile is ideally suited to a wide range of applications, offering exceptional reliability in the most demanding of environments. Approved for use on MOD contracts such as Queen Elizabeth class aircraft carriers and Astute class submarines.

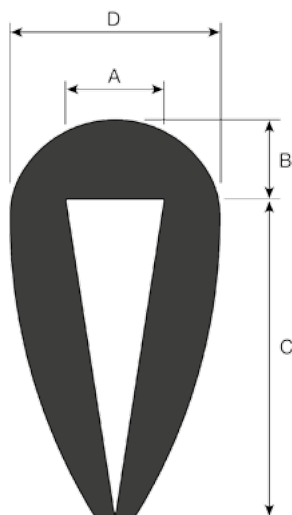
Operating Temperature

- From -40°C to +200°C

Specifications & Approvals

- BS6853 Compliant
- BR1326 Approval

Part Number	Measurements (mm) - nominal				BAE Ref. Number	
	A	B	C	D	ACA	CPC
GEPR-02-25	2.00	3.00	9.00	6.00	-	-
GEPR-03-25	3.00	4.00	13.00	10.66	40073362	15424647
GEPR-05-25	5.00	4.00	16.00	10.66	40073524	15424648
GEPR-10-25	10.00	7.00	24.00	16.00	40073525	-
GEPR-12-25	12.00	10.00	32.00	24.00	40073526	-



Material Characteristics

- Hardness Shore 60
- Smoke density * 0.0049 m²/g
- Toxic fume emission* 0.05 R
- Flammability temp. index* 354°C
- Toxicity approval* BR1326 Class

*BS6853 test method

Ordering Information

When ordering, the part can be referenced either by the appropriate BAE number, or the IS-Rayfast product code as identified below, standard pack size is 25m.

GEPR-XX-25-Black

Accessories

RAYRIM® and TPEM

Polyolefin
Heat Shrinkable Protective Edging



Rayrim® and TPEM are extruded strips internally coated with heat activated adhesive, so that on heating the profile changes from a 'V' to form a 'U' and the adhesive bonds to the substrate profile, typically electrical cabinets and enclosures.

Manufactured from cross-linked Polyolefin, offering a clean and rapid means of covering edges for all round protection. The flexible nature of the product allows application to both internal and external radii, plus straight edges.

Adhesion strength:
RAYRIM 25N/25mm minimum
TPEM 35N/25mm minimum

Operating Temperature

- From -55°C to +80°C

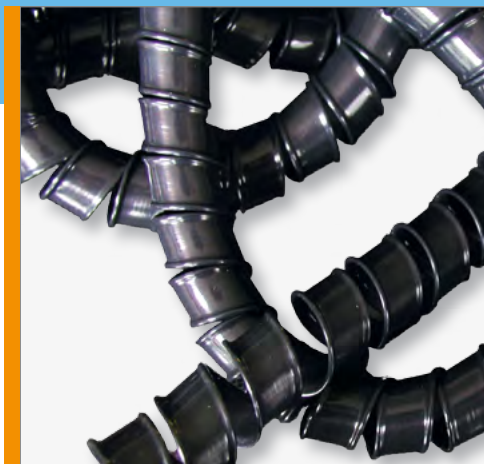


A	B	C	D	E	Std Pack Size		Description	
					(STK)	(SP)	RAYRIM No.	TPEM No.
(mm)	(mm)	(mm)	(mm)	(mm)	(STK)	(SP)	RAYRIM No.	TPEM No.
0.6	0.5	3.5	0.8	1.25	60 pcs	100m	RAYRIM-NR-6-0-*	TPEM-NR-6-0-*
1.0	0.9	4.8	1.6	1.25	60 pcs	100m	RAYRIM-NR-7-0-*	TPEM-NR-7-0-*
2.0	0.9	6.6	2.5	2.25	60 pcs	75m	RAYRIM-NR-8-0-*	TPEM-NR-8-0-*
4.2	0.9	13.5	4.5	2.20	30 pcs	50m	RAYRIM-NR-9-0-*	TPEM-NR-9-0-*

Standard Colour: 0 Black
* Denotes standard pack size required **STK** (1.2m lengths) or **SP** for spools/reels.
Packaging: Non-standard pack sizes are available for stocked products, please ask for details.

Application Range Guide

Plate Gauge	Thickness	Bending Radius	Part Number	
SWG	(mm)	Min. (mm)	RAYRIM No.	TPEM No.
30 - 24	0.31 - 0.56	10	RAYRIM-NR-6-0-*	TPEM-NR-6-0-*
23 - 16	0.61 - 1.63	15	RAYRIM-NR-7-0-*	TPEM-NR-7-0-*
15 - 10	1.83 - 3.25	20	RAYRIM-NR-8-0-*	TPEM-NR-8-0-*
9 - 5	3.66 - 5.38	25	RAYRIM-NR-9-0-*	TPEM-NR-9-0-*



Specifications & Approvals

- PAN 6480
- AS41088

PTFE Spiral binding can be used in many environments for:

- Organising wires
- Harness protection
- Abrasion protection
- Eliminate lacing cord and tie-offs

Features & Benefits

- Re-usable
- Flexible and fast installation
- Allows breakouts and re-routing
- Harness multiple cables into a single manageable bundle

Operating Temperature

- From -70°C to +260°C

ID	Width (W)	Thickness	Ø (D)	Weight	Package	Part Number
Nom. (mm)	Max (mm)	Nom g/m	(mm)	(g/m)	Standard	
3.0 (±0.25)	5.0 (±0.25)	0.75 (±0.08)	1.125	20	100m Reel	GTB-30-Colour
5.0 (±0.40)	5.0 (±0.25)	0.75 (±0.08)	1.125	29	50m Reel	GTB-50-Colour
7.5 (±0.50)	8.0 (±0.40)	0.75 (±0.08)	1.125	40	30m Reel	GTB-75-Colour
10.0 (±0.75)	8.0 (±0.40)	0.75 (±0.08)	1.125	50	15m Bag	GTB-100-Colour
12.5 (±0.80)	10.0 (±0.50)	0.75 (±0.08)	1.125	67	15m Bag	GTB-125-Colour
20.0 (±0.80)	12.5 (±0.65)	1.25 (±0.10)	1.660	210	Bag	GTB-200-Colour
25.5 (±0.80)	25.5 (±0.65)	1.25 (±0.10)	1.660	250	Bag	GTB-255-Colour

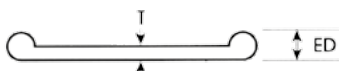
Standard Colour: **Black**

Other Colours: **Natural, Red and Yellow**

Packaging: All reels/bags of spiral binding are supplied in random lengths as standard. The most popular sizes of black spiral binding are held in stock, with low MOQs, plus there is a cut length service available.



SECTION AA



ID Internal Diameter
W Strip Width
T Wall Thickness
ED Edge Diameter

This product may become distorted during storage and transit, we would advise gently heating (not exceeding 100°C would sufficient) to return the product to its natural state.

Lacing Tape

Cords and Yarns
General Information

We offer a comprehensive range of high performance lacing tapes, cords and braiding yarns, used throughout the aerospace, electronics, medical and many smaller specialist manufacturing industries. The lacing tapes are manufactured to meet the CID A-A-52080-4 (MIL-T-43435) specification and cover the five materials most commonly used:

- Polyamide (Nylon)
- Polyester (Dacron®)
- Polytetrafluoroethylene (Teflon®)
- Glass-fibre
- Heat Resistant Polyamide (Nomex®)

When specifying a lacing tape, performance parameters such as fibre type (raw materials), size (physical dimensions), form (flat or round), finish, tensile strength and colours should be considered.

Colours

The standard lacing tape colours are Natural and Black, dependent on the type of material used. For further information on additional colours available, please contact us.



Approvals Overview

- Airbus NSA 8420
- Boeing BMS-13-54D
- Eurofighter J96.502 and JN1127
- Lockheed
- Panavia 6481
- Raytheon 268-10-11
- Rolls Royce ESW 1900
- Sikorsky SS 7057
- Westland EE 423 (M-T43435T5-3C)

Finishes

The table below shows the finishes that are available that meet the requirements of CID-A-A-52080 to CID-A-A52084 (MIL-T-43435), as well as demanding industrial and commercial applications. Finishes are generally used to improve a lacing tapes physical properties and performance characteristics. Not all finishes are available on all products, for further information please contact us.

1. Material / Finish Selection

Designation			Description
MIL	Gu	Br	
A	U	-1	No Finish
B	W	-2	Micro-crystalline, Fungicidal Wax
C	H	-3	Synthetic Rubber or Elastomer
C	Z	n/a	Flame Retarded Rubber
C	PTH	n/a	Low Out-gassing Rubber
D	T	-4	Teflon
E	R	-5	Vinyl
F	S	-6	Silicone Resin
G	B/G	-7	Liquid Nylon
#	n/a	-8	Self extinguishing

Meets requirements of Finish C
(Gu = Gudebrod and Br = Breyden)

Part Number System - Example

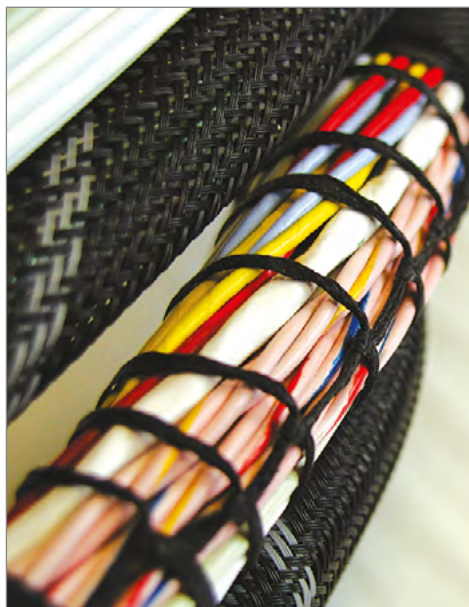
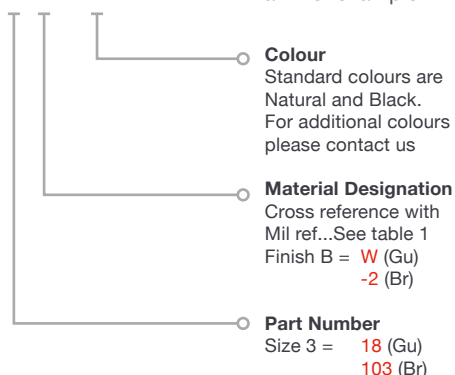
As a guide to constructing your part number identified below is an example based on...

- Type I - Nylon Tape CID-A-A-52080
- MIL ref for Type 1, Size 3, Finish B

Based on premise that a Gudebrod manufactured part is required...

18 W Black

Part No. example



Specifying Information

Lacing Tapes and Yarns

Fibre Type

NYLON Tape CID-A-A-52080 (formerly MIL-T-43435 Type I)

Flat braid manufactured from high tenacity, continuous filament nylon yarn. Temperature range: -55°C to 121°C, melting point 248°C. Available with a variety of finishes as per table.

- General purpose

POLYESTER Tape CID-A-A-52081 (formerly MIL-T-43435 Type II)

Flat braid manufactured from high tenacity, continuous filament polyester yarn. Temperature range -73°C to 177°C, melting point 250°C. Available with a variety of finishes as per table.

- Superior knot tying properties to Nylon
- High temperature performance, available in a range of finishes
- Suitable for aerospace/NASA applications
- Also available 'Pre-shrunk' to reduce longitudinal shrinkage.

TEFLON Tape CID-A-A-52082 (formerly MIL-T-43435 Type III)

Flat braid manufactured from high tenacity, continuous filament Teflon yarn. Temperature range -73°C to 232°C, melting point 327°C. Available with a variety of finishes as per table.

- High temperature performance, available in a range of finishes
- Good resistance to fluids and solvents
- Suitable for aircraft engine applications
- Also available 'Pre-shrunk' to reduce longitudinal shrinkage.

GLASS Tape CID-A-A-52083 (formerly MIL-T-43435 Type IV)

Flat braid manufactured from high tenacity, continuous filament glass yarn coated with Teflon before braiding. Temperature range to -55°C to 427°C, melting point 1150°C. Available with a variety of finishes as per table.

- Extremely high temperature performance
- Very low elongation
- Minimal fibre to fibre abrasion
- Produced from continuous filament electrical grade glass (E-Glass).

NOMEX® Tape CID-A-A-52084 (formerly MIL-T-43435 Type V)

Flat braid manufactured from high tenacity, continuous filament Nomex yarn. Temperature range -55°C to 260°C, melting point 371°C. Available with a variety of finishes as per table.

- Excellent high temperature performance and Non flammable
- Highly resistant to fluids and lubricants
- Suitable for critical aircraft harness applications, identifiable by a green coloured tracer.

NYLON Cord MIL-T-713 Type P, Class 1

Meets or exceeds MIL-T-713 Type P. Round twisted 3 ply nylon cord manufactured from high tenacity, continuous filament yarn. Temperature range -55°C to 121°C. Available with no finish, or micro-crystalline fungicidal wax finish.

NOMEX® Overbraiding Yarn PAA MIL-C-572

Continuous Filament Nomex yarn twisted to form an essentially round bundle. Available unbonded or bonded with a non-corrosive liquid nylon finish. Temperature range -55°C to 260°C, melting point 371°C. Packaged on cardboard tubes or plastic ratchet bobbins for use on New England Butt #2 braiding machines, other packages are available.

- General purpose
- Superior abrasion and fluid resistance

Polyester overbraiding yarn (MIL-C-572 Type PSTR) is also available, please contact us for further information or to discuss further.

Nylon, Polyester and Teflon

Braided Lacing Tapes
Selection Guide**TYPE I • NYLON Tape CID-A-A-52080 Braided Lacing Tape**

Part Number		Size	Breaking Strength	Tape Width		Tape Thickness		Spool Sizes
Br	Gu	Mil-Spec	Kg (Min.)	mm (Min.)	mm (Max.)	mm (Min.)	mm (Max.)	Metres
101	26	1	61.23	4.57	5.59	0.33	0.48	228
102	23	2	36.29	2.51	3.07	0.30	0.46	228
103	18	3	22.68	1.96	2.39	0.28	0.43	457
104	22	4	11.34	1.37	1.68	0.23	0.38	457
105	20	5	6.80	1.14	1.40	0.15	0.36	457
n/a	21	n/a	9.07	1.42	1.73	0.13	0.28	457
n/a	15	n/a	3.18	0.74	0.89	0.03	0.23	457

Standard colours are Natural and Black, for additional colour choices please contact us.
Dimension in Metric unless otherwise stated

TYPE II • POLYESTER Tape CID-A-A-52081 Braided Lacing Tape

Part Number		Size	Breaking Strength	Tape Width		Tape Thickness		Spool Sizes
Br	Gu	Mil-Spec	Kg (Min.)	mm (Min.)	mm (Max.)	mm (Min.)	mm (Max.)	Metres
201	26D	1	61.23	4.57	5.59	0.33	0.48	228
202	23D	2	36.29	2.51	3.07	0.30	0.46	228
203	18D	3	22.68	1.96	2.39	0.28	0.43	457
204	22D	4	11.34	1.37	1.68	0.23	0.38	457
205	21D	5	6.80	1.14	1.40	0.15	0.36	457
n/a	20D	n/a	5.44	1.09	1.35	0.10	0.25	457
n/a	15D	n/a	1.81	0.74	0.89	0.05	0.20	457

Standard colours are Natural and Black, for additional colour choices please contact us.
Dimension in Metric unless otherwise stated

TYPE III • TEFLON Tape CID-A-A-52082 Braided Lacing Tape

Part Number		Size	Breaking Strength	Tape Width		Tape Thickness		Spool Sizes
Br	Gu	Mil-Spec	Kg (Min.)	mm (Min.)	mm (Max.)	mm (Min.)	mm (Max.)	Metres
302	256	2	13.61	2.74	3.35	0.23	0.36	228
304	231	4	6.80	1.5	1.83	0.23	0.36	457
305	n/a	5	4.50	0.58	0.71	0.23	0.36	457
n/a	230	n/a	6.35	0.71	0.86	0.64	0.79	457
n/a	302	n/a	1.81	0.25	-	-	-	457

Standard colours: Natural (Dark Brown) only, Teflon fibres cannot be dyed or coloured.
Finishes available: 'unfinished' and 'synthetic' only
Dimension in Metric unless otherwise stated

Accessories

Glass, Nomex® and Nylon

Braided Lacing Tape and Twisted Cord
Selection Guide

1 TYPE IV • GLASS Tape CID-A-A-52083 Braided Lacing Tape

Part Number		Size	Breaking Strength	Tape Width		Tape Thickness		Spool Sizes
Br	Gu	Mil-Spec	Kg (Min.)	mm (Min.)	mm (Max.)	mm (Min.)	mm (Max.)	Metres
401	26X	1	90.72	5.16	6.30	0.33	0.48	228
402	23X	2	45.36	2.51	3.07	0.33	0.48	228
403	18X	3	34.02	1.96	2.39	0.33	0.48	457
404	22X	4	22.68	1.37	1.68	0.33	0.48	457
405	n/a	5	22.68	1.14	1.40	0.33	0.48	457
n/a	21X	n/a	31.75	1.73	2.11	0.30	0.46	457

Standard colours are Natural (White) and Black, fibreglass cannot be dyed but finish may be pigmented Black.
Dimension in Metric unless otherwise stated

7 TYPE V • NOMEX® Tape CID-A-A-52084 Braided Lacing Tape

Part Number		Size	Breaking Strength	Tape Width		Tape Thickness		Spool Sizes
Br	Gu	Mil-Spec	Kg (Min.)	mm (Min.)	mm (Max.)	mm (Min.)	mm (Max.)	Metres
501	726	1	38.56	4.57	5.59	0.33	0.48	228
502	723	2	22.68	2.51	3.07	0.28	0.43	228
503	718	3	15.88	1.73	2.11	0.23	0.38	457
504	722	4	11.34	1.27	1.55	0.18	0.33	457
n/a	1342	n/a	31.75	2.06	2.51	0.43	0.58	228
n/a	946	n/a	2.27	0.30	-	-	-	457

Standard colours are Natural (off White) with a Green tracer. Additional colour choices with or without tracer please contact us.
Dimension in Metric unless otherwise stated

13 TYPE P • NYLON Cord MIL-T-713 Twisted cord

Part Number		Size	Breaking Strength	Approximate Yield	Diameter		Spool Sizes
Br	Gu	Mil-Spec	Kg (Min.)	Metres per Kg	mm (Min.)	mm (Max.)	Kg
111-2	n/a	1	31.75	273 Wax Finish	0.91	1.12	0.45
111-1	n/a	1	31.75	350 No Finish	0.91	1.12	0.45
112-2	n/a	2	21.77	446 Wax Finish	0.53	0.74	0.45
112-1	n/a	2	21.77	595 No Finish	0.53	0.74	0.45
113-2	n/a	3	14.51	558 Wax Finish	0.48	0.69	0.45
113-1	n/a	3	14.51	744 No Finish	0.48	0.69	0.45

Standard colours are Natural (off White) or Black, no other colours available.
Dimension in Metric unless otherwise stated

MIL-C-572 Nomex®Overbraiding Yarn
Selection Guide

Continuous Filament Nomex yarn twisted to form an essentially round bundle. Material is available unbonded or bonded with a non-corrosive liquid nylon finish. Temperature range -55°C to 260°C, melting point 371°C.

Material packaged on cardboard tubes or plastic ratchet bobbins for use on New England Butt #2 braiding machines, other packages are available.

Ordering Information

When ordering please specify the denier, finish, colour, number of ply per end x number of ends, material and bobbin requirement, as per example shown below;

200 B Natural 1x4 Nomex® R.

TYPE PAA • NOMEX® MIL-C-572 Overbraiding Yarn

Yarn Size	Number of Filaments	Breaking Strength	Nominal Diameter	Yarn Elongation	Parallel Ends per Bobbin	Spool Sizes
		Kg (Min.)	mm (Min.)			Metres
200 Denier	100	1.24	0.152	35%	1-8	4,572
1200 Denier	600	6.45	0.305	37%	1-4	914.4

Code	Finishes	Comments
U	Untreated	General Purpose
B	Bonded with non-corrosive, flame retardant Polyamide	Superior abrasion resistance. Excellent fluid resistance

Put-Up	Length tube	Length braid	Width	Height	Tube Ø	Taper
T	133.50	120.65	6.35 tube	47.63	20.96	30°
R	155.58	134.94	46.04 bobbin	44.45	7.94	-

Standard colours are Natural (Off White) Olive Drab, Black and Red, other colours are available in bond dyed form or with unbonded yarn in minimum dye lots, for details please contact us.

Dimension in millimetres unless otherwise stated

TYPE PSTR • POLYESTER Mil-C-572 Overbraiding Yarn

Also available please contact us for details

