Lashing straps and accessories

The Deltec cable support system is a user-friendly product designed to provide ease and flexibility in fastening communications cables to messenger strand. It is equally well suited for copper conductor cable, coaxial cable, fiber optic cable and innerduct in aerial applications.



Strong, long-life and cost-saving method of securing communication cables

The Deltec system answers your aerial cable needs with innovative design and state-of-the-art materials. This system includes weather-resistant acetal cable straps, marine grade locking devices, and base hanger accessories for specific applications where mounting is required. Pre-assembled Deltec cable straps are available in standard lengths of 10 in. (254 mm), 13.5 in. (342.9 mm), and 27 in. (685.8 mm). Convenient 50 ft. (15.24 m) to 3500 ft. (1066.8 m) reels where specific lengths need to be established by the installer in the field are available. Additional "standard" lengths can be established for applications where higher volumes prevail.

Extra security!

The recommended maximum continuous static loading for the Deltec straps is 20 lb. per strap. For best results, suggested spacing is 15 in. It's the responsibility of the user to determine whether or not their application meets our recommendation.

Advantages of the Deltec System Include:

- · Proven years of service
- · No sharp edges craft friendly Cable friendly!
- Ease of installation one wrap, no re-treading or re-strap
- · Lowers installation costs
- · High tensile strength after fastening
- · Total flexibility in lengths when using reel
- Stackable spacers accommodate all cable sizes no need to stock multiple sizes of individual height spacers
- Spacer designed to retain strap on each side and cradle the cable, providing restricted movement of spacer and preventing damage to cable
- In situations where multiple cables are supported, the ABB TCP360 stackable spacer may be rotated 90° and installed similarly to a single cable, yet provide the same restricting features (unlike those commonly used today)
- Month and year of manufacture stamped into strap material
- · Squirrels and vermin won't eat it!







Pre-assembled Deltec cable ties



Characteristics

- Provides a strong, long-life and cost saving method of securing communication and overhead cables
- Double locking head with corrosion resistant locking barbs in copper alloy
- Proven years of service: designed to last a minimum of 20 years outdoor
- No sharp edges: operator friendly, cable friendly!
- Easy to install, low installation costs
- Extremely robust ties, with high tensile strength (1110N) after fastening
- · Choice of specific spacers and accessories
- Superior resistance to moisture and salt environments

Technical information

- Material Strap & head: Toughened weatherable acetal
- Material Locking barb: Marine grade, corrosionresistant copper alloy
- Temperature range: -65°C to +105°C (-85°F to 221°F)
- Flammability rating: UL 94 HB
- Colour: Black
- · Halogen free

Pre-assembled Deltec cable ties

-	ANSI UL94 Flame	Max. wire bundle dia.		,	Length L		Width W		Std. pkg.	
Cat. n°.	rating	[mm]	[in.]	[mm]	[in.]	[mm]	[in.]	[lb]	strength [N]	[pcs]
CSS-100	НВ	76.2	3	254.0	10	12.7	0.5	250	1,110	50
CSS-135	НВ	88.9	3.5	342.9	13.5	12.7	0.5	250	1,110	50
CSS-160	НВ	101.6	4	406.4	16	12.7	0.5	250	1,110	50
CSS-270	НВ	200	7.87	685.8	27	12.7	0.5	250	1,110	10

Note: the recommended maximum continuous static loading for the Deltec straps is $90\,\mathrm{N}$ per strap.

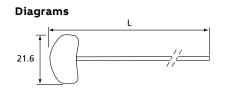
For best results suggested spacing is 35 to 40cm.

It is the responsibility of the user to determine whether or not their application meets our recommendation.

Tooling



WT3D For use with 12.7mm (1110N) Cable ties. See page C42.





Strap on reel & double locking heads



Characteristics

- · Strap on reel, with separate head
- Total flexibility & no waste: cut at the desired length
- · Easy to store: reduced inventory
- Convenient kits containing several reels of strap and separate locking heads, to provide all you need to be efficient on the field
- 2 configurations to match your need
- Superior resistance to UV rays, to moisture and salt environments

Technical information

- Material Strap & head: Toughened weatherable acetal
- Material Locking barb: Marine grade, corrosionresistant copper alloy
- Temperature range: -40°C to +85°C (-40°F to 185°F)
- Flammability rating: UL 94 HB
- Colour: BlackHalogen free

Strap on reel

	ANSI UL94 Flame	Lengt	h per reel		Width		Min. tensile strength	Std. pkg. reel	Std. pkg. heads
Cat. n°.	rating	[m]	[pi]	[mm]	[in.]	[lb]	[N]	[pcs]	[pcs]
CSS-5K	НВ	15	50	12.7	0.5	250	1,110	5	150
CSS-10K	НВ	15	50	12.7	0.5	250	1,110	5	300
TYD-50R	НВ	15	50	12.7	0.5	250	1,110	1	_
696-41794	НВ	305	1,000	12.7	0.5	250	1,110	1	_

Note: the recommended maximum continuous static loading for the Deltec straps is 90 N per strap.

For best results suggested spacing is 35 to 40cm. It is the responsibility of the user to determine whether or not their application meets our recommendation.

Tooling



For use with 12.7mm (1110N) Cable ties. See page C42.



Technical information

- Material: Toughened weatherable acetal
- Material locking barb: Marine grade, corrosionresistant copper alloy
- Superior resistance to UV rays, to moisture and salt environments
- Temperature range: -40°C to +85°C (-40°F to +185°F)
- Flammability rating: UL 94 HB
- Colour: Black
- Halogen free

Double locking heads

Std.	Bulk	ANSI UL94 Flame		Length L		Width W		Height H	Std. pkg.	Bulk pkg.
Cat. N°.	Cat. N°.	rating	[mm]	[in.]	[mm]	[in.]	[mm]	[in.]	[pcs]	[pcs]
TYD-LH	696-41795	НВ	21.6	0.85	19.1	0.75	12.6	0.50	25	1,000

To be assembled with Deltec strap on reel





Modular stackable cable spacers



Characteristics

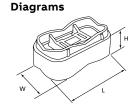
- Stackable, 0.5 in (12.7 mm) high each, to achieve desired spacing regardless of cable diameter - no need to store a multitude of spacers of different heights
- Designed to hold and support each side of the cable, limiting movement of the spacer to prevent damage to the cable
- Ideal for coaxial cables (TCP360)
- Can be used for parallel or perpendicular cable routing

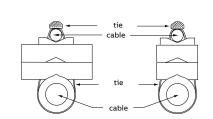
Technical information

- Material: weather-resistant polypropylene
- Temperature range: -40°C to +85°C (-40°F to +185°F)
- Flammability rating: UL 94 HB
- · Colour: Black
- · Halogen free

Spacers

Std.	d. Bulk ANSI		L	ength L		Width W		Height H	Std. pkg.	Bulk pkg.
Cat. N°.	Cat. n°.	Flame rating	[mm]	[in.]	[mm]	[in.]	[mm]	[in.]	[pcs]	[pcs]
TCP5255	TCP360	НВ	53.3	2.10	30.5	1.20	12.7	0.5	25	100





Cable support system with metallic locking barb

Base and hanger



Characteristics

• Secures cables to all types of surfaces

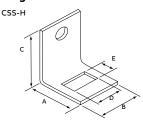
Technical information

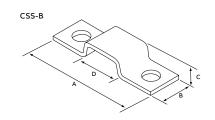
• Material: zinc-plated steel

Base and hanger

	Dimensions											Dia. from the hole		
		Α		В		С		D		E		fixation	Std. pkg.	
Cat. n°.	[mm]	[in.]	[mm]	[in.]	[mm]	[in.]	[mm]	[in.]	[mm]	[in.]	[mm]	[in.]	[pcs]	
CSS-B	48.4	1.91	14.3	0.56	7.1	0.28	15.1	0.59	5.6	0.22	6.7 (2x)	0.26 (x2)	50	
CSS-H	22.5	0.89	22.2	0.87	29.8	1.17	13.6	0.54	8.3	0.33	6.9	0.27	50	

Must be assembled with Deltec on reels.





Messenger hanger straps



Characteristics

- Very good resistance to ultraviolet rays, exposure to chemicals and weathering
- 2 practical kits containing several rolls of ties and separate heads to fully meet your needs on site

Technical information

• Material: polyamide 12

• Temperature range: -40°C to +80°C

(-40°F to +176°F)

• Colour: Black







UV-resistant

Weathe proof

Messenger Hanger Straps

	Max. wire bu	ndlo dia		Length		Width		Min. tensile strength		Std. pkg.	
							Material				
Cat. n°.	[mm]	[in.]	[mm]	[in.]	[mm]	[in.]	hook	[lb]	[N]	[pcs]	
Weather-Resist	ant polyamide 1	L2 messenger	hanger strap	s (Releasabl	e)						
TYM5412X	76	3	305	12	12.7	0.5	Bronze	200	890	50	
TYM5418X	127	5	457	18	12.7	0.5	Bronze	200	890	25	
TYM5423X	178	7	610	24	12.7	0.5	Bronze	200	890	25	
TYM5430X	229	9	762	30	12.7	0.5	Bronze	200	890	25	
TYM5436X	279	11	914	36	12.7	0.5	Bronze	200	890	25	
TYM5412X-S	76	3	305	12	12.7	0.5	Stainless steel	200	890	50	
TYM5418X-S	127	5	457	18	12.7	0.5	Stainless steel	200	890	25	
TYM5423X-S	178	7	610	24	12.7	0.5	Stainless steel	200	890	25	
TYM5430X-S	229	9	762	30	12.7	0.5	Stainless steel	200	890	25	
TYM5436X-S	279	11	914	36	12.7	0.5	Stainless steel	200	890	25	
Weather-resist	ant polyamide 1	2 hanger stra	p (Releasable)							
TY54407X	51	2	161	6,34	12.7	0.5	Steel	200	890	100	
TY54413X	102	4	349	13,75	12.7	0.5	Steel	200	890	100	

Note: The recommended maximum continuous static load for polyamide is 25 lbs (111 N) per strap.

 $For best results, the suggested spacing is 15 in. (38 cm). \\ It is the user's responsibility to determine whether or not their application meets our recommendations.$

The hook hooks onto a ½ in. diameter carrier cable.

Heavy-Duty lashing tie (Releasable)



Characteristics

- Black carbon provides good resistance to ultraviolet rays and also extends the service life of the clip
- One piece heavy duty ties
- Reusable, ideal for temporary installations
- · Quick and durable installation
- · Easily transportable
- No tools

Technical information

- Material: polyamide 6.6
- Temperature range: -40°C to +85°C (-40°F to +185°F)
- Flammability rating: UL 94 V-2
- Colour: Black
- · Halogen free

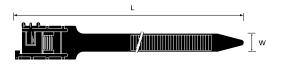


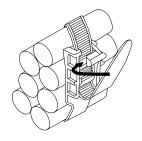


Heavy-Duty lashing tie (Releasable)

Cat. n°.	ANSI UL94 Flame	Wire bundle dia.		Length L		Width W		Min. tensile strength		Std. pkg.	Bulk pkg.
Std. pkg. / Emb. en nbr.	rating	[mm]	[in.]	[mm]	[in.]	[mm]	[in.]	[lb]	[N]	[pcs]	[pcs]
TY5409 / TY409	V-2	45 - 121	1,77 - 4,76	483	19	12,7	0,5	200	890	25	100

Description of Cat. n°. structure: see page C13 Description of materials and properties: see pages C132 to C144 $\,$





Introduce the cable tie tail into the lower slot in the head. Tighten the tie and pull it back. Slide in the tie under the catch from the side until it snaps into position.

2-piece reusable attachment straps



Characteristics

- Heavy-duty lashing ties, in cut lengths with preassembled heads
- The strap is made of UV-resistant Polypropylene, ideal for applications where chemical resistance is important
- Extremely robust (670N)
- Easily releasable & reusable
- 2 types of head: type A: no mounting hole, type B: with mounting hole
- Typical applications: Indoor and outdoor fastening of cables, pipes and other parts in industry, shipbuilding, chemical industry etc

- Cat. n°. 696-41563: strap on reel of 300 meter, UV resistant polypropylene
- Cat. n°. 696-41562: separate head (without fixing hole), polyamide 6.6 UV resistant

Technical information

- Material tie : weatherable Polypropylene
- Material head : polyamide 6.6
- Temperature range:

strap: -55°C to +110°C (-67°F to +230°F)

head: -40°C to +85°C (-40°F to +185°F)

- Flammability rating: UL 94 V-2
- · Colour: Black
- · Halogen free

Releasable 2-piece lashing ties, pre-assembled version

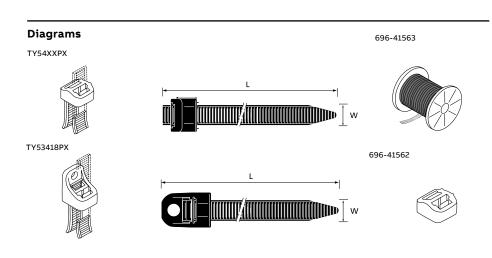
	ANSI UL94 Flame	Wir	e bundle dia.		Length L		Width W	Mounti	ng hole ameter		Tensile rength	Std. pkg.
Cat. n°.	rating	[mm]	[in.]	[mm]	[in.]	[mm]	[in.]	[mm]	[in.]	[lb]	[N]	[pcs]
Weather-resista	ant polypropylene	hanger lashi	ng tie (Releasab	ole)								
TY53418PX	UL 94 V-2	45 - 127	1.77 - 5	457	17.99	13.2	0.52	6.9	0,27	150	670	25
Weather-Resist	ant polypropylene	lashing tie (Releasable)									
TY5418PX	UL 94 V-2	45 - 127	1.77 - 5	457	17.99	13.2	0.52	_	_	150	670	25
TY5424PX	UL 94 V-2	10 - 178	0.39 - 7.01	610	24.02	13.2	0.52	_	_	150	670	25
TY5442PX	UL 94 V-2	10 - 305	0.39 - 12.01	1.067	42.01	13.2	0.52	_	_	150	670	10
TY5460PX	UL 94 V-2	10 - 457	0.39 - 17.99	1.524	60	13.2	0.52	_	_	150	670	10

Description of Cat. n°. structure: see page C13

Description of materials and properties: see pages C132 to C144

Releasable 2-piece lashing ties on reel with separate heads

	ANSI UL94 Flame	Max. wire b	undle dia.		Length L	Width W		Tensile strength		Std. pkg.
Cat. n°.	rating	[mm]	[in.]	[mm]	[in.]	[mm]	[in.]	[lb]	[N]	[pcs]
696-41562	V-2		= -	-	-	-	-	150	670	200
696-41563	V-2	45	1.8	300	1,000	13.2	0.5	150	670	1



Hook and Loop Fasteners

FO and FOL series and mounting bases



FO series loop ties are ideal for wrapping pre-determined bundle diameters thanks to the convenient slotted head.



FOL series buckle ties provide added strength and stability thanks to the high performance polyamide buckle.

Characteristics

These handy ties are very easy to release and re-use, making them ideal for applications where changes are anticipated or continuous access is required.

- · Quick bundling and re-adjustable tension
- No risk of over-tightening the cables, which makes the Ty-Grip Hook & Loop fasteners ideal for specific applications in fibre optics, computer network wiring, telecom cables, etc.
- Multiple colours available for identifying specific bundles
- Different sizes available to accommodate varying bundle diameters
- Screw-mount and self-adhesive mounting bases provide multiple mounting options

Technical information FO and FOL series

- Material hook side: Polyamide 6.6
- Material loop side: Low density Polyethylene
- Temperature range: (FO serie): -20°C to +104°C (-4°F to +219.2°F)
- Temperature range: (FOL serie): -20°C to +93°C (-4°F to +199.4°F)
- Add the suffix "-FR" to obtain an ANSI UL94 V-2 classified product
- Peel-off strength: 0.8N/cm

Technical information mounting bases

- Material: polyamide 6.6
- Temperature range:

screw / glue version : -40°C to +85°C

(-40°F to +185°F)

self-adhesive version : 0° C to + 70° C

(32°F to +158°F)

- · Colour: Natural
- Halogen free, silicone free



Two mounting bases designed for use with hook and loop fasteners

Colour code

Colour code	Colour
0	Black 🔲
1	Brown
2	Red 🗌
3	Orange 🗌
4	Yellow

Colour code	Colour
5	Green 🗌
6	Blue 🗌
7	Purple 🗌
8	Grey 🗌
10	White

Hook and loop fasteners, mounting bases

	Max. wire bundle dia.			Length		Width	Tensile strength	Std. pkg.	
Cat. n°.	[mm]	[in.]	[mm]	[in.]	[mm]	[in.]	[lb] [N]	[pcs]	
FO series	,				,				
FO200-40-0	51	2	229	9	12.7	0.50	40 180	10	
FO200-50-0	51	2	229	9	19.1	0.75	50 220	10	
FO350-40-0	89	3.5	330	13	12.7	0.50	40 180	10	
FO350-50-0	89	3.5	330	13	19.1	0.75	50 220	10	
FO350-50-0-FR*	89	3.5	330	13	19.1	0.75	50 220	10	
FOL series									
FOL300-50-0	76	3	305	12	19.1	0.75	50 220	10	
FOL500-50-0	127	5	457	10.13	19.1	0.75	50 220	10	

Replace "0" at the reference for the desired colour.

* FR suffix is flame retardant

Mο	untir	na ba	ases

Trounting Subsci								
Cat. n°.	Description	Screw size		Max width of the tie	Std. pkg.			
TC368	2 in. x 2 in. Screw Mounted	#8	19.1	0.75	500			
TC368A	2 in. x 2 in. Adhesive Mounted	#8	19.1	0.75	500			

Hook and Loop Fasteners

FOS and FOR series and mounting bases



FOS series strip ties are pre-cut which makes bundling easy.



FOR series rolled hook and loop allows customers to conveniently cut pieces to desired lengths, eliminating waste.



Two mounting bases designed for use with hook and loop fasteners

Characteristics

These handy ties are very easy to release and re-use, making them ideal for applications where changes are anticipated or continuous access is required.

- Quick bundling and re-adjustable tension
- No risk of over-tightening the cables, which makes the Ty-Grip Hook & Loop fasteners ideal for specific applications in fibre optics, computer network wiring, telecom cables, etc.
- Multiple colours available for identifying specific bundles
- Different sizes available to accommodate varying bundle diameters
- Screw-mount and self-adhesive mounting bases provide multiple mounting options

Technical information FOS and FOR series

- Material hook side: Low density Polyethylene
- · Material loop side: Polyethylene
- Temperature range: -20°C to +104°C (-4°F to +219.2°F)
- Add the suffix "-FR" to obtain an ANSI UL94 V-2 classified product
- Peel-off strength: 0.8N/cm

Technical information mounting bases

- Material: polyamide 6.6
- Temperature range:

screw / glue version : -40°C to +85°C

(-40°F to +185°F)

self-adhesive version : 0°C to +70°C

(32°F to +158°F)
• Colour: Natural

• Halogen free, silicone free

Colour code

Colour code	Colour			
0	Black 🗌			
1	Brown 🗌			
2	Red 🗌			
3	Orange 🗌			
4	Yellow 📗			

Colour code	Colour		
5	Green 🗌		
6	Blue 🗌		
7	Purple 🗌		
8	Grey 🗌		
10	White		

$\label{eq:hook and loop fasteners, mounting bases} \label{eq:hook and loop fasteners, mounting bases}$

				Length		Width		Tensile	
	Max. wire	bundle dia.		L		W		strength	Std. pkg.
Cat. n°.	[mm]	[in.]	[mm]	[in.]	[mm]	[in.]	[lb]	[N]	[pcs]
FOS series						,			
FOS150-50-0	38	1,5	152	6	19.1	0.75	50	220	10
FOS320-50-0	81	3.20	305	12	19.1	0.75	50	220	10
FOS500-50-0	127	5	457	18	19.1	0.75	50	220	10
FOR series									
FOR180-50-0		Variable	4,572	180	19.1	0.75	50	220	1
FOR180-50-0-FR**		Variable	4,572	180	19.1	0.75	50	220	1

^{*} Standard colour: black

Replace "-0" in the Cat. no. by the corresponding colour

Contact your Sales Office for Product Availability in the other colours

Mounting bases					
Cat. n°.	Description	Screw size	·	Max width of the tie	Std. pkg.
TC368	2 in. x 2 in. Screw mounted	#8	19.1	0.75	500
TC368A	2 in. x 2 in. Adhesive mounted	#8	19.1	0.75	500





^{**} FOR180-50-0-FR is made of flame retardant material

