

## Stainless Steel Cable Ties

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**Introduction**

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**Ranges Available:**

- Ball Lock – coated and uncoated material grade AISI 316 page 2
  - Smooth entry & easy threading of tie body
  - Self-locking at any position with minimum slip back
- Ladder – coated and uncoated material grade AISI 316 page 3
  - Low profile with extra flexible body
- Releasable – coated and uncoated material grade AISI 316 page 4
  - Due to the shape of the head, this product can be re-used
- Permark 316 Marker System page 5
- BetaMarker Stainless Steel Marker System page 5
- BetaTies Stainless Steel Ties page 6
- BetaTies Nylon Coated Stainless Steel Ties page 6
- Tooling page 6
- ZHCP Low fire hazard profile extrusion for cable protection pages 7-8

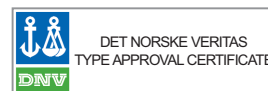
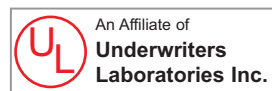
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These products can be used in most indoor / outdoor environments especially where severe environmental conditions exist.

The material being used is high quality AISI 316 with high corrosion resistance, the typical applications would be: -  
Food Processing, Marine, Power Stations, Petro-Chemical, Off Shore /  
Underground Cable Laying and where new regulations state second fixings must be used.

Selected ranges of ties are powder coated to give corrosion resistance. The coating also acts as a barrier to avoid corrosion between dissimilar metals.

Selected products are Quality Certified by UL and DNV and also offer LFH.



## Stainless Steel Cable Ties

### Roller Ball - Uncoated



TE Part No.	Size (mm)	Pack Qty.
1634259-1	100 x 4.6	100
1634259-2	150 x 4.6	100
1634259-3	200 x 4.6	100
1-1634259-7	260 x 4.6	100
1634259-4	360 x 4.6	100
1634259-5	520 x 4.6	100
1634259-6	620 x 4.6	100
1634259-7	840 x 4.6	100
1634259-8	1000 x 4.6	100
1634259-9	100 x 7.9	50
1-1634259-0	150 x 7.9	50
1-1634259-1	200 x 7.9	50
1-1634259-8	260 x 7.9	50
1-1634259-2	360 x 7.9	50
1-1634259-3	520 x 7.9	50
1-1634259-4	620 x 7.9	50
1-1634259-5	840 x 7.9	50
1-1634259-6	1000 x 7.9	50

Loop Tensile Strength: 4.6 mm width 445 N (100 Lbs) - 7.9 mm width 1112 N (250 Lbs)  
Material : Stainless Steel Grade 316

### Roller Ball - Coated

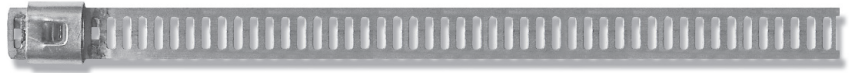


TE Part No.	Size (mm)	Pack Qty.
1634260-1	100 x 4.6	100
1634260-2	150 x 4.6	100
1634260-3	200 x 4.6	100
1-1634260-7	260 x 4.6	100
1634260-4	360 x 4.6	100
1634260-5	520 x 4.6	100
1634260-6	620 x 4.6	100
1634260-7	840 x 4.6	100
1634260-8	1000 x 4.6	100
1634260-9	100 x 7.9	50
1-1634260-0	150 x 7.9	50
1-1634260-1	200 x 7.9	50
1-1634260-8	260 x 7.9	50
1-1634260-2	360 x 7.9	50
1-1634260-3	520 x 7.9	50
1-1634260-4	620 x 7.9	50
1-1634260-5	840 x 7.9	50
1-1634260-6	1000 x 7.9	50

Loop Tensile Strength: 4.6 mm width 445 N (100 Lbs) - 7.9 mm width 1112 N (250 Lbs)  
Material : Stainless Steel Grade 316

## Stainless Steel Cable Ties

### Ladder - Uncoated



TE Part No.	Size (mm)	Pack Qty.
1814426-1	150 x 7.0	100
1814426-3	225 x 7.0	100
1814426-5	300 x 7.0	100
1814426-7	450 x 7.0	100
1814426-9	610 x 7.0	100
1-1814426-2	150 x 12	50
1-1814426-4	225 x 12	50
1-1814426-6	300 x 12	50
1-1814426-8	450 x 12	50
2-1814426-0	610 x 12	50

Loop Tensile Strength: 7 mm width 445 N (100 Lbs) - 12 mm width 1112 N (250 Lbs)

Material : Stainless Steel Grade 316

### Ladder - Coated



TE Part No.	Size (mm)	Pack Qty.
1814427-1	150 x 7.0	100
1814427-3	225 x 7.0	100
1814427-5	300 x 7.0	100
1814427-7	450 x 7.0	100
1814427-9	610 x 7.0	100
1-1814427-2	150 x 12	50
1-1814427-4	225 x 12	50
1-1814427-6	300 x 12	50
1-1814427-8	450 x 12	50
2-1814427-0	610 x 12	50

Loop Tensile Strength: 7 mm width 445 N (100 Lbs) - 12 mm width 1112 N (250 Lbs)

Material : Stainless Steel Grade 316

## Stainless Steel Cable Ties

### Releaseable - Uncoated



TE Part No.	Size (mm)	Pack Qty.
1634261-1	150 x 5.0	100
1634261-2	230 x 5.0	100
1634261-3	330 x 5.0	100
1634261-4	450 x 5.0	100
1634261-5	600 x 5.0	100
1634261-6	750 x 5.0	100
1634261-7	900 x 5.0	100
1634261-8	150 x 10	50
1634261-9	230 x 10	50
1-1634261-0	330 x 10	50
1-1634261-1	450 x 10	50
1-1634261-2	600 x 10	50
1-1634261-3	750 x 10	50
1-1634261-4	900 x 10	50

Loop Tensile Strength: 5 mm width 1334 N (300 Lbs) - 10 mm width 2000 N (450 Lbs)

Material : Stainless Steel Grade 316

### Releaseable - Coated



TE Part No.	Size (mm)	Pack Qty.
1634262-1	150 x 5.0	100
1634262-2	230 x 5.0	100
1634262-3	330 x 5.0	100
1634262-4	450 x 5.0	100
1634262-5	600 x 5.0	100
1634262-6	750 x 5.0	100
1634262-7	900 x 5.0	100
1634262-8	150 x 10	50
1634262-9	230 x 10	50
1-1634262-0	330 x 10	50
1-1634262-1	450 x 10	50
1-1634262-2	600 x 10	50
1-1634262-3	750 x 10	50
1-1634262-4	900 x 10	50

Loop Tensile Strength: 5 mm width 1334 N (300 Lbs) - 10 mm width 2000 N (450 Lbs)

Material : Stainless Steel Grade 316

## Stainless Steel Cable Ties

### Permark 316 Marker System

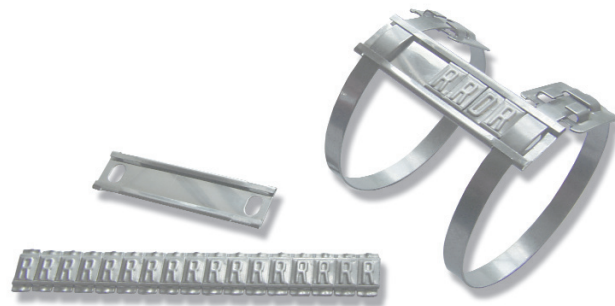


Description	Size (LxH) mm	Print Area (LxH) mm	Sales Part No.	TE Part No.
Pre-Marked Stainless Steel marker	85x12	50x10	PM08512	on application

Material : Stainless Steel Grade 316

- Standard Colour - Metallic
- Service Temperature - -80°C to 500°C plus
- UV Resistance - Excellent
- Abrasion Resistance - Excellent
- Chemical Resistance - Excellent resistance to: Hydrocarbons, Fuels, Greases, Oils, Alcohols, Inorganic Salts and Inorganic Acids. For resistance to a specific chemical, please contact Tyco Electronics
- Pre-Marked to Customer Requirements
- Customer Defined Kits for Ease of Installation
- Excellent Character Legibility
- One Piece, 316 Stainless Steel Construction
- Variety of Fixing Methods

### BetaMarker Stainless Steel Markers



Description	Quantity Packed	Sales Part No.	TE Part No.
BetaMarker Tiles (20 per strip)	200 Tiles	0700	on application
Carrier Strips 6 Digits	100 Strips	0703	4-1198158-1
10 Digits	100 Strips	0704	2-1198149-4
16 Digits	50 Strips	0705	6-1198194-4

Material : Stainless Steel Grade 316

- Standard Colours - Metallic, A-Z, 0-9, +, -, / and blank
- Limited Fire Hazard
- Suitable for use in the Harshesht of Environments
- Heavily Embossed Characters
- Fixed with Beta Ties One-Piece Stainless Steel Ties
- 6, 10 or 16 Digit Carriers

## Stainless Steel Cable Ties

### BetaTies - Light Duty



Sales Part No.	TE Part No.	Sales Part No.	TE Part No.	Strap Length **		Loop Tensile Strength (N) Tamped		Maximum Bundle Dia		Colour #	Packed
				inches	mm	6mm Strap Width	9.5mm Strap Width	inches	mm		
1820	7-1200199-6	1830	9-1200203-7	9	229	1000	1550	2.3	58	Black	100
1821	2-1200196-2	1831	9-1200202-3	12	305	1050	1450	3.3	84	Black	100
1822	2-1200189-8	1832	6-1200194-0	18	457	1250	1475	5.2	132	Black	100
-	-	1833	6-1200190-3	24	610	-	1500	7.1	180	Black	50

Material : Nylon II Coated Stainless Steel Grade 316

\* Minimum Values

\*\* Length Excluding Buckle

# Other Colours Available - Subject to Quotation

- Standard Colour - Black
- Limited Fire Hazard
- Service Temperature - Up to +80°C
- One-Piece Construction

### Stainless Steel Cable Tie Tooling



Sales Part No: EPGSS20A  
TE Part No: 1814428-1



Sales Part No: EPGSS10A  
TE Part No: 1814429-1

- Adjustable tensing tool with automatic cut off for unwanted tie tail
- Manual tensing tool with cut off for unwanted tie tail
- Thickness of tie:- up to 3.0mm
- Thickness of tie:- up to 3.0mm
- Width of tie:- up to 7.9mm
- Width of tie:- up to 7.9mm

ZHCP low fire hazard, profile extrusion for cable protection when using metal cable ties

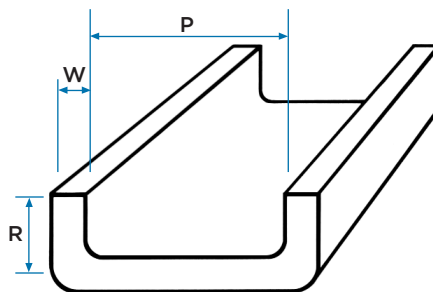


The Thermofit ZHCP profile extrusion is made from Tyco Electronics Raychem brand Zerohal material. The product is used in conjunction with cable ties for holding together bundles of cables - inside cabinets, in trunking, against walls - in fact anywhere cables are tied together.

The Thermofit ZHCP profile extrusion exhibits outstanding fire safety characteristics - low smoke emission, low Toxicity Index (as defined by NES 711) and low acid gas generation. These properties are combined with good mechanical and fuel resistance. ZHCP is listed in BRI326 and has been given a hazard category rating of G for general use.

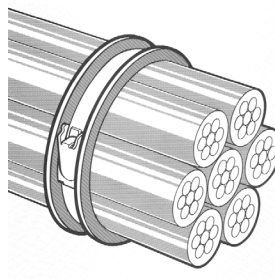
- Continuous Operating Temperature -30°C to +105°C
- Full fire testing has been carried out in accordance with Def Std 07-247

### Dimensions



Description	P mm	R mm	W mm	Rec. Bundle Dia. Min. (mm)
ZHCP NR 1	16.2	3	1.5	80
2	10.2	3	1.5	50
3	8.1	3	1.1	40
4	4.7	1.5	0.8	20
6	13.2	3	1.5	65

### Typical Installed Example





ZHCP low fire hazard, profile extrusion for cable protection when using metal cable ties

Fire Safety Properties	Minimum Performance	Test Method
Limiting Oxygen Index (LOI)	29	ISO 4589-2
Temperature Index	250°C	ISO 4589-3
Flame Retardancy - burntime - burn length	100 seconds max 25mm max	ASTM D635
Smoke Index	20 max	IEC 60684-2 (Def Std 02-711)
Toxicity Index	5 max per 100 grams	IEC 60684-2 (NES 713)
Acid Gas Generation - pH Index - Electrolytic conductivity	4.3 - 10.5 10pS/mm max	IEC 60754-2

Physical	Minimum Performance	Test Method
Tensile Strength (TS)	8MPa min	ISO 37
Ultimate Elongation	150% min	ISO 37
2% Secant Modulus	130MPa max	ASTM D882
Specific Gravity	1.65 max	ISO 1183
Heat ageing 120 hours at 130°C (TS)	6MPa min	ISO 188
Ultimate Elongation	100% min	ISO 37
Heat Shock 4 hours at 225°C	No dripping, cracking or flowing	ASTM D2671
Low temperature flexibility 4 hours at -30°C	Pass	RK6193

Electrical	Minimum Performance	Test Method
Electrical Strength	15MV/m min (15KV/mm)	IEC 60243-1

Chemical	Minimum Performance	Test Method
Water absorption	1.5% max at 23°C for 24hrs +/- 2hrs immersion 4.0% max at 70°C for 24hrs +/- 2hrs immersion	ISO 62 ISO 62
Fluid resistance 0149 (50°C) (TS) IRM 902 Standard Oil (TS)	6 MPa min UE 75% min 6 MPa min UE 75% min	ISO1817 and ISO 37

Specification
RK 6193

Installation
Use the size of ZHCP appropriate to the overall cable diameter being bundled. Cut to required length and install underneath cable tie. No heat is required.

Ordering Information
Supplied in spools of 50m Standard colour is black

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Application Notes

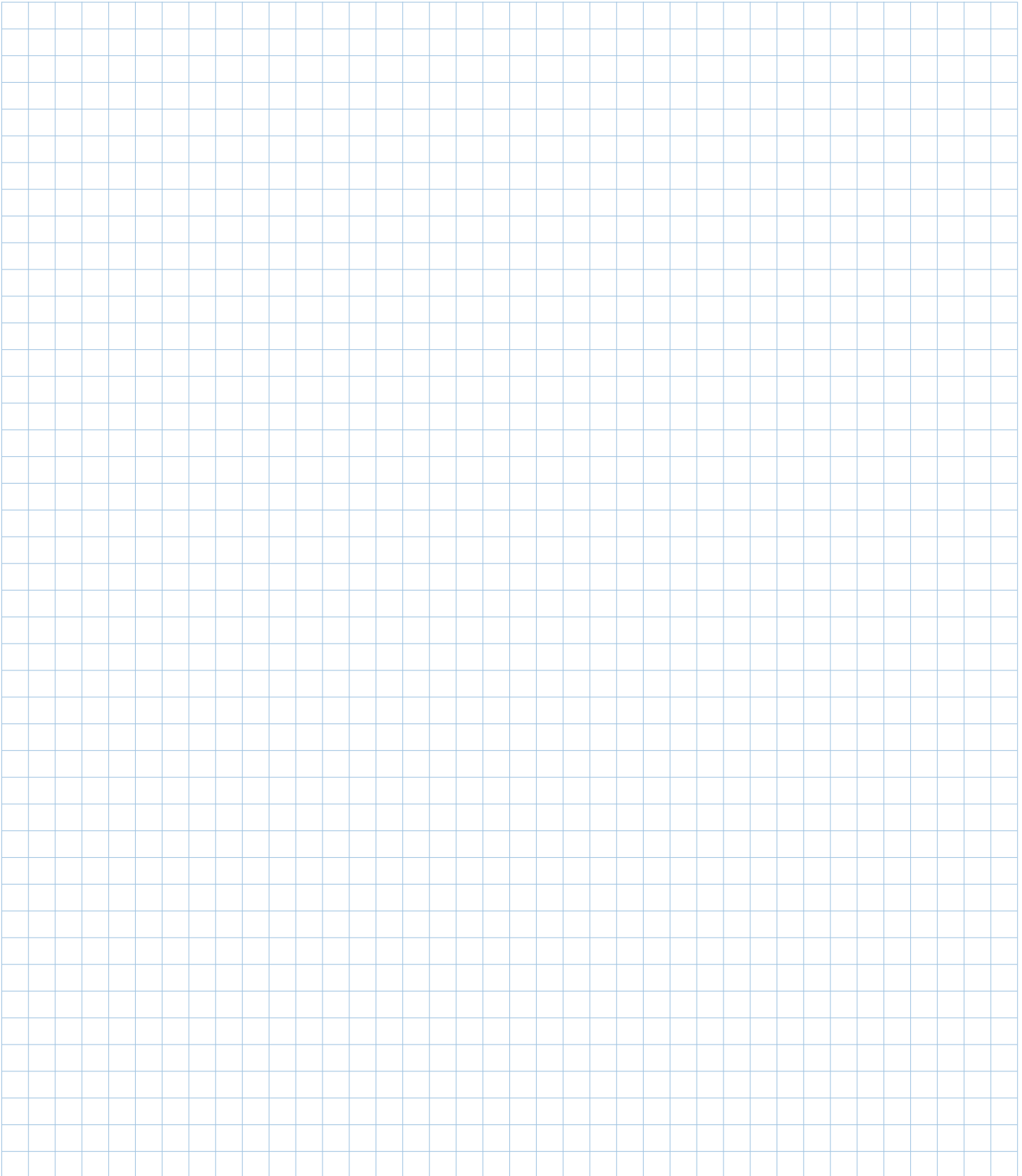
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Application Notes

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