

## 1. Description



**Releasable Stainless Steel Cable Ties** offer a versatile and durable fastening solution with the added benefit of being able to be opened and reused. Constructed from highgrade stainless steel, these ties provide excellent strength, corrosion resistance, and longevity, making them suitable for demanding environments. The unique releasable mechanism allows for temporary bundling, adjustments, or reuse, providing flexibility in applications where changes or modifications may be required. Available in various sizes and potentially with coatings, releasable stainless steel cable ties are a practical choice for a range of industrial and commercial uses.

#### 2. Key Features

- **Releasable and Reusable:** The primary feature is the ability to open and re-fasten the tie, allowing for adjustments, additions, or removal of bundled items without cutting the tie.
- **High Strength and Durability:** Made from quality stainless steel (typically SS304 or SS316) for robust bundling and long service life.
- **Corrosion and Weather Resistant:** Stainless steel material provides inherent resistance to rust and corrosion, suitable for various environmental conditions. Coated versions offer additional protection.
- **Convenient for Temporary Bundling and Prototyping:** Ideal for applications where the bundled configuration may change during installation or testing.
- **Time and Cost Saving:** The reusability feature can reduce material waste and replacement costs in applications requiring frequent modifications.
- Available in Coated and Uncoated Options: Uncoated for high-temperature resistance; coated versions (e.g., Polyester or PPA) offer electrical insulation, protect against dissimilar metal corrosion, and enhance chemical resistance.
- Secure Locking (when fastened): While releasable, the locking mechanism is designed to provide a secure grip when the tie is fastened.

#### **3. Associated Products**

- Stainless Steel Cable Tie Tensioning Tools: While some releasable ties can be tensioned by hand, tools can help achieve consistent tightness during the initial fastening. Note that cutting features on standard tensioning tools are typically not used with releasable ties if reuse is intended.
- **Release Tools:** Specific tools or methods may be required to safely and effectively release the tie without damaging it or the bundled items.



### 4. Technical Data

- Material (Tie): Stainless Steel Grade 304 or 316 (SS316 is often preferred for superior corrosion resistance in harsh environments).
- **Material (Coatings):** Polyester, PPA (Passivated Polyamide), or other specialized coatings (check manufacturer specifications).
- **Tensile Strength:** Typically lower than comparable non-releasable stainless steel ties due to the releasable mechanism. Specific tensile strength ratings vary significantly by width and design (e.g., 100 lbs, 225 lbs, 850 N, 1112 N).
- **Operating Temperature (Uncoated):** Can withstand high temperatures, often up to +500°C (+932°F) or higher for the stainless steel material itself.
- **Operating Temperature (Coated):** The temperature range is limited by the coating material, typically ranging from around -40°C to +150°C (-40°F to 302°F).
- Flammability: Non-burning (Stainless Steel). The flammability of the coating material should be verified with the manufacturer.
- **UV Resistance:** Generally good, particularly with coated versions designed for outdoor use.
- Available Widths: 1/4"(6.4mm), 3/8"(9.5mm).
- Available Lengths: Offered in a range of lengths to accommodate various bundle diameters.
- Locking Mechanism: Designed to be engaged and disengaged, often involving a tab, lever, or specific head design that allows for release.

## **5.Applications**

- Releasable Stainless Steel Cable Ties are beneficial in applications where the ability to open and re-close the tie is advantageous, in addition to requiring the strength and durability of stainless steel. Common applications include:
- **Prototyping and Testing:** Temporarily securing components during development and testing phases.
- **Maintenance and Repair:** Bundling cables or pipes that may require future access for service or modifications.
- Installations with Potential Changes: Applications where the configuration of bundled items might need to be altered after initial fastening.
- **Temporary Installations:** Securing items for a limited time where the ties will be removed and potentially reused.
- Cable Management in Dynamic Environments: Where additions, removals, or rearrangements of cables are anticipated.
- Exhibition and Event Setups: Temporarily fastening equipment and cabling.
- Industrial and Commercial Settings: General bundling where reusability is desired for efficiency and waste reduction.



### **6.Material Specifications**

- Stainless Steel Grade 304 (SS304): Austenitic stainless steel offering good corrosion resistance in various atmospheric and mild chemical environments. Standard choice for many industrial applications.
- Stainless Steel Grade 316 (SS316): Austenitic stainless steel containing molybdenum, providing superior corrosion resistance, especially against chlorides, acids, and in marine environments. Recommended for coastal areas, offshore platforms, and chemical plants.

#### 7. Installation & Release Guidance

- Installation:
- Select the Appropriate Tie: Choose a releasable stainless steel cable tie of the correct size and material for your application.
- **Prepare the Bundle:** Neatly arrange the cables or objects to be bundled.
- Wrap the Tie: Wrap the tie around the bundle. If coated, ensure the coated side is against the items for protection.
- Insert the Tail: Feed the free end (tail) of the tie through the self-locking head designed for the releasable mechanism.
- **Tension the Tie:** Pull the tail firmly by hand to tighten the tie around the bundle. Avoid excessive force that could deform the bundle or damage the tie, as the releasable mechanism may have a lower breaking strength than non-releasable types. Some manufacturers may recommend a specific tensioning tool for optimal fastening; however, ensure it is compatible with releasable ties and does not cut the tail if reuse is intended.
- Verify Secureness: Confirm that the tie is sufficiently tight to hold the bundle securely for the intended application.
- Release:
- Locate the Release Mechanism: Identify the specific tab, lever, or button on the head of the cable tie that is designed for release. The exact method varies by manufacturer and design.
- **Engage the Release Mechanism:** Using your fingers or a small, appropriate tool (such as a flathead screwdriver or needle-nose pliers, as recommended by the manufacturer), gently actuate the release mechanism. This disengages the locking pawl or system from the tie body.
- Withdraw the Tail: While holding the release mechanism open, carefully pull the tail of the cable tie back through the head to loosen and open the loop.
- **Reuse (if applicable):** Once released, the tie can typically be re-wrapped and fastened again. Inspect the tie for any signs of damage or deformation before reuse, as repeated flexing or overtensioning can reduce its strength and reliability.
- **Safety:** Wear appropriate hand protection, such as gloves, during both installation and release to avoid potential cuts from the stainless steel material.



## 8. Specifications



Thickness-

Width		Thickness		Length		Max Bundle Diameter	
inch	mm	inch	mm	inch	mm	inch	mm
1/4	6.4	0.020	0.50	6	152	1.5	38
1/4	6.4	0.020	0.50	9	229	2.5	63
1/4	6.4	0.020	0.50	12	305	3.4	86
1/4	6.4	0.020	0.50	18	457	5.4	137
1/4	6.4	0.020	0.50	24	610	7.3	185
3/8	9.5	0.020	0.50	6	152	1.5	38
3/8	9.5	0.020	0.50	9	229	2.5	63
3/8	9.5	0.020	0.50	12	305	3.4	86
3/8	9.5	0.020	0.50	18	457	5.4	137
3/8	9.5	0.020	0.50	24	610	7.3	185

Note: Any lengths from 150 to 1,000mm are available for custom.

The thickness above is for raw material, thickness with coating is about 1.10mm(0.045")