LONYOU

TECHNICAL DATASHEET

1. Description



PVC Coated Stainless Steel Banding combines the high strength and corrosion resistance of stainless steel strapping with the added protection and insulation of a durable Polyvinyl Chloride (PVC) coating. This fully coated banding is designed for applications requiring extra protection against abrasion, weathering, galvanic corrosion, and potentially needing electrical insulation. The smooth PVC layer prevents damage to bundled items, such as cable jackets or painted surfaces, while the underlying stainless steel core (available in various grades like 201, 304, or 316) ensures secure and longlasting fastening. It is ideal for use in harsh environmental conditions, marine applications, electrical installations, and general bundling where protection of the strapped item is paramount. Application requires compatible stainless steel buckles/clips and appropriate tensioning tools.

2. Key Features:

- **Enhanced Protection:** The tough PVC coating safeguards the underlying stainless steel from abrasion and mild chemical exposure, and protects bundled materials from scratches or cutting by the band edges.
- **Galvanic Corrosion Prevention:** Acts as an effective barrier when securing dissimilar metals, preventing electrochemical reactions.
- **Electrical Insulation Properties:** The PVC layer provides dielectric strength, making it suitable for certain electrical bundling applications (verify rating for specific needs).
- Weather and UV Resistance: High-quality PVC coating (often UV stabilized) offers excellent resistance to weathering and sunlight exposure for outdoor longevity.
- High Core Strength: Retains the inherent high tensile strength of the stainless steel core material.
- **Core Corrosion Resistance:** The underlying stainless steel grade (e.g., 304, 316) provides excellent resistance to atmospheric and chemical corrosion.
- **Improved Handling:** The smooth coating can provide a more comfortable handling experience compared to uncoated bands.
- **Color Options:** Typically available in black for UV stability, but other colors may be available for identification or coding purposes.
- **Versatility:** Suitable for securing cables, hoses, pipes, signs, and other components in demanding environments.



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3. Applications

PVC Coated Stainless Steel Banding is particularly suited for applications where the benefits of the coating are advantageous:

- **Cable and Conduit Bundling:** Securing electrical cables, data lines, and conduits, especially outdoors or where protection against abrasion and vibration is needed. The PVC coating prevents damage to cable jackets.
- **Electrical Installations:** Used in utility pole line hardware applications, providing insulation benefits and securing electrical components.
- **Marine and Offshore Environments:** Fastening items in corrosive saltwater environments where the PVC adds an extra barrier against the elements and prevents galvanic corrosion when

4. Technical Data:

- **Core Material Grades:** Stainless Steel Grades typically SS201, SS304, SS316. Note: Select grade based on required corrosion resistance (SS316 for marine/chemical).
- Coating Material: Polyvinyl Chloride (PVC), UV-Resistant.
- **Core Tensile Strength:** Varies by core grade and dimensions. Typically 300 500 MPa (43,511 72,518 psi).
- Available Core Widths: Common core widths: 5/16" (8.0mm), 3/8" (10.0mm), 1/2" (12.0mm), 5/8" (16.0mm). Note: Overall width will be slightly larger due to coating.
- Core Thickness: Common core thicknesses: 0.010" (0.25mm) to 0.015" (0.40mm).
- Total Thickness (Core + Coating): Core thickness + Approx. 0.25mm 0.4mm coating per side.
- Standard Coil Length: Typically 100 ft (30.5m) or 50m rolls.
- **Operating Temperature Range:** Typically limited by the PVC coating, e.g., approx. -40°C to +85°C / +90°C (-40°F to +185°F / +194°F). This is lower than bare stainless steel.
- Coating Color: Standard: Black or Grey.
- **Dielectric Strength:** Provide value if tested/applicable, e.g., Volts/mil or kV/mm. (Important if marketed for electrical insulation).
- **Compliance:** Core material may conform to ASTM A240/A666. Coating may meet RoHS or other

5. Packaging:

Supplied in continuous coils for ease of use and minimal waste.

Standard packaging typically involves robust plastic dispensers (totes) or cardboard boxes designed to protect the coil and coating during transport and storage, allowing for smooth dispensing.

Standard Coil Quantity: 20/30 meters per roll, 10 rolls per carton.



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6. Associated Products:

Stainless Steel Clips: Essential for securing the band ends. Must be compatible with the banding width and made from a comparable stainless steel grade (e.g., SS304 or SS316) to maintain corrosion resistance. Common types include push-type buckles and wing seals/clips. Note: Ensure buckle size is appropriate for the coated band thickness.

Banding Tools: Requires specialized manual or powered tools designed for stainless steel banding to properly tension and cut the band. Examples include: LYBT002, LYBT004, LYBT006.

.Note: Tools should accommodate the slightly increased overall thickness of the coated band.

7. Handling and Storage:

Storage: Store in a clean, dry, indoor environment away from direct sunlight (unless explicitly UV stable for long-term outdoor storage) and chemical fumes to preserve the integrity of both the stainless steel core and the PVC coating. Keep in original packaging until use.

Handling: While the PVC coating can make handling smoother, always wear appropriate safety gloves (e.g., cut-resistant gloves) during installation to protect against potential sharp edges from the cut end or the core material.

Coating Integrity: Avoid dragging the band over rough or sharp surfaces that could damage the PVC coating, as this could compromise its protective and insulating properties. Inspect the coating for significant damage before critical applications.

8. Specifications

Thickness -

Width —

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Wie	Width		ness	Optional	Optional
inch	mm	inch	mm	Length(m)	Material
5/16	8.0	0.012	0.30	30 / 50 / 100	SS304 / 316
3/8	10.0	0.015	0.40	30 / 50 / 100	SS304 / 316
1/2	12.0	0.015	0.40	30 / 50 / 100	SS304 / 316
5/8	16.0	0.015	0.40	30 / 50 / 100	SS304 / 316
5/16	8.0	0.040	1.0	25/30	SS304 / 316
3/8	10.0	0.040	1.0	25/30	SS304 / 316
1/2	12.0	0.040	1.0	25/30	SS304 / 316
5/8	16.0	0.040	1.0	25/30	SS304 / 316