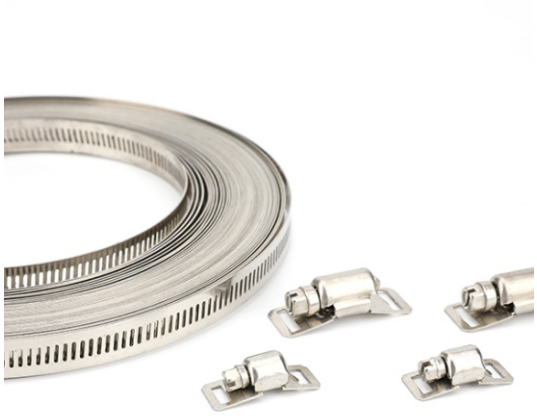
TECHNICAL DATASHEET

1. Description



Adjustable Stainless Steel Band Clamps refer to clamping systems that utilize continuous stainless steel banding (typically supplied in rolls) combined with separate adjustable fastener mechanisms (such as worm-gear housings or T-bolt latches). This system allows users to create custom-diameter clamps on-site to suit specific application requirements. By cutting the desired length of banding and attaching the fastener, users can produce strong, reliable clamps for various securing, joining, and mounting tasks, particularly where standard pre-sized clamps are unsuitable.

2. Key Features

- **Custom Sizing:** Allows creation of clamps of virtually any diameter by cutting banding to the required length.
- **Adjustable Tension:** Fastener mechanisms (e.g., worm-gear screw) enable precise tensioning for a secure fit.
- **High Strength:** Stainless steel banding provides significant tensile strength for robust clamping.
- **Corrosion Resistance:** Components made from stainless steel offer excellent resistance to weathering, moisture, and chemicals (grade dependent).
- **Versatility:** Suitable for round, oval, or irregular shapes.
- **On-Site Assembly:** Enables creation of clamps as needed, reducing inventory of multiple pre-sized clamps.
- **Potential Reusability:** Depending on the fastener type and application, clamps may be loosened and retightened or potentially reused.
- **Multiple Fastener Options:** Available with different fastener types (e.g., worm-gear, T-bolt) to suit application needs.

3. Associated Products

- **Stainless Steel Banding Rolls:** The primary component.
- **Adjustable Clamps:** Worm-gear housings or other compatible mechanisms.
- **Banding Cutting Tool:** Shears suitable for cutting stainless steel banding cleanly.
- **Tensioning Tool:** Screwdriver (slotted or Phillips) or Hex Wrench/Nut Driver matching the fastener screw head.

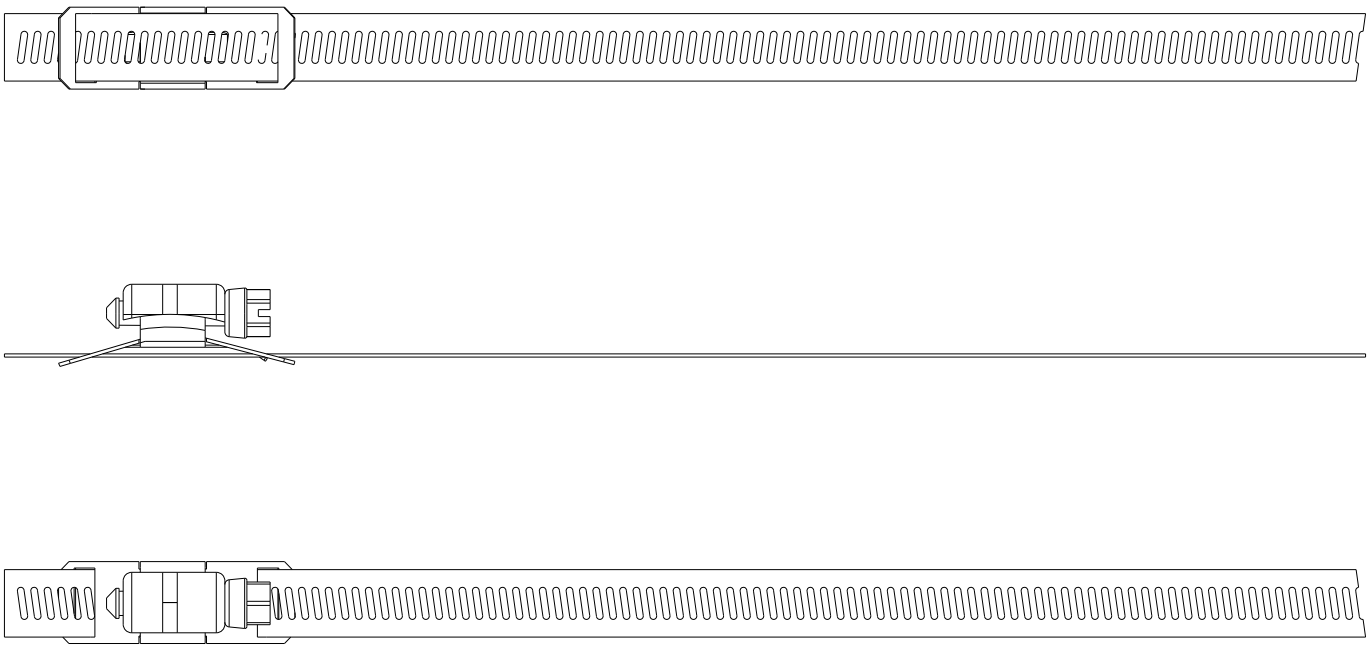
4. Technical Data

- **System Components:**
  - **Stainless Steel Banding:** Supplied in rolls.
    - Material: Typically Stainless Steel Type 201, Type 304 (SS304 / UNS S30400), or Type 316 (SS316 / UNS S31600).
    - Widths: 8.0mm, 12.7mm, 14.2mm.
    - Thickness: 0.6mm.
  - **Adjustable Clamps:** Separate mechanisms attached to the banding.
    - Type 1: Worm-Gear Housing
    - Housing Material: Stainless Steel (e.g., 201, 301, 304, 316).
    - Screw Material: Stainless Steel (e.g., 305, 410) or Plated Carbon Steel.
    - Screw Head: Typically Hexagonal (e.g., 5/16") or Slotted.
- **Clamp Diameter Range:** Virtually unlimited; determined by the length of banding cut.
- **Operating Temperature Range:** -80°C to +300°C.
- **Resistance:** Excellent resistance to corrosion (grade-dependent), UV radiation, and weathering.

5. Installation Guidance

- **Measure & Cut Banding:** Determine the required clamp diameter. Cut a length of stainless steel banding from the roll using appropriate shears. Allow sufficient extra length for overlap within the housing and for tensioning (typically add ~3-6 inches / 75-150mm to the circumference).
- **Prepare Clamp:** Ensure the worm-gear screw is sufficiently retracted (turned counter-clockwise) to allow band insertion.
- **Insert Band:** Feed one end of the cut banding strip into the worm-gear housing according to the manufacturer's instructions. Typically, the band passes under the screw bridge and out through the housing slot. Ensure the correct side of the band engages with the screw threads (usually the smooth side faces inwards towards the object being clamped).Position Clamp: Wrap the assembled band and housing around the object to be clamped.
- **Feed Tail:** Insert the free end (tail) of the banding into the housing opening, passing it over the first band layer and under the screw mechanism.
- **Apply Tension:** Using the appropriate tool (screwdriver/hex wrench), turn the tensioning screw clockwise. The screw threads will engage the slots/perforations in the band, pulling it tight to create clamping force. Continue tensioning until the desired tightness is achieved. **Do not overtighten.**
- **Inspect:** Ensure the band is properly seated in the housing and the clamp is secure.

6. Specifications



Code	Thickness	Quantity	Material
AK08B	Band - 8.0 X 0.6 MM	30 Meters	SS201/304
AK12B	Band - 12.7 X 0.6 MM	30 Meters	SS201/304
AK14B	Band - 14.2 X 0.6 MM	30 Meters	SS201/304
AK08H	Clamp - 8.0 MM	50 PCS	SS201/304
AK12H	Clamp - 12.7 MM	50 PCS	SS201/304
AK14H	Clamp - 14.2 MM	50 PCS	SS201/304

7. Applications

- Ideal for creating custom clamps for various applications:
- **Hose Clamping:** Securing large diameter, industrial, or irregularly shaped hoses and ducts.
- **Ducting:** Joining sections of flexible or rigid ductwork.
- **Pole Mounting:** Attaching signs, enclosures, or equipment to poles of various sizes (often requires specific mounting brackets used with the clamp).
- **Exhaust Systems:** Temporary or permanent repairs.
- **Marine Applications:** Securing items in corrosive environments (SS316 recommended).
- **Bundling:** Grouping large cables, pipes, or irregular objects.
- **Maintenance & Repair (MRO):** Creating custom clamps for repairs and temporary fixes.
- **Filter Bags:** Securing filter bags to housings.

Disclaimer: The information provided in this datasheet is intended as a general guide for adjustable stainless steel band clamp systems. Performance depends on the quality of components, correct assembly, proper tensioning, and suitability for the specific application conditions. Users must evaluate the system's suitability for their requirements and consult manufacturer-specific data. Manufacturer reserves the right to change specifications without notice.