# TECHNICAL DATASHEET

## 1. Description

**Saddle Type Hose Clamps** are fastening devices designed to securely hold hoses, pipes, cables, or tubes in place, often by attaching them to a fixed surface or by clamping them around a fitting. The "saddle" component is a key feature, typically a curved or shaped piece that conforms to the contour of the object being clamped. This saddle helps to distribute the clamping force more evenly, reducing the risk of pinching, deforming, or damaging the hose or pipe, especially with softer materials. These clamps can vary in design, from simple P-clips or U-shaped saddles with mounting holes, to more robust multi-bolt clamps where a saddle piece works in conjunction with bands and bolts to secure a connection. They are used in a wide array of applications for both support and sealing purposes.

## 2. Key Features

- **Even Pressure Distribution:** The saddle component helps to spread the clamping force over a wider area of the hose or pipe, minimizing stress concentration and potential damage.
- **Secure Fastening:** Provides a stable and reliable hold for hoses, pipes, cables, or conduits.
- Protection for Clamped Object: The saddle (and sometimes an additional rubber lining) can protect the surface of the clamped item from abrasion or distortion.
- **Versatility:** Available in various designs suitable for different applications, including simple support, vibration damping, and sealing.
- **Material Variety:** Constructed from various materials like steel, stainless steel, or plastic to suit different environmental conditions and strength requirements.
- **Range of Sizes:** Accommodates a wide spectrum of hose, pipe, and cable diameters.
- **Easy Installation:** Most types can be installed using common hand tools.
- **Vibration Damping (for rubber-lined versions):** Rubber-lined saddle clamps can effectively reduce noise and vibration transmission.

## 3. Technical Data

- **Type:**Double Bolt Saddle Clamp (for hose/pipe connection)
- **Common Materials:**
  - **Saddle/Band Body:**
    - Mild Steel (Carbon Steel) - Often zinc-plated or galvanized for corrosion resistance.
    - Stainless Steel (e.g., AISI 201, AISI 304/A2, AISI 316/A4) - For enhanced corrosion resistance.
    - Ductile Iron / Cast Iron (for larger pipe saddles/tapping saddles)
  - **Lining (if applicable):** EPDM Rubber, Neoprene, Silicone.
  - **Bolts & Nuts (for multi-bolt types):** Steel (zinc-plated), Stainless Steel.
- **Band Width (for band-style saddle clamps):** 12mm, 18mm.
- **Bolt/Screw Sizes (for securing or tightening):** Common metric M4, M6.
- **Clamping Diameter Range:** Available for a vast range of diameters, from a few millimeters for small tubing up to very large pipe diameters (e.g., 5mm to 300mm+).
- **Mounting Holes (for P-clips/support saddles):** Diameter and spacing vary by clamp size.
- **Surface Finish/Coating:**
  - Zinc Plating (BZP - Bright Zinc Plated, Yellow Zinc).
  - Hot-Dip Galvanizing (HDG).
  - FBE (Fusion Bonded Epoxy) Coating, Nylon Coating (for some pipe saddles).
  - Natural finish (for stainless steel).
- **Relevant Standards:**
  - DIN 3016 (for P-type retaining clamps).
  - AS/NZS 1594, AS/NZS 4680 (for material and galvanizing standards in some regions).
  - ISO 8177 (verifying saddle clamp gripping dimensions).

## 4. Common Applications

- **Plumbing & Pipework:** Securing and supporting water pipes, gas lines, drainage pipes, and conduits to walls, ceilings, or other structures.
- **Automotive:** Mounting fuel lines, brake lines, wiring harnesses, and exhaust components.
- **HVAC Systems:** Supporting ductwork, refrigerant lines, and condensate drains.
- **Electrical Installations:** Securing cables and conduits.
- **Industrial Machinery:** Clamping hoses, pipes, and cables on equipment.
- **Marine Applications:** Securing pipes and wiring in corrosive environments (stainless steel versions are preferred).
- **Agricultural Equipment:** Supporting hydraulic lines and other tubing.
- **Construction:** General pipe and conduit support.
- **Fluid Transfer Systems:** Securing hoses in low to medium pressure applications where even clamping is important (e.g., double bolt saddle clamps on vacuum hoses).
- **Hydraulic Cylinders:** Fastening lines or cables to round cylinder bodies without welding or drilling.

## 5. Associated Products

- Screws, Bolts, Nuts, and Washers (for mounting or tightening)
- Threaded Rods, Strut Channels (for support systems)
- Hoses and Pipes of various materials
- Wrenches, Screwdrivers, Socket Sets (for installation)

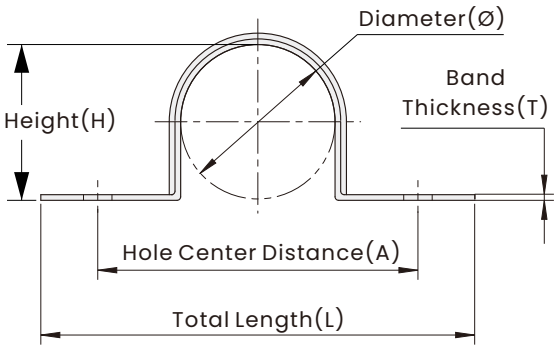
## 6. Installation Guidance

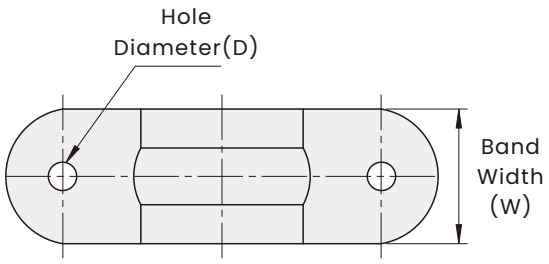
- Select a clamp that matches the hose's outside diameter.
- Place the hose over the fitting.
- Position the lower and upper saddle pieces around the hose over the fitting area.
- Insert bolts and thread on nuts.
- Tighten the nuts alternately and evenly in multiple steps until the desired clamping force is achieved. Refer to manufacturer torque specifications if available.

## 7. Maintenance & Safety

- **Regular Inspection:** Periodically check clamps for tightness, signs of corrosion, wear, or damage to the saddle or rubber lining (if present).
- **Material Compatibility:** Ensure the clamp material (and lining) is suitable for the operating environment (e.g., temperature, chemicals, UV exposure) and compatible with the clamped object.
- **Correct Sizing:** Using the correct size of clamp is crucial for effective support and sealing.
- Avoid Over-Tightening: While designed for secure clamping, over-tightening can damage the clamp, the hose/pipe, or the mounting surface. Follow torque specifications where provided.
- **Safety Equipment:** Wear appropriate PPE, such as gloves and safety glasses, during installation.

## 8. Specifications



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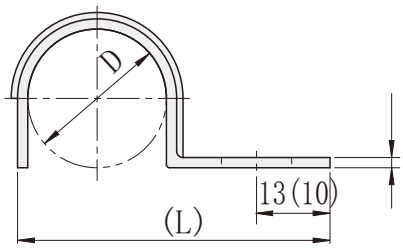
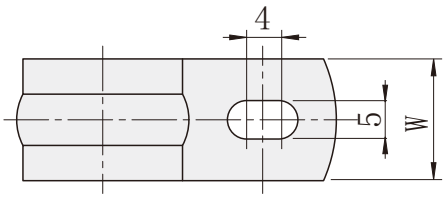
# TECHNICAL DATASHEET

| Code | Dimensions(mm) | | | | | | | Code | Dimensions(mm) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ø | H | A | L | D | W | T | | Ø | H | A | L | D | W | T |
| SD5 | 6 | 5 | 20 | 38 | 4 | 12 | 0.6 | SD60 | 61 | 60 | 92 | 103 | 6 | 18 | 0.6 |
| SD8 | 9 | 8 | 23 | 39 | 4 | 12 | 0.6 | SD63 | 64 | 63 | 96 | 105 | 6 | 18 | 0.6 |
| SD10 | 11 | 10 | 25 | 40 | 4 | 12 | 0.6 | SD65 | 66 | 65 | 98 | 108 | 6 | 18 | 0.6 |
| SD12 | 13 | 12 | 27 | 42 | 4 | 12 | 0.6 | SD70 | 71 | 70 | 103 | 116 | 6 | 18 | 0.6 |
| SD14 | 15 | 14 | 32 | 47 | 4 | 12 | 0.6 | SD75 | 76 | 75 | 105 | 120 | 6 | 18 | 0.6 |
| SD16 | 17 | 16 | 38 | 51 | 6 | 18 | 0.6 | SD80 | 81 | 80 | 110 | 125 | 6 | 18 | 0.6 |
| SD18 | 19 | 18 | 40 | 53 | 6 | 18 | 0.6 | SD90 | 91 | 90 | 120 | 130 | 6 | 18 | 0.6 |
| SD20 | 21 | 20 | 43 | 55 | 6 | 18 | 0.6 | SD100 | 101 | 100 | 130 | 140 | 6 | 18 | 0.6 |
| SD22 | 23 | 22 | 53 | 65 | 6 | 18 | 0.6 | SD110 | 111 | 110 | 140 | 150 | 6 | 18 | 0.6 |
| SD25 | 26 | 25 | 56 | 69 | 6 | 18 | 0.6 | SD115 | 116 | 115 | 145 | 160 | 6 | 18 | 0.6 |
| SD27 | 28 | 27 | 57 | 70 | 6 | 18 | 0.6 | SD120 | 121 | 120 | 150 | 170 | 6 | 18 | 0.6 |
| SD30 | 31 | 30 | 60 | 72 | 6 | 18 | 0.6 | SD130 | 131 | 130 | 160 | 180 | 6 | 18 | 0.6 |
| SD32 | 33 | 32 | 62 | 74 | 6 | 18 | 0.6 | SD140 | 141 | 140 | 170 | 190 | 6 | 18 | 0.6 |
| SD35 | 36 | 35 | 64 | 76 | 6 | 18 | 0.6 | SD150 | 151 | 150 | 180 | 200 | 6 | 18 | 0.6 |
| SD40 | 41 | 40 | 69 | 82 | 6 | 18 | 0.6 | SD160 | 161 | 160 | 190 | 210 | 6 | 18 | 0.6 |
| SD42 | 43 | 42 | 72 | 82 | 6 | 18 | 0.6 | SD170 | 171 | 170 | 200 | 220 | 6 | 18 | 0.6 |
| SD45 | 46 | 45 | 75 | 87 | 6 | 18 | 0.6 | SD180 | 181 | 180 | 210 | 225 | 6 | 18 | 0.6 |
| SD50 | 51 | 50 | 82 | 96 | 6 | 18 | 0.6 | SD190 | 191 | 190 | 220 | 230 | 6 | 18 | 0.6 |
| SD57 | 58 | 57 | 89 | 98 | 6 | 18 | 0.6 | SD200 | 201 | 200 | 230 | 240 | 6 | 18 | 0.6 |

Please contact sales for more information about other sizes.

## Single Hole Saddle Clamp




**Disclaimer:** This datasheet provides general information typical for Saddle Type Hose Clamps. Specific technical data, materials, load capacities, and installation procedures can vary significantly between different manufacturers and product designs. Always refer to the manufacturer's official documentation and specifications for the particular saddle clamp being considered or used.