

## **TECHNICAL DATASHEET**

### 1. Description



**British Type Hose Clamps**, often referred to as Jubilee Clips (a common brand name that has become genericized in the UK), are a type of worm drive hose clamp designed for securing hoses to fittings. They are widely recognized and used, particularly in the UK and European markets. These clamps typically feature a band with a worm gear mechanism fixed to one end. The screw engages with threads pressed or formed into the band (often a non-perforated band, unlike the slotted American type). As the screw is tightened, the band constricts around the hose, providing a secure and leakproof seal. British type clamps are known for their robust construction, high clamping force, and reliability in various applications, including automotive, industrial, agricultural, marine, and general plumbing. They are often designed to meet specifications like BS 5315.

## 2. Key Features

- Worm Drive Mechanism: Provides controlled and effective tightening for a secure seal.
- **Non-Perforated Band:** Many British type clamps feature a solid (non-perforated or "unslotted") band with rolled edges. This design is intended to provide a smoother contact surface with the hose, reducing the risk of damage or cutting into softer hose materials, and can offer a more uniform pressure distribution. Some variations might have pressed threads rather than perforations.
- **Robust Housing:** The housing for the screw mechanism is typically designed for strength and durability, often welded or riveted to the band.
- **High Clamping Force and Torque:** Engineered to achieve high clamping forces and withstand significant tightening torque, ensuring a reliable and durable connection.
- Rounded Band Edges: Helps to protect the hose from damage during installation and use.
- **Conformity to Standards:** Often manufactured in accordance with British Standard BS 5315, which specifies dimensions, materials, and performance requirements.
- **Versatility:** Suitable for a wide range of hose materials and applications, from general purpose to more demanding industrial uses.
- **Good Corrosion Resistance:** Available in various materials, including stainless steel grades, offering good to excellent corrosion resistance depending on the material chosen.
- Reusable: Can generally be loosened and retightened multiple times.
- **Simple Housing Structure:** Often a three-component design (band, housing, screw) that is robust and effective.

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#### 3. Technical Data

- Type: Worm Drive Hose Clamp (British Standard Type)
- · Common Materials:
  - Band & Housing:
    - Mild Steel (Carbon Steel), typically zinc-plated for corrosion resistance (W1 material).
    - Stainless Steel 201, 304, 316 for increased corrosion resistance.
  - · Screw:
    - Carbon Steel (typically zinc-plated).
    - Stainless Steel (matching the band/housing grade for W4/W5 types).
- Material Designations (Common W-Grades):
  - **W1:** All parts (band, housing, screw) are zinc-plated mild steel.
  - W2: Band and housing are stainless steel; screw is zinc-plated carbon steel.
  - W3: Band and housing are stainless steel; screw is often a lower grade stainless or plated steel.
  - W4: All parts (band, housing, screw) are stainless steel (typically 304 grade or equivalent).
  - **W5:** All parts (band, housing, screw) are 316 grade stainless steel (for high corrosion resistance, especially in marine environments).
- Band Widths (Common): 9.7mm, 11.7mm.
- Band Thickness (Typical): 0.8mm,0.9mm,1.0mm
- Screw Head Type (Common): Hexagonal Head, often slotted for use with a flathead screwdriver.
- · Clamping Diameter Range:
  - Available in various sizes, from small diameters (e.g., 9.5-12mm) up to larger sizes (e.g., 140-160mm, or even up to 300mm+ for specialized versions).
  - Sizes are often denoted by their adjustment range (e.g., 13-20mm, 22-30mm, 35-50mm).
- Recommended Installation Torque / Breaking Torque:
  - Free Torque (typical): ≤ 1.0 Nm for both 9.7mm and 11.7mm bands.
  - Load/Installation Torque (typical minimums):
    - For 9.7mm band width: ≥ 3.0 Nm to 3.5 Nm.
    - For 11.7mm band width: ≥ 4.8 Nm to 5.0 Nm (can be higher, e.g., 7Nm, depending on design and material).
  - **Breaking Torque:** Significantly higher than installation torque, indicating clamp strength (e.g., 5Nm for 9.7mm, 7Nm+ for 11.7mm as a minimum break point in some specs).

#### · Relevant Standards:

• **BS 5315:** The primary British Standard for worm drive type hose clamps, covering dimensions, materials, performance, and testing. This is a key differentiator.

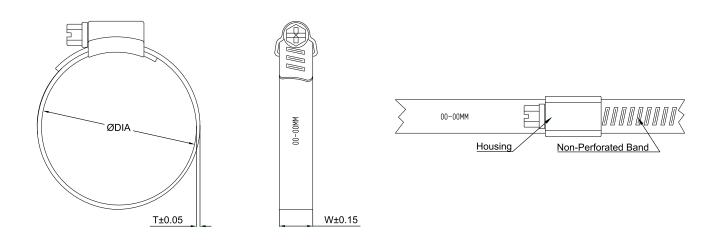
#### • Surface Treatment:

- Zinc-plating (for mild steel components, often yellow or silver/clear passivation).
- Natural finish or polishing (for stainless steel components).
- Housing sometimes painted (e.g., blue) for identification or branding.



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## 6. Specifications



Code	Band Width (mm)	Thickness (mm)	Clamping Range		Material
			inch	mm	- Material
BH12	9.7	0.8	3/8~1/2	9.5-12	W1/W2/W4/W5
BH16	9.7	8.0	7/16~5/8	11-16	W1/W2/W4/W5
BH19	9.7	0.8	1/2~3/4	13-19	W1/W2/W4/W5
BH23	9.7	0.8	5/8~7/8	16-23	W1/W2/W4/W5
BH25	9.7	0.8	3/4~1	19-25	W1/W2/W4/W5
BH29	11.7	0.9	7/8~1-1/8	22-29	W1/W2/W4/W5
BH32	11.7	0.9	7/8~1-1/4	22-32	W1/W2/W4/W5
BH40	11.7	0.9	1~1-1/2	25-40	W1/W2/W4/W5
BH44	11.7	0.9	1-1/4~1-3/4	32-44	W1/W2/W4/W5
BH51	11.7	0.9	1-3/8~2	35-51	W1/W2/W4/W5
BH60	11.7	0.9	1-3/4~2-3/8	44-60	W1/W2/W4/W5
BH70	11.7	0.9	2-3/16~2-3/4	55-70	W1/W2/W4/W5
BH80	11.7	0.9	2-3/8~3-1/8	60-80	W1/W2/W4/W5
вн90	11.7	0.9	2-3/4~3-9/16	70-90	W1/W2/W4/W5
BH100	11.7	0.9	3-3/8~3-15/16	85-100	W1/W2/W4/W5
BH110	11.7	0.9	3-9/16~4-5/16	90-110	W1/W2/W4/W5
BH120	11.7	0.9	3-15/16~4-3/4	100-120	W1/W2/W4/W5
BH130	11.7	0.9	4-5/16~5-1/8	110-130	W1/W2/W4/W5
BH140	11.7	0.9	4-3/4~5-1/2	120-140	W1/W2/W4/W5
BH150	11.7	0.9	5-1/8~5-15/16	130-150	W1/W2/W4/W5
BH165	11.7	0.9	5-5/16~6-1/2	135-165	W1/W2/W4/W5

Please contact sales for customizing any other specific sizes.



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**Disclaimer:** This datasheet provides general information typical for British Type Hose Clamps. Specific technical data, materials, and performance characteristics can vary significantly between different manufacturers and specific product lines, especially regarding compliance with BS 5315. Always refer to the manufacturer's official documentation and specifications for the particular hose clamp being considered or used.