

Lead Free Water Hammer Arrestor RWS-C

Technical Data Sheet

Product Overview

The RWS Water Hammer Arrestor (WHA) is a high-quality, piston-type surge pressure absorber designed to eliminate the effects of water hammer in plumbing systems. Water hammer is caused by the sudden stop of high-speed water flow, which creates pressure surges or spikes that can be damaging to pipes and appliances. The RWS WHA protects the plumbing system and helps ensure a long, trouble-free life for the pipe system.



Key Features & Characteristics

- **Lead Free** The arrestor meets Lead Free requirements.
- **PDI Listed** PDI Listed (PDI WH201).
- **Construction Type** Copper Body Piston Type Water Hammer Arrestor.
- **Pre-Charged** Factory air charged and permanently sealed air chamber prevents air loss and insures long life.
- **Installation** May be installed in new or existing plumbing systems with a standard pipe tee.
- **Adaptability** Can be installed vertically, horizontally, or at any angle.
- **Accessibility** Approved for installation with no access panel required.
- **Connection** NPT solid hex Lead Free Brass adapter end connection for easy installation.

Sizing and Selection Table (PDI Standards)

The PDI unit (water hammer arrestor) is selected by totalling the Fixture Unit (FU) ratings of the fixtures served by the branch line.

| PDI Symbol | Connection Size (Threaded) | Model Threaded | Fixture Unit (FU) Range | Pipe Size (in) |
|------------|----------------------------|----------------|-------------------------|----------------|
| A | 1/2" (15mm) | RWS-C-A | 1-11 | 1/2 |
| B | 3/4" (20mm) | RWS-C-B | 12-32 | 3/4 |
| C | 1" (25mm) | RWS-C-C | 33-60 | 1 |
| D | 1" (25mm) | RWS-C-D | 61-113 | 1 1/4 |
| E | 1" (25mm) | RWS-C-E | 114-154 | 1 1/2 |
| F | 1" (25mm) | RWS-C-F | 115-352 | 2 |

| Technical Specification | |
|-------------------------|---|
| Item | Specification |
| Operating Pressure | Up to 150 PSI (10.6 bar) working pressure (domestic and commercial) |
| Max. Pressure | 350 psig |
| Temperature Range | 33°F to 180°F (0.5°C to 82°C) |
| Air Pre-Charge | 60 PSI (4.2 bar) |
| Connection | Lead Free Adaptor Male NPT (and BSP) thread |
| Application Standards | ASSE 1010 ANSI/ASME A 111.26.1 PDI-WH201 |

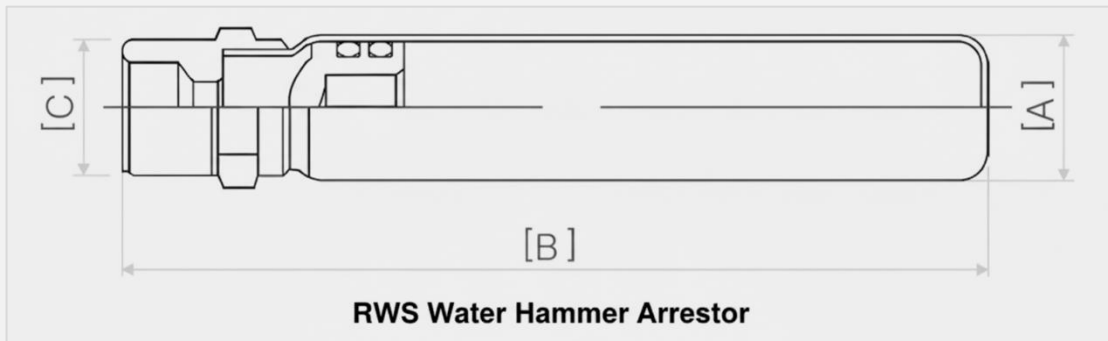
| Construction Materials | |
|------------------------|---|
| Component | Material |
| Body | Hard drawn copper barrel with custom internal mirror finish |
| Piston | Teflon or Polypropylene |
| Seals | (2) EPDM 'O'-rings |
| Adapter | Lead Free Brass |

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Dimension and Weights

| SIZE | A (in) | A (mm) | B (in) | B (mm) | C (in) | Weight (kg) |
|---------|--------|--------|----------|--------|--------|-------------|
| RWS-C-A | 1 1/8 | 28.58 | 5 15/16 | 151 | 1/2 | 0.17 |
| RWS-C-B | 1 1/8 | 28.58 | 7 5/16 | 185 | 3/4 | 0.22 |
| RWS-C-C | 1 5/8 | 41.28 | 8 13/16 | 224 | 1 | 0.45 |
| RWS-C-D | 2 1/8 | 53.94 | 10 3/16 | 253 | 1 | 0.72 |
| RWS-C-E | 2 1/8 | 53.94 | 12 11/16 | 323 | 1 | 0.88 |
| RWS-C-F | 2 5/8 | 66.64 | 12 15/16 | 284 | 1 | 1.08 |



Installation Placement Rules

The preferred location for the WHA is at the end of the branch line between the last two fixtures served.

- **Rule 1 (Up to 20 FT):** Covers multiple fixture branch lines that **do not exceed 20 ft. (6m)** in length. The WHA is installed at the end of the line.
- **Rule 2 (Over 20 FT):** Covers multiple fixture branch lines that **do exceed 20 ft. (6m)** in length. An **additional** water hammer arrestor should be used