

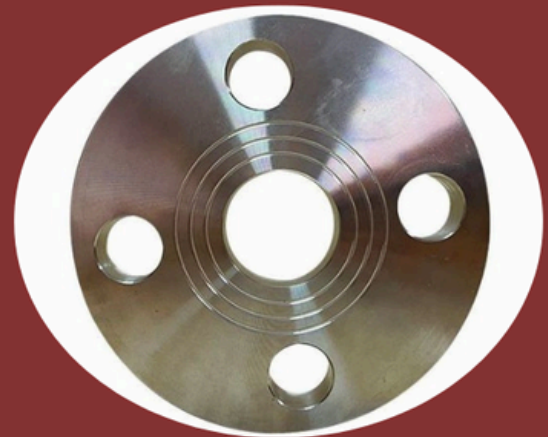


Comprehensive Guide to AWWA C207 Flanges by Emirerri Steel



AWWA C207 Flanges

Class	Nominal Size (inches)	Pressure Rating (psi)	Material
Class B	4" to 144"	Up to 86 psi	Steel
Class D	4" to 144"	Up to 150 psi	Steel
Class E	4" to 144"	Up to 275 psi	Steel
Class F	4" to 144"	Up to 300 psi	Steel



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[AWWA C207 flanges](#) are critical components in the piping industry, designed to meet the stringent standards set by the American Water Works Association (AWWA). These flanges ensure robust, leak-free connections in water-related applications such as municipal water supply, wastewater systems, and industrial processes. At **Emirerri Steel**, we specialize in **manufacturing top-quality** AWWA C207 flanges to meet diverse project needs.

What Are AWWA Flanges?

AWWA flanges are specialized flanges designed for use in water systems, adhering to the standards set by the **American Water Works Association (AWWA)**. These flanges are engineered to provide a secure connection in pipelines that transport potable water, wastewater, and other fluids. They are widely utilized in applications requiring low to moderate pressure.

Key features of AWWA flanges include:

- **Material Strength:** Made from high-quality materials to ensure reliability and durability.
- **Pressure Range:** Suitable for low to moderate pressure applications in waterworks.
- **Standardized Dimensions:** Compliant with AWWA specifications for compatibility and efficiency.
- **Versatility:** Available in multiple types and classes to cater to varied industrial needs.

These flanges are essential for ensuring the structural integrity and efficiency of water-related piping systems.

What Are AWWA C207 Flanges?

AWWA C207 flanges are a specific type of **AWWA flange** that complies with the **AWWA C207** standard. This standard outlines the dimensions, materials, and pressure ratings required for steel flanges used in waterworks. These flanges are designed for steel pipelines transporting water and wastewater, offering excellent durability and versatility.

Key characteristics of AWWA C207 flanges include:

- **Wide Range of Sizes:** Typically, available in sizes from 4 inches to 144 inches.
 - **Pressure Ratings:** Designed to operate efficiently at pressure ratings specific to their class (e.g., Class B, D, E, F).
 - **Application Versatility:** Used in pipelines for municipal water supply, wastewater systems, and industrial processes.
 - **Types of Flanges:** These include ring flanges, blind flanges, and various pressure classes to suit project requirements.
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Materials Used in AWWA C207 Flanges

AWWA C207 flanges are manufactured using high-quality materials to ensure strength, durability, and corrosion resistance. The choice of material depends on the application and environmental conditions.

1. Carbon Steel

- Commonly used for its strength and affordability.
- Suitable for low to moderate-pressure applications.
- Can be coated or lined to enhance corrosion resistance.

2. Stainless Steel

- Offers excellent corrosion resistance in harsh environments.
- Ideal for applications involving potable water or aggressive chemicals.
- Durable and requires low maintenance.

3. Alloy Steel

- Combines strength and durability for high-pressure applications.
- Resilient to temperature variations and mechanical stress.

4. Ductile Iron

- Provides flexibility and high tensile strength.
- Frequently used in wastewater systems and municipal applications.

5. Specialized Coatings and Linings

- Epoxy or rubber linings can be applied for added corrosion protection.
- Coatings enhance durability and extend the lifespan of the flanges.

Types of AWWA C207 Flanges

1. AWWA C207 Class B Flange

Designed for low-pressure applications, Class B flanges are lightweight and cost-effective, making them ideal for municipal water projects.

2. AWWA C207 Class D Flange

These flanges are suited for moderate-pressure applications, balancing strength and affordability.

3. AWWA C207 Class E Flange

Used in high-pressure systems, Class E flanges are engineered for enhanced durability and reliability.

4. AWWA C207 Class F Flange

Perfect for heavy-duty and high-pressure applications, Class F flanges offer exceptional performance under extreme conditions.

5. AWWA C207 Ring Flange

Lightweight and compact, these flanges are used for connecting flat-faced flanges in

pipelines.

6. AWWA C207 Blind Flange

Used to close off pipeline ends, blind flanges prevent flow and are available in various pressure classes.

AWWA C207 Flange Dimensions

The dimensions of AWWA C207 flanges depend on their class and type. Sizes range from **4 inches to 144 inches**, with pressure ratings varying based on the class. Below is a brief overview:

Class	Nominal Size (inches)	Pressure Rating (psi)	Material
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Applications of AWWA C207 Flanges

- **Municipal Water Supply Systems**
Used for connecting pipelines in urban water distribution networks.
 - **Wastewater Treatment Plants**
Essential for efficient and secure connections in sewage and wastewater systems.
 - **Industrial Processes**
Applied in industries such as chemical processing, power generation, and petrochemicals.
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Why Choose Emirerri Steel for AWWA C207 Flanges?

At Emirerri Steel, we are dedicated to providing **top-quality** AWWA C207 flanges that meet and exceed **industry standards**. Our advantages include:

- **Premium Materials:** Flanges made from high-grade steel for enhanced durability.
 - **Custom Solutions:** Tailored products to meet specific project requirements.
 - **Competitive Pricing:** Affordable solutions without compromising quality.
 - **Global Reach:** Reliable supply and support across the globe.
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Conclusion

AWWA flanges and **AWWA C207 flanges** are indispensable for waterworks and industrial applications, offering reliability, efficiency, and compliance with international standards.

Whether it's a **Class B, D, E, or F flange**, [Emirerri Steel](#) is your trusted partner for high-quality flange solutions.

Contact us today to learn more about our AWWA C207 flanges, including dimensions and types such as **ring flanges** and **blind flanges**.