NIBCO PC61144212

NIBCO 5861LH 3X3X11/2 H x H x H 90 Elbow with Low Heel Inlet ABS User Manual

Model: PC61144212

1. Introduction

This manual provides essential information for the proper installation, use, and maintenance of the NIBCO ABS DWV 90-degree elbow. This fitting is designed for use in residential and commercial drain, waste, and vent (DWV) systems. Adherence to these instructions will ensure optimal performance and longevity of the product.

The NIBCO ABS DWV 90-degree elbow is manufactured from Acrylonitrile Butadiene Styrene (ABS), a durable thermoplastic material known for its resistance to a wide range of chemicals and its suitability for non-pressure drainage applications. It features a low heel inlet, allowing for efficient flow within the system.

2. Product Overview

The NIBCO 5861LH 90-degree elbow is a critical component for changing the direction of flow in DWV piping systems. Its design ensures smooth transitions and efficient waste removal. Key features include:

- **Material:** Acrylonitrile Butadiene Styrene (ABS)
- **Connection Type:** Solvent Weld
- **Application:** Drain, Waste, and Vent (DWV) systems
- **Temperature Range:** Service temperature from -40°F to 180°F (-40°C to 82°C)
- **Country of Origin:** United States

Figure 2.1: The NIBCO 5861LH 3X3X11/2 H x H x H 90 Elbow with Low Heel Inlet, designed for efficient flow in DWV systems.

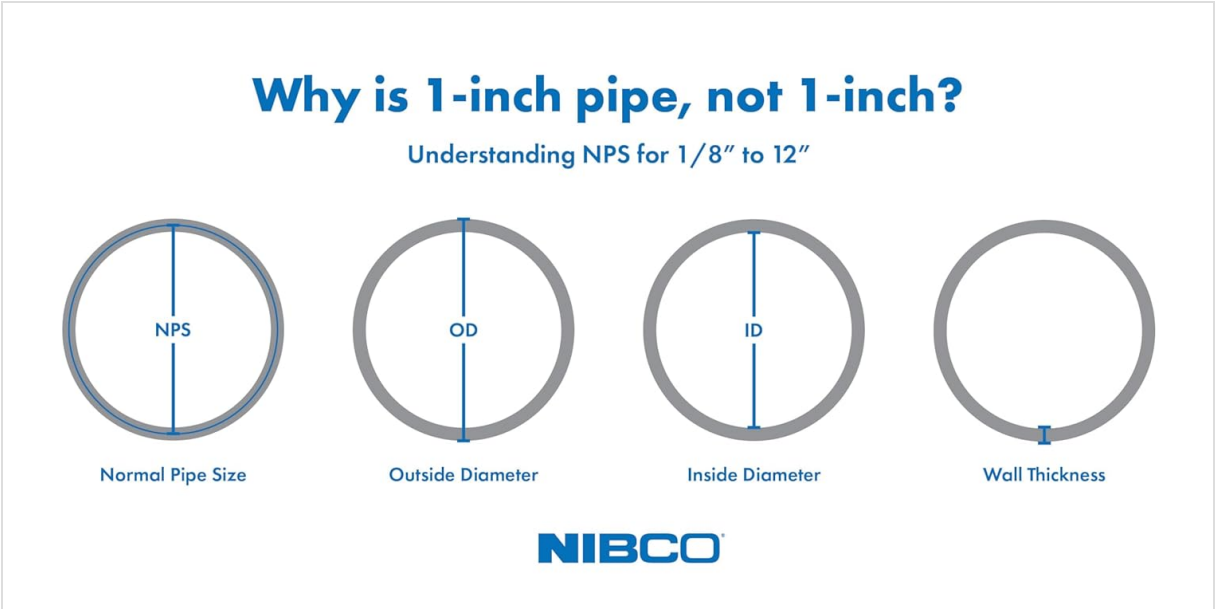


Figure 2.2: Understanding pipe dimensions is crucial for proper fitting selection and installation. This diagram illustrates Normal Pipe Size (NPS), Outside Diameter (OD), Inside Diameter (ID), and Wall Thickness.

3. Setup and Installation

Proper installation is critical for the long-term performance of ABS DWV fittings. Always consult local plumbing codes and regulations before beginning any installation.

3.1 Safety Precautions

- Wear appropriate personal protective equipment (PPE), including safety glasses and gloves, when handling ABS pipe and solvent cement.
- Ensure adequate ventilation when working with solvent cement and primer.
- Keep solvent cement and primer away from open flames or ignition sources.
- **Important: Do not test or use with compressed air or other gases. ABS DWV systems are designed for non-pressure drainage applications only.**

3.2 Installation Steps (Solvent Welding)

1. **Cut Pipe:** Cut the ABS pipe squarely to the desired length using a fine-tooth saw or plastic pipe cutter.
2. **Deburr and Chamfer:** Remove all burrs from the inside and outside of the pipe end. Chamfer the pipe end slightly to allow for easier entry into the fitting socket.
3. **Dry Fit:** Dry fit the pipe into the fitting socket to ensure a proper fit. The pipe should enter the socket easily about one-third to two-thirds of the way.
4. **Clean Surfaces:** Clean the joining surfaces (outside of the pipe end and inside of the fitting socket) with a clean, dry cloth to remove any dirt, grease, or moisture. ABS primer is generally not required for ABS solvent welding, but always follow the solvent cement manufacturer's recommendations.
5. **Apply Solvent Cement:** Apply a liberal, even coat of ABS solvent cement to the outside of the pipe end and a thin, even coat to the inside of the fitting socket. Work quickly, as ABS cement dries rapidly.
6. **Join Pipe and Fitting:** Immediately insert the pipe into the fitting socket with a quarter-turn twist until the pipe bottoms out in the socket. Hold the joint firmly for at least 30 seconds to allow the cement to set and prevent the pipe from pushing out.
7. **Cure Time:** Allow the joint to cure for the recommended time specified by the solvent cement manufacturer before testing the system. This typically ranges from 30 minutes to several hours, depending on temperature and humidity.

4. Operation

The NIBCO ABS DWV 90-degree elbow operates passively as a conduit for wastewater and vent gases. Once properly installed, it facilitates the directional change of flow within the DWV system, ensuring efficient drainage and proper ventilation without requiring active user interaction.

Ensure that the system is not subjected to pressure beyond its design limits. ABS DWV systems are gravity-fed and designed for non-pressure applications. Any attempt to pressurize the system can lead to failure and potential damage.

5. Maintenance

ABS DWV systems, including the NIBCO 90-degree elbow, are generally low-maintenance. Regular inspection can help identify potential issues before they become significant problems.

- **Visual Inspection:** Periodically inspect exposed sections of the DWV system for any signs of leaks,

cracks, or damage. Pay close attention to joints.

- **Cleaning:** Avoid pouring harsh chemicals, such as strong drain cleaners containing sulfuric acid or petroleum distillates, down drains, as these can degrade ABS plastic over time. Use enzymatic or biological drain cleaners if necessary.
- **Temperature Control:** Ensure the system operates within its specified temperature range (-40°F to 180°F). Exposure to temperatures outside this range can compromise the material's integrity.

6. Troubleshooting

Most issues with DWV systems are related to improper installation or blockages. The NIBCO 90-degree elbow itself is a static component and rarely the direct cause of failure unless damaged during installation or by external factors.

6.1 Common Issues and Solutions

- **Leaks at Joints:**
  - **Cause:** Insufficient solvent cement, improper curing, or inadequate surface preparation during installation.
  - **Solution:** For minor leaks, a repair clamp may offer a temporary solution. For persistent or significant leaks, the affected section of pipe and fitting must be cut out and replaced following proper solvent welding procedures.
- **Blockages/Slow Drainage:**
  - **Cause:** Accumulation of debris (hair, grease, food particles) within the pipe system.
  - **Solution:** Use a plumbing snake or a plunger. Avoid harsh chemical drain cleaners that can damage ABS pipes. If the blockage is severe or recurring, professional plumbing assistance may be required.
- **Cracked or Damaged Fitting:**
  - **Cause:** Physical impact, excessive stress, or exposure to incompatible chemicals/temperatures.
  - **Solution:** A cracked or damaged fitting cannot be repaired and must be replaced immediately to prevent leaks and system failure.

7. Specifications

Attribute	Value
Product Dimensions	6.56 x 3.99 x 6.56 inches; 1.59 ounces
Item Model Number	PC61144212
Date First Available	October 21, 2019
Manufacturer	NIBCO INC.
ASIN	B002E8C6TY
Size	3 X 3 X 1 1/2
Material	Acrylonitrile Butadiene Styrene

Attribute	Value
Brand	NIBCO
Color	Black
Item Dimensions L x W x H	6.56 x 3.99 x 6.56 inches
Connector Type	Solvent Weld
Exterior Finish	ABS
Global Trade Identification Number	00039923197009
UPC	039923197009

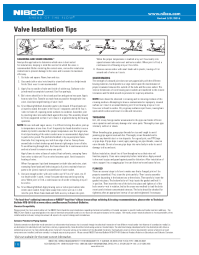
8. Warranty and Support

NIBCO products are manufactured to high-quality standards. For specific warranty information regarding the NIBCO 5861LH 90-degree elbow, please refer to the official NIBCO warranty policy available on their corporate website or contact NIBCO customer service directly.

For technical support, product inquiries, or to report any issues, please contact NIBCO customer service. You can often find contact details on the official NIBCO website or through authorized distributors.

Visit the official NIBCO Store for more information and product offerings:NIBCO Store on Amazon

Related Documents - PC61144212

	NIBCO Press System Installation Instructions for Copper Tubing Comprehensive installation guide for NIBCO Press System fittings and valves on copper tubing, covering preparation, pressing, and testing procedures for secure and watertight connections.
	NIBCO Valve Installation Tips: Soldering, Brazing, Threading, and Flanged Connections Comprehensive guide from NIBCO on best practices for installing valves, covering soldering, silver brazing, pipe threading, and flanged joint assembly. Includes tips on chemical compatibility and galvanic corrosion.
	NIBCO B038750, 705 Baseboard Tee C x F x C - Cast | Fitting Specifications Detailed specifications for the NIBCO B038750, 705 Baseboard Tee fitting. Features include two solder cups, an FNPT outlet, bronze material, and ISO 9001 certification.

	[NIBCO Press System Installation and Crimp Integrity Instructions] Comprehensive guide for installing NIBCO Press System fittings and valves on copper tubing, including safety precautions, preparation steps, crimping procedures for various sizes, and detailed integrity testing methods.
	[NIBCO Bronze & Iron Valves Catalog] Explore the NIBCO catalog featuring a wide selection of bronze and iron valves, including gate, globe, angle, check valves, and strainers. Find detailed product specifications, dimensions, and material information for industrial and commercial applications.
	[NIBCO Bronze & Iron Valves Catalog | Comprehensive Product Guide] Explore the NIBCO catalog of high-quality bronze, iron, and ductile iron valves. Find detailed specifications, dimensions, and product information for gate, globe, angle, check valves, and strainers.