SIGHT GLASS BUBBLE TRAPS

Douglass

See more, see better

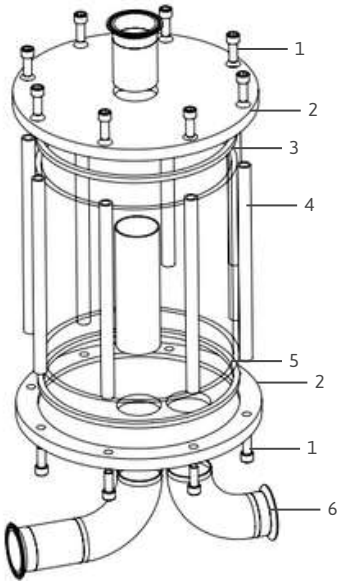
SIGHT GLASS
BUBBLE TRAPS

Overview

Douglass Sight Glass Bubble Traps are specialized components used for observing fluid flow while effectively trapping and removing air bubbles. These traps consist of a durable glass viewing window and a robust housing that allows for continuous monitoring of liquid systems. Designed for easy integration into pipelines or tanks, the bubble traps offer a clear view of the fluid, ensuring that air pockets are removed to prevent disruptions in flow or system performance. With a simple installation process, they provide reliable, real-time observation, making them ideal for industries where fluid clarity and consistency are critical.

Key Features

- **Effective air bubble removal**: Sight Glass Bubble Traps are specifically designed to capture and eliminate air bubbles from the liquid flow, enhancing system efficiency and stability. This feature is crucial in applications where the presence of air can affect process accuracy or performance.
- **Clear and continuous liquid flow visualization**: With a high-quality, durable glass window, Sight Glass Bubble Traps provide real-time observation of liquid flow. This ensures continuous and effective monitoring, which is essential in industries where fluid clarity and consistency are critical.
- **Easy installation and maintenance**: Designed for seamless integration into existing systems, Sight Glass Bubble Traps do not require welding, simplifying both installation and maintenance. Their streamlined structure reduces downtime and associated costs with repairs or replacements, making them a practical and cost-effective solution.
- **High durability and pressure resistance**: Sight Glass Bubble Traps are built to withstand harsh operating conditions, including high-pressure environments. By selecting appropriate materials and glass thickness, these traps can be customized to handle extreme pressures, ensuring long-lasting performance and reliability in demanding applications.



Parts and Materials:

Item	Part name	Material options
1	Allen Bolts	· Stainless Steel 316L · Stainless Steel 304
2	Tapper	· Stainless Steel 316L · Stainless Steel 304
3	Gasket (max temp)	· Non Asbestos (200°C) · FKM (260°C) · Exp Graphite (450°C) · PTFE (260°C) · Graph/Kevlar (450°C) · EPDM (140°C)
4	Protection Rods	· Stainless Steel 316L · Stainless Steel 304
5	Sight Glass	· Tempered Borosilicate · Polycarbonate
6		· Stainless Steel 316L · Stainless Steel 304 · Carbon Steel w/ anti-corrosion coating

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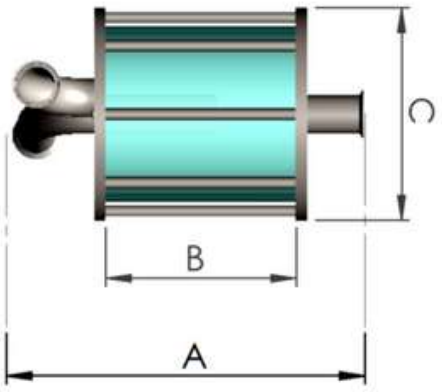
TECHNICAL INFORMATION	
A (Total length)	480 mm
B (Field of view)	280 mm
C (Base size)	250 mm



Installation Instructions for Sight Glass Bubble Traps (Douglass Brand):

Tools and Materials Required:

- Welding machine
- Welding rods/electrodes (appropriate for materials)
- Torque wrench (calibrated)
- Gaskets (as specified, typically non-reusable)
- Bolts and nuts (as specified)
- Protective gear (welding mask, gloves, etc.)

1. Preparation:

- Clean the flange surface on the tank thoroughly where the Sight Glass Bubble Trap will be installed. Remove any dirt, rust, or old gasket material to ensure the surface is smooth, flat, and free from debris.

2. Position the Gasket:

- Place a new gasket on the tank flange. Ensure that the bolt holes on the gasket align perfectly with the holes on the flange. Choose a gasket material suitable for your operating conditions, such as high pressure, temperature, or chemical exposure.

3. Mount the Sight Glass Bubble Trap:

- Position the bubble trap on top of the gasket, making sure the bolt holes on the bubble trap align with those on the flange and gasket. The bubble trap should sit flat against the gasket with no gaps.

4. Install Bolts:

- Insert the bolts through the aligned holes in the flange, gasket, and bubble trap. It is recommended to use bolts made from stainless steel or another corrosion-resistant material suitable for your application. Hand-tighten the bolts at first to hold the trap in place.

5. Tighten Bolts in Sequence:

- Using a torque wrench, begin tightening the bolts in a criss-cross or star pattern. This ensures even pressure distribution across the flange, preventing gasket deformation and ensuring a good seal. Follow the manufacturer's torque specifications for the bolts, as these may vary depending on the flange size and gasket material.

6. Final Checks:

- Inspect the welding for any gaps, cracks, or defects.
- Ensure the gasket is evenly compressed along the entire oval shape and that the sight glass is securely aligned with no signs of stress or damage.

7. Testing:

- Perform a pressure test to verify that there are no leaks and the Sight Glass Bubble Traps is securely installed.
- Inspect for any potential misalignments or weak points, especially around the narrower ends of the Sight Glass Bubble Traps.

Do´s

1. Do verify that the flange size and type on the tank match the sight glass specifications before installation.
2. Do clean the flange surface thoroughly before placing the gasket to ensure a proper seal.
3. Do use a new gasket for every installation to prevent leaks and ensure a reliable seal.
4. Do use a torque wrench to tighten the bolts evenly in a criss-cross pattern to avoid uneven pressure and gasket deformation.
5. Do gradually pressurize the tank after installation to check for leaks and ensure the sight glass is properly sealed.
6. Do wear appropriate PPE (gloves, safety glasses, face shield) during installation to ensure personal safety.
7. Do inspect the sight glass periodically during regular maintenance to ensure it remains in good condition.
8. Do follow the manufacturer's torque specifications for tightening bolts to prevent overtightening or undertightening.
9. Do monitor the sight glass during the initial hours of operation after installation to ensure it functions correctly.

Don'ts:

1. Don't reuse old gaskets; always install a new gasket to maintain a proper seal.
2. Don't overtighten the bolts as this can damage the gasket and the sight glass, leading to leaks.
3. Don't use damaged or corroded bolts; replace them with new, corrosion-resistant bolts if necessary.
4. Don't skip the cleaning of the flange surface, as debris or old gasket material can prevent a proper seal.
5. Don't use a makeshift tool or guesswork for tightening bolts; always use a torque wrench to ensure even pressure.
6. Don't operate the tank without performing a pressure test after installation to check for leaks.
7. Don't ignore signs of wear or damage on the sight glass or gasket during routine inspections; replace them promptly.
8. Don't attempt to install the sight glass on a pressurized or filled tank; always ensure the tank is depressurized and empty.
9. Don't neglect regular maintenance; routine checks are essential for ensuring long-term reliability and safety.

Satisfaction Guarantee