

Pigtail loop diameter



Overview

To ensure steam pressure gauges are highly reliable, it is essential to use a steam gauge pigtail, which will prevent damage to the gauge from direct exposure to high steam temperatures.

Key Takeaways

Standard pigtail loop diameters typically range from 1/4 inch to 1/2 inch, depending on the application and pressure requirements.

Overview

A pigtail loop is a coiled or looped section of tubing installed between a pressure gauge and the process line to protect the instrument from high-temperature fluids, steam, and pressure surges. The loop allows condensate to form, creating a protective barrier that prevents direct contact of hot media with the gauge, while also absorbing vibration and thermal expansion.

Standard Diameters

Common diameters: 1/4", 3/8", and 1/2" for standard instrumentation applications. Material considerations: Pigtails are typically made from carbon steel, stainless steel (316/316L), or brass, with wall thicknesses conforming to ANSI B36. 10 and B36.

19 standards. Custom sizes: Larger diameters up to 1" can be manufactured for high-pressure or specialized applications.



Design Considerations

Loop size: The diameter of the loop should be sufficient to allow condensate retention and prevent heat transfer to the gauge. A larger loop can improve cooling and reduce stress on the instrument. **Installation orientation:** Vertical or horizontal installation affects condensate collection and protection efficiency.

Pressure and temperature: The internal diameter and coil length are selected based on the process pressure, temperature, and type of media to ensure proper function without restricting flow.

Functionality

The pigtail loop acts as a thermal and pressure buffer, enhancing the reliability and service life of gauges and transmitters. It prevents high-temperature steam or corrosive gases from reaching sensitive components and minimizes vibration transfer, which improves measurement accuracy. In summary, selecting the correct pigtail loop diameter is crucial for effective protection of pressure instruments, with 1/4" to 1/2" being standard for most applications, while larger or custom diameters may be required for high-pressure or specialized systems.

Article Content

importance of a PIGTAIL ON A STEAM PRESSURE GAUGE

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What are Pigtails | Piping Glossary

Its geometry depends on the pressure, temperature, and type of process media. In addition, the internal diameter and coil length are selected to ensure proper

No. 17 - Pigtails for Steam Pressure Gauges

Check the loop diameter. The loop diameter should be sufficient to provide enough surface area to dissipate the latent and sensible energy from the steam and create a cool liquid seal.

Pressure Gauge Siphons Type 910.15.100 Pigtail

Pressure gauge siphons are used to protect the pressure gauge from the effect of hot pressure media such as steam and also to reduce the effect of rapid pressure surges. The pressure medium forms a

SPECIFICATIONS FOR PIGTAIL ASSEMBLIES

Burst pressure ratings for pigtails are determined at room temperature with the hose in a straight line. A safety factor of 4:1 or 5:1 should be used for normal applications. Impulse and shock pressure

PIGTAIL ON A STEAM PRESSURE GAUGE

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Pressure gauge syphon

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the importance of a PIGTAIL ON A STEAM PRESSURE GAUGE

The pigtail allows steam to change phase from a gas into a liquid by dissipating the latent heat energy of steam and allowing the steam to condense, thus providing a loop seal of liquid. The loop seal of

Pleural Drains in Adults

Pleural Pigtail Catheters have a variety of locking mechanisms. Facilities should ensure that information related to type of pigtail drain and locking mechanism in use is available for relevant clinicians.

SPECIFICATIONS FOR PIGTAIL ASSEMBLIES

All pigtails 100% tested before shipping and labelled for gas service and pressure rating Pressure ratings limited by CGA connection standards-the lowest pressure rating prevails Notes: Burst pressure

Double-Pigtail Drainage Catheter: A New Design for Efficient ...

Figure 1. Detailed structure of a double-loop pigtail catheter. (a) Multi-Purpose Drainage Catheter, (b) consisting of a double-loop pigtail structure by adding another pigtail coiling in the

Double-Pigtail Drainage Catheter: A New Design for ...

Furthermore, DPC was efficient for pleural effusion drainage with a shorter indwelling time. Detailed structure of a double-loop pigtail catheter.

What is Fiber Pigtail? A Complete Guide for Beginners

The pigtail is an especially good choice for short-distance runs where runs are unlikely to be disturbed frequently. Fiber pigtails are available in many styles and connector types. The style of

Mastering the Percutaneous Pigtail Thoracostomy Catheter

Catheter-based thoracostomy using “pigtail catheters” has become a ubiquitous procedure for the management of pleural effusion or pneumothorax in many patient populations. Despite their

Fiber Optic Pigtail: The Complete Guide to Types,

Confused about fiber optic pigtails—which connector type, which polish, fusion or mechanical splice? Our guide covers LC vs SC, APC vs UPC,

(PDF) Chapter-47 Percutaneous Abdominal Drain

(ii) Cope-loop pigtail catheter with a string attached to the tip of the catheter, which can be pulled and fixed at the hub end of the catheter to lock the

What is a Fiber Optic Pigtail, and What Is It Used For?

Don't expose the pigtails to harsh environments; most pigtails are designed for indoor applications. Benefits of using a fiber optic pigtail There are many benefits to using a fiber-optic

BNMD-RND-IFU-38 Multipurpose Drainage Catheter Pigtail

The Multi-Purpose Drainage Catheter Pigtail is flexible tube made of polyurethane, intended for percutaneous introduction into two or more abdominothoracic anatomies (nephrostomy, biliary,

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This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

