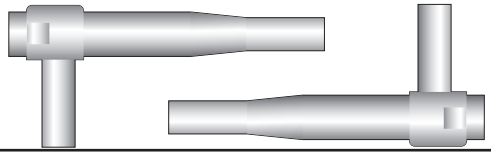
BURNS ENGINEERING

Sanitary Elbow with Built-In Thermowell Installation Manual

Contents



Illustrations

Introduction

The sanitary elbow thermowell is designed to provide a way to make temperature measurements in small diameter lines without impeding the process flow or inducing errors due to stem conduction. For lines less than 1" in diameter, the thermowell tubing diameter is increased around the well to accommodate flow with minimal restriction. The parallel orientation of the well allows for greater sensor immersion which minimizes stem conduction effects.

Installation

Identify the inlet and outlet of the sanitary elbow thermowell and align to the process flow direction.

For lines less than 1" in diameter, the inlet orientation needs to be considered. The orientation should be such that no fluid is trapped when the line is drained. Choose the appropriate orientation from Fig. a-e according to the line placement and line slope.

The sanitary elbow thermowell can be manufactured with weld ends to be butt welded in place or with tri-clover ends to be clamped in place. If ordered with weld ends, use an orbital welder to connect thermowell to the existing lines. If ordered with tri-clover ends, connect to the existing lines with the appropriate gaskets and clamps.

The sanitary elbow thermowell can be manufactured with a threaded or tri-clover instrument connection. If ordered with a threaded instrument connection, install spring-loaded element into well using the wrench flats for leverage (do not over tighten). If ordered with a tri-clover instrument connection, install spring-loaded element using the appropriate gasket and clamp.

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FORM 0800368
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Figure a. Concentric Elbow

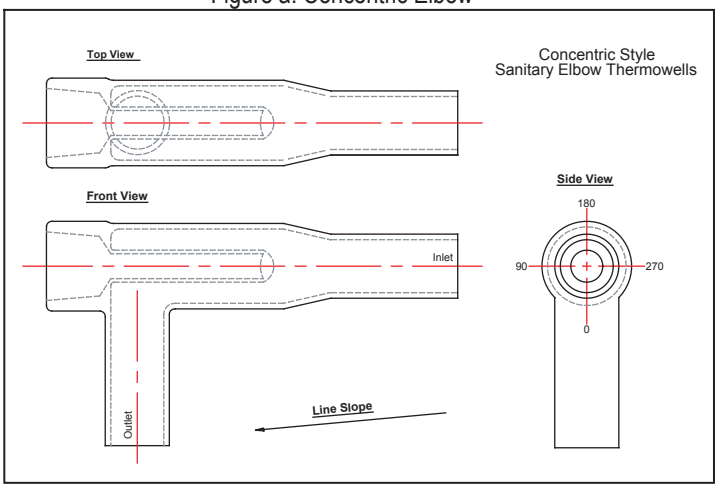


Figure b. 0° Orientation Elbow

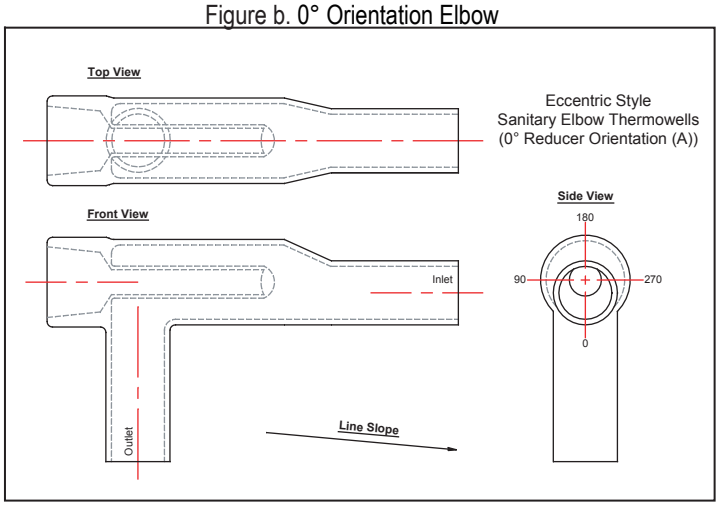


Figure c. 90° Orientation Elbow

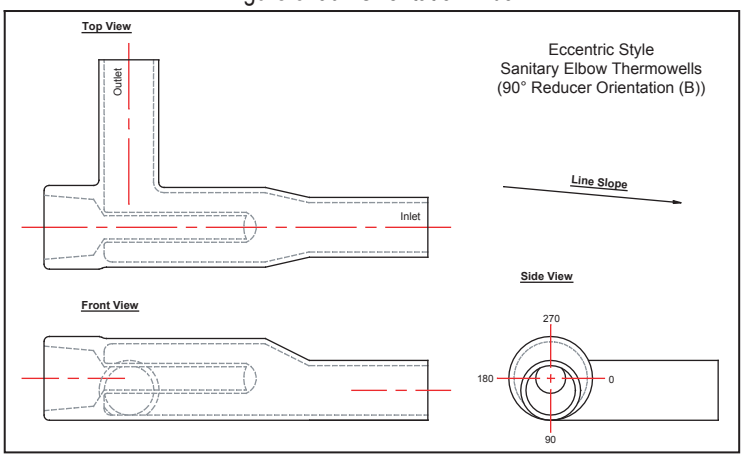


Figure d. 180° Orientation Elbow

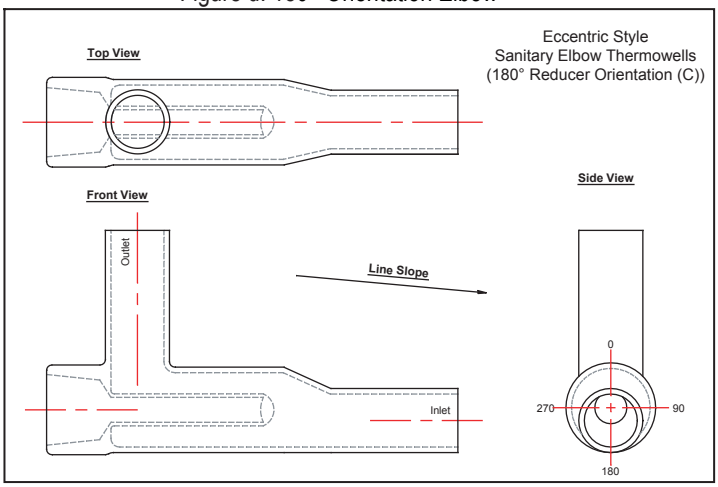
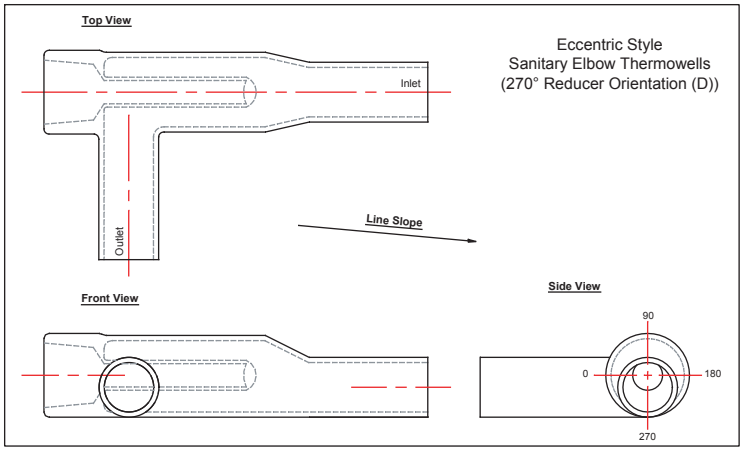


Figure e. 270° Orientation Elbow



Notes:

For Sanitary Elbow Themowells Ordering Information please reference Burns Engineering Series 'S' Catalog, Type SWE Elbow Thermowells

While this information is presented in good faith and is believed to be accurate, Burns Engineering cannot guarantee satisfactory results from reliance upon this information.