White Paper for the design of Tailored of Plunger Valves.

Dr. Raúl Trujillo Álvarez

11 February, 2022

Abstract

The scope of this With paper is to provide guidelines for designing the Inherent Control Valve Flow Characteristics in such a way as to allow linear Installed Control Valve Flow Characteristics.

Contents

1 Scope **1**

2 Basic definitions **1**

Reference **1**

1 Scope

2 Basic definitions

Basic terminology used herein is based on definitions stated in "Control Valve Terminology" [2] or applicable IEC standards.

- Flow coefficient: Flow coefficient is a constant (K_v) related to the geometry of a valve plus cylinder (obturator) for a given valve opening that can be used to predict flow rate; see ANSI/ISA-75.01.01 (IEC 60534-2-1 Mod)-2007, "Flow Equations for Sizing Control Valves," [1] and ANSI/ISA-75.02.01-2008, "Control Valve Capacity Test Procedures" [3].

Reference

[1] American National Standards Institute ; International Society of Automation: ANSI/ISA-75.01.01-2007, Flow equations for sizing control valves.

[2] American National Standards Institute ; ISA–The Instrumentation, Systems, and Automation Society ; Instrument Society of America: ANSI/ISA-75.05.01-2000 (R2005), Control Valve Terminology.

[3] International Society of Automation ; American National Standards Institute: ANSI/ISA-75.02.01-2008, Control valve capacity test procedures.