Indian Standard

INDUSTRIAL-PROCESS CONTROL VALVES
PART 2 FLOW CAPACITY

Section 3 Test Procedures

1 Scope

This section of IEC 60534-2 is applicable to industrial-process control valves and provides the flow capacity test procedures for determining the following variables used in the equations given in IEC 60534-2-1 and IEC 60534-2-2:

a) flow coefficient C;
b) liquid pressure recovery factor without attached fittings F_L;
c) combined liquid pressure recovery factor and piping geometry factor of a control valve with attached fittings F_{LP};
d) piping geometry factor F_P;
e) pressure differential ratio factors x_T and x_{TP};
f) valve style modifier F_d ;
g) Reynolds number factor F_R.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this section of IEC 60534-2. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this section of IEC 60534-2 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 60534-1:1987, *Industrial-process control valves - Part* 1: *Control valve terminology and general considerations*

IEC 60534-2:1978, *Industrial-process control valves - Part* 2: *Flow capacity* - Section One: *Sizing equations for incompressible fluid flow u under installed conditions*

IEC 60534-2-2:1980, *Industrial-process control valves - Part* 2: *Flow capacity* - Section Two: *Sizing equations for compressible fluid flow under installed conditions*

IEC 60534-8-2:1991, *Industrial-process control valves - Part* 8: *Noise considerations* Section 2: *Laboratory measurement of noise generated by hydrodynamic flow through control valves*

IEC 61298-1:1995, *Process measurement and control devices - General methods and procedures for evaluating performance - Part* 1: *General considerations*

IEC 61298-2:1995, *Process measurement and control devices - General methods and procedures for rocedures for evaluating performance - Part* 2 : *Tests under reference conditions*