

Industrial-process control valves —

Part 8: Noise considerations —

Section 2: Laboratory measurement of noise generated by hydrodynamic flow through control valves

The European Standard EN 60534-8-2:1993 has the status of a
British Standard

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Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Industrial-process Measurement and Control Standards Policy Committee (PCL/-) to Technical Committee PCL/1, upon which the following bodies were represented:

- British Coal Corporation
- British Gas plc
- British Pressure Gauge Manufacturers' Association
- Department of Energy (Gas and Oil Measurement Branch)
- Department of Trade and Industry (National Weights and Measures Laboratory)
- Energy Industries Council
- Engineering Equipment and Materials Users' Association
- GAMBICA (BEAMA Ltd.)
- Health and Safety Executive
- Institution of Gas Engineers

The following bodies were also represented in the drafting of the standard, through subcommittees and panels:

- British Chemical Engineering Contractors' Association
- British Valve and Actuator Manufacturers' Association
- Electricity Industry in United Kingdom

This British Standard, having been prepared under the direction of the Industrial-process Measurement and Control Standards Policy Committee, was published under the authority of the Standards Board and comes into effect on 31 October 1991

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The following BSI references relate to the work on this standard:
Committee reference PLC/1
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Amendments issued since publication

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National foreword

This Section of BS 5793 has been prepared under the direction of the Industrial-Process Measurement and Control Standards Policy Committee. It is identical with IEC Publication 534-8-2:1991 “*Industrial-process control valves. Part 8: Noise considerations. Section 2: Laboratory measurement of noise generated by hydrodynamic flow through control valves*”, published by the International Electrotechnical Commission (IEC).

In 1993 the European Committee for Electrotechnical Standardization (CENELEC) accepted IEC 534-8-2:1991 as European Standard EN 60534-8-2:1993. As a consequence of implementing the European Standard this British Standard is renumbered as BS EN 60534-8-2 and any reference to BS 5793-8.2 should be read as a reference to BS EN 60534-8-2.

For ease of reproduction the French text has been retained in Figure 3, Figure 4 and Figure 5.

Cross-references

International Standard	Corresponding British Standard
	BS 5793 <i>Industrial-process control valves</i>
IEC 534-1:1987	Part 1:1989 <i>Specification and terminology for control valves</i> (Identical)
IEC 534-2-3:1983	Section 2.3:1984 <i>Methods of test</i> (Identical)
IEC 651:1979	BS 5969:1981 <i>Specification for sound level meters</i> (Identical)
ISO 7-1:1982	BS 21:1985 <i>Specification for pipe threads for tubes and fittings where pressure-tight joints are made on the threads (metric dimensions)</i> (Technically equivalent)
ISO 65:1981	BS 1387:1985 <i>Specification for screwed and socketed steel tubes and tubulars and for plain end steel tubes suitable for welding or for screwing to BS 21 pipe threads</i> (Technically equivalent)
	BS 4196 <i>Sound power levels of noise sources</i>
ISO 3744:1981	Part 4:1981 <i>Engineering methods for determination of sound power levels for sources in free-field conditions over a reflecting plane</i> (Identical)
ISO 3745:1977	Part 5:1981 <i>Precision methods for determination of sound power levels for sources in anechoic and semi-anechoic rooms</i> (Identical)
ISO 4200:1985	BS 3600:1976 <i>Specification for dimensions and masses per unit length of welded and seamless steel pipes and tubes for pressure purposes</i> (Technically equivalent)

NOTE Textual error. In the title of Figure 6, L_{pa} should be read as L_{pA} .

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, the EN title page, pages 2 to 16, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

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Descriptors: Industrial-process, control valves, noise generated by hydrodynamic flow through control valves, laboratory measurement of noise

English version

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

(IEC 534-8-2:1991)

Vannes de régulation des processus industriels
Partie 8: Considérations sur le bruit
Section 2: Mesure en laboratoire du bruit créé
par un écoulement hydrodynamique dans une
vanne de régulation
(CEI 534-8-2:1991)

Stellventile für die Prozeßregelung
Teil 8: Allgemeine Geräuschbetrachtungen
Hauptabschnitt 2: Laboratoriumsmessungen
von Geräuschen bei hydrodynamisch
durchströmten Stellventilen
(IEC 534-8-2:1991)

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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

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CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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Foreword

The CENELEC questionnaire procedure, performed for finding out whether or not the International Standard IEC 534-8-2:1991 could be accepted without textual changes, has shown that no common modifications were necessary for the acceptance as European Standard.

The reference document was submitted to the CENELEC members for formal vote and was approved by CENELEC as EN 60534-8-2 on 9 December 1992.

The following dates were fixed:

- latest date of publication
of an identical national
standard (dop) 1993-12-01
- latest date of withdrawal
of conflicting national
standards (dow) 1993-12-01

For products which have complied with the relevant national standard before 1993-12-01, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 1998-12-01.

Annexes designated “normative” are part of the body of the standard. In this standard, Annex ZA is normative.