

Thermocouples —

Part 2: Tolerances

The European Standard EN 60584-2:1993 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
- Department of Energy (Gas and Oil Measurement Branch)
- Electricity Industry in United Kingdom
- 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 Cable Makers' Confederation
- British Pressure Gauge Manufacturers' Association
- Department of Trade and Industry (National Physical Laboratory)
- Engineering Industries Association
- Institute of Metals
- Society of Glass Technology

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 20 December 1991

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National foreword

This Part of BS 4937 has been prepared under the direction of the Industrial-process Measurement and Control Standards Policy Committee. It implements CENELEC HD 446.2 S2 1990 and is identical with IEC 584-2:1982 *“Thermocouples — Part 2: Tolerances”* published by the International Electrotechnical Commission (IEC) together with Amendment No. 1:1989. It supersedes BS 4937-20:1983, which is withdrawn.

In 1993 the European Committee for Electrotechnical Standardization (CENELEC) accepted IEC 584-2:1982 and Amendment 1:1989 as European Standard EN 60584-2:1993. As a consequence of implementing the European Standard this British Standard is renumbered BS EN 60584-2 and any reference to BS 4937-20 should be read as a reference to BS EN 60584-2. EN 60584-2:1993 supersedes HD 446.2 S2:1990.

In order to clarify the scope it should be noted that the tolerance values are specified in three classes and that eight types of thermocouples are divided into six groups.

Attention is drawn to the fact that whenever the words “Part 1” appear, they should be read as “Parts 1 to 8 of BS 4937”.

Cross-references

International standard	Corresponding British Standard
IEC 584-1:1977	BS 4937 International thermocouple reference tables
	Part 1:1973 Platinum — 10 % rhodium/platinum thermocouples. Type S (Technically equivalent)
	Part 2:1973 Platinum — 13 % rhodium/platinum thermocouples. Type R (Technically equivalent)
	Part 3:1973 Iron/copper-nickel thermocouples. Type J (Technically equivalent)
	Part 4:1973 Nickel-chromium/nickel-aluminium thermocouples. Type K (Technically equivalent)
	Part 5:1974 Copper/copper-nickel thermocouples. Type T (Technically equivalent)
	Part 6:1974 Nickel-chromium/copper-nickel thermocouples. Type E (Technically equivalent)
	Part 7:1974 Platinum 30 % rhodium/platinum 6 % rhodium thermocouples. Type B (Technically equivalent)

For type N thermocouples, refer to BS 4937-8:1986 “Nickel-chromium-silicon/nickel-silicon (nicrosil/nisil) thermocouples including composition type N” (there is no IEC equivalent).

Textual error. The following textual error has been discovered during the preparation of this British Standard and has been reported to the IEC.

In Table I for tolerance class 2, the temperature range for type K or N should read:

– 40 °C to + 333 °C

NOTE In Table I, the raised point in some of the tolerance values has been used as a multiplication sign, and it should not be confused with the decimal point.