

SPECIFICATION FOR  
SPEEDOMETER AND  
ODOMETER SYSTEMS  
FOR ROAD VEHICLES

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The Institution desires to call attention to the fact that this British Standard does not purport to include all the necessary provisions of a contract.

In order to keep abreast of progress in the industries concerned, British Standards are subject to periodical review. Suggestions for improvements will be recorded and in due course brought to the notice of the committees charged with the revision of the standards to which they refer.

A complete list of British Standards, numbering over 5000, fully indexed and with a note of the contents of each, will be found in the British Standards Yearbook, which may be purchased from BSI Sales Department. It may also be consulted in many public libraries and similar institutions.

This standard makes reference to the following British Standards:

BS 84. Parallel screw threads of Whitworth form.

BS 1580. Unified screw threads.

BS 3643. ISO metric screw threads.

BS 3693. Recommendations for the design of scales and indexes. Part 1. Instruments of bold presentation and for rapid reading.

*British Standards are revised, when necessary, by the issue either of amendment slips or of revised editions. It is important that users of British Standards should ascertain that they are in possession of the latest amendments or editions.*

The following BSI references relate to the work on this standard:  
Committee references INE/8, INE/8/1      Draft for comment 69/27186

## CONTENTS

|                            | Page |
|----------------------------|------|
| Co-operating organizations | 5    |
| Foreword                   | 6    |

## SPECIFICATION

|  |    |
|--|----|
| 1. Scope   | 6  |
| 2. Definitions   | 7  |
| 3. Speedometer drives  | 8  |
| 4. Drive input for speedometers and odometers<br>(distance indicators)               | 8  |
| 5. Accuracy of odometer  | 10 |
| 6. Accuracy of speed indication  | 10 |
| 7. Cases or other protection   | 10 |
| 8. Installation  | 11 |
| 9. Mounting and overall dimensions (only<br>applicable to heavy commercial vehicles) | 11 |
| 10. Parallax   | 11 |
| 11. Dial presentation  | 11 |
| 12. Rotation and deflection  | 11 |
| 13. Insulation resistance (only applicable to heavy<br>commercial vehicles)          | 12 |
| 14. Temperature and humidity   | 12 |
| 15. Index stability  | 12 |
| 16. Identification marking   | 12 |
| 17. Type tests   | 12 |
| 18. Routine tests  | 14 |

## APPENDICES

|  |    |
|--|----|
| A. Selection of equipment  | 14 |
| B. Recommendations on the design and con-<br>struction of speedometers and odometers | 15 |

## TABLES

|  |   |
|--|---|
| 1. Drives  | 8 |
| 2. Drive input   | 8 |
| 3. Effect of non-standard input on 620 rev per<br>indicated kilometre instrument | 9 |

|   | Page |
|---|------|
| 4. Effect of non-standard input on 1000 rev per indicated mile instrument | 9    |
| 5. Accuracy of speed indication of instrument as manufactured             | 10   |

#### FIGURES

|  |    |
|--|----|
| 1. Drive A. Regular  | 16 |
| 2. Drive B. Snap on (typical representation only)                          | 17 |
| 3. Drive C. Light flexible (non-preferred)                                 | 18 |
| 4. Drive D. Heavy flexible metric  | 19 |
| 5. Drive E. Heavy flexible (applicable to mechanical and electrical types) | 20 |
| 6. Drive F. For electrical transmitter (flanged)                           | 21 |
| 7. Drive G. For electrical transmitter (snout mounted)                     | 22 |
| 8. Drive H. Pulse generator  | 23 |
| 9. Socket for connection to electronic speedometers for Drive H            | 24 |
| 10. 148 mm speedometer (mechanical)  | 25 |
| 11. Electronic speedometer (clamp fixing)                                  | 26 |
| 12. Electronic speedometer (bracket mounted)                               | 27 |
| 13. 100 mm/4 in nominal diameter speedometer (electrical)                  | 28 |
| 14. Transmitter for speedometers   | 29 |

## CO-OPERATING ORGANIZATIONS

The Instrument Industry Standards Committee, under whose supervision this British Standard was prepared, consists of representatives from the following Government departments and scientific and industrial organizations:

- British Calibration Service
- \*British Electrical and Allied Manufacturers' Association
- British Industrial Measuring and Control Apparatus Manufacturers' Association
- British Mechanical Engineering Confederation
- British Nautical Instrument Trade Association
- British Railways Board
- British Steel Industry
- Council of British Manufacturers of Petroleum Equipment
- Department of the Environment
- Electrical Research Association
- Electricity Council, the Central Electricity Generating Board and the Area Boards in England and Wales
- Electronic Engineering Association
- Engineering Equipment Users' Association
- Gauge and Tool Makers' Association
- HEVAC Association
- Institute of Measurement and Control
- Institution of Chemical Engineers
- Institution of Electrical Engineers
- Institution of Heating and Ventilating Engineers
- \*Institution of Mechanical Engineers
- Institution of Production Engineers
- Meteorological Office
- Ministry of Defence, Air Force Department
- \*Ministry of Defence, Army Department
- Ministry of Defence, Navy Department
- National Coal Board
- National Physical Laboratory (Department of Trade and Industry)
- Oil Companies Materials Association
- \*Scientific Instrument Manufacturers' Association
- SIRA Institute
- Water-tube Boilermakers' Association

The Government department and scientific and industrial organizations marked with an asterisk in the above list, together with the following, were directly represented on the committee entrusted with the preparation of this British Standard:

- Automobile Association
- Society of Motor Manufacturers and Traders Ltd
- Individual firm

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**FOREWORD**

This British Standard has been prepared under the authority of the Instrument Industry Standards Committee. In the preparation of this second edition of the standard account was taken of SMMT Standards Nos. 90, 91, 91A, 92, 103 and 106. This edition of the standard supersedes BS AU 37, 'Dimensions of connections for flexible drives for instruments', BS AU 38, 'Flexible drives for speedometers', and BS AU 70, 'Dimensions of transmitter for speedometers (cradle-mounted: flexible drive)'.

The requirements for speedometer and odometer systems used in private motor cars and light commercial vehicles are somewhat restricted because of the ever-changing styles and requirements associated with these types of vehicles. The requirements for systems for heavy commercial vehicles are more comprehensive and achieve greater standardization. Attention is drawn to the legal requirement that speedometer dials shall be fitted with means of illumination to permit reading at night. It is also a legal requirement that speedometers shall be capable of indicating the true speed at which the vehicle is moving within  $\pm 10\%$  at all speeds in excess of 10 mile/h.

For static applications reference should be made to BS 3403, 'Indicating tachometer and speedometer systems for industrial, railway and marine use'.

Guidance of the selection of equipment will be found in Appendix A. Recommendations on the design and construction of speedometers and odometers are given in Appendix B.

**SPECIFICATION**

**1. SCOPE**

This British Standard specifies requirements for the drive, coupling and performance of speedometer and odometer systems for heavy and light commercial vehicles and private motor cars.

NOTE. The titles of the British Standards referred to in this standard are listed on page 2.