

Vehicle parking control equipment —

Part 2: Specification for electrically powered parking meters

UDC 62 – 189.2:621.3 – 523:625.712.63:625.746.53:656.053.6 + 681.118.1:656.835.34:001.4:620.1

Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Road Engineering Standards Policy Committee (RDB/-) to Technical Committee RDB/29, upon which the following bodies were represented:

- Association of London Authorities
- Association of Metropolitan Authorities
- Automobile Association
- British Parking Association
- Chartered Institute of Public Finance and Accountancy
- Department of Transport
- Institution of Civil Engineers
- Institution of Highways and Transportation
- Joint Committee on Mobility for the Disabled
- London Boroughs Association
- Metropolitan Police
- Royal Automobile Club
- Coopted members

This British Standard, having been prepared under the direction of the Road Engineering Standards Policy Committee, was published under the authority of the Board of BSI and comes into effect on 28 April 1989

© BSI 09-1999

The following BSI references relate to the work on this standard:
Committee reference RDB/29
Draft for comment 87/13588 DC

ISBN 0 580 17202 3

Amendments issued since publication

Amd. No.	Date of issue	Comments
6480	September 1990	
8284	March 1995	Indicated by a sideline in the margin

Contents

	Page
Committees responsible	Inside front cover
Foreword	ii
1 Scope	1
2 Definitions	1
3 General	2
4 <i>Text deleted</i>	5
5 Radio interference	6
6 Marking	6
7 Information and instruction plates	6
8 Components	6
9 Environmental conditions	7
10 Tokens	7
11 Operational accuracy	7
12 Type test	7
Appendix A Type test for electronic parking meters	14
Figure 1 — Visibility requirements for variable displays and parking state indications	4
Figure 2 — Typical layout of a single type A coin operated meter with a fixed tariff for on-street use	8
Figure 3 — Typical layout of a twin type B coin operated meter with alternative tariffs for on-street use	9
Figure 4 — Typical examples of instruction and information plates for type A or type B coin operated meters for on-street use	10
Publications referred to	Inside back cover

Foreword

This Part of BS 6571 has been prepared under the direction of the Road Engineering Standards Policy Committee.

Other Parts of this standard are as follows:

- *Part 1: Specification for coin operated clockwork parking meters;*
- *Part 3: Specification for pay and display equipment;*
- *Part 4: Specification for barrier type parking control equipment;*
- *Part 5: Guide to the requirements for non-coin operated apparatus for use with parking control equipment.*

Further Parts are under consideration.

Whilst it is not within the scope of this standard, attention is drawn to the guidance of the Design Council on the aesthetic qualities of street furniture.

Because multi-bay meters are seldom employed, requirements for such meters have been excluded from this Part of BS 6571.

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 and ii, pages 1 to 14, 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.

1 Scope

This Part of BS 6571 specifies requirements for electrically powered parking meters activated by coins, tokens, cards or electronic devices.

This standard covers the following types of meter using one or more methods of activation:

- a) single, comprising one meter head controlling one bay;
- b) double, comprising two separate meter heads on a common mounting controlling two separate bays;
- c) twin, comprising a housing or case containing a module or modules to control independently two parking bays;
- d) multi-head, comprising a number of meter heads on a common mounting to control independently a number of parking bays.

This standard does not cover multi-bay meters.

NOTE The titles of the publications referred to in this standard are listed on the inside back cover.

2 Definitions

For the purposes of this Part of BS 6571, the following definitions apply.

2.1

accuracy of meter

the magnitude of an accumulated variation in time expressed as a percentage tolerance in respect of elapsed time and a period, in minutes, over a course of consecutive days in respect of real time, where a real time control is fitted

2.2

temperature range

the upper and lower limit of temperature, in degrees Celsius, within which the meter will operate without exceeding the stated accuracy of the meter

2.3

basic period

the period extending from the maximum time point of the elapsed time period to zero, excluding any portion of the time which may be used for the purposes of an excess period, if provided, or a penalty purpose

2.4

total period

the basic period plus the time for the purposes of an excess period, if provided, or a penalty purpose

2.5

coin/token acceptance

the function involving the correct operation of a meter as the result of the insertion of a valid coin or approved token

2.6

device acceptance

a function involving the correct operation of a meter as the result of the correct use of a device

2.7

meter activation

the use of coin(s) or token(s) or devices to purchase time or test the meter

2.8

elapsed time display

a visible indication in hours and minutes of the amount of purchased time remaining since the last activation of the meter or of the amount of excess time if provided, or penalty time in hours and minutes

2.9

real time control

a device to establish chronological time within the meter

NOTE This device may be used for:

- a) visibly displaying current time in hours and minutes; or
- b) giving the capability to switch the meter's tariff regime according to predetermined schedules; or
- c) giving the capability to switch elements of the meter's total period according to predetermined schedules; or
- d) any combination of a), b) and c); or
- e) accommodating an advance purchase capability.

2.10

memory

a function of the meter whereby the meter is capable of recording data about its operation which can be recovered by an authorized person

NOTE Data will be of two types:

- a) operational information which controls the operation of the meter, e.g. the tariff, which can be altered to change the basis of operation; and
- b) statistical data about how the meter has operated, e.g. account data, which the operator may need for management purposes.

2.11

purchased time

time within the basic period paid for by the current user plus any remaining time purchased by a previous user plus the time during which the display shows zero

2.12

excess time

elapsed time during a predetermined excess period if provided, immediately following the expiry of the basic period

2.13

penalty time

elapsed time following the expiry of the excess period, if provided

2.14**type A meter**

a meter that will give an indication that it is out of order but does not preclude further insertion of valid coins, approved tokens or devices

2.15**type B meter**

a meter that will give an indication that it is out of order and which has the capability, when indicating that it is out of order, of precluding or returning further insertions of valid coins, approved tokens or devices

2.16**valid coin**

any coin issued by the Royal Mint for use in the United Kingdom of a denomination approved by the parking meter operator

NOTE The permissible degree of wear can be up to 0.2 mm below the minimum minted diameter of the coin.

2.17**minimum audit facility**

a means of indicating the totals and/or value of coins or tokens deposited in the cash box and the total of payments

2.18**optional tariff selection**

the selection of a separate tariff approved by the parking meter operator for a specified category of user

2.19**alternative tariff selection**

the automatic selection of the tariff regime in accordance with predetermined schedules approved by the parking meter operator

2.20**approved token**

an inert metallic or plastics disc of specified dimensions and tolerances having a predetermined value displayed by the parking meter operator

2.21**advance purchase facility**

the capability for the meter to be arranged so that, in conjunction with the real time control, unexpired purchase time at the conclusion of a controlled hours session is carried forward without any excess time, if provided, or penalty time to the commencement of the next session of controlled hours; or a meter activation outside controlled hours is registered as purchased time at the commencement of the next session of controlled hours, or both

3 General**3.1 Type and features**

3.1.1 Parking meters shall be electrically powered and either of type A or type B.

NOTE The coin/token acceptance function may operate mechanically.

3.1.2 The equipment shall comprise the following features within each meter:

- a) coin/token acceptance unit or device acceptance unit or both;
- b) security coin/token box where a coin/token acceptance unit is fitted;
- c) elapsed time display;
- d) parking state indicators;
- e) minimum audit facility;
- f) "out of order" indicator.

NOTE The provision of the following features may be provided where required by the purchaser and/or at the option of the manufacturer:

- a) real time control;
- b) expanded audit facility;
- c) advance purchase facility;
- d) an escrow unit and a coin/token reject facility;
- e) optional tariff selection facility;
- f) alternative tariff selection facility.

3.1.3 Each meter module shall bear a unique serial number.

3.2 Mains electricity operation

3.2.1 Meters supplied from an external power source shall operate at extra-low voltage up to 25 V a.c. r.m.s., 50 Hz or up to 60 V ripple free d.c.

NOTE Anti-condensation heaters may operate at a higher voltage.

3.2.2 All wiring shall be in accordance with the relevant British Standard.

NOTE Attention is drawn to the Institution of Electrical Engineers (IEE) Wiring Regulations¹⁾.

3.2.3 All items of metalwork within the equipment shall be bonded together to ensure adequate earthing.

3.2.4 Any mains equipment shall be fitted with a labelled isolating switch to disconnect the mains supply. Every circuit shall be capable of being isolated from the mains supply.

3.2.5 Where a memory is fitted it shall be supported by means of either an automatically recharging battery or primary cell which shall retain the memory for a period of not less than 7 days following a loss of the primary power source.

Where a real time control is fitted it shall also continue to operate under the above conditions.

¹⁾ Regulations for electrical installations, IEE Wiring Regulations, 15th edition, 1981.