

# Vehicle parking control equipment —

## Part 2: Specification for electrically powered parking meters

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# Committees responsible for this British Standard

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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

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The following BSI references relate to the work on this standard:  
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## Amendments issued since publication

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# 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 Regulations<sup>1)</sup>.

**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.

<sup>1)</sup> Regulations for electrical installations, IEE Wiring Regulations, 15th edition, 1981.

If the meter automatically returns to operation when the primary power source is re-established the meter shall record the period(s) for which it was non-functional within the electronic memory. Otherwise the meter shall remain out of order until manually reset.

NOTE Primary cells, where used, should be changed at sufficient intervals to ensure these conditions are met.

**3.2.6** All areas of the meter containing heaters shall carry labels, giving appropriate warning of electrical and temperature hazards.

**3.2.7** An externally visible indicator shall be fitted to show whether or not the meter is operational. When the meter is not operational the indicator shall make reference to or display the legend "Out of order". Other legends shall not be permitted.

**3.2.8** The power supply unit shall be so constructed that any staff adjusting mechanisms, or removing coin receptacles are inherently safe from injury due to electrical hazards.

**3.2.9** The power supply unit shall carry ON/OFF external supply switches and fuses.

**3.2.10** All power supply units shall carry approved electrical hazard/mains supply voltage warning labels.

### 3.3 Non-mains electricity

**3.3.1** *Type A meters.* After the fitting of a new power source and standing complete and unused for 7 days, non-mains electrically operated meters shall be capable of accepting at least 900 activations, continuously over a period of 15 days at a rate of 60 per day without the necessity to recharge or replace the power source.

**3.3.2** *Type B meters.* After the fitting of a new power source and standing complete and unused for 7 days, non-mains electrically operated meters shall be capable of accepting at least 480 activations per bay continuously over a period of 8 days at a rate of 60 per day for each bay controlled without the necessity to recharge or replace the power source.

### 3.4 Time display

**3.4.1** Parking meters shall be fitted with an elapsed time display which shall be capable of being read with normal or corrected vision at light intensities, measured at the immediate exterior surface of the meter, of between 5 lx and 100 000 lx, when assessed from a vertical/horizontal sighting 1.0 m wide and located between 0.4 m and 1.0 m normal to the vertical centre line of the front face of the meter and varying in height from 1.10 m to 1.75 m above the horizontal ground level (see Figure 1).

**3.4.2** Elapsed time shall be displayed digitally in hours and minutes. When elapsed times of less than 60 min are displayed "0" or "00" h shall be displayed; and when the number of minutes to be displayed is less than 10 a leading zero shall be displayed.

NOTE It is recommended that the hours and minutes of elapsed time should be divided by a colon, either permanently displayed or intermittently displayed at approximately 1 s "on" and 1 s "off".

**3.4.3** Purchased time shall be displayed decrementally to and including zero minutes.

Excess time, if provided, shall be displayed incrementally from 1 min prefixed with a minus sign and/or character "E". Penalty time shall be displayed incrementally from 1 min prefixed with a minus sign and/or the character "P".

**3.4.4** Any unexpired portion of purchase time, the excess time, if provided, and the recorded penalty time shall be established to within 0, + 0.1 % and the elapsed time display shall be varied at, and only at, the conclusion of each 1 min period.

**3.4.5** There shall be no variance between elapsed time displays where more than one is fitted for the control of an individual parking bay.

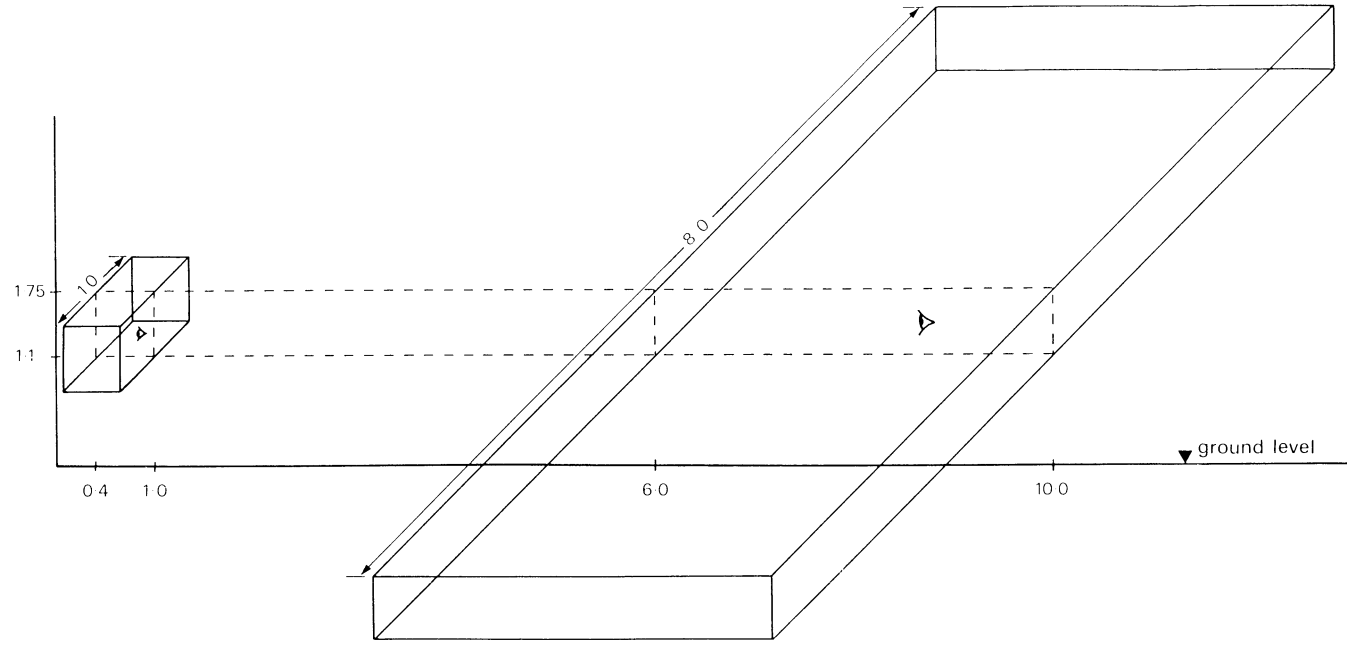
**3.4.6** Throughout any unexpired portion of paid for time the elapsed time display will show off digits in a steady manner.

NOTE During the excess period, if provided, or the record penalty period, the display may be intermittent with equally spaced "on" and "off" periods of approximately 1 s.

**3.4.7** Where a real time control is fitted and the visible display of current time is required the meter shall be so arranged that the elapsed time display at any moment can be temporarily changed to current time in hours and minutes for a period of between 2 s and 4 s when a proximity control is activated.

**3.4.8** When an audit is fitted a facility shall be provided to collect the audit information from the memory, either by displaying the data on the elapsed time display or by separate provision.

**3.4.9** The elapsed time display or other indicators shall indicate when a fault has occurred.



All dimensions are in metres.

**Figure 1 — Visibility requirements for variable displays and parking state indications (see 3.4.1 and 3.5.1)**



**3.4.10** The meter shall be capable of indicating at least 2 h penalty time.

The maximum penalty time shall be displayed in a steady state.

**3.4.11** The meter timing device shall be so arranged that it is possible to verify compliance with **3.4.1** to **3.4.10** under operational conditions with separate equipment.

### 3.5 Parking state indicators

**3.5.1** *Visibility of excess and penalty indicators.* The excess and penalty indicators shall be capable of being identified with normal or corrected vision at light intensities, measured at the immediate exterior face of the meter, of between 5 lx and 100 000 lx, when assessed from a vertical/horizontal sighting position 8 m wide and located between 6 m and 10 m normal to the vertical centre line of the display face(s) of the meter and varying in height from 1.10 m to 1.75 m above the horizontal ground level (see Figure 1).

**3.5.2** *Parking status.* The parking status shall be indicated by means of displaying the elapsed time or the words “EXCESS”, if an excess period is provided, or “PENALTY” as appropriate. If shown on the elapsed time display the words shall alternate at approximately 1 s intervals with the negative time. Only one status shall be indicated at any given time.

**3.5.3** *Type A meter.* When a fault, jam or energy supply failure occurs the meter shall give a clear indication that it is out of order.

**3.5.4** *Type B meter.* When a fault, jam or energy supply failure occurs the meter shall indicate that it is out of order. When the meter is out of order the meter shall not be capable of being activated.

The meter, when faulty, shall have the capability of indicating automatically, by means of a steady indicator, that the bay is not to be used.

**3.5.5** *Out of order status.* Where it would be an offence to park at a meter displaying the “out of order” indication, that indication shall consist of the words “OUT OF ORDER” displayed:

- a) during the initial period, either continuously or alternately with the unexpired part of the initial period;
- b) during any excess period, either continuously or alternately with the elapsed part of the excess period, together with the indication that the excess period, together with the indication that the excess period applies;
- c) during the first 2 h of penalty time, either continuously or alternately with the elapsed penalty time together with the indication that the penalty period applies.

### 3.6 Operation

**3.6.1** After the activation of the meter by an appropriate valid coin(s) or token(s) or device to the value of the initial charge, the meter shall indicate that the charge has been paid. The time paid for shall be added to the time remaining on the display unless by so doing the purchased time aggregate would exceed the maximum permitted stay, in which case the maximum stay shall be displayed.

**3.6.2** The implementation of an advance purchase facility, if fitted, shall be optional.

### 3.7 Mounting

**3.7.1** The parking meter shall be so constructed that it is capable of being mounted on the uppermost part of a post, the mounting details of which are circular in section, constructed of a material of not less than 4.5 mm wall thickness and having an inside diameter of  $51^{+1}_{-0}$  mm.

**3.7.2** All variable displays, device acceptance external features and associated external controls shall be located between 1.0 m and 1.40 m above the surrounding ground.

## 4 Text deleted

### 4.1 On-street parking

The colour of the external casing of meters used to control on-street parking shall comply with one of the following standard colours of BS 381C:

- 631 Light grey
- 226 Middle Brunswick green
- 106 Royal blue
- 210 Sky
- 388 Beige
- 436 Dark camouflage brown
- 320 Light brown
- 627 Light aircraft grey or anodized aluminium approximately to this colour
- 109 Middle blue
- 217 Sea green

### 4.2 Off-street parking

The colour of the external casing of meters used to control off-street parking shall be as given in **4.1** with the addition of:

- 568 Apricot
- 557 Light orange

### 4.3 Mounting poles and fixtures

Mounting poles and fixtures shall be the same colour as the meter casing.

## 5 Radio interference

The equipment shall be so designed as not to create or be corrupted by telegraphic, telephonic or radio interference (see BS 800).

## 6 Marking

The parking meter shall be clearly and indelibly marked with the following information:

- a) the manufacturer's name or trade mark;
- b) the number and date of this British Standard, i.e. BS 6571-2:1989<sup>2)</sup>.

## 7 Information and instruction plates

### 7.1 Information

Information given on the meter shall be adequate to ensure the correct operation of the meter in accordance with the requirements of the Parking Order.

The information given shall include the following:

- a) maximum parking periods;
  - b) charging rates;
- NOTE Tariffs should be such that, in combination with valid coins or tokens or devices they will produce purchases in whole numbers of minutes.
- c) denominations of valid coins, types of token or devices that may be used;
  - d) charges for and length of excess period, if provided;
  - e) the days and times of controlled parking;
  - f) whether charges are made on Saturdays, Sundays and Public Holidays, etc.;
  - g) information as to the use of unexpired time;
  - h) reference to any restrictions on reparking;
  - i) the name of the operating authority of the meter;
  - j) statement regarding expiry of excess period, if provided and irregular use of coins, tokens or devices.

NOTE Typical examples of panel layouts and instruction plates are shown in Figure 2 to Figure 4.

In all cases where a cluster of meter mechanisms, e.g. two meter units in one common case or two or more meters on one pole, serves more than one parking bay, an arrow shall be marked in a prominent position to indicate without confusion the appropriate slot for each meter bay. This arrow shall have associated with it the words "Parking this side pay here" and/or a bold symbol of a car, coach or other vehicle as appropriate.

<sup>2)</sup> Marking BS 6571-2:1989 on or in relation to a product represents a manufacturer's declaration of conformity, i.e. a claim by or on behalf of the manufacturer that the product meets the requirements of the standard. The accuracy of the claim is therefore solely the responsibility of the person making the claim. Such a declaration is not to be confused with third party certification of conformity, which may also be desirable.

### 7.2 Figuring and lettering

Figuring and upper case lettering shall be not less than 3 mm "X" height. Lower case lettering shall be not less than 2 mm "x" height. The colour of the figuring and lettering shall be in contrast to the background colour of the plate carrying the information.

The figuring of the maximum stay period shall be not less than 28 mm in height for a single tariff meter and not less than 14 mm in height for a multi-tariff meter.

NOTE The height of the letter "x" or "X" defines the height of the other characters excluding ascenders and descenders of lower case characters.

### 7.3 Cleaning, resistance to solvents

When tested as described in clause 12 of BS 873-1:1983, allowing 5 min for drying, no part of the instruction plate shall show evidence of softening or dissolving of the surface or any other deleterious effect.

The lettering shall still be legible at the conclusion of the test.

## 8 Components

NOTE There are no requirements for the construction material of the case, for corrosion resistance, fire resistance or for vandal resistance in this standard, but these factors will generally need to be considered before the meters are purchased.

### 8.1 Keys, locks and security

Locks shall provide a system of security not less than that obtained from a multi-tumbler type of lock.

NOTE The precise system of locking is not specified in this standard and should be agreed between the purchaser and the manufacturer. In this connection, attention is drawn to the possible use of selected key systems.

The key used to operate the mechanism door shall not allow entry into the coin compartment.

### 8.2 Windows

Windows shall be manufactured from toughened safety glass complying with BS 857 or plastics safety glazing material complying with the properties of categories C or G in clause 4 of BS AU 182:1982.

### 8.3 Coin/token capacity

**8.3.1** The meter coin/token box, when fitted into the meter case and filled via a meter mechanism with 5p or 10p coins or with these coins in any combination, shall hold not less than £5 sterling.

NOTE A slave meter mechanism may be used to test this requirement.

**8.3.2** A hand removable coin/token box shall have a maximum capacity of 6 L. If a larger capacity box is used it shall be capable of being removed with mechanical assistance.

**8.3.3** The security coin/token box shall be of sheet steel of welded construction with a minimum thickness of 1.5 mm or of other material and construction of equivalent mechanical strength and security.

**8.3.4** All removable coin/token boxes shall have a self-closing lockable lid actuated either upon withdrawal or upon unlocking the receptacle from its housing, to prevent access to the money contained therein.

**8.3.5** The security coin/token box shall be housed, either within a secure compartment or be capable of being further secured by a locking mechanism.

**8.3.6** The coin/token box shall be so designed to be capable of being monitored on the volume of coins/tokens accepted and when a preset amount is attained this fact shall be indicated externally at the meter. When the coin/token box is full the meter shall go out of operation.

**8.3.7** Coin acceptors fitted with a change-giving unit, holding a greater value of coins than the equivalent of 20 minimum-value transactions shall incorporate a secure lockable housing to prevent access to the money contained therein.

#### **8.4 Card capacity**

Where a meter takes cards to be retained it shall be capable of holding at least 50 cards.

#### **8.5 Coin, token or card entry**

The equipment shall be capable of accepting coins, tokens or cards for which it is designed.

The equipment shall be capable of accepting coins or tokens up to 0.2 mm below the minimum diameter of the coins or tokens for which it is designed.

NOTE It is permissible for the size of slot to be set so as to preclude the entry of some undesirable coins, tokens or other devices.

### **9 Environmental conditions**

#### **9.1 Weathering**

When classified in accordance with BS 5490:1977 parking meters shall comply with IPX3.

NOTE This classification relates to the degree of protection provided by the case and requires that water falling as a spray at an angle of up to 60° from the vertical has no harmful effect on the mechanism.

#### **9.2 Temperature**

The meter shall function correctly over a temperature range of – 10 °C to + 45 °C.

#### **9.3 Damp heat**

The meter shall function correctly at a relative humidity of 80 % at an ambient temperature of 45 °C.

#### **9.4 Vibration**

The meter shall continue to function correctly after being vibrated over a frequency range of 10 Hz to 150 Hz.

### **10 Tokens**

Tokens shall not exceed  $30 \pm 0.125$  mm in diameter and  $2.5 \pm 0.152$  mm in thickness.

### **11 Operational accuracy**

#### **11.1 General**

The correct use of any valid coin, token, card or device designated on the information plate to operate the meter shall cause not less than the period of time attributable to the value of that coin, token, card or device, to be registered on the display.

#### **11.2 Indication of excess period**

The indication of the excess period if provided, shall appear not less than 60 s or more than 63 s after the expiry of the paid for parking time.

#### **11.3 Indication of penalty period**

The indication of the penalty period shall appear within 3 s of any excess period. If an excess period is not provided, the penalty period shall be indicated not less than 60 s and not more than 63 s after the expiry of the basic period.

#### **11.4 Accuracy of timing**

The accuracy of real time control, where fitted, shall be to within 2 min in 7 days.

NOTE An equivalent accuracy may be determined electronically during a type test.

### **12 Type test**

The meter shall function correctly and remain within the limits specified in this Part of BS 6571 when tested as described in Appendix A.

Where a real time control is fitted it shall maintain the specified accuracy over the period of the test.

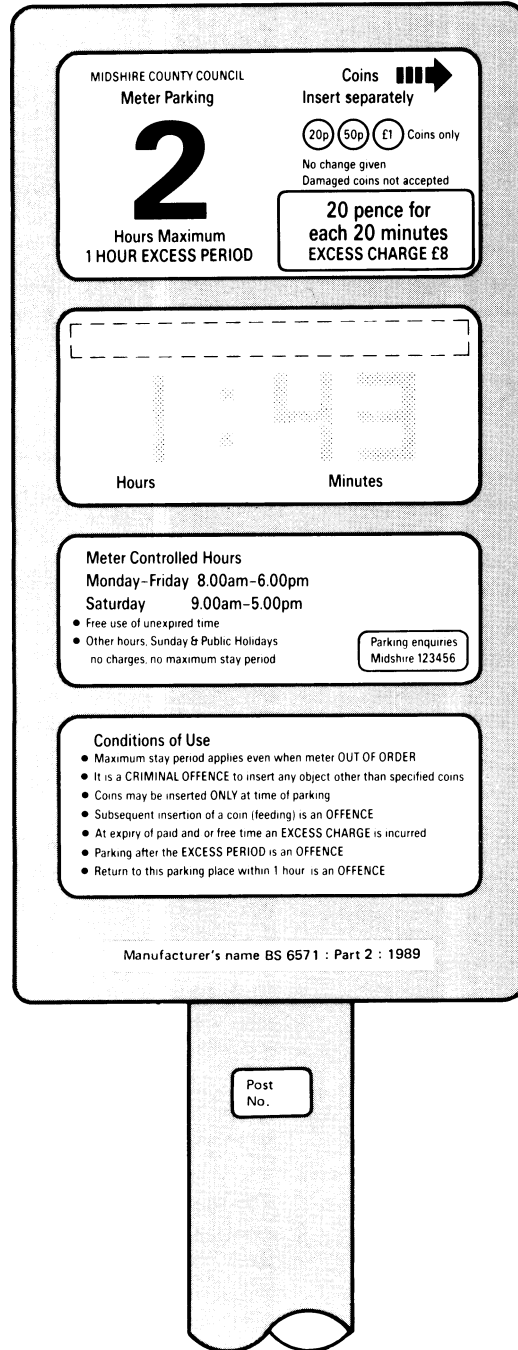


Figure 2 — Typical layout of a single type A coin operated meter with a fixed tariff for on-street use



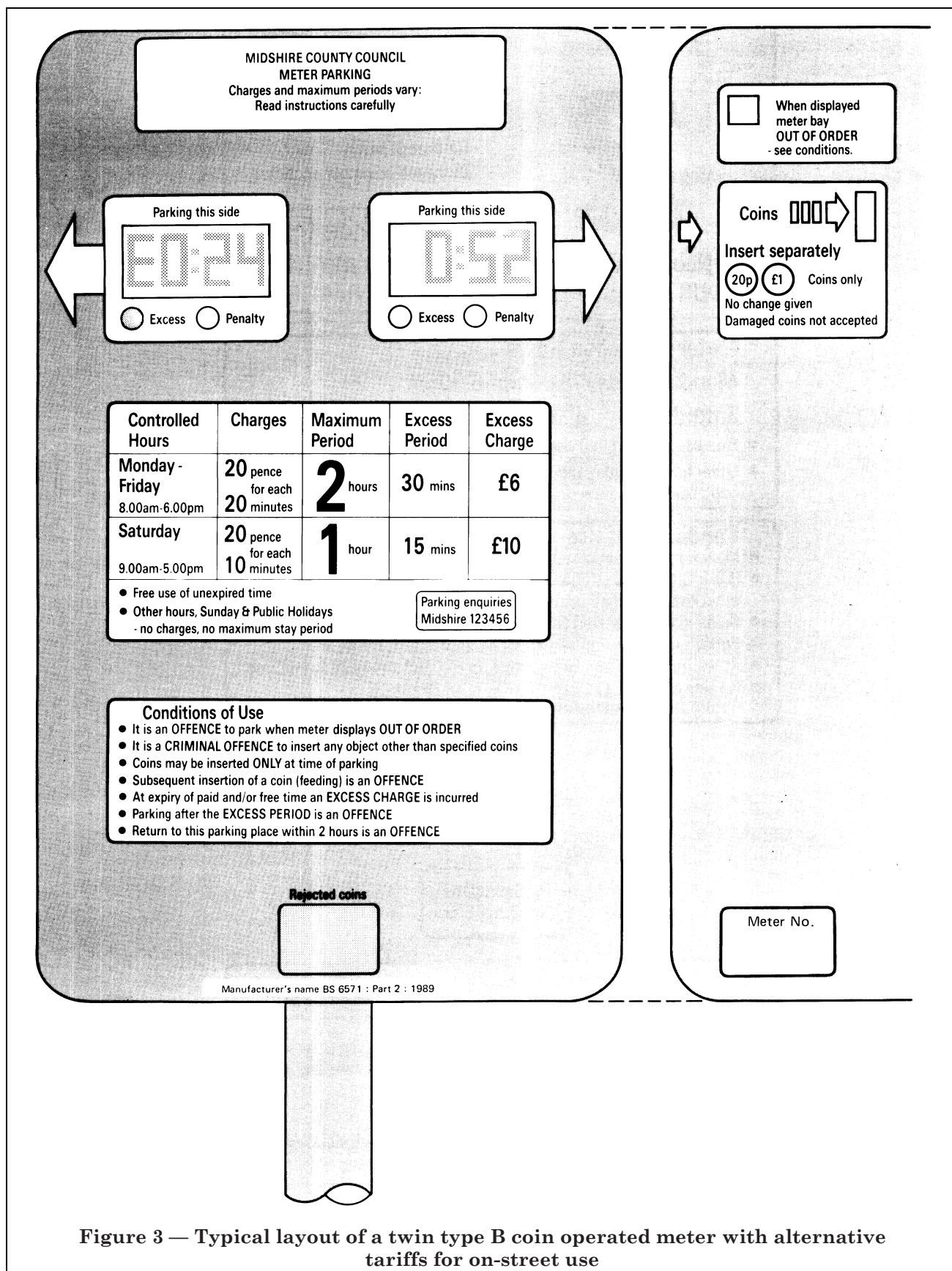






Figure 3 — Typical layout of a twin type B coin operated meter with alternative tariffs for on-street use

MIDSHIRE COUNTY COUNCIL  
Meter Parking

**2**  
Hours Maximum  
1 HOUR EXCESS PERIOD

Coins   
Insert separately

   Coins only  
No change given  
Damaged coins not accepted

**20 pence for  
each 20 minutes  
EXCESS CHARGE £8**

**Meter Controlled Hours**  
Monday–Friday 8.00am–6.00pm  
Saturday 9.00am–5.00pm

- Free use of unexpired time
- Other hours, Sunday & Public Holidays  
- no charges, no maximum stay period

Parking enquiries  
Midshire 123456

**Conditions of Use**

- Maximum stay period applies even when meter OUT OF ORDER
- It is a CRIMINAL OFFENCE to insert any object other than specified coins
- Coins may be inserted ONLY at time of parking
- Subsequent insertion of a coin (feeding) is an OFFENCE
- At expiry of paid and/or free time an EXCESS CHARGE is incurred
- Parking after the EXCESS PERIOD is an OFFENCE
- Return to this parking place within 1 hour is an OFFENCE

OPTIONAL PLATES

For Conditions  
See Other Side

**Permit Holders ZONE E: Separate Conditions Apply**

NOTE Precise requirements are to be consistent with parking order regulations.

(a) Fixed tariff meter


**Figure 4 — Typical examples of instruction and information plates for type A or type B coin operated meters for on-street use**

MIDSHIRE COUNTY COUNCIL




**OFF PEAK**  
Meter Parking

**2**

Hours Maximum  
1 HOUR EXCESS PERIOD


Coins 

Insert separately

   Coins only

No change given  
Damaged coins not accepted

**20 pence for  
each 20 minutes  
EXCESS CHARGE £8**



**NO WAITING NO LOADING**  
Monday - Friday  
8.00am - 9.30am  
4.30pm - 6.30pm

**Meter Controlled Hours**  
Monday-Friday 9.30am-4.30pm  
Saturday 8.00am-6.30pm

- Free use of unexpired time
- Other hours, Sunday & Public Holidays  
- no charges, no maximum stay period

**Conditions of Use**

- It is an OFFENCE to park when meter displays OUT OF ORDER
- It is a CRIMINAL OFFENCE to insert any object other than specified coins
- Coins may be inserted ONLY at time of parking
- Subsequent insertion of a coin (feeding) is an OFFENCE
- At expiry of paid and/or free time an EXCESS CHARGE is incurred
- Parking after the EXCESS PERIOD is an OFFENCE
- Return to this parking place within 2 hours is an OFFENCE

**Permit Holders ZONE E: Separate Conditions Apply**

No parking at  
OUT OF ORDER  
meter

NOTE Precise requirements are to be consistent with parking/traffic regulation order.

(b) "Off-peak" meter

**Figure 4** — Typical examples of instruction and information plates for type A or type B coin operated meters for on-street use (*continued*)

**MIDSHIRE  
COUNTY COUNCIL  
Meter Parking**

**Charges and Maximum  
Periods Vary –  
Read Instructions Carefully**

**Coins**

**Insert separately**

Coins only  
 No change given  
 Damaged coins not accepted

Controlled Hours	Charges	Maximum Period	Excess Period	Excess Charge
<b>Monday - Friday</b> 8.00am-6.00pm	<b>20</b> pence for each <b>20</b> minutes	<b>2</b> hours	<b>30</b> mins	<b>£6</b>
<b>Saturday</b> 9.00am-5.00pm	<b>20</b> pence for each <b>10</b> minutes	<b>1</b> hour	<b>15</b> mins	<b>£10</b>

● Free use of unexpired time  
 ● Other hours, Sunday & Public Holidays  
 - no charges, no maximum stay period

Parking enquiries  
 Midshire 123456

**Conditions of Use**

- It is an **OFFENCE** to park when meter displays **OUT OF ORDER**
- It is a **CRIMINAL OFFENCE** to insert any object other than specified coins
- Coins may be inserted **ONLY** at time of parking
- Subsequent insertion of a coin (feeding) is an **OFFENCE**
- At expiry of paid and/or free time an **EXCESS CHARGE** is incurred
- Parking after the **EXCESS PERIOD** is an **OFFENCE**
- Return to this parking place within 2 hours is an **OFFENCE**

NOTE Precise requirements are to be consistent with parking order regulations.

(c) Meter with alternative tariffs according to the day of the week

**Figure 4** — Typical examples of instruction and information plates for type A or type B coin operated meters for on-street use (*continued*)



**MIDSHIRE  
COUNTY COUNCIL  
Meter Parking**

**Charges and Maximum  
Periods Vary –  
Read Instructions Carefully**

**Coins**

**Insert separately**

**Coins only**  
 No change given  
 Damaged coins not accepted

Controlled Hours	Charges	Maximum Period	Excess Period	Excess Charge
Monday-Friday 8.00am-9.30am 3.00pm-6.00pm	<b>10</b> pence for each <b>10</b> minutes	<b>1</b> hour	<b>30</b> mins	<b>£6</b>
Monday-Friday 9.30am-3.00pm Saturday 9.00am-5.00pm	<b>10</b> pence for each <b>20</b> minutes	<b>2</b> hours	<b>30</b> mins	<b>£6</b>

**Charges and Maximum Stay are set  
according to your Time of Arrival**  
**← PRESS TO CHECK TIME NOW**

- Free use of unexpired time
- Other hours, Sunday & Public Holidays  
- no charges, no maximum stay period

### Conditions of Use

- Charges and maximum periods apply at time when parking commences and at start of controlled hours
- When indicator displays  it is an offence to commence parking in the specified bay
- It is a **CRIMINAL OFFENCE** to insert any object other than specified coins
- Coins may be inserted **ONLY** at time of parking
- Subsequent insertion of a coin (feeding) is an **OFFENCE**
- At expiry of paid and/or free time an **EXCESS CHARGE** is incurred
- Parking after the **EXCESS PERIOD** is an **OFFENCE**
- Return to this parking place within 2 hours is an **OFFENCE**

NOTE Precise requirements are to be consistent with parking order regulations.

(d) Meter with alternative tariffs according to the time of day

**Figure 4** — Typical examples of instruction and information plates for type A or type B coin operated meters for on-street use (*concluded*)

## Appendix A Type test for electronic parking meters

### A.1 Performance check

A performance check shall consist of the following steps.

- a) The meter accepts payment and displays the correct paid for time.
- b) The meter performs to the specified timing accuracy.
- c) The meter then displays excess or penalty periods as specified.
- d) The performance check is carried out using 1 h paid for time, 1 h excess period and 1 h penalty period.

### A.2 Order of testing

The meter shall be tested in the following order.

- a) A performance check is carried out at ambient temperature.

b) The meter is placed in a chamber and the temperature increased to 50 °C over a period of not less than 1 h. It is left at 50 °C for between 20 h and 24 h, after which a performance check is carried out.

c) The meter is then subjected to damp heat at a temperature of 40 °C and a relative humidity of 95 % for 4 h, after which a performance check is carried out.

d) The meter is reduced in temperature to 20 °C over a period of not more than 1 h and held for a duration of 2 h, after which a performance check is carried out.

e) The meter is reduced in temperature to – 10 °C over a period of not less than 1 h. It is left at – 10 °C for between 20 h and 24 h, after which a performance check is carried out.

f) The meter is raised to ambient temperature.

g) The meter is vibrated at a constant  $0.5g_n$  in three axes over a frequency range of 10 Hz to 150 Hz at a sweep rate of 8 min, pausing at major resonances for 5 min. A performance check is then carried out.

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## Publications referred to

BS 381C, *Specification for colours for identification, coding and special purposes.*

BS 800, *Specification for radio interference limits and measurements for household appliances, portable tools and other electrical equipment causing similar types of interference.*

BS 857, *Specification for safety glass for land transport.*

BS 873, *Road traffic signs and internally illuminated bollards.*

BS 873-1, *Methods of test.*

BS 4684, *Clockwork parking meters*<sup>3)</sup>.

BS 5490, *Specification for classification of degrees of protection provided by enclosures.*

BS 6571, *Vehicle parking control equipment.*

BS 6571-1, *Specification for coin operated clockwork parking meters*<sup>3)</sup>.

BS 6571-3, *Specification for pay and display equipment*<sup>3)</sup>.

BS 6571-4, *Specification for barrier type parking control equipment*<sup>3)</sup>.

BS 6571-5, *Guide to the requirements for non-coin operated apparatus for use with parking control equipment*<sup>3)</sup>.

BS AU 182, *Specification for plastics safety glazing materials for use in road vehicles.*

Regulations for electrical installations, IEE Wiring Regulations<sup>4)</sup>.

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<sup>3)</sup> Referred to in the foreword only.

<sup>4)</sup> Institution of Electrical Engineers, Savoy Place, London WC2R 0B2.

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