



**ANSI C12.7-2022**

*American National Standard  
Requirements for Watthour Meter Sockets*

Secretariat:

**National Electrical Manufacturers Association**

Approved: November 17, 2022

**American National Standards Institute, Inc.**

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**Foreword** (This foreword is not part of American National Standard C12.7-2022.)

This standard was developed by Subcommittee 15 and balloted by the Accredited Standards Committee on Electricity Metering, C12, for full consensus approval as an American National Standard. This revised version supersedes ANSI C12.7-2014. Figures 1-9 have been recreated. Figure 4 from ANSI C12.8 has been transferred to this standard as the new Figure 10.

This standard covers the dimensions and functions of meter test switches for transformer-rated watt-hour meters when used in conjunction with instrument transformers.

Suggestions for improvements of this standard are welcome. They should be in the form of a proposed change of text, together with appropriate supporting comments.

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## Contents

Foreword .....	ii
<b>1 Scope .....</b>	<b>1</b>
<b>2 References.....</b>	<b>1</b>
<b>3 Definitions .....</b>	<b>1</b>
3.1 Circuit Bypass Means (Bypass).....	1
3.2 Continuous-Duty Current Rating .....	1
3.3 Continuous Load.....	1
3.4 Meter Socket (Socket) .....	1
3.5 Meter Support .....	1
3.6 Ringless-Type Meter Socket .....	1
3.7 Ring-Type Meter Socket.....	1
3.8 Socket Cover .....	2
3.9 Socket Rim .....	2
3.10 Socket Sealing Ring.....	2
3.11 Connector.....	2
3.12 Disconnect .....	2
3.13 Test Block .....	2
<b>4 Meter Socket Electrical Ratings .....</b>	<b>2</b>
4.1 Current Ratings.....	2
4.2 Voltage Ratings .....	2
<b>5 Performance Requirements.....</b>	<b>2</b>
<b>6 Construction Requirements .....</b>	<b>3</b>
6.1 Construction and Workmanship .....	3
6.2 Marking .....	3
6.3 Enclosures .....	3
6.3.1 Protection .....	3
6.3.2 Construction .....	3
6.3.3 Enclosure Materials.....	3
6.3.4 Mounting Bosses .....	4
6.3.5 Wiring Space .....	4
6.4 Conduit Connections and Knockouts .....	4
6.5 Limiting Dimensions and Relative Locations of Functional Parts.....	5
6.6 Terminal Connectors .....	6
6.7 Circuit Closing Means (Bypass) .....	6
6.7.1 Horn Bypass.....	6
6.8 Sealing.....	6

6.9	Sectional and Multiple-Position Sockets.....	7
6.9.1	Structural Types .....	7
6.9.2	Covers .....	7
6.9.3	Meter Position Spacings.....	7
6.10	Socket Sealing .....	7
6.10.1	General.....	7
6.10.2	Dimensions and Tolerances.....	7
6.10.3	Facilities for Sealing .....	7
6.11	Watt-hour Meter/Ringless Socket Interface .....	7
6.12	Metric Conversion .....	8
6.13	Safety Alert Markings .....	8
<b>7</b>	<b>Test Blocks.....</b>	<b>8</b>
7.1	Standard Ratings .....	8
7.2	Spacings .....	8
7.3	Temperature Rise .....	8
7.4	Assembly Bolts .....	9
7.5	Connectors .....	9
7.6	Connector Nuts.....	9
7.7	Test Clips.....	9
7.8	Barriers .....	9
7.9	Disconnect Device .....	9
7.10	Base Material .....	9
7.11	Mounting Holes .....	9
7.12	Dimensions and Configuration.....	9
<b>Tables</b>		
Table 1	300 V Rating .....	2
Table 2	600 V Rating.....	2
Table 3	Knockout and Busbar Dimensions.....	5
Table 4	Limiting Dimensions and Tolerances .....	5
<b>Figures</b>		
Figure 1	Limiting Dimensions of Socket Rim.....	10
Figure 2	Limiting Dimensions of Socket Jaws .....	11
Figure 3	Location of Socket Jaws (Front View) .....	12
Figure 4	Socket-Jaw Position Identification.....	13
Figure 5	Internal Voltage Connections of 13-, 14-, and 15-Jaw Sockets .....	14
Figure 6	Socket Sealing Ring Dimensions .....	15
Figure 7	Hole Dimensions to Accommodate Sealing Means .....	16
Figure 8	Provisions for Interchangeable Gasketless Hubs.....	17
Figure 9	Horn Bypass .....	18
Figure 10	200 A Test Block Line-Load, Alternate Construction Sequence of Connections.....	19

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## 1 Scope

This standard covers the general requirements and pertinent dimensions applicable to watt-hour meter sockets rated up to and including 600 V and up to and including 320 A continuous-duty per socket opening.

## 2 References

This standard shall be used in conjunction with the following standards. When the following standards are superseded by an approved revision, the revision shall apply.

ANSI C12.10-2011 *American National Standard for Physical Aspects of Watthour Meters—Safety Standard*

ANSI Z535.4-2011 *Product Safety Signs and Labels*

ANSI/UL 50-2012 *Enclosures for Electrical Equipment, Non-Environmental Considerations*

ANSI/UL 414-2009 *Safety Standard for Meter Sockets*

ANSI/NEMA 250-2020 *Enclosures for Electrical Equipment (1000 Volts Maximum)*

## 3 Definitions

### 3.1 Circuit Bypass Means (Bypass)

An assembly of parts that, when properly operated, closes the circuit between the line and load jaws.

### 3.2 Continuous-Duty Current Rating

The rating in amperes that a meter socket will carry continuously under stated conditions without exceeding the allowable temperature rise. A multi-position socket has an additional current rating that denotes the maximum ampere capacity of the line buses.

### 3.3 Continuous Load

A load where the current continues for 3 hours or more.

### 3.4 Meter Socket (Socket)

An enclosure that has matching jaws to accommodate the bayonet-type (blade) terminals of a detachable watt-hour meter and has a means of connection for the termination of the circuit conductors. It may be a single-position socket for one meter or a multi-position socket for two or more meters.

### 3.5 Meter Support

The component(s) of a ringless-type meter socket that positions and supports a detachable watt-hour meter.

### 3.6 Ringless-Type Meter Socket

A meter socket that has no provision for a socket sealing ring but has other means of holding a detachable watt-hour meter in place, such as a cover that is secured in place by a latch.

### 3.7 Ring-Type Meter Socket

A meter socket that has a socket rim.