

Australian Standard™

**Insulators—Ceramic or glass—Hollow  
pressurized and unpressurized—  
Voltages greater than 1000 V a.c.**

This Australian Standard was prepared by Committee EL-010, Overhead Lines. It was approved on behalf of the Council of Standards Australia on 21 April 2005. This Standard was published on 20 May 2005.

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The following are represented on Committee EL-010:

Australasian Railway Association  
Australian Chamber of Commerce and Industry  
Australian Electrical and Electronic Manufacturers Association  
Australian Porcelain Insulators Association  
Electricity Engineers Association (New Zealand)  
Energy Networks Association

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## PREFACE

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee EL-010, Overhead Lines. After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian, rather than an Australian/New Zealand Standard.

The objective of this Standard is to provide users and manufacturers of hollow ceramic and glass insulators with definitions and terms, test methods and acceptance criteria to facilitate their specification.

This Standard is identical with, and has been reproduced from IEC 62155, Ed. 1.0 (2003), *Hollow pressurized and unpressurized ceramic and glass insulators for use in electrical equipment with rated voltages greater than 1000 V*.

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The term 'informative' is used to define the application of the annex to which it applies. An informative annex is only for information and guidance.

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## STANDARDS AUSTRALIA

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**1 Scope and object****1.1 General**

This standard is applicable to

- ceramic and glass hollow insulators intended for general use in electrical equipment;
- ceramic hollow insulators intended for use with a permanent gas pressure in switchgear and controlgear.

These insulators are intended for indoor and outdoor use in electrical equipment, operating on alternating current with a rated voltage greater than 1 000 V and a frequency not greater than 100 Hz or for use in direct-current equipment with a rated voltage of greater than 1 500 V.

The hollow insulators are intended for use in electrical equipment, for example:

- circuit-breakers,
- switch-disconnectors,
- disconnectors,
- earthing switches,
- instrument transformers,
- surge arresters,
- bushings,
- cable sealing ends,
- capacitors.

It is not the object of this standard to prescribe dielectric type tests because the withstand voltages are not characteristics of the hollow insulator itself but of the apparatus of which it ultimately forms a part.

**1.2 Hollow insulators or hollow insulator bodies intended for general use**

Hollow insulators or insulator bodies of ceramic material or glass, intended for use

- without pressure;
- with permanent pressure  $\leq 50$  kPa gauge;
- with permanent gas pressure  $> 50$  kPa gauge in combination with an internal volume  $< 1$  l ( $1\,000$  cm<sup>3</sup>);
- with permanent hydraulic pressure.

The object of this standard is to define

- the terms used;
- the mechanical and dimensional characteristics of hollow insulators and hollow insulator bodies;



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