AS 4310:2024

Australian STANDARD®

STANDARDS Australia

DN 80 piston type vacuum interface valves for municipal sewer systems

AS 4310:2024

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Australian Building Codes Board
Australian Chamber of Commerce and Industry
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Australian Stainless Steel Development Association
Australian Water Association
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DN 80 piston type vacuum interface valves for municipal sewer systems

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Preface

This Standard was prepared by the Standards Australia Committee WS-022, Valves for Waterworks Purposes, to supersede AS 4310:2004.

The objective of this document is to provide uniform minimum requirements for DN 80 piston-type vacuum interface valves for municipal sewer systems operating up to a maximum temperature of 45 °C and 100 % relative humidity.

The terms “normative” and “informative” are used in Standards to define the application of the appendices to which they apply. A “normative” appendix is an integral part of a Standard, whereas an “informative” appendix is only for information and guidance.

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1 Scope and general

1.1 Scope

This document specifies requirements for DN 80 piston-type vacuum interface valves for municipal sewer systems operating up to a maximum temperature of 45 °C and 100 % relative humidity.

The valves provide an interface between the vacuum in the sewerage reticulation system and atmospheric pressure in the collection chamber. The valve is designed to activate at a pre-set sewage level in the collection chamber to facilitate transfer of the sewage into the vacuum sewer.

This document is not intended for valves used in vacuum sewage applications for general industry, e.g. ships, commercial premises, industry, aircraft, etc.

NOTE Appendix A provides means for demonstrating conformance with this document.

1.2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document.

NOTE Documents for informative purposes are listed in the Bibliography.

AS 1646, *Elastomeric seals for waterworks purposes*

AS ISO/IEC 17025, *General requirements for the competence of testing and calibration laboratories*

ISO 8044, *Corrosion of materails and alloys — Vocabulary*

ISO 16365-1, *Plastics — Thermoplastic polyurethanes for moulding and extrusion — Part 1: Designation system and basis for specifications*

ISO 16396-1, *Plastics — Polyamide (PA) moulding and extrusion materials — Part 1: Designation system and basis for specifications*

ISO 19069-1, *Plastics — Polypropylene (PP) moulding and extrusion materials — Part 1: Designation system and basis for specifications*

ASTM A276, *Standard specification for stainless steel bars and shapes*

ASTM A313, *Standard specification for stainless steel spring wire*

1.3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

(a) IEC Electropedia: available at https://www.electropedia.org/

(b) ISO Online browsing platform: available at https://www.iso.org/obp

1.3.1
batch volume
volume of sewage in the sump corresponding to a level at which the controller level sensor setting activates the vacuum interface valve