International Standard

ISO 18994

Plastics — Water meter cabinet — Materials and design specifications

Plastiques — Armoire de compteur d'eau — Spécifications relatives aux matériaux et à la conception

First edition
2026-08

Reference number
ISO 18994:2026(en)

© ISO 2026



COPYRIGHT PROTECTED DOCUMENT

© ISO 2026

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

Page

Foreword ..... **iv**

Introduction ..... **v**

1 Scope **1**

2 Normative references **1**

3 Terms and definitions **1**

4 Requirements **1**
4.1 Body of the cabinet 1
4.2 Dust resistance 1
4.3 Rain proofing 2
4.4 Cabinet dimensions 2
4.5 Cabinet door 2
4.6 Water pipe connections 2
4.7 Cabinet reading window 2
4.8 Cabinet bills holder 2

5 Sampling **4**

6 Testing **4**
6.1 Visual inspection: 4
6.2 Impact strength 4
6.3 Thermal endurance 4
6.4 Vicat softening 4
6.5 Weathering test 4
6.6 Resistance to fire 4

7 Marking **4**
7.1 Cabinet marking information 4
7.2 Cabinet instruction sheet 5

© ISO 2026 – All rights reserved

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents. ISO shall not be held responsible for identifying any or all such patent rights.

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 11, *Products*.

Any feedback or questions on this document should be directed to the user’s national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

© ISO 2026 – All rights reserved

Introduction

Given the high demand on water meter cabinet, a standard covering specifications for the thermoplastic water meter cabinet is needed. This document states technical specifications for manufacturers, such as material selected, minimum wall thickness, dimensions, aesthetic properties and mechanism of door opening and marking based on regulators and manufacturer details. It includes weathering resistance to ensure the cabinet withstand harsh outdoor environment, impact and scratch resistance of the transparent cover for consumption readings. Several tests following international and/or local standards are listed, e.g. visual inspection, mechanical strength, heat stability and resistance, dust resistance and splash resistance. The document includes schematic drawing of design and dimensions of the thermoplastic water cabinet shown in all views. Such information adds value to manufacturers, regulators and end users.

© ISO 2026 – All rights reserved

Plastics — Water meter cabinet — Materials and design specifications

1 Scope

This document gives the specifications of the thermoplastic water meter cabinets. It specifies the thickness of material, design drawing, dimensions and accessories incorporated into the construction of it for pipe sizes from 12,7 mm to 31,75 mm.

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. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 306, *Plastics — Thermoplastic materials — Determination of Vicat softening temperature (VST)*

ISO 2578, *Plastics — Determination of time-temperature limits after prolonged exposure to heat*

ISO 4892-2, *Plastics — Methods of exposure to laboratory light sources — Part 2: Xenon-arc lamps*

ISO 7765-2, *Plastics film and sheeting — Determination of impact resistance by the free-falling dart method — Part 2: Instrumented puncture test*

ISO 9773, *Plastics — Determination of burning behaviour of thin flexible vertical specimens in contact with a small flame ignition source*

3 Terms and definitions

No terms and definitions are listed in this document.

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

— ISO Online browsing platform: available at http://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

4 Requirements

4.1 Body of the cabinet

The body of the cabinet shall be made from thermoplastic material, with high impact resistant material tested in accordance with ISO 7765-2 that can withstand high temperatures overtime tested in accordance with ISO 2578, and a vicat softening tested in accordance with ISO 306, and with a minimum wall thickness of 6mm with good weathering resistant tested in accordance with ISO 4892-2.

4.2 Dust resistance

The meter cabinet shall be designed in away that does not allow for dust to enter the cabinet in sufficient quantity to interfere with satisfactory operation of internal accessories.

© ISO 2026 – All rights reserved