



SLOVENSKI STANDARD
SIST EN 28659:1997

01-februar-1997

Plastomerni ventili - Trajna nihajna trdnost - Preskusna metoda (ISO 8659:1989)

Thermoplastics valves - Fatigue strength - Test method (ISO 8659:1989)

Armaturen aus Thermoplasten - Ermüdungsfestigkeit - Prüfverfahren (ISO 8659:1989)

Robinets en matériaux thermoplastiques - Résistance à la fatigue - Méthode d'essai (ISO 8659:1989)

(standards.iteh.ai)

Ta slovenski standard je istoveten z: EN 28659:1990

<https://standards.iteh.ai/catalog/standards/sist/2b83f174-ecce-465d-9e37-18ce04118528/sist-en-28659-1997>

ICS:

83.140.30	Cevi, fitingi in ventili iz polimernih materialov	Plastics pipes, fittings and valves
-----------	---	-------------------------------------

SIST EN 28659:1997

en

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 28659:1997

<https://standards.iteh.ai/catalog/standards/sist/2b83f174-eece-465d-9e37-f8ce04118528/sist-en-28659-1997>

EUROPEAN STANDARD

EN 28 659

NORME EUROPEENNE

EUROPAISCHE NORM

December 1990

UDC 621.646-036.073:620.169.1

Key words: Plastics, thermoplastic resins, cocks, torque, fatigue tests, fatigue life

English version

Thermoplastic valves - Fatigue strength - Test method (ISO 8659:1989)

Robinets en matériaux thermoplastiques
- Résistance à la fatigue - Méthode
d'essai (ISO 8659:1989)

Armaturen aus Thermoplasten -
Ermüdungsfestigkeit - Prüfverfahren
(ISO 8659:1989)

This European Standard was accepted by CEN on 1990-11-08 and is identical to the ISO standard as referred to.

CEN members are bound to comply with the requirements of the CEN/CENELEC Common Rules which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN Central Secretariat or to any CEN member.

<https://standards.iteh.ai/catalog/standards/sist/2b83f174-eece-465d-9e37-86591997>

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to CEN Central Secretariat has the same status as the official versions.

CEN members are the national standards organizations of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue Bréderode 2, B-1000 Brussels

(c) CEN 1990 Copyright reserved to all CEN members

Ref. No. EN 28 659:1990 E

Page 2
EN 28659:1990

FOREWORD

Based on the positive result of the Formal Vote procedure, the International Standard

ISO 8659:1989 "Thermoplastics valves - Fatigue strength - Test method"

is adopted as a European Standard.

In accordance with the Common CEN/CENELEC Rules, the following countries are bound to implement this standard:

Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

iTeh STANDARD PREVIEW ENDORSEMENT NOTICE (standards.iteh.ai)

The text of the International Standard ISO 8659, edition 1989 was approved by CEN as a European Standard without any modification.

<https://standards.iteh.ai/catalog/standards/sist/2b83f174-ecce-465d-9e37-f8ce04118528/sist-en-28659-1997>

INTERNATIONAL STANDARD

ISO
8659

First edition
1989-07-01

Thermoplastics valves — Fatigue strength — Test method

*Robinetts en matériaux thermoplastiques — Résistance à la fatigue — Méthode
d'essai*

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 28659:1997](#)

[https://standards.iteh.ai/catalog/standards/sist/2b83f174-ecce-465d-9e37-
f8ce04118528/sist-en-28659-1997](https://standards.iteh.ai/catalog/standards/sist/2b83f174-ecce-465d-9e37-f8ce04118528/sist-en-28659-1997)



Reference number
ISO 8659 : 1989 (E)

ISO 8659 : 1989 (E)

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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 8659 was prepared by Technical Committee ISO/TC 138, *Plastics pipes, fittings and valves for the transport of fluids*.

[SIST EN 28659:1997](https://standards.iteh.ai/catalog/standards/sist/2b83f174-eece-465d-9e37-f8ce04118528/sist-en-28659-1997)

<https://standards.iteh.ai/catalog/standards/sist/2b83f174-eece-465d-9e37-f8ce04118528/sist-en-28659-1997>

© ISO 1989

All rights reserved. No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Organization for Standardization

Case postale 56 • CH-1211 Genève 20 • Switzerland

Printed in Switzerland

Introduction

The aim of this International Standard is to establish certain basic requirements for the endurance testing of plastics valves to ensure that uniform test methods are adopted. This International Standard must be considered in conjunction with any specific requirements in particular product standards applicable to the individual types of valves.

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN 28659:1997](https://standards.iteh.ai/catalog/standards/sist/2b83f174-eece-465d-9e37-f8ce04118528/sist-en-28659-1997)

<https://standards.iteh.ai/catalog/standards/sist/2b83f174-eece-465d-9e37-f8ce04118528/sist-en-28659-1997>

iTeh STANDARD PREVIEW
(standards.iteh.ai)

This page intentionally left blank

[SIST EN 28659:1997](#)

<https://standards.iteh.ai/catalog/standards/sist/2b83f174-eece-465d-9e37-f8ce04118528/sist-en-28659-1997>

Thermoplastics valves – Fatigue strength – Test method

1 Scope

This International Standard specifies the endurance test necessary to confirm the ability of hand-operated plastics valves to withstand prolonged use, with repeated opening and closure. It does not specify the ability of valves to withstand adverse conditions, in particular those of chemically aggressive fluid media and/or environments, or excessive fluid velocities and cavitation.

This International Standard includes values of the parameters necessary for the proper performance of the endurance test, with the reservation that parameters may be different in particular product standards (see 5.1).

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards listed below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 161-1 : 1978, *Thermoplastics pipes for the transport of fluids – Nominal outside diameters and nominal pressures – Part 1: Metric series*.

ISO 6708 : 1980, *Pipe components – Definition of nominal size*.

ISO 7005-2 : 1988, *Metallic flanges – Part 2: Cast iron flanges*.

ISO 7005-3 : 1988, *Metallic flanges – Part 3: Copper alloy and composite flanges*.

3 Definitions

For the purposes of this International Standard, the following definitions apply.

3.1 nominal pressure (PN): An alphanumeric designation of pressure, used for reference purposes, which is related to the mechanical strength of the valve. Usually it corresponds to the pressure of water at 20 °C, in bars, for which the valve is designed (see also ISO 161-1).

3.2 closing torque: Torque required to close a valve to full tightness at the nominal pressure.

3.3 fluid velocity: The velocity of a fluid in a pipe connected to a valve of nominal size equivalent to the nominal diameter of the pipe.

3.4 reference dimensions: The following are considered to be the reference dimensions:

- nominal size DN (see ISO 6708) for flanged systems (see ISO 7005-2 and ISO 7005-3);
- nominal outside diameter D for tubes (see ISO 161-1).

4 Apparatus

Test apparatus, capable of testing the whole valve assembly with its obturator mechanism. Furthermore, it shall include appropriate devices to perform each step separately, or continuously and automatically.

The test apparatus shall include appropriate means to discontinue the test cycle during the pressure period and to maintain the pressure in the closed position.