

# DIN EN ISO 18984:2025-12 (E)

## Ball valves for thermoplastics piping systems for hot and cold water installations under pressure - Types, dimensions and requirements (ISO 18984:2025)

---

<b>Contents</b>		<b>Page</b>
	<b>Foreword</b> .....	<b>iv</b>
	<b>Introduction</b> .....	<b>v</b>
<b>1</b>	<b>Scope</b> .....	<b>1</b>
<b>2</b>	<b>Normative references</b> .....	<b>1</b>
<b>3</b>	<b>Terms and definitions</b> .....	<b>2</b>
<b>4</b>	<b>Requirements</b> .....	<b>5</b>
4.1	Design.....	5
4.1.1	Design operating conditions.....	5
4.1.2	Function.....	5
4.1.3	Design characteristics.....	5
4.1.4	Types of valve ends.....	5
4.2	Materials.....	6
4.2.1	General.....	6
4.2.2	Body and shell material.....	6
4.2.3	Valve end materials.....	6
4.2.4	Materials for internal components and functional components of the valve.....	6
4.2.5	Metal parts.....	7
4.2.6	Sealing materials.....	7
4.2.7	Greases and lubricants.....	7
4.2.8	Adhesives.....	7
4.2.9	Assembly.....	7
<b>5</b>	<b>Application classes for hot water</b> .....	<b>7</b>
5.1	General.....	7
5.2	Design pressure for the application class.....	7
<b>6</b>	<b>Dimensions</b> .....	<b>8</b>
6.1	Face-to-face dimensions.....	8
6.2	Joint dimensions of the valve end connection (DN).....	8
<b>7</b>	<b>Operation</b> .....	<b>8</b>
<b>8</b>	<b>Functional characteristics and requirements</b> .....	<b>8</b>
8.1	General.....	8
8.2	Flow characteristics.....	8
8.3	Endurance test.....	8
8.3.1	Principle.....	8
8.3.2	Test installation.....	9
8.3.3	Test.....	9
8.3.4	Acceptance criteria.....	9
8.4	Operating torque test.....	10
<b>9</b>	<b>Other requirements</b> .....	<b>10</b>
9.1	Control and traceability of the body and bonnet/cover.....	10
9.2	Permanent jointing.....	10
9.3	Wear.....	10
9.4	Operating instructions.....	10
<b>10</b>	<b>Marking, documentation, storage and transportation</b> .....	<b>11</b>
10.1	Marking and technical information.....	11
10.2	Preparation for storage and transportation.....	11

**Annex A (normative) PP ball valve ..... 13**  
**Annex B (normative) PVC-C ball valve ..... 16**  
**Annex C (informative) Determination of nominal flow coefficient,  $K_v$  ..... 18**  
**Bibliography ..... 19**