

ISO 18984:2025-07 (E)

Ball valves for thermoplastics piping systems for hot and cold water installations under pressure - Types, dimensions and requirements

Contents		Page
Foreword		iv
Introduction		v
1 Scope		1
2 Normative references		1
3 Terms and definitions		2
4 Requirements		5
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
5 Application classes for hot water		7
5.1 General.....		7
5.2 Design pressure for the application class.....		7
6 Dimensions		8
6.1 Face-to-face dimensions.....		8
6.2 Joint dimensions of the valve end connection (DN).....		8
7 Operation		8
8 Functional characteristics and requirements		8
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
9 Other requirements		10
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
10 Marking, documentation, storage and transportation		11
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