DIN EN 593:2026-11 (E)

Industrial valves - Metallic butterfly valves

Contents

Page

European foreword 4
Introduction 5
1 Scope 6
2 Normative references 6
3 Terms and definitions 8
4 Design requirements 9
4.1 General 9
4.2 Shell 12
4.3 Body 13
4.4 Obturator (disc) 15
4.5 Seat seal 16
4.6 Driving shaft 16
4.7 Shaft seal 16
4.8 Optional design features 16
4.9 Materials 17
4.10 Pressure/temperature ratings 19
4.11 Dimensions and tolerances 19
4.12 Operation 20
4.13 Manufacturing 22
4.14 Functional characteristics and performances 22
4.15 Additional requirements for butterfly valves classified as pressure accessories in accordance with EN 16668:2025 23
4.16 Additional requirements for butterfly valves intended to be used in other applications 23
5 Final assessment 24
6 Designation 25
7 Marking and preparation for storage and transportation 25
7.1 Marking 25
7.2 Preparation for storage and transportation 26
8 Documentation 26
8.1 General 26
8.2 Operating instructions 26
Annex A (informative) Valve data sheet 27
Annex B (informative) Trim material list 29
Annex C (informative) Environmental corrosion protection 30
Annex D (informative) Correspondence between DN and NPS 31
Annex E (informative) Example for valve shaft calculation 32
E.1 General 32
E.2 Calculation 33

E.3 Examples of influence of flow velocity/hydrodynamic torques for shaft sizing 34

Annex F (informative) Relationship between this document and EN 16668:2025 37

Annex ZA (informative) Relationship between this European Standard and the essential requirements of Directive 2014/68/EU (Pressure Equipment Directive) aimed to be covered 39

Bibliography 41