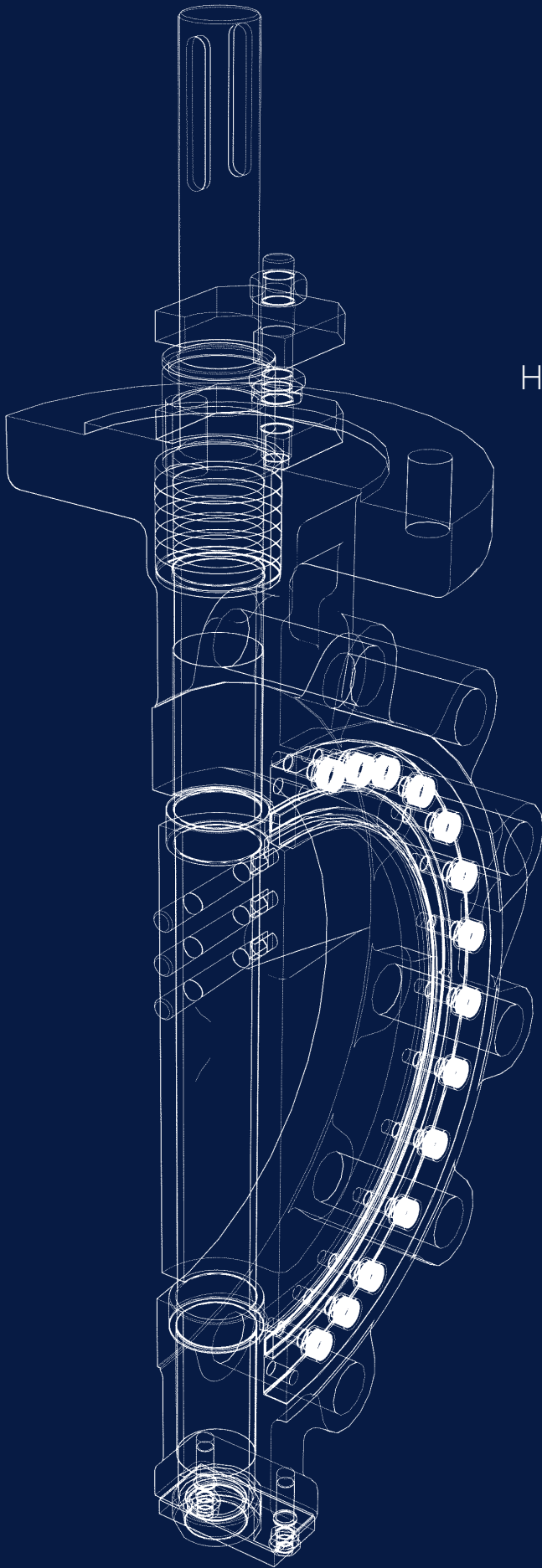


## 8300 Series

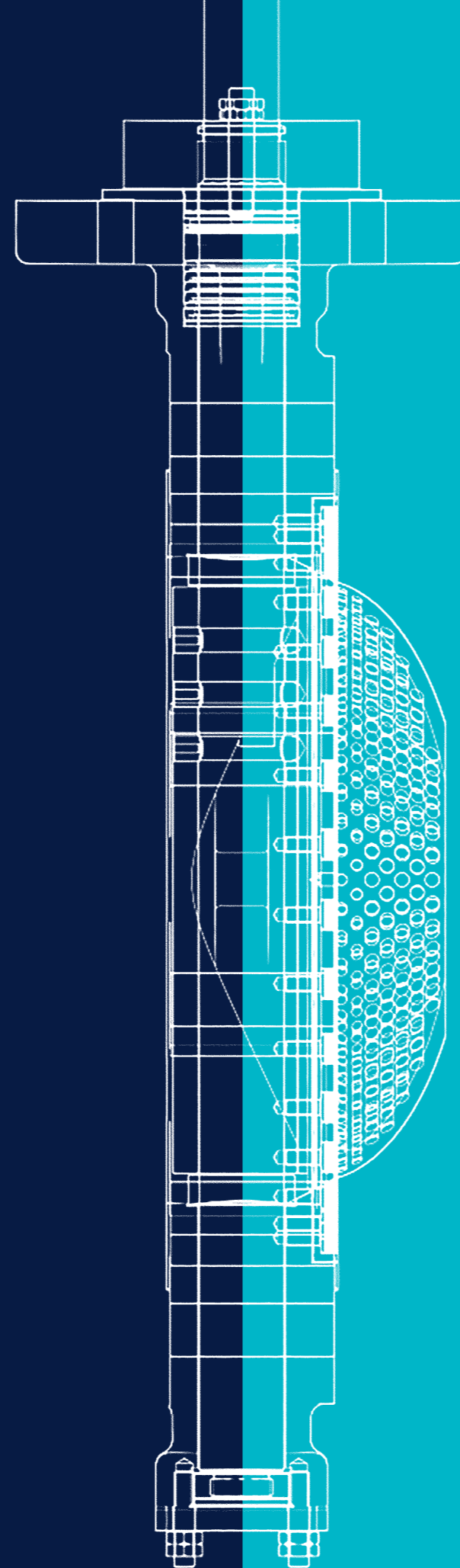
High Performance Butterfly Valves



It all flows from expertise.

# Contents

Introduction	01
Engineering data	02 – 03
Dimensions	04
Flow Coefficients Cv	04 – 05



# 8300 SERIES

Severn's 8300 Double Offset High Performance Butterfly Valve Series enables the disc to achieve a uniform 360° seal contact and to move into and break out from the seat with the minimum of wear.

The seat design ensures low seating and breakout torque, resulting in smaller actuators and improved economy when selection from the various forms of actuation available.

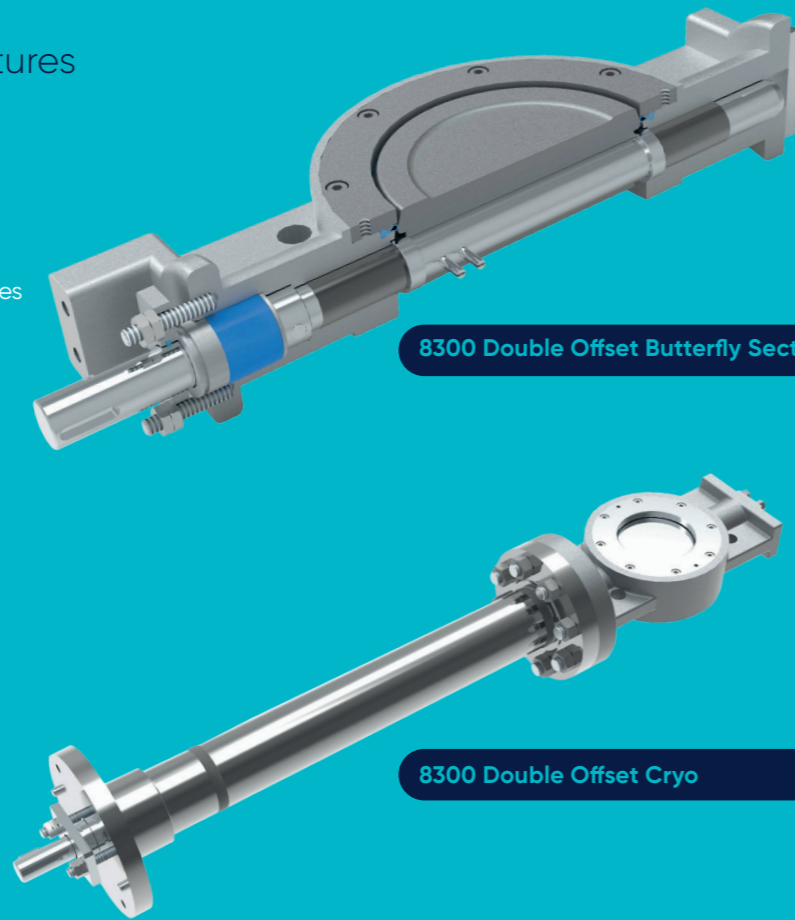
Across the size range, the 8300 Series has a variety of distinct features, all designed to reduce wear and control effectively to support durable performance, ensuring you meet your core imperatives of safe operations and minimum downtime.



# Engineering data

## High performance – Design features

- ✔ Self-energising seat at low pressure
- ✔ Pressure energized at high pressure compensating for wear and temperature
- ✔ Seat energizer fully isolated by PTFE envelope
- ✔ Cavities minimised to avoid ingress of particulates
- ✔ Temperature ratings from -196°C to +230°C
- ✔ Shut off pressures up to 100 Bar
- ✔ The quarter turn design ensures ease of actuation for both control and on/off duties
- ✔ Standard face to face dimensions to API 609 /ISO 5752 and B16.10 with non-standard dimensions available on request.
- ✔ Valve size range – 2in (50mm) – 48in (1200mm) with larger sizes available on request
- ✔ Body pressure ratings up to 2500lb
- ✔ Can be manufactured in all commercially available metals in cast, forged or plate form.
- ✔ Non-graphite options available for seawater service
- ✔ Anti-blowout stem as standard on #300 ratings and above

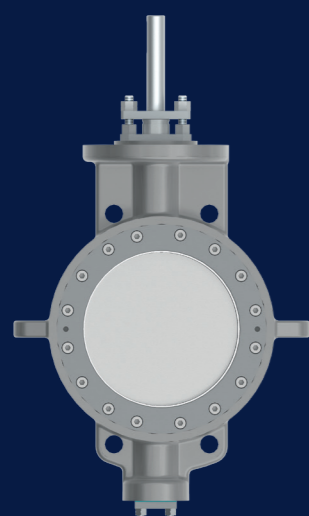


## Performance benefits

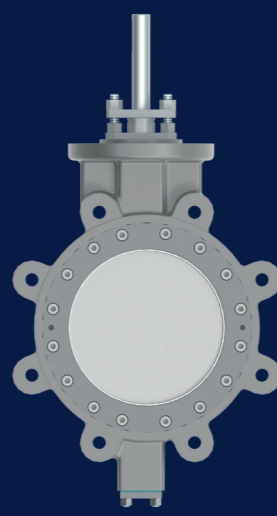
- ✔ The double eccentric action enables the disc to achieve a uniform 360° seal contact and to move into and break out from the seat with the minimum of wear
- ✔ The seat design ensures low seating and breakout torque
- ✔ Anti cavitation trims and baffle plates available to reduce cavitation and noise issues
- ✔ Reliable leakage performance bubble tight shutoff

## Valve body style options

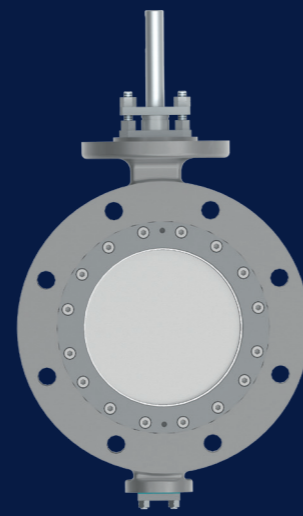
The 8300 series valve is available in 3 basic body styles, Wafer, Lugged and Double Flanged (long and short pattern) special face to face and BWE options are available on request.



Wafer

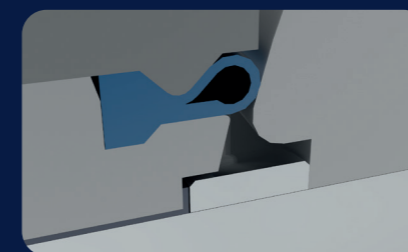


Lugged

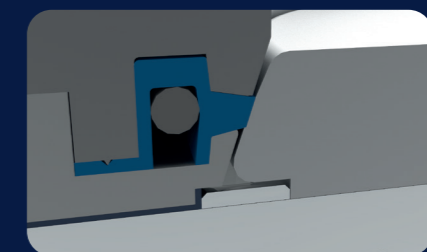


Double Flanged

## Seat options available

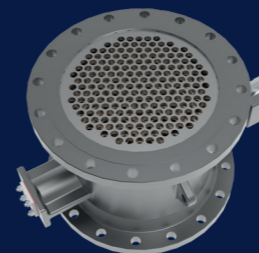


High Performance Seal

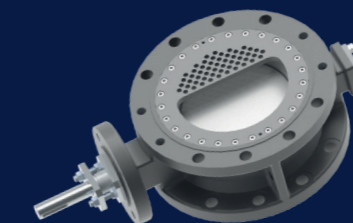


HP Cryo Seal

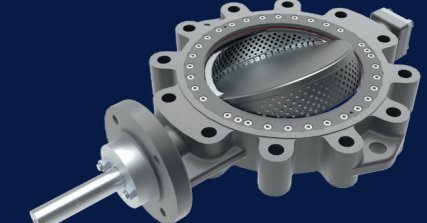
## Trim options available



Full Baffle



Half Baffle



Anti-Cavitation

# Engineering data (continued)

## End connection sizes/types

2in (50mm) – 48in (1200mm), larger sizes available on request. Wafer, Lugged, Flanged or Butt Weld Ends. For other styles please contact us.

## Valve body ratings

ASME 150 – ASME 2500  
EN 1092 PN 10 to PN 400

## Body configurations

Wafer, Lugged, Double Flanged and Butt Weld End

## Body face to face dimensions

API 609/ISO 5752 and B16.10 with non-standard dimensions available on request.

## Bonnet styles

Standard and cryogenic

## Standard valve packing

Teflon and graphite

## Trim options

Anti cavitation, baffles, half baffles and hard faced

## Seat leakage class

Up to ANSI/FCI 70.2.  
Class IV to VI, API 598  
Zero available on request

## Construction materials

A wide range of standard materials are available for both the valve pressure containing parts and trim, including carbon and stainless steel, duplex/ super duplex, aluminum bronze, titanium and high nickel alloys. Stellite, and other hard facings/coatings are available. For further details on materials please contact us.

## Paint

A wide range of paint finishes are available including enamel, alkyd gloss and various epoxy finishes.

## Clean build

Severn maintains high clean build standards-utilising clean build areas including Oxygen clean and a Ultra High Purity clean room.

## Actuation

We offer a wide range of actuators including – pneumatic scotch yoke and rack and pinion, electric, hydraulic, electro hydraulic and manually operated.

## Instruments

A wide range of control instruments are available from Severn including positioners, air-filter regulators, volume boosters, solenoid valves, and lock-up valves.

# Applications

## Offshore Platform and FPSO

- ✔ Seawater lift pump back pressure control
- ✔ Ballast water flow control
- ✔ Hydrocarbon gas flow control
- ✔ Fire main bypass control

## Refinery

- ✔ Flare gas control
- ✔ Flow Balancing for Fiscal Metering

## Power Generation

- ✔ LP and MP Steam control
- ✔ Cooling water flow and back pressure control
- ✔ Cooling Tower de-icing

## LNG Storage and Transportation

- ✔ Loading and unloading flow control
- ✔ LNG Recirculation control
- ✔ LNG Tank flow control

## Urea, Ammonia and Fertilizer Production

- ✔ Synthesis gas flow control
- ✔ Urea flow control
- ✔ HP steam pressure reduction

## Desalination

- ✔ Seawater make up level control
- ✔ Brine Recycle
- ✔ Brine blow down
- ✔ Condensate back pressure control
- ✔ Distillate back pressure and flow control





Engineering  
Excellence

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