

# Double Block & Bleed Piping Ball Valves

Taurus Series – Twin Ball Design



### **General Features**

#### **Features**

 DESIGNED IN ACCORDANCE WITH INDUSTRY STANDARDS
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i.e. ASME B16.34, ASME B31.3, ASME B16.5, API 6D / ISO 14313

• FULL BORE

Meets the minimum bore requirements according to API 6D / ISO 14313, Table 1.

REDUCED BORE

One size below nominal size of valve with bore according to API 6D / ISO 14313, Table 1.

- STANDARD MATERIALS OF CONSTRUCTION are forged Carbon Steel LF2, Stainless Steel 316 and Duplex.
- PRESSURE CLASS 150 TO 2,500
- FIRE SAFE IN ACCORDANCE TO API 607 AND ISO 10497
- COMPLIANT TO NACE MR0175 AND ISO 15156
- FACTORY TESTED
  in accordance with ASME B16.34, API 6D / ISO 14313, ISO 5208
- MANUFACTURED IN ACCORDANCE WITH THE PRESSURE EQUIPMENT DIRECTIVE

#### • BALL SEAT MATERIAL PTFE, Devlon, PEEK or Metal Seated

• STEM SEAL MATERIAL

FKM, HNBR - RGD resistant (RGD = Rapid Gas Decompression) or Graphite

- ANTI-BLOWOUT STEM DESIGN AND ANTI-STATIC DESIGN
- WELD INLAY

Seat pocket and seal area overlay on request.

• BI-DIRECTIONAL

The Taurus Series floating and trunnion ball valves are bi-directional

PAINTING

The valves can be supplied with any kind of adequate coatings for environmental protection, according to customers specifications.

CERTIFICATION AND TRACEABILITY

Material test certificates 3.1 according to EN 10204. A unique code is stamped on all relevant components linking them with their material and chemical analysis certificates.

## Manufactured according to the following Codes and Specifications

| • ASME B31.3                | Process Piping   |
|-----------------------------|--|
| • ASME B16.34               | Valves – Flanged, Threaded and Welding End   |
| • ASME B16.5                | Pipe Flanges and Flanged Fittings  |
| • ASME B16.10               | Face-to-Face and End-to-End Dimensions of Valves   |
| • ASME B16.11               | Forged Fittings, Socket Welding and Threaded   |
| • ASME B16.25               | Buttwelding Ends   |
| • NACE MR0175/<br>ISO 15156 | Petroleum and Natural Gas Industries – Materials for use in H2S-containing Environments in Oil and Gas Production          |
| • API 6D/<br>ISO 14313      | Specification for Pipeline Valves Petroleum and Natural Gas Industries – Pipeline Transportation Systems – Pipeline Valves |
| • API 598                   | Valve Inspection and Testing   |
| • ISO 5208                  | Industrial Valves – Pressure Testing of Metallic Valves  |
| • API 607/<br>ISO 10497     | Fire Test for Soft-Seated Quarter Turn Valves Testing of Valves. Fire Type-testing Requirements                            |
| • MSS SP-25                 | Standard Marking System for Valves, Fittings, Flanges and Unions   |

#### YOUR BENEFITS:

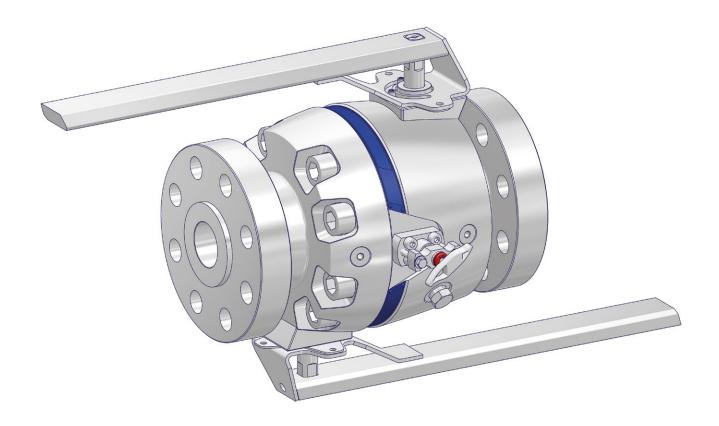
- Compact Assembly
- Reduced Weight
- Reduced Leak Paths
- Reduced Installation and Maintenance Costs
- Significant Space Savings

# BASICALLY WE OFFER 2 DIFFERENT DESIGNS:

- 2 Piece Design
- 3 Piece Design
- Both Flanged Style and Side Entry

2 General Features AS-Schneider

## 2 Piece Design, Flanged Style



#### 2 Piece Design, Flanged Style - Features

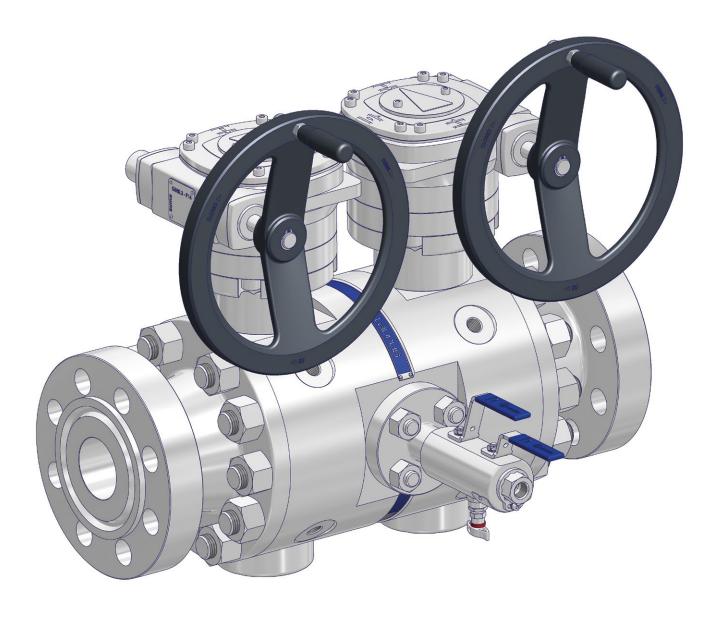
- Bore Size 1" through 2"
- Floating Ball Design (Bore Size 1" through 2")
- Trunnion Ball Design (Bore Size 2" only)
- Acc. to ASME B16.10 Standard Length
- Floating Ball Design Class 600, 900 & 1,500
- Trunnion Ball Design Class 900, 1,500
- Non Standard Length for Class 150 & 300 and also for Trunnion Ball Design Class 600
- Flanged Connections acc. to ASME B16.5
- Vent: Integral Needle Valve
- Lockable Handle/Lever removable, Gear Box Operation available. Actuator mounting flanges, unless otherwise specified, are in full accordance with ISO 5211.
- Forged Body

#### Vent Connections:

- Integral Vent Valve Needle Type, Screwed Bonnet or Flanged Bonnet (OS&Y)
- Screwed Vent Valve Ball Valve

www.as-schneider.com 2 Piece Design, Flanged Style

## 3 Piece Design, Flanged Style



#### 3 Piece Design, Flanged Style - Features

- Bore Size 1" through 6"
- Floating Ball Design (Bore Size 1" through 2")
- Trunnion Ball Design (Bore Size 2" through 6")
- Non Standard Length face-to-face dimensions
- Flanged Connections acc. to ASME B16.5
- Handle lockable and removable, Gear Box Operation as Standard. Actuator mounting flanges, unless otherwise specified, are in full accordance with ISO 5211.
- Forged Body

#### Vent Connections:

- Integral Vent Valve Needle Type, Screwed Bonnet or Flanged Bonnet (OS&Y)
- Screwed Vent Valve Ball Valve

Further Vent Connections for Ball Valves with Bore Size from 3" up to 6":

- Flanged Vent Valve Ball Valve
- Flanged Double Block & Bleed Valve (VariAS-Block)
- Flanged Monoflange

3 Piece Design, Flanged Style AS-Schneider

### Your Benefits At A Glance



#### Your Benefits At A Glance

#### MADE IN GERMANY

The Taurus Series is designed, developed, manufactured and tested in Germany and certified by TÜV Süd.

#### • STATE-OF-THE-ART VALVES

Taurus are state-of the-art valves and developed and reengineered using the latest design and simulating methods paired with decades of experience.

#### • HIGH-QUALITY RAW MATERIALS

Valve Body raw materials are sourced basically from Europe or North America.

#### • ALL TAURUS TYPES MEET THE FOLLOWING REQUIRE-MENTS BY DEFAULT:

- Fire Safe tested and certified acc. to API 607 and ISO 10497
- Tested and certified for Fugitive Emissions acc. to ISO 15848-1
- NACE MR0175 and ISO 15156
- Pressure Equipment Directive (PED)
- API 6D / ISO 14313
- ASME B16.34

#### • FULL BORE

We offer a 'real' Full Bore Valve according to API 6D / ISO 14313.

Some manufacturers fall below these minimum dimensions and offer it anyway as "Full Bore", although the bore size diameter do not meet the minimum requirements.

#### • SHORT FACE-TO-FACE LENGTH

These valves meet the face-to-face requirements of ASME B16.10 (where feasible) and can therefore replace an existing ball valve or double block & bleed valve. This short and compact design results in less space requirements and less weight.

#### HIGH-QUALITY MATERIALS

Use of high-quality materials for maximum performance:

- Where necessary, PEEK as seat material and Duplex as ball material are provided.
- Stems are generally made in XM-19, an austenitic stainless steel grade, which has a greater corrosion resistance and higher yield strength than 316 stainless steel.
- All other trim materials and all non-wetted parts are provided in 316 stainless steel (or superior). Therefore the use in corrosive or salty environment is feasible.
- Materials of actuators and gearboxes acc. to manufacturer's standard.
- For valves in special alloys all wetted parts are made in the special alloy material.



## **Product Specification At A Glance**

#### **Product Specification At A Glance**

|               |        |                            |                 | 2 Piece Design                 |                               | 3 Piece Design                 |                                 | Standard         |        |
|---------------|--------|----------------------------|-----------------|--------------------------------|-------------------------------|--------------------------------|---------------------------------|------------------|--------|
| Bore<br>Size  |        | Bore Size<br>Diameter      | Operation       | Face-to-<br>Face<br>Length (3) | Operation                     | Face-to-<br>Face<br>Length (3) | Seat<br>Material <sup>(4)</sup> | Ball<br>Material |        |
|               | 1"     | 150                        | 1"<br>- 25 mm   | Lever                          | MS                            | Lever                          | MS                              | PTFE             | Duplex |
|               |        | 300                        |                 |                                | 113                           |                                |                                 |                  |        |
|               |        | 600                        |                 |                                | ASME<br>B16.10 <sup>(2)</sup> |                                |                                 |                  |        |
|               |        | 900 / 1,500 <sup>(1)</sup> |                 |                                |                               |                                |                                 | PEEK             |        |
| =             |        | 2,500                      |                 |                                |                               |                                |                                 |                  |        |
| Floating Ball |        | 150                        |                 |                                | MS                            |                                |                                 |                  |        |
| -<br>0.0      |        | 300                        | 1 1/2"          |                                | 113                           |                                |                                 | PTFE             |        |
| <b>.</b> E    | 1 1/2" | 600                        | 1 1/2"<br>38 mm | Lever                          | ASME                          | Lever                          | MS                              |                  | Duplex |
| at            |        | 900 / 1,500 <sup>(1)</sup> | 30              |                                | B16.10 (2)                    |                                |                                 | PEEK             |        |
| <u></u>       |        | 2,500                      |                 |                                | 2.0                           |                                |                                 | TEEK             |        |
| ш.            |        | 150                        |                 |                                | MS                            |                                |                                 |                  |        |
|               |        | 300                        | 2"              | Lever                          | 1415                          | Lever                          | MS                              | PTFE             | Duplex |
|               | 2"     | 600                        | 50 mm           |                                | ASME                          |                                |                                 |                  |        |
|               |        | 900 / 1,500 <sup>(1)</sup> | 30 111111       | Gearbox                        | B16.10                        | Gearbox                        |                                 | PEEK             |        |
|               |        | 2,500                      |                 |                                |                               |                                |                                 |                  |        |
|               |        | 150                        | 2"              | Lever                          | MS                            | Lever MS                       | MS                              | PTFE             |        |
|               | 2"     | 300                        |                 |                                |                               |                                |                                 |                  |        |
|               |        | 600                        | 50 mm           |                                |                               |                                |                                 |                  | Duplex |
|               |        | 900 / 1,500 <sup>(1)</sup> |                 |                                | ASME                          |                                |                                 |                  |        |
|               |        | 2,500                      | 42 mm           | Gearbox                        | B16.10                        | Gearbox                        |                                 | FEEK             |        |
|               |        | 150                        | 3"<br>74 mm     |                                | Gearbox                       | Coorboy                        | MS                              | PEEK             | Dupley |
|               |        | 300                        |                 |                                |                               |                                |                                 |                  |        |
|               | 3"     | 600                        |                 |                                |                               |                                |                                 |                  |        |
|               |        | 900                        | 74              |                                |                               | 1.12                           | FEEK                            | Duplex           |        |
| B             |        | 1,500                      |                 |                                |                               |                                |                                 |                  |        |
| _             |        | 2,500                      | 62 mm           |                                |                               |                                |                                 |                  |        |
| Trunnion Ball |        | 150                        | 4"<br>100 mm    |                                |                               |                                |                                 |                  |        |
|               | 4"     | 300                        |                 |                                |                               |                                |                                 |                  |        |
| 5             |        | 600                        |                 |                                | Gearbox                       | MS                             | PEEK                            | Duplex           |        |
|               | 4      | 900                        |                 |                                |                               |                                |                                 |                  |        |
| -             |        | 1,500                      |                 |                                |                               |                                |                                 |                  |        |
|               |        | 2,500                      | 87 mm           |                                |                               |                                |                                 |                  |        |
|               | 6"     | 150                        |                 |                                |                               |                                |                                 |                  |        |
|               |        | 300                        | 6"              |                                |                               | Gearbox                        | MS                              | PEEK             | Duplex |
|               |        | 600                        | 150 mm          |                                |                               |                                |                                 |                  |        |
|               |        | 900                        |                 |                                |                               |                                |                                 |                  |        |
|               |        | 1,500                      | 144 mm          |                                |                               |                                |                                 |                  |        |
|               |        | 2,500                      | 131 mm          |                                |                               |                                |                                 |                  |        |

<sup>1)</sup> Class 900 Valves are equal to Class 1,500.

<sup>2)</sup> ASME B16.10 does not indicate ball valve face-to-face dimension for Class 1,500 / 2,500 and sizes up to 1 1/2". Therefore these types correspond to the overall dimensions of gate valves – Those have typically the same face-to-face dimensions in ASME B16.10 as ball valves.

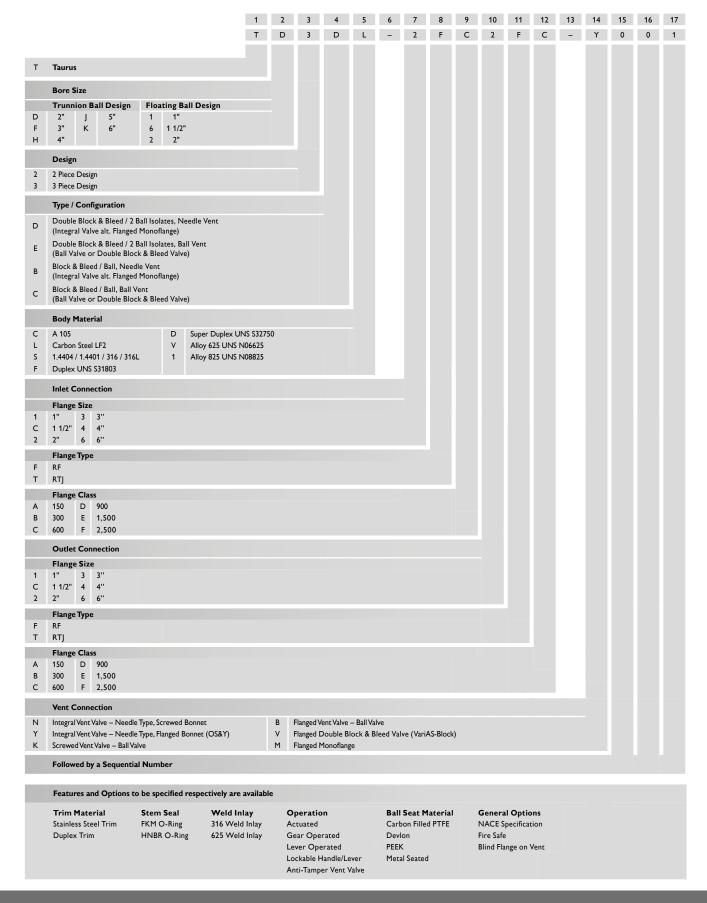
<sup>3)</sup> MS = Manufacturer's Standard

<sup>4)</sup> PEEK = Modified PEEK

PTFE = Reinforced PTFE

### **Ordering Information**

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www.as-schneider.com Ordering Information

### **Technical Service Portal - Digital Valve Plate**

#### **Digital Valve Plate for Valves and Manifolds**

The DBB Piping Ball Valves manufactured by the AS-Schneider Group are now marked with an unique QR-code acc. to IEC 61406. That QR-code provides easy access to static product information like material properties, certificates and physical dimensions via CAD drawings. It also includes operating and installation instructions or spare parts or replacement information.



#### How it works

If you have an AS-Schneider valve or manifold with QR-code acc. to IEC 61406 in your hand or installed in your plant, you can now access the product information very easy. The access is straightforward:



#### **Maintenance Benefits**

All technically relevant information on the product can always be retrieved directly.

#### Identification

Easy access to relevant product information on the go.

#### **Error-free assembly**

Automated error-free equipment identification at the incoming good inspection & during field installation.

#### Fast maintenance

Easier and faster maintenance and repair cycles. This is possible due to direct access to spare parts or replacement units.

#### Open interface

Operators can link this information into their respective asset and operation management system acc. to IEC 61406 and VDI 2770.

#### **Environmental friendly**

Environmentally responsible disassembly and disposal. Will be adapted to future EU circular economy requirements.

# Check the DVP of your valves and manifolds:

www.qr4v.de

## **Your Notes**

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## **Your Notes**

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