

Product range

Trunnion Mounted Ball Valves



SIDE ENTRY

The innovative technology driven two and three piece cast and forged trunnion mounted designs comply to the most rigorous manufacturing and engineering standards which deal with the industry's toughest applications. All split body designs offer tight shut-off for both gas and liquid service.



TOP ENTRY

The top entry model is a single piece cast or forged body valve design which delivers superior quality and functionality in the most demanding applications. It provides the highest level of safety and integrity, with the possibility of vertical installation for easier maintenance in offshore and other tight quarter applications.



FULLY WELDED

Fully Welded type ball valves are cut off devices suitable for use both on natural gas distribution network and for liquid service when high performance on tightness and low-pressure drop are required.

Design Features

Pin or Plate trunnion	Full bore or Reduced bore	Plate trunnion
Full bore or Reduced bore	Blowout proof shouldered stem	Full bore
Anti-blowout stem	Double block and bleed	Anti-blowout stem
Double block and bleed	Self-relieving	Self-relieving
Self-relieving	Antistatic device	Antistatic device
Antistatic device		

Design

API 6D and API 6A ASME B16.34	API 6D and API 6A ASME B16.34	API 6D ASME B16.34
----------------------------------	----------------------------------	-----------------------

Size range

2" to 48"	2" to 56"	4" to 56"
-----------	-----------	-----------

Pressure Class

ANSI 150, 300, 600, 900, 1500, 2500 API 6A up to 10000 psi	ANSI 150, 300, 600, 900, 1500, 2500 API 6A up to 10000 psi	ANSI 150, 300, 600, 900, 1500
---	---	-------------------------------

Temperature range

-196 °C to +400 °C	-196 °C to +400 °C	-60 °C to +250 °C
--------------------	--------------------	-------------------

Certifications

Fire tested to API 6FA, API 607	Fire tested to API 6FA, API 607	Fire tested to API 6FA, API 607
---------------------------------	---------------------------------	---------------------------------

Seat design

Metal to Metal (TCC or CCC)	Metal to Metal (TCC or CCC)	Soft seal
Soft seal	Soft seal	Single and double piston effect
Single and double piston effect	Single and double piston effect	

Materials

ASTM, UNS, AISI, NACE MR-01-03 CRA weld overlays are available *All materials conform to NACE MR-01-75 upon requirement		
---	--	--

Connections

Flanged RF, RTJ, butt-weld, mechanical	Flanged RF, RTJ, butt-weld, mechanical	Flanged RF, butt-weld
---	---	-----------------------

*For more detailed information please contact our sales representative

Product range

Cast Gate Globe Check Valves



GATE VALVES

The bolted bonnet type valves are manufactured to guarantee the highest performance in the widest spectrum of oil and gas applications.



GLOBE VALVES

Globe valves are heavy duty, outside screw and yoke type, bolted bonnet, rising stem and rising handwheel type. These valves are highly efficient for service requiring frequent operation and throttling.



CHECK VALVES

Cast Steel Bolted Bonnet Check Valves are designed for fast check valve action and maximum service life.

Design Features

Robust valve body in a wide range of materials (NACE compliance included).
Threaded seat rings facilitate maintenance and/or replacement.
Yoke sleeve in material suitable to withstand high temperature, wear and corrosion.
Wedge gate valves designed in full compliance with API 600, ASME B16.34 and BS 1414

Stem packing is designed for optimum control of fugitive emission leakage to the atmosphere and is assured by the polished finish stem sealing area.
Disc is ground and lapped for better finish and sealing. The disc is integrally guided to assure true alignment between disc and valve body.

Swing check valves can fit on both horizontal and vertical (up-flow) piping.
Corrosion-resistant overlaying of seats and disc sealing surfaces.
Robust one-piece construction to withstand the severe shock of check valve service

Size range

2" to 36"

2" to 24" for Class 150-600
2" to 12" for Class 900 and above

2" to 36"

Pressure Class

ANSI 150 to 2500

ANSI 150 to 2500

ANSI 150 to 2500

Temperature range

-196 °C to +650 °C

-60 °C to +650 °C

-60 °C to +650 °C

Materials

ASTM, UNS, AISI, NACE MR-01-03
Carbon, alloy and stainless steels, duplex steels, special alloys
CRA weld overlays are available
*All materials conform to NACE MR-01-75 upon requirement

Flanges

ASME B16.5 and B16.47, API 605, MSS-SP 44

ASME B16.5

ASME B16.5 and B16.47, API 605, MSS-SP 44

Buttweld

ASME B16.25

ASME B16.25

ASME B16.25

**For more detailed information please contact our sales representative*

Ball Valves for Extreme Services

Metal Seated Ball Valves



Application:

Metal Seat Ball Valves designed to meet severe service applications, where elastomeric seats would be inappropriate. These applications include:

- High pressures
- High temperatures over 200°C
- Corrosive, Erosive or abrasive medias.

Size Range:

2" to 24"

Pressure Class:

ANSI Class 150-2500

Coating Options:

a) Tungsten Carbide Coating (TCC)

A hard, dense coating to resist high abrasive conditions, as well as particle erosion and fretting while providing the corrosion resistance of nickel with minimal loss of heat resistance.

b) Chrome Carbide Coating (CCC)

A hard coating that does not oxidize at high temperatures. Provides good abrasion, particle erosion cavitation and fretting resistance in high temperature environments.

Coating Type	Coating Hardness		Temperature Limit		Coating Method	Description
	HV	HRC	°F	°C		
TCC	Up to 1400	71 +/- 3	572	300	HVOF Spray	Excellent anti-wear properties under lower temperature. Suitable for media with dust or particles
CCC	900-1100	66 +/-3	977	525	HVOF Spray	Excellent resistance to cavitation erosion under high temperature and sliding wear. Suitable for high temperature, high pressure and corrosive application

Features:

For high temperature service, the valves will be fitted with extension bonnets to attain acceptable ambient temperature and ensure safety operation. Other features include:

- Graphite Seals
- Metallic bearings
- Dynamic, live loaded, gland bolting

**For more detailed information please contact our sales representative*

Cryogenic Ball Valves



Size Range:

2" to 24"

Pressure Class:

ANSI Class 150-900

Features:

For services at temperatures down to -321°F [-196°C], models are available with the following features:

- Extended bonnet
- Graphite seals
- PCTFE seat insert
- Dynamic, live loaded, gland bolting.

Cryogenic Valves: Gate, Globe, Check



Application:

The cryogenic valves are widely installed on applications involving media at extremely low temperatures, such as the production, storage and transportation of liquefied natural gas, hydrogen, oxygen, etc.

Size Range:

2" to 24"

Pressure Class:

ANSI Class 150-900

Body Materials:

CF8M, CF8 and other

Features:

Our cryogenic valves face harsh conditions of services involving temperatures down to -196°C.

Body in a range of materials suitable for extremely low temperatures, such as CF8M, CF8 and other very low temperature steels.

The extended bonnet of valves eliminates any chance of frosting in the packing area.

The presence of a bleed hole in the gate valve wedge helps equalize the body cavity pressure with the up-stream pressure.

Connections are offered as flanged or special.

All cryogenic valves are designed in full compliance with ASME B16.34 and BS 6364.

The cryogenic tests are performed in the fully equipped in-house facilities, according to BS 6364 and all major oil & gas cryogenic test procedures.

**For more detailed information please contact our sales representative*

Product range

Special Application Valves

Control Ball Valves



Application:

Control Ball Valves are designed to control working medium parameters (pressure, flowrate) by throttling flow at pipelines.

Size Range:

2" to 28"

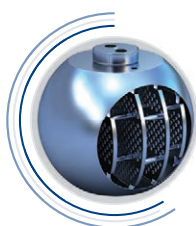
Pressure Class:

ANSI Class 150-900

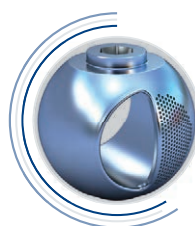
Design Features:

Control valve has all the advantages of ball valves as a standard: reliability; ergonomic design, ease of installation, stable tightness index of shut-down element, and suitability for different types of medium.

- **Split-Body Design:** split-body design increases valve maintainability, allows to use it for aggressive working medium and conduct: components replacement; maintenance without dismantling.
- **Trunnion Mounted Ball:** control element of control valve (the ball) is designed to ensure a wide range of control and high flowrate capacity with minimal pipeline pressure reduction.



Ball Design for Liquid Media



Ball Design for Gaseous Media

- **Metal-to-Metal Seat Design**

Capacity:

NPS	Class	Flow performance	Nominal capacity in "open" position Kv _v , m3/hour	Minimum capacity Kv _{min} , m3/hour
150	150-600	Equal Percentage	744	11
200	150-600		1206	18
250	150-600		1972	30
300	150-600		2744	41
350	150-600		3448	51
400	150-600		4689	70
500	150-600		7661	96,9
600	150-600		12533	187,63
700	150-600		17149	257

**For more detailed information please contact our sales representative*

Pig Valves



Application:

Pig valves are designed for loading and receiving cleaning pigs and detecting tools at pipelines transporting: natural gas; oil products.

Size Range:

6" to 20"

Pressure Class:

ANSI Class 150-900

Design Features:

- **Bypass Cavity:** pig valve ball has bypass cavity. It ensures working medium flow through ball valve in «closed» position (during loading or removing a pig). Bypass cross-section is about 25% from pipeline cross-section. Herewith medium pressure in the pipeline is not changed.
- **Safety:**



Launching and receiving cameras are equipped with pressure relief valves to ensure safe operation of the Pig Valve.

Superior performance:

- Significant reduction of installation area
- High effectiveness in cleaning pipelines from impurities
- Contraction of volume of preventive maintenance and required spare parts in the process of operation
- Pig valves retain all design advantages of ball valves: size-conscious design, ease of installation, stable tightness index of shut-down element, capability of use at different types of medium;
- Different pig types can be used: needle, scraping, spherical;
- Simple way of installation at operating pipelines and fewer expenses for installation

Product range

Special Application Valves

Axial Flow Check Valves



Application:

Designed to prevent medium return (back) flow for pipelines transporting oil, natural gas, petrochemical products.

Size Range:

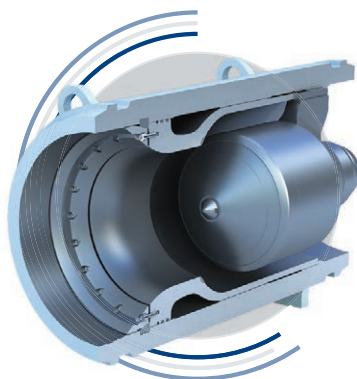
2" to 56"

Pressure Class:

ANSI Class 150-900

Connections:

RF/RTJ (ASME 16.47, ASME 16.5) or BW (ASME 16.25)

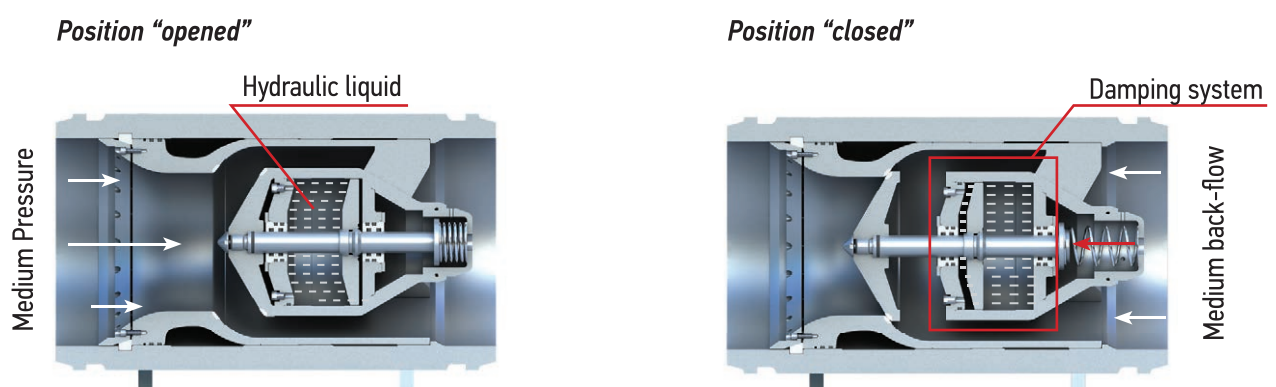


Design Features:

- **Non-Slam Operation:** it consists of a camera filled with hydraulic liquid and a damping disk solidly connected with closure stem that moves inside the camera. Sealing system of the camera ensures its tightness and wouldn't require hydraulic liquid changing during full service life.
- **Metal-to-Metal Sealing:** tight shut-off is provided by highly erosive-resistant stainless-steel sealing (metal-to metal).

Operation:

The opening of the Axial Check Valve occurs under the influence of input medium flow pressure on the locking element. In case of medium back-flow the locking element is returned in «closed» position by spring action



**For more detailed information please contact our sales representative*

Ball Valves for subsea



Application:

Ball valves are designed for subsea, FSPO, BURGE, application for pipelines transporting natural gas, oil and other liquids and gases.

Size Range:

1" to 24"

Pressure Class:

ANSI Class 150-2500

Design standards:

API 6DSS, ASME B16.34, ASME VIII

Temperature range:

-20°C to +80°C

Seat tighness class:

ISO 5208 rate a for soft seated valve and rate b for metal seated valve

Fet futivite emission test:

- ISO 15848 part 1 qualification rate a
- ISO 15848 part 2 production rate a

Design life:

30 years

End connection:

flanged end, welding end, tecklock ends, kamplock ends, graylock ends or as per customer requirement

Actuation:

- manual with lever
- manual with gear with or without pressure compesator and with or without rovs connection based on the customer demand
- hydraulic actuator with or without rovs connection

Material of construction:

based on the compatibility with the media and the service can be cs-ss-sdss-ni alloys



Product range

Actuator valves

PTPA Group is with using following types actuators for valve automatization:

- Direct gas actuators;
- Pnevmatic Low pressure actuators;
- Electric actuators;
- Gas-over-Oil actuators;
- Electro Hydro actuators.

We are collaborating with actuator manufactures included in vendor lists of customers and also our design actuators in our production facilities.



Type	PTPA production	Actuator manufacturers
Direct gas actuators	+	Rotork, DVG and other
Pnevmatic Low pressure actuators	+	Rotork, DVG and other
Electric actuators	-	Auma and other
Gas-over-Oil actuators	-	DVG, Paladon and other
Electro Hydro actuators	+	Rotork and other



Services for international clients

PTPA ME FZC is a company PTPA Group which is in charge of international clients.

PTPA ME FZC provides a wide range of service solutions covering the entire product lifespan, from SAT (Site Acceptance Test by end user), installation and commissioning to end of life support, including advanced offerings like Valve Automation and Asset Integrity Management.

We are working closely with customers to ensure their plants reduce downtime by maintaining their valves and controls assets to the highest standards.

1. **SPARE PARTS & REPLACEMENT**
2. **REPAIR & MAINTENANCE**
3. **INSPECTION, TESTING & CERTIFICATION**
4. **SERVICE ON-SITE**
5. **INSTALLATION AND COMMISSIONING**
6. **VALVE AUTOMATION**

For more information please visit our website or contact us.



Stock

PTPA ME FZC recognizes the importance of fast and reliable delivery times. By maintaining a comprehensive valve stock, we want to become the first choice among end-users and suppliers for their day-to-day requirements. The stocks are constantly monitored to ensure that the right product range is always maintained at suitable levels.



For more information please contact us.

GATE, GLOBE, CHECK (CAST)

Size: 2" to 24"

Pressure Rating: #150 / #300 / #600

Connections: Flanged Ends

Materials: CS/St Steel Body, St Steel Trim

GATE, GLOBE, CHECK (FORGED)

Size: 1/2" to 2"

Pressure Rating: #150 / #300 / #600 / #800 / #1500

Connections: NPT / SW / Flanged Ends

Materials: CS/St Steel Body, St Steel Trim

BALL

Size: 1/2" to 24"

Pressure Rating: #150 / #300 / #600 / #800 / #900 / #1500

Connections: NPT/SW/Flanged Ends

Materials: CS/St Steel Body, St Steel Trim

Design Features: Full / Reduced Bore

Floating / Trunnion