

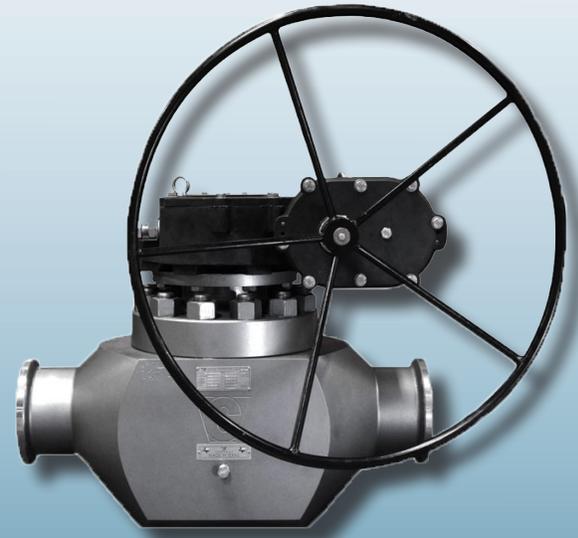
One Piece Top Entry Ball Valves

Model: TE-1



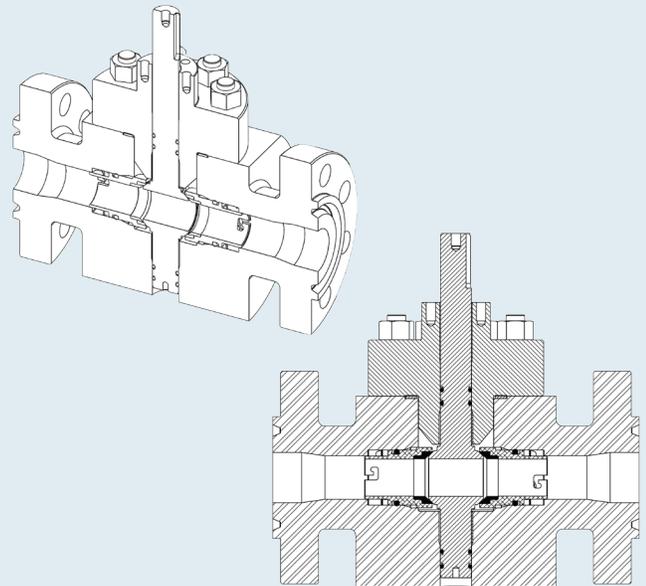
Top Entry, In-Line Repairable (through the Bonnet),
Trunnion Mounted, Bi-Directional Shut-Off

Sizes:	1.5" to 26" FULL or REDUCED PORT
Pressure Class:	ANSI 150 - 4500 API 2000 - 15000
Design:	B16.34, API 6A, API 6D, BPVC
Temperature:	(-) 320° F (Cryogenic) to (+) 1500° F (High Temperature)
End Connections:	RF / RTJ / WELD END / HUB END Special ANSI B16.5 / API 6A / ANSI B16.25
Leakage Class:	-API 6D & API 6A - PSL1-3G -API 598 Zero Leakage -ANSI/FCI 70.2 Class V & VI (Metal Seated) -API 622/API 641 Type Tested
Actuation:	Manual, Pneumatic, Hydraulic, Electric...



Standard Features

1. Metal-to-metal body/bonnet seal: reliable and fire safe
2. Solid one-piece ball, stem trunnion designs: Stronger, simpler, and more accurate
3. Pre-loaded, pressure assisted seating, bi-directional seating: no lateral ball movement along flow bore. Pre-loading provides uniform torque. Pressure assistance assures tighter seal.
4. Engineered stem and seat seals per customer specification
5. Trunnion bearing supports: assures alignment and reduce ball/seat torque



1535 Industrial Drive, Missouri City, TX. 77489
www.cornerstonevalve.com
(281) 880-8188 sales@cornerstonevalve.com

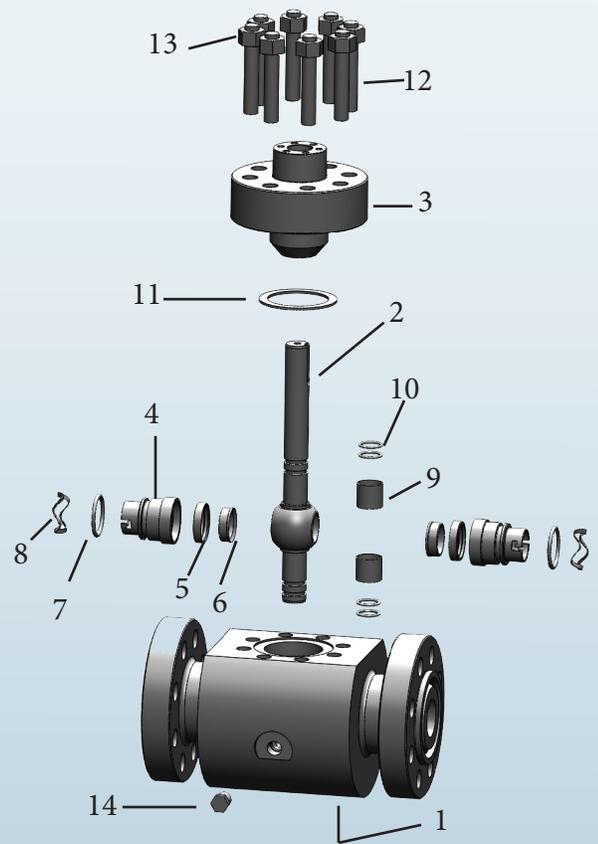


Model: TE-1

PARTS LIST

A/R = AS REQUIRED

ITEM	QTY	DESCRIPTION
1	1	Body
2	1	Ball
3	1	Bonnet
4	2	Seat pool (soft or metal)
5	2	Seat insert (soft seat only)
6	2	Seat lock ring (soft seat only)
7	2	Piston Seal (seat)
8	2	Wave spring
9	4	Bearing (stem)
10	4	Stem Seal
11	1	Bonnet Seal
12	A/R	Stud
13	A/R	Nut
14	2	Test Plug



CORNERSTONE VALVE
CAN ASSIST IN
SELECTION OF THE
OPTIMUM MATERIALS FOR
YOUR SPECIFIC SERVICE.

Applications

- Oil & gas production / Crude Oil
- Gas Utilities and Natural Gas Compression
- Ore slurries, Sewage, Sludge and Abrasive
- HRSG, Blowdown, & High Temp Steam
- Cryogenic liquid/gas in LNG Service
- Subsea: Shallow and Deepwater
- Refining, Coking, Chemical & Petrochemical
- Fertilizer, Ammonia, Carbon Capture, Hydrogen

Materials

Carbon Steel, Stainless Steel, Duplex, Chrome, Molybdenum, Nickel & Titanium based alloys and other exotic alloy available upon request.

Available Options

- Solids proof design
- In-line reparability through the Bonnet!
- Double block & bleed standard (or twin ball)
- Steam purge ports
- Secondary & Tertiary stem seals
- Soft seated or metal seated
- Various ball coatings (HVOF)
- CRA Overlays (316SS, Inconel 625)
- Firesafe
- Subsea up to 11,000 ft. hyperbaric tested
- Materials to NACE MR01-75 standards
- FE ISO15848 & API 641 Available

3 Piece Top Entry Ball Valves

Model: TE-3



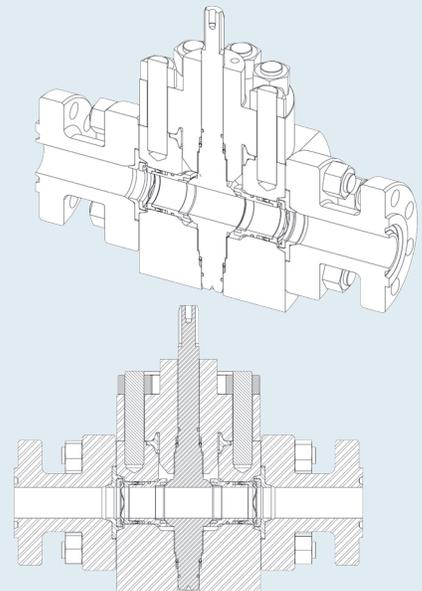
TRUNNION MOUNTED
BI-DIRECTIONAL SHUT-OFF

Sizes:	Up to 4" or 4 & 1/16 th "
Pressure Class:	ANSI / ASME 150 - 4500 B 16.34, API 6A, API 6D, BPVC API 2000 - 15000
Temperature:	(-) 320° F (Cryogenic) to (+) 1500° F (High Temperature)
End Connections:	RF / RTJ / WELD END / HUB END Special ANSI B16.5 / API 6A / ANSI B16.25
Leakage Class:	Bubble Tight (Soft Seated) ANSI/FCI 70.2-Class V & VI (Metal Seated) API 6D & API 6A - PSLI-4 API 598
Actuation:	Manual, Pneumatic, Hydraulic, Electric...



Standard Features

1. Metal-to-metal body/bonnet seal: reliable and fire safe
2. Solid one-piece ball, stem trunnion designs: Stronger, simpler, and more accurate
3. Pre-loaded, pressure assisted seating, bi-directional seating: no lateral ball movement along flow bore. Pre-loading provides uniform torque. Pressure assistance assures tighter seal.
4. Engineered stem and seat seals
5. Rigid bolted body: optimal strength and versatility
6. Trunnion bearing supports: assures alignment and reduce ball/seat torque



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Model: TE-3

PARTS LIST

A/R = AS REQUIRED

ITEM	QTY	DESCRIPTION
1	1	Center body
2	1	Ball
3	1	Bonnet
4	2	Seat Pool (soft or metal)
5	2	Seat Seal (soft seat only)
6	2	Seat Retainer (soft seat only)
7	2	Pusher Ring (seat)
8	2	Wave Spring
9	4	Fire-safe Seal (seat)
10	2	O-Ring (seat small O.D.)
11	2	Guide Ring (seat)
12	2	Anti-extrusion Ring (stem)
13	2	Bearing (stem)
14	2	Fire-safe Seal (stem)
15	1	Fire-safe metal Seal (bonnet)
16	A/R	Stud
17	A/R	Nut
18	2	Fire-safe metal Seal (tail-piece)
19	2	Body - Tailpiece
20	A/R	Stud
21	A/R	Nut
22	1	Test plug

Available Options

- Solids proof design
- In - Line repairability
- Double block & bleed
- Steam purge ports
- Secondary & tertiary stem seals
- Soft seated or metal seated
- Various ball coatings
- CRA overlays
- Firesafe
- Subsea
- Materials to nace standards
- More available, upon request

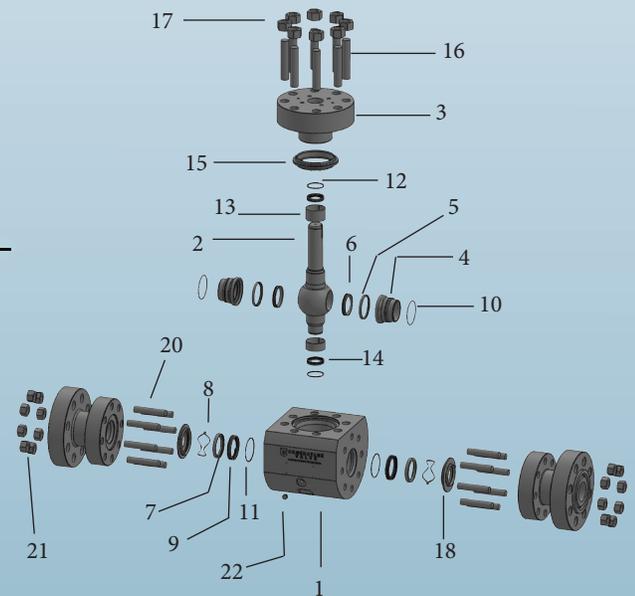
CORNERSTONE VALVE
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OPTIMUM MATERIALS FOR
YOUR SPECIFIC SERVICE.

Materials

Carbon Steel, Stainless Steel, Duplex, Chrome Molybdenum, Nickel & Titanium based alloys and other exotic alloys available upon request.

Applications

- Liquids
- Oil & Gas production
- Natural Gas
- Petrochemicals
- Crude Oil
- Polymers
- Steam
- High Pressure Gas
- Cryogenic



CERTIFICATES & LICENSES



API 6A: 0321



API 6D: 0164

ABS Quality Evaluations

Certificate Of Conformance

This is valid for the Quality Management System of
Cornerstone Valve
1535 Industrial Drive
Missouri City, TX 77450
U.S.A.

The American Petroleum Institute, Inc. and American Petroleum Institute Inc. are ISO 9001:2015 certified.

ISO 9001:2015

The Quality Management System is certified to:

DESIGN AND MANUFACTURE OF SERVICE VALVES

The certificate may be used to advertise and promote the products and services of the organization only. It is not to be used for any other purpose.

Certified to: ISO 9001
Issue Date: 01 February 2021
Review Date: 01 February 2022
Expiry Date: 01 February 2023



ISO 9001:2015



API 6DSS: 0073