

# End-Entry Floating Ball Model: FB2/3



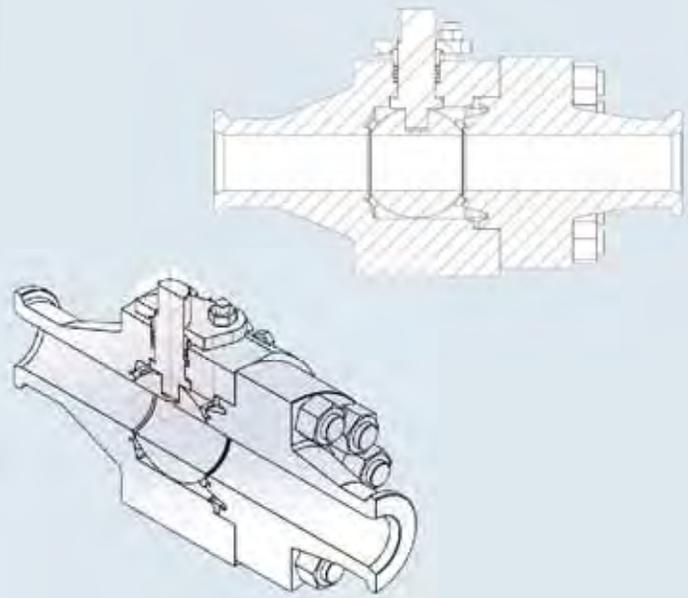
Metal Seated & Soft Seated Options, Cryogenic and High Temp Options, Uni-Directional and Bi-Directional, 2 & 3 Piece Body Available

Sizes:	ANSI 1/2" - 24" API 1 13/16" - 4 1/16"
Ratings:	ANSI 150 - 4500 API 2000 - 20000
Design Standards:	B16.34, API 6D, API 6A, BPVC
Temperature:	From minus 320 °F (CRYOGENIC) To 1500 °F (HIGH TEMPERATURE)
End Connections:	SW, BW, RF, RTJ, HUB END ANSI B16.5 / API 6A / ANSI B16.25
Leakage Class Options:	- API 6D, ISO-5208 Rate A - API 6A, PSL - 1, 2, 3 & 3G - API 598, API 622, API 641 - FCI 70.2, CLASS V & VI (Metal Seat) - Bubble Tight (Soft Seated)
Actuation:	Manual, Pneumatic, Hydraulic, Electric...



## Standard Features

1. Spiral wound graphite or metal to metal body/bonnet seal: reliable and fire safe
2. Floating ball design
3. Pre-loaded, pressure assisted seating, uni-directional seating: Pre-loading provides uniform torque. Pressure assistance assures tighter seal.
4. Engineered stem and fugitive emission seals per customer specification - able to meet API 622/641
5. Rigid bolted body: optimal strength and versatility



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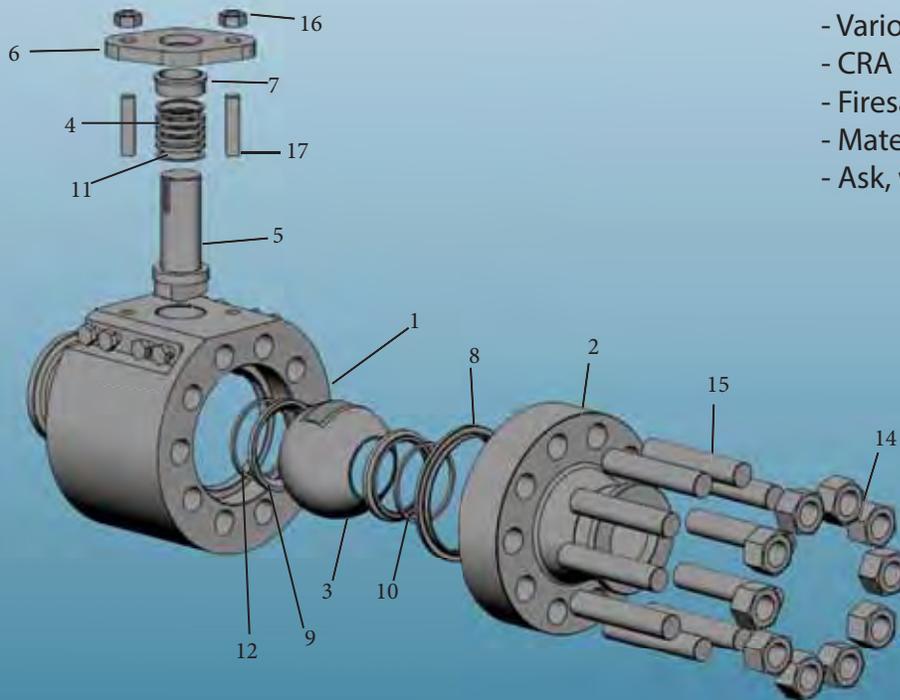


# Model: FB2/3

## PARTS LIST

A/R = AS REQUIRED (**REFERENCE ONLY**)

ITEM	QTY	DESCRIPTION
1	1	Body
2	1	Tail Piece
3	1	** Ball
4	2	** Seat
5	1	Stem
6	1	Packing Gland
7	1	Packing Ring
8	1	** Fire Safe Body Seal
9	1	Thrust Washer
10	2	* Anti Extrusion Ring
11	2	* Anti Extrusion Ring
12	2	* Seat Back Seal
13	4	* Packing
14	A/R	Heavy Hex Nuts
15	A/R	Body Studs
16	A/R	Packing Heavy Hex Nuts
17	A/R	Packing Studs



## Applications

- Chemical Processing & Refining
- Frequent Actuation Operation
- Tight Shut-Off (soft seat design) Oxygen
- Chlorine Service
- LNG Service (Full Cryogenic & Low Temp)
- Hydrogen Service and Zero Emissions
- Compression Gas and Upstream

## Materials

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

## Available Options

- Steam Purge Ports
- Secondary & Tertiary Stem Seals
- Soft Seated or Metal Seated
- Various Ball Coatings
- CRA Overlays
- Firesafe
- Materials to Nace Standards
- Ask, we can provide others

# Certifications



**Certificate of Authority to use the Official API Monogram**  
License Number: 6A-0321 ORIGINAL

The American Petroleum Institute hereby grants to  
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Missouri City, TX  
United States

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The scope of this license includes the following: Gate, Ball, Plug Valves, Check Valves at PSL 1, PSL 2, PSL 3

OMS Exclusions: No Exclusions Identified as Applicable

Effective Date: JANUARY 19, 2022  
Expiration Date: JANUARY 19, 2025

To verify the authenticity of this license, go to [www.api.org/corncert.html](http://www.api.org/corncert.html).

*Anneal Liddar*  
Global Vice President of Global Industry Services

API 6A-0321



**Certificate of Authority to use the Official API Monogram**  
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The scope of this license includes the following: Ball Valves, Gate Valves

OMS Exclusions: No Exclusions Identified as Applicable

Effective Date: JANUARY 19, 2022  
Expiration Date: JANUARY 19, 2025

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*Anneal Liddar*  
Global Vice President of Global Industry Services

API 6D-0164



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OMS Exclusions: No Exclusions Identified as Applicable

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Expiration Date: JANUARY 19, 2025

To verify the authenticity of this license, go to [www.api.org/corncert.html](http://www.api.org/corncert.html).

*Anneal Liddar*  
Global Vice President of Global Industry Services

API 6DSS-0073

ISO9001:2015

SIL-3 CERT

## ABS Quality Evaluations

### Certificate Of Conformance

This is to certify that the Quality Management System of

**Cornerstone Valve**  
1535 Industrial Drive  
Missouri City, TX 77489  
U.S.A.

has been assessed by ABS Quality Evaluations, Inc. and found to be in conformance with the requirements set forth by  
**ISO 9001:2015**

The Quality Management System is applicable to:

DESIGN AND MANUFACTURE OF SEVERE SERVICE VALVES

This certificate may be found on the ABS QCE Website ([www.abs-qe.com](http://www.abs-qe.com)). For certificates issued in the People's Republic of China information may also be verified on the CNCA website ([www.cnca.gov.cn](http://www.cnca.gov.cn)).

Certificate No: 83874  
Effective Date: 04 February 2022  
Expiration Date: 03 February 2026  
Revision Date: 04 February 2022

*Donnie Townsend*  
Donnie Townsend, President



\*Validity of this certificate is based on the recorded registration of the periodic surveillance audits of the assessment criteria defined by the above scope and a continuous open program of witness verification to ABS Quality Evaluations, Inc. of significant changes in the management system or organization thereof.  
ABS Quality Evaluations, Inc. 1701 1702 River Street, Spring, TX 77388, U.S.A.  
\*Validity of this certificate may be confirmed on [www.abs-qe.com/corncert.html](http://www.abs-qe.com/corncert.html).  
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**FUNCTIONAL SAFETY CERTIFICATE**  
CERTIFICATO – ZERTIFIKAT – CERTIFICADO – CERTIFICAT

The product:  
**Bolted end entry trunnion mounted ball valve series EE/ST**

Manufactured by:  
**Cornerstone Valve**  
1535 Industrial Drive, Missouri City  
TX 77489, United States

suitable for the following safety function(s)  
Upon demand, the ball valve moves from open to closed position, or vice-versa, depending on the process Safe State, within the required response time.

has been assessed per the relevant requirements of  
**IEC 61508:2010 Parts 1 to 2**  
and meets the requirements providing the following:

<b>Systematic Capability:</b> The compliance with the requirements for the avoidance of systematic faults and the requirements for the control of systematic faults have been assessed following the compliance route L <sub>1</sub> .	SC 3
<b>Hardware Safety Integrity:</b> The compliance on hardware safety integrity have been verified in order to achieve a sufficiently robust architecture taking into account the level of element and subsystem complexity following the compliance route L <sub>1</sub> .	Type A
<b>Random Safety Integrity:</b> The estimated safety integrity, for each safety function, due to random hardware safety and dangerous failure rates (excluding "no part" and "no effect" contribution) and the contribution of the software safety integrity, must be verified for each specific application and safety function implemented by the E/E/PE safety-related system.	See page 2

Defined by: **BYHON** (BYHON Certification Designer)  
*F.M. Rossi* (Rossi Francesco)

CERTIFICATE No: **CSVA-EESTV-ENS-A01**  
Revision: A  
Issued: December 19<sup>th</sup>, 2026  
Valid until: December 19<sup>th</sup>, 2026

The issuer of a valid certificate for an assessed product is authorized to affix the following mark and number ID number to all recognized devices which are identical to the product in scope.

**BYHON SIL**  
IDN 563423EN01A

**ANSI ACCREDITED**  
8074  
20001-1101  
Petroleum Certification Board