

## PRODUCT OVERVIEW

**API Licenses:**

- API 6D
- API 6DSS
- API 6A-PSL4

**Size Range: 1" to 56"**

**Pressure Class:**

ASME 150-2500  
API 2000-15000

**Service Type:**

- Standard Temperature: -29°C to 220°C / -20°F to 428°F
- Low Temperature: -46°C to 150°C / -50°F to 302°F
- Cryogenic Temperature: -47°C to -196°C / -52°F to -320°F
- Subsea (Shallow & Deep Water)
- Underground
- High Temperature: Above 220°C / 428°F



**MODEL F & FF**  
SIDE ENTRY BOLTED BODY

SERVICE	API 6D Size (in/mm) - Pressure Range				API 6A Size (in/mm) - Pressure Range		
	ASME 150-600	ASME 900	ASME 1500	ASME 2500	API 2000-5000	API 10000	API 15000
Standard	2"-56" 50-1400	2"-48" 50-1200	2"-42" 50-1050	2"-24" 50-600	1 13/16"-11" 46-280	1 13/16"-11" 46-280	1 13/16"-7 1/16" 46-179
Low Temperature	2"-56" 50-1400	2"-48" 50-1200	2"-42" 50-1050	2"-24" 50-600	1 13/16"-11" 46-280	1 13/16"-11" 46-280	1 13/16"-7 1/16" 46-179
Cryogenic	2"-36" 50-900	2"-24" 50-600	2"-16" 50-400	2"-12" 50-300	1 13/16"-11" 46-280	*	*
Subsea	2"-56" 50-1400	2"-48" 50-1200	2"-42" 50-1050	2"-24" 50-600	1 13/16"-11" 46-280	1 13/16"-11" 46-280	1 13/16"-7 1/16" 46-179
Underground	2"-56" 50-1400	2"-48" 50-1200	2"-42" 50-1050	2"-24" 50-600	1 13/16"-11" 46-280	1 13/16"-11" 46-280	1 13/16"-7 1/16" 46-179
High Temperature	2"-36" 50-900	2"-24" 50-600	2"-16" 50-400	2"-12" 50-300	1 13/16"-11" 46-280	*	*



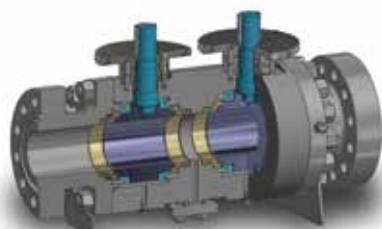
**MODEL FW**  
SIDE ENTRY WELDED BODY

SERVICE	API 6D Size (in/mm) - Pressure Range				API 6A Size (in/mm) - Pressure Range		
	ASME 150-600	ASME 900	ASME 1500	ASME 2500	API 2000-5000	API 10000	API 15000
Standard	2"-56" 50-1400	2"-36" 50-900	2"-30" 50-750	*	*	*	*
Low Temperature	2"-56" 50-1400	2"-36" 50-900	2"-30" 50-750	*	*	*	*
Cryogenic	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Subsea	2"-56" 50-1400	2"-36" 50-900	2"-30" 50-750	*	*	*	*
Underground	2"-56" 50-1400	2"-36" 50-900	2"-30" 50-750	*	*	*	*
High Temperature	N/A	N/A	N/A	N/A	N/A	N/A	N/A



**MODEL FT**  
TOP ENTRY BOLTED BONNET

SERVICE	API 6D Size (in/mm) - Pressure Range				API 6A Size (in/mm) - Pressure Range		
	ASME 150-600	ASME 900	ASME 1500	ASME 2500	API 2000-5000	API 10000	API 15000
Standard	2"-56" 50-1400	2"-48" 50-1200	2"-42" 50-1050	2"-24" 50-600	1 13/16"-11" 46-280	1 13/16"-11" 46-280	1 13/16"-7 1/16" 46-179
Low Temperature	2"-56" 50-1400	2"-48" 50-1200	2"-42" 50-1050	2"-24" 50-600	1 13/16"-11" 46-280	1 13/16"-11" 46-280	1 13/16"-7 1/16" 46-179
Cryogenic	2"-36" 50-900	2"-24" 50-600	2"-16" 50-400	2"-12" 50-300	1 13/16"-11" 46-280	*	*
Subsea	2"-56" 50-1400	2"-48" 50-1200	2"-42" 50-1050	2"-24" 50-600	1 13/16"-11" 46-280	1 13/16"-11" 46-280	1 13/16"-7 1/16" 46-179
Underground	2"-56" 50-1400	2"-48" 50-1200	2"-42" 50-1050	2"-24" 50-600	1 13/16"-11" 46-280	1 13/16"-11" 46-280	1 13/16"-7 1/16" 46-179
High Temperature	2"-36" 50-900	2"-24" 50-600	2"-16" 50-400	2"-12" 50-300	1 13/16"-11" 46-280	*	*



**MODEL FC**  
COMPACT BODY (TWIN BALL)

SERVICE	API 6D Size (in/mm) - Pressure Range				API 6A Size (in/mm) - Pressure Range		
	ASME 150-600	ASME 900	ASME 1500	ASME 2500	API 2000-5000	API 10000	API 15000
Standard	2"-30" 50-750	2"-24" 50-600	2"-16" 50-400	2"-12" 50-300	1 13/16"-11" 46-280	1 13/16"-11" 46-280	1 13/16"-7 1/16" 46-179
Low Temperature	2"-30" 50-750	2"-24" 50-600	2"-16" 50-400	2"-12" 50-300	1 13/16"-11" 46-280	1 13/16"-11" 46-280	1 13/16"-7 1/16" 46-179
Cryogenic	2"-30" 50-750	2"-24" 50-600	2"-16" 50-400	2"-12" 50-300	1 13/16"-11" 46-280	*	*
Subsea	2"-30" 50-750	2"-24" 50-600	2"-16" 50-400	2"-12" 50-300	1 13/16"-11" 46-280	1 13/16"-11" 46-280	1 13/16"-7 1/16" 46-179
Underground	2"-30" 50-750	2"-24" 50-600	2"-16" 50-400	2"-12" 50-300	1 13/16"-11" 46-280	1 13/16"-11" 46-280	1 13/16"-7 1/16" 46-179
High Temperature	2"-30" 50-750	2"-24" 50-600	2"-16" 50-400	2"-12" 50-300	1 13/16"-11" 46-280	*	*

\* - Available upon request, please consult factory

# ORDERING GUIDE

## Example: 12" Figure # FF600-1-CF-E1-GO



12" CLASS 600 TRUNNION BALL VALVE, FULL BORE, 3-PC, FLG-RF, SINGLE PISTON EFFECT, A105 BODY X A105 + (0.003) ENP TRIM, DEVLON SEAT INSERTS, HNBR AED O-RINGS, NACE, FIRESAFE, GEAR OP.

### 1. MODEL

- |   |  |
|---|--|
| F - TRUNNION BALL, 2 PIECE, SPLIT BODY, FULL BORE     | GT - TRUNNION BALL, 1 PIECE, TOP ENTRY, REDUCED BORE |
| G - TRUNNION BALL, 2 PIECE, SPLIT BODY, REDUCED BORE  | FW - TRUNNION BALL, FULLY WELDED BODY, FULL BORE     |
| FF - TRUNNION BALL, 3 PIECE, SPLIT BODY, FULL BORE    | GW - TRUNNION BALL, FULLY WELDED BODY, REDUCED BORE  |
| GG - TRUNNION BALL, 3 PIECE, SPLIT BODY, REDUCED BORE | FC - TRUNNION TWIN BALL, COMPACT BODY, FULL BORE     |
| FT - TRUNNION BALL, 1 PIECE, TOP ENTRY, FULL BORE     | GC - TRUNNION TWIN BALL, COMPACT BODY, REDUCED BORE  |

### 2. RATING

- |                |                  |                |                 |
|----------------|------------------|----------------|-----------------|
| 15 - CLASS 150 | 90 - CLASS 900   | 200 - API 2000 | 1000- API 10000 |
| 30 - CLASS 300 | 150 - CLASS 1500 | 300 - API 3000 | 1500- API 15000 |
| 60 - CLASS 600 | 250 - CLASS 2500 | 500 - API 5000 |                 |

### 3. END CONNECTION

- |                                  |                        |             |
|----------------------------------|------------------------|-------------|
| 0 - RF FLANGED                   | 8 - BUTTWELD X RF ENDS | X - SPECIAL |
| 7 - BUTTWELD (SCHEDULE REQUIRED) | 9 - RING JOINT         |             |

### 4. TYPE

- |                                |   |
|--------------------------------|---|
| 1 - SINGLE PISTON EFFECT (SPE) | 3 - SINGLE X DOUBLE PISTON EFFECT (SPE x DPE) |
| 2 - DOUBLE PISTON EFFECT (DPE) |   |

### 5. MATERIAL (BODY + TRIM)

- |                             |                           |                    |
|-----------------------------|---------------------------|--------------------|
| AC - WCB + 304              | GC - LCC + 316            | NF - F316L + 316L  |
| AF - A105 + 304             | GF - LF2 + 316            | OC - CN7M + A/20   |
| BC - WCB + 316              | HC - LCB + LF2/ENP (.003) | OF - A/20 + A/20   |
| BF - A105 + 316             | IC - LCB + F6A/13CR       | PC - A890-4A + F51 |
| CC - WCB + A105/ENP (.003)  | JC - LCB + 316            | PF - F51 + F51     |
| CF - A105 + A105/ENP (.003) | KC - CF8 + 304            | QC - A890-5A + F53 |
| DC - WCB + F6A/13CR         | KF - F304 + 304           | QF - F53 + F53     |
| DF - A105 + F6A/13CR        | LC - CF8M + 316           | RC - A890-6A + F55 |
| EC - LCC + LF2/ENP (.003)   | LF - F316 + 316           | RF - F55 + F55     |
| EF - LF2 + LF2/ENP (.003)   | MC - CF3 + 304L           | X - SPECIAL        |
| FC - LCC + F6A/13CR         | MF - F304L + 304L         |                    |
| FF - LF2 + F6A/13CR         | NC - CF3M + 316L          |                    |

### 6. MATERIAL (SEAT)

- |              |                    |                    |
|--------------|--------------------|--------------------|
| B - NYLON 12 | F - VITON AED      | U - PCTFE (KEL-F)® |
| C - NYLON 6  | G - RTFE           | V - PEEK           |
| E - DEVLON   | M - METAL TO METAL | X - SPECIAL        |

### 7. MATERIAL (O-RING SEAL)

- |               |                   |                         |                    |
|---------------|-------------------|-------------------------|--------------------|
| 1 - HNBR AED  | 3 - VITON GLT AED | 5 - AFLAS               | 7 - PTFE + ELGILOY |
| 2 - VITON AED | 4 - EPDM          | 6 - HNBR AED (Low Temp) | X - SPECIAL        |

### 8. OPERATOR

- |           |           |               |
|-----------|-----------|---------------|
| L - LEVER | GO - GEAR | B - BARE STEM |
|-----------|-----------|---------------|

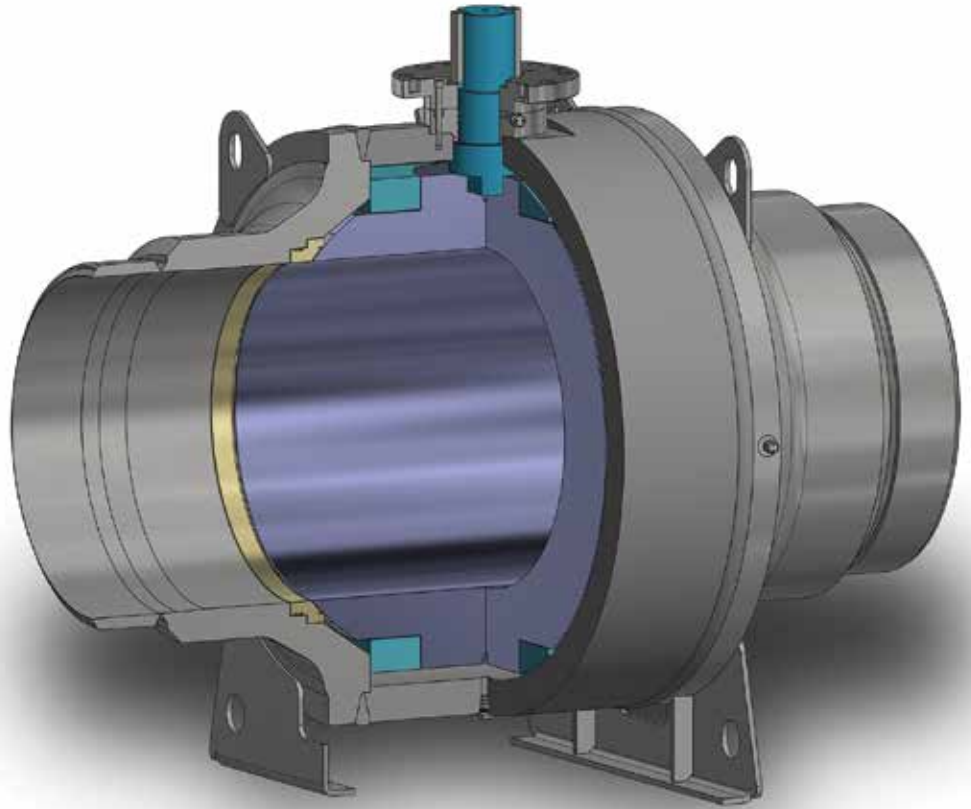
### 9. SPECIAL REQUIREMENTS

- S - SUPPLY COMPLETE INFORMATION

**NOTE:** For Cryogenic application ordering guide, refer to GWC catalog #CTBV-1001  
 For Subsea application ordering guide, refer to GWC catalog #SSBV-1001

## MODEL FW FORGED SIDE ENTRY WELDED BODY

- GWC ITALIA Fully Welded Body Valves are used in pipelines and pumping compression stations as well as subsea applications.
- Our welded design reduces the leakage path and makes the valves ideal for underground and subsea installations.
- Welding of the two or three piece body parts are performed with a special technique so that post welding heat treatment is not required and soft seals are not subject to damage during the welding.
- The extensive size range and pressure class are available in a variety of materials including Carbon, Alloy & Stainless steel suitable for general to severe service conditions.



<b>SIZE RANGE:</b>	<b>2" - 56"</b>
<b>PRESSURE CLASS:</b>	<b>ASME 150 - 1500</b>
<b>API STANDARDS:</b>	<b>6D &amp; 6DSS</b>
<b>ASME:</b>	<b>B16.34</b>

### FEATURES

- ▶ 1 PIECE BODY
- ▶ FULL AND REDUCED BORE
- ▶ TRUNNION MOUNTED
- ▶ DOUBLE BLOCK AND BLEED
- ▶ SINGLE OR DOUBLE PISTON EFFECT DESIGN
- ▶ ANTI-BLOW OUT STEM
- ▶ ANTI-STATIC DEVICE
- ▶ FIRESAFE TO API-607 / 6FA / ISO 10497
- ▶ SPRING LOADED SEATS
- ▶ SEALANT INJECTION
- ▶ NACE MR-01-75