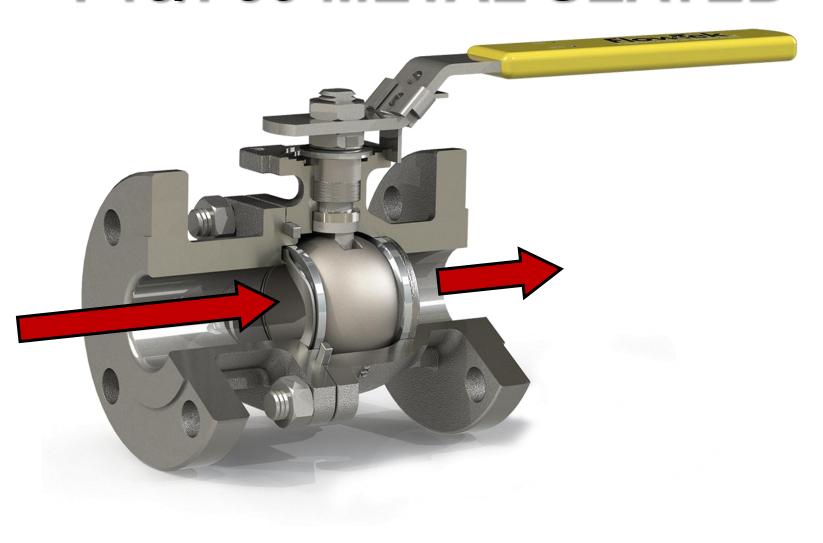




F15/F30 METAL SEATED PRODUCT LAUNCH



F15/F30 METAL SEATED



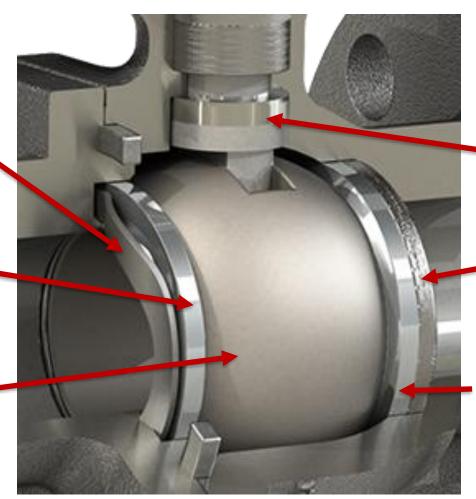


Cutaway View

Wave Spring

Upstream Metal Seat

Coated Ball



Metal Thrust Washer

Seat Seal

Downstream Metal Seat



Ball & Seat Set Conversion





Design Features

- Extends F15/F30 temperature range (750°F /400°C)
- Abrasion/erosion resistance and anti-fouling capabilities (slurries, etc.)
- Size range: 1/2" to 8", CL150 & CL300
- 2015 Kick Off Stock: 2"-6", CL150 & CL300
- Currently Uni-directional sealing
- No machining required, uses standard F15/F30 valve Drop-in trim replacement for soft seated trim
- Significantly reduced cost
- Significantly reduced lead time
- Field repairable
- Reduced torque at low pressure



Design Features

- Mate-lapped Ball & Seat Set with high performance coating
 - In-House proprietary thermal spray and lapping technology
 - Superior wear resistance
 - Reduced torque & extended sealing surface life
 - Class IV to VI Leakage, per customer request
- Blowout proof, high strength, one-piece stem
- Wave spring generates precise loading of the ball/seat interface and graphite seals, allowing for:
 - low torque operation
 - tight shutoff
 - thermal expansion throughout full range operating range
- Graphite seals for high temp and chemical compatibility
- Galling-resistant Nitronic® 60 thrust washer for high temp



COMPONENTS & MATERIALS

ı	TEM / NAME	STAINLESS STEEL	CARBON STEEL	QTY.
1.	Body	ASTM A351 Gr CF8M	ASTM A216 Gr WCB	1
2.	End Cap	ASTM A351 Gr CF8M	ASTM A216 Gr WCB	1
3.	Ball	ASTM A351 Gr CF8M/Chrome Carbide ASTM A351 Gr CF8M/Hard Chrome		
4A.	Upstream Seat	ASTM A351 Gr CF8M/Chrome Carbide ASTM A351 Gr CF8M/Stellite® 6		
4B.	Downstream Seat	ASTM A351 Gr CF8M/Chrome Carbide ASTM A351 Gr CF8M/Stellite® 6		1 •
5.	Stem	SS660 or17-4 PH		1
6.	Body Seal	Spiral Wound (316/Graphite)		1 •
7.	Body Nut	ASTM A194 Gr 8	ASTM A194 2H	*
8.	Body Stud	ASTM A193 B8	ASTM A193 B7	*
44.	Seat Seal	Graphite		1 •
45.	Wave Spring	17-7 or Inconel® 718		1 •



FlowTek.

26 28 28 11. Thrust Washer 14. Stem Packing

26	
19	
18	8

15

14

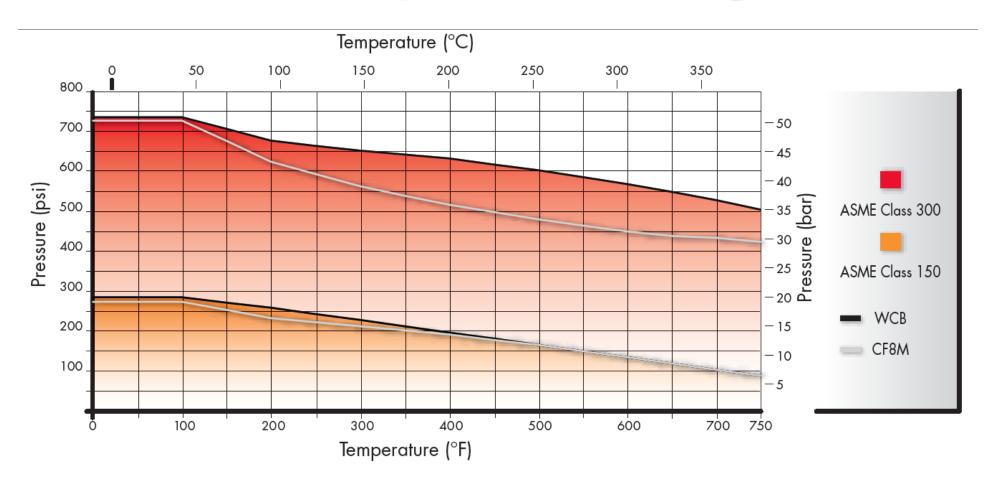
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1	2 4
	23

11.	Thrust Washer	UNS S21800 (Nitronic® 60)	1 •
14.	Stem Packing	Graphite	1 •
15.	Packing Gland	ASTM A167 Type 304	1
18.	Belleville Washer	SS301	2
19.	Tab Lock Washer	SS304	1
23.	Travel Stop Sleeve	ASTM A167 Type 304	1
24.	Travel Stop Bolt	SS300	1
25.	Handle	SS304/ Ductile Iron 2½" and larger	1
26.	Lock Nut	ASTM A167 Type 304	2
28.	Handle Sleeve	Vinyl 2" [50mm]	1
29.	Locking Device	SS304	1



Pressure/Temperature Ratings





Metal Seated Applications

- Chemical
- Refining
- Power
- Mining
- Pulp & Paper
- Pharmaceutical
- Food and beverage

- High Temp to 750°F / 400°C
- Abrasive applications
- Steam service
- Mild slurries
- Higher combination of temperature & pressure
- Gate Valve applications

FILLS THE GAP BETWEEN SOFT SEATS AND SEVERE SERVICE BALL VALVES



Certifications/Standards

- ASME B16.34
- ASME B16.10
- ASME B16.5 Class & DIN/EN PN Rated Flanges
- API 608
- API 607
- ISO 5211
- API 598, MSS SP-61, or ANSI FCI 70-2 Class IV VI
- NACE MR0175
- CE/PED in-Progress



Metal Seated FAQs

- Current seats only work in the F15/30
- Not designed for the RF15/30, Triad, etc.
- Current seats fit DIN/EN valves (FD10/FD40)
- Can be used for F15/F30 V-Port control valves (but not stocked in V-Port)



F15/F30 METAL SEATED





