

# 623 & 633 Series

## High Performance

## 7500 psi Ball Valve

The 633 Series valve is made from bar stock in 316 SS and the 623 Series is made from bar stock in WCB.

The valve structure and wall thickness follows ASME B16.34 as standard. The 633 and 623 Series is a fire safe design in accordance with API 607 4th Edition.

The standard seat material is PEEK (450G) and Delrin (POM). PEEK is available for higher temperature pipe line and Delrin is for low temperature environments.

The 633 Series is full bore in sizes 1/4" to 2". Both the 633 and 623 Series are also available with a V-ball with slot, 15°, 60°, or 90° for different flow rate requirements.

The locking device is available in both open and closed conditions.

Automation is available for both Series as well. Pneumatic and Electric actuators are available.



### SPECIFICATIONS

- Body and end caps are machined from bar stock
- Valve construction and wall thickness are ASME B16.34 standard
- Class range:
  - 7500 psi for 1/4" to 1"
  - 6000 psi for 1-1/4" to 2"
- Full bore design
- In-line repairable
- 4 holes for mounting bracket
- Adjustable stem packing
- Available in carbon or stainless steel
- Blow-out proof stem design
- 100% air tested under water at 80 - 100 psi
- End connections: Threaded, socket weld, butt weld, extended SW, BW (Sch. 80/Sch. 160)

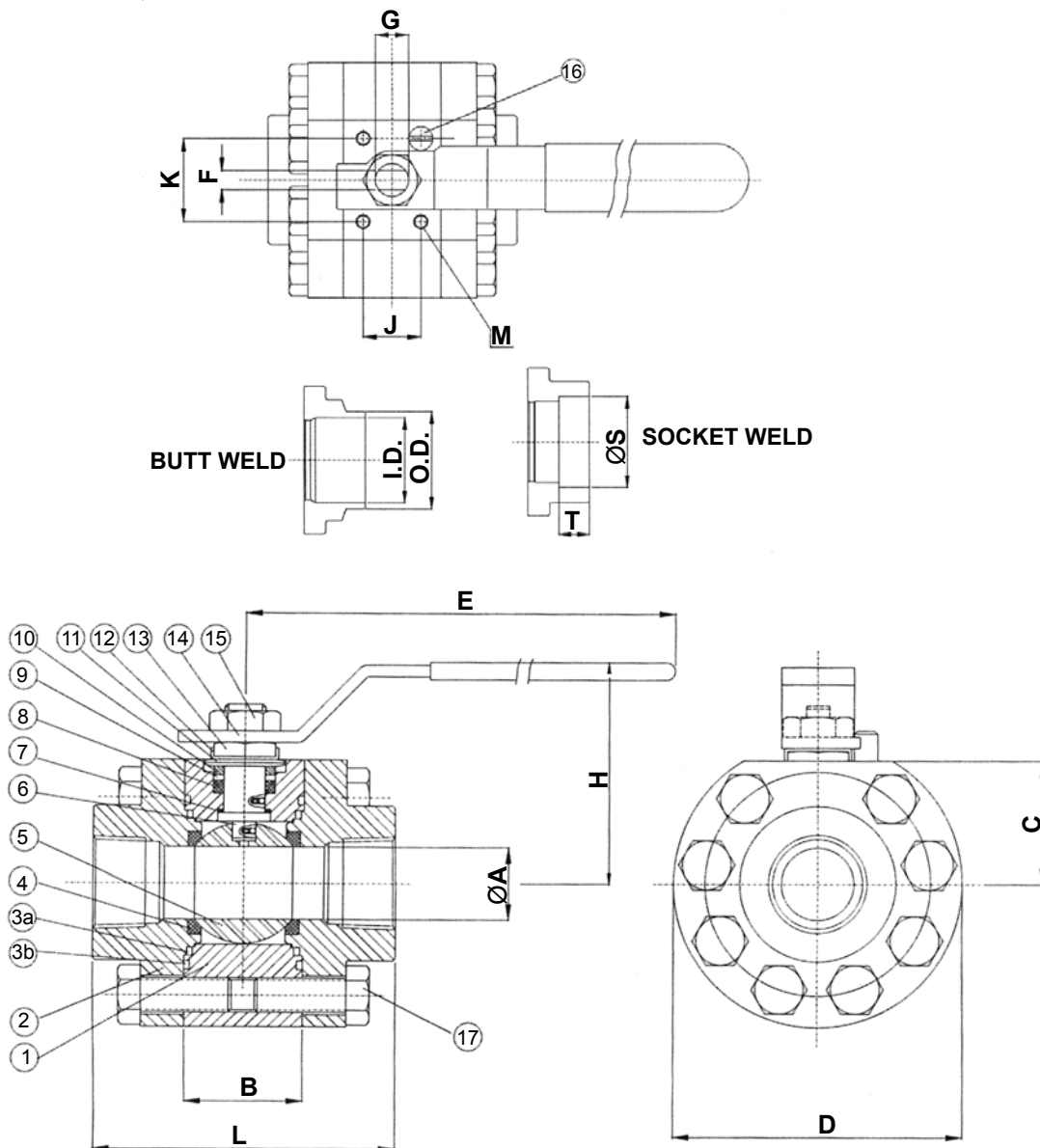
# J Flow Controls

J Flow Controls, LLC  
14 De Camp • Cincinnati, OH 45216  
Phone: 513-731-2900 • Fax 513-731-6939  
[www.jflowcontrols.com](http://www.jflowcontrols.com)

## OPTIONS

- Fire safe design with SS housing
- Spring handle (dead man handle, long pattern)
- Oval handle
- Locking device (both on open and closed conditions)
- V-ball for control valve
- Automation application
- Cryogenic option
- PTFE / PFA coating
- Special Alloy - Hastelloy C 276 / Super duplex / Alloy 20 / Monel 400

## DIMENSIONS & BILL OF MATERIALS



## BILL OF MATERIALS

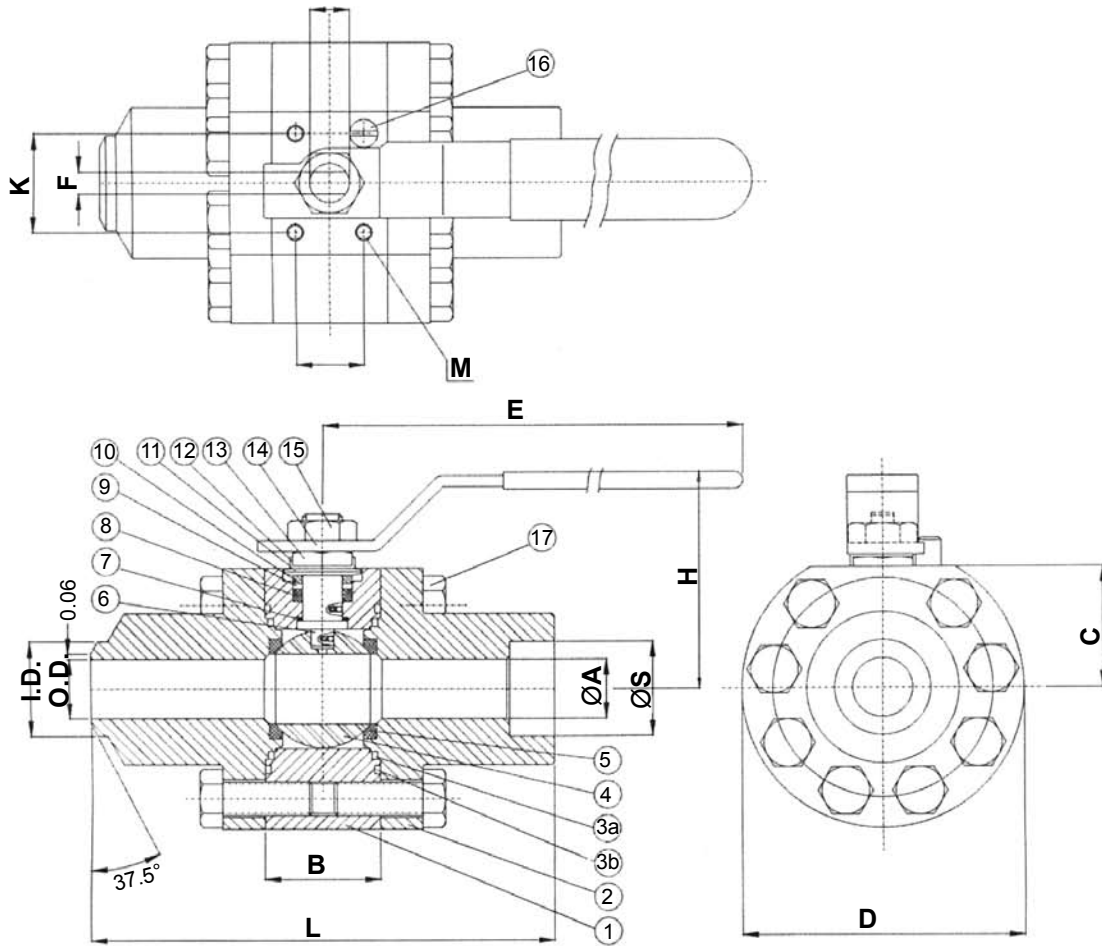
Part No.	Description	Materials	
1	Body	Stainless Steel 316	Carbon St. A105
2	End Cap	Stainless Steel 316	Carbon St. A105
3a	Gasket	TFM / Graphite	TFM / Graphite
3b	Secondary Gasket	TFM	TFM
4	Ball Seat	PEEK / Delrin	PEEK / Delrin
5	Ball	Stainless Steel 316	Stainless Steel 316
6	Stem	SS 17-4 PH	SS 17-4 PH
7	Thrust Washer	PEEK	PEEK
8	Stem Packing	TFM / Graphite	TFM / Graphite
9	Packing Protector	PEEK	PEEK
10	Gland Housing	SS 304	SS 304
11	Disk Washer	SS 301	SS 301
12	Nut Stop	SS 304	SS 304
13	Stem Nut	SS 304	SS 304
14	Handle	SS 304	SS 304
15	Handle Nut	SS 304	SS 304
16	Stop Pin	SS 304	SS 304
17	Body Bolts	A193 Gr. B8	A193 Gr. B7

## DIMENSIONS (INCHES)

Size	A	B	C	D	E	F	G	H	L
1/4"	0.43	0.81	1.06	2.91	6.89	0.25	3/8	1.77	2.60
3/8"	0.49	0.81	1.06	2.91	6.89	0.25	3/8	1.77	2.60
1/2"	0.59	1.01	1.26	3.11	6.89	0.25	3/8	1.89	2.80
3/4"	0.79	1.26	1.50	3.70	7.87	0.31	M12	2.48	3.62
1"	0.98	1.61	1.69	3.90	9.84	0.38	M14	2.72	4.17
1-1/2"	1.50	2.20	2.17	5.71	11.4	0.38	M18	3.23	5.51
2"	1.97	2.83	2.99	7.44	13.8	0.47	M20	5.71	6.50

Size	OPTION			SW		BW (80#)	
	J	K	M	S	T	OD	ID
1/4"	-	-	M5	0.56	0.44	0.54	0.31
3/8"	-	-	M5	0.69	0.44	0.68	0.40
1/2"	0.51	1.06	M5	0.86	0.50	0.84	0.54
3/4"	0.75	1.18	M5	1.07	0.51	1.05	0.74
1"	0.91	1.65	M5	1.33	0.51	1.31	0.96
1-1/2"	1.57	2.28	M6	1.91	0.63	1.91	1.50
2"	1.97	3.54	M10	2.41	0.63	2.38	1.93

# DIMENSIONS (INCHES)



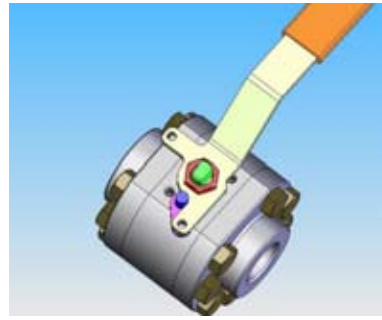
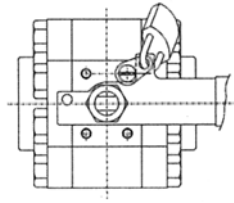
Size	A		OPTION			SW	
	SCH80	SCH160	J	K	M	S	T
1/4"	0.35	0.26	-	-	M5	0.56	0.44
3/8"	0.49	0.35	-	-	M5	0.69	0.44
1/2"	0.63	0.45	0.51	1.06	M5	0.86	0.50
3/4"	0.83	0.61	0.75	1.18	M5	1.07	0.51
1"	1.00	0.81	0.91	1.65	M5	1.33	0.51
1-1/2"	1.61	1.34	1.57	2.28	M6	1.91	0.63
2"	2.07	1.71	1.97	3.54	M10	2.41	0.63

Size	BW (80#)		BW (160#)	
	OD	ID	OD	ID
1/4"	0.54	0.31	-	-
3/8"	0.68	0.40	-	-
1/2"	0.84	0.54	0.84	0.46
3/4"	1.05	0.74	1.05	0.61
1"	1.31	0.96	1.31	0.82
1-1/2"	1.91	1.50	1.91	1.34
2"	2.38	1.93	2.38	1.69

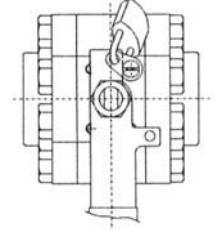
## LOCKING DEVICE (HANDLE LOCK)



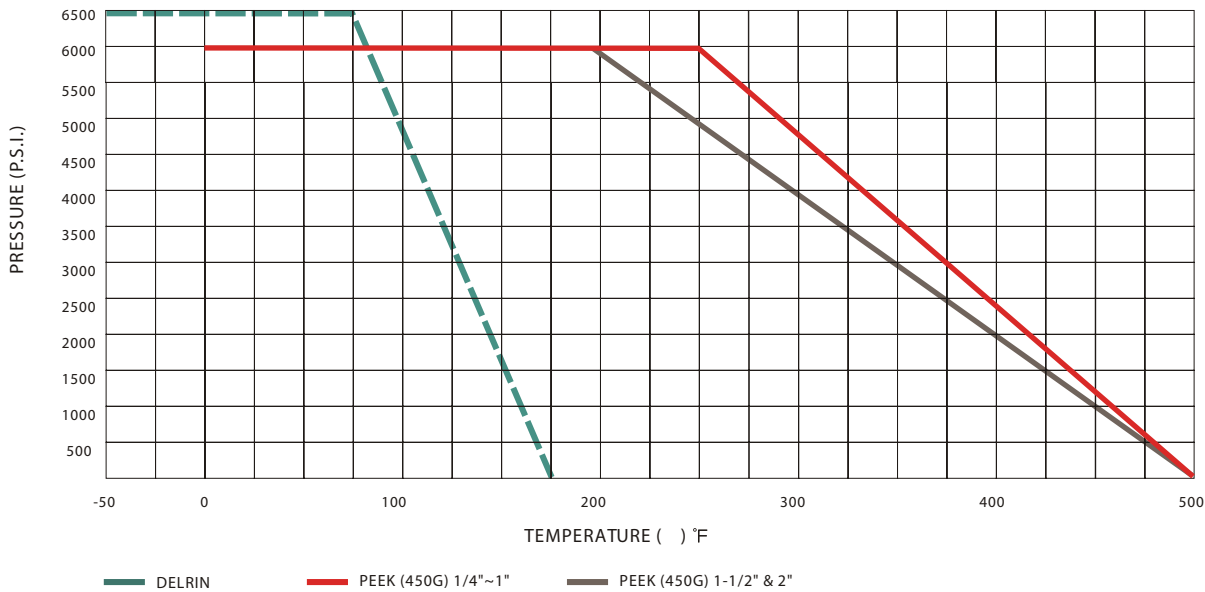
OPEN CONNECTION



CLOSED CONNECTION



## PRESSURE / TEMPERATURE CHART



## ORDERING SCHEMATIC

Series		Body		Trim		Port		Packing		Seat		End Connection	
6	Series	2	WCB	2	Chrome	F	Full Port	G	Grafoil	D	Delrin	S	Threaded
		3	316	3	316			T	Teflon	P	PEEK	SW	Socket Weld
		4	Alloy 20	4	Alloy 20					C	Carbon PEEK	BW	Butt Weld
		5	Monel	5	Monel							ESW	Ext. Socket Weld
		7	Hastelloy	7	Hastelloy							EBW	Ext. Butt Weld
		8	Duplex	8	Duplex							F9	Flanged 900#
												F15	Flanged 1500#
												F25	Flanged 2500#