

# KF Contromatics 2-Piece Threaded Ball Valves



## **KF Contromatics Industrial Products**



Superior Fluid Control Products  
A Brand of **CIRCOR** Energy Products, Inc.

# KF Contromatics 2-Piece Threaded Ball Valves

## Series 7000-M3/ 8000-M3 Series 7200-M3/ 8200-M3

7000/7200-Carbon Steel Body, Stainless Steel Trim  
 8000/8200-All Stainless Steel Construction  
 1/4" - 2" Full Port, 2000 WOG  
 2 1/2" - 4" Full Port, 1500 WOG (7200/8200)  
 NPTF Ends

### General Design Features

- 1 • Locking Handle Standard, Oval Handle Optional
- 2 • Bottom Loaded Blowout Proof Stem
- 3 • Adjustable Packing Gland
- 4 • Threaded Ends (ANSI B1.20.3)
- 5 • ISO 5211 4-Bolt Mounting Pad
- 6 • Mineral Filled Seats (Optional) (250 PSI Steam Service)
- 7 • 2-Piece Seal Welded Construction (Series 7200 & 8000, 1 1/4" & Larger 7000/8000)
  - 316 Stainless Steel Trim Standard
  - Pressure Balanced Ball
  - Positive Grounding
  - 150 PSI Saturated Steam

### Available Seat Materials

Uniseal™  
 Mineral Filled PTFE

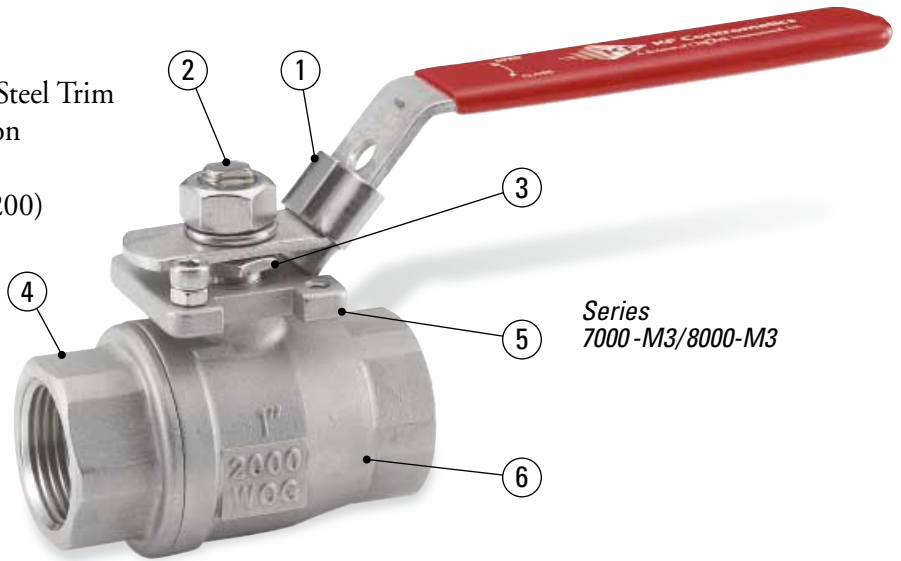
### Certified

NACE MR0175/ISO 15156  
 CE 1 1/4" & Larger  
 CRN# OC 7841.50126789

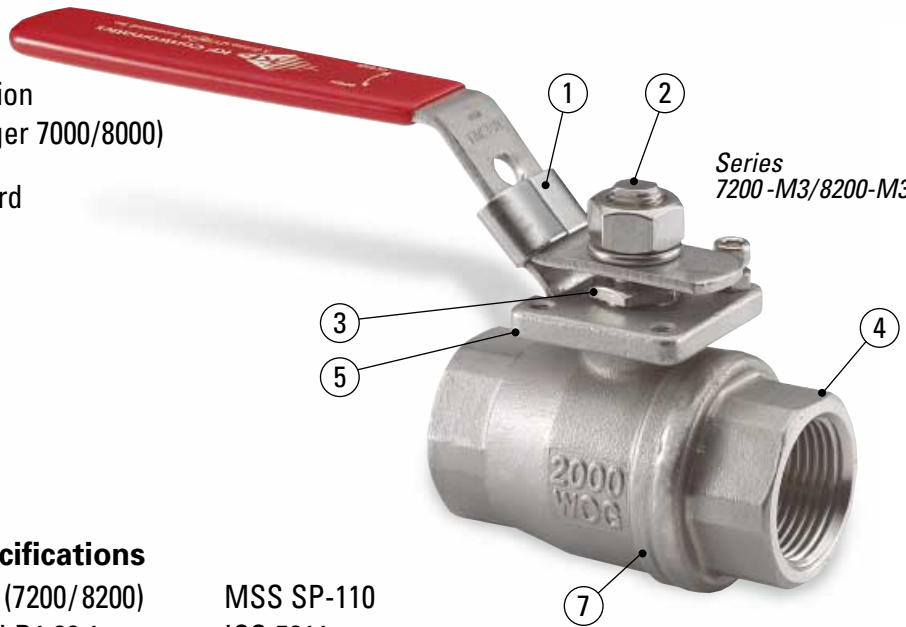
### Specifications

AAR (7200/8200)  
 ANSI B1.20.1  
 ANSI B1.20.3

MSS SP-110  
 ISO 5211



Series 7000-M3/8000-M3



Series 7200-M3/8200-M3

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# KF Contromatics 2-Piece Threaded Ball Valves

## How To Order

Code numbers fully describe a valve. They are made up of size and figure designations based upon the following code:

Example: 3/4", Full Port, Series 7200-M3 2-piece seal welded, Carbon Steel, mineral filled seat, 316 Stainless Steel ball and stem, Graphite packing, lever locking handle, assembled dry.

3/4"		7	20	0	—	04	—	SS	—	GP	—	LH	—	AD	—	M3
1		2	3	4		5		6		7		8		9		10

### 1 • Size

1/4" - 2"	Series 7000 & 8000
1/4" - 4"	Series 7200 & 8200

### 2 • Body Model

7	Carbon Steel, WCB
8	Stainless Steel, CF8M

### 3 • Construction

00	2-Piece Thread, Full Port
20	2-Piece Welded, Full Port

### 4 • End Connection

0	NPT
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### 5 • Seat Material

Blank	Uniseal™
04	Mineral Filled PTFE

### 6 • Ball & Stem

Blank	316 Stainless Steel, 8000 & 8200
SS	316 Stainless Steel, 7000 & 7200

### 7 • Packing

Blank	PTFE
GP	Graphite

### 8 • Operators

LH	Lever Locking
OVL	Oval Locking
H	Extended

### 9 • Options

AD	Assembled Dry
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### 10 • Model Revision

M3	Current Model
M4	7200 & 8200 w/PTFE Primary Body Seal

## Optional Handles & Handle Extensions

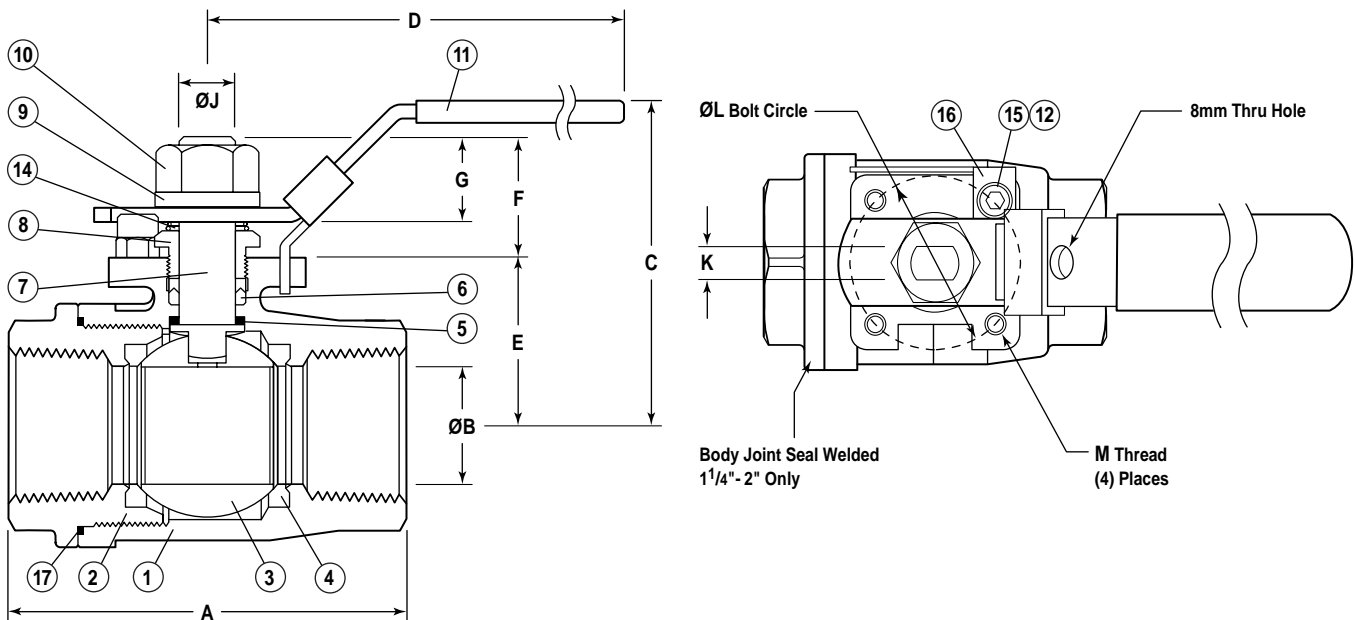
Size (in.)	Series 7000/8000 & 7200/8200		
	Oval Locking Handle	Lever Locking Handle	Extended Handle
1/4 - 1/2	08000-05011629	0097290	0097801
3/4	08000-07511629	0097291	0097824
1	08000-10011629	0097292	0097825
1 1/4	08000-10011629	0097292	0097825
1 1/2	08000-15011629	0097293	0097855

Size (in.)	Series 7000/8000 & 7200/8200		
	Oval Locking Handle	Lever Locking Handle	Extended Handle
2	08000-15011629	0097293	0097855
2 1/2	N/A	0097294	N/A
3	N/A	0097294	N/A
4	N/A	0097295	N/A



# KF Contromatics 2-Piece Threaded Ball Valves

## Series 7000-M3/8000-M3, Dimensional Data (in, mm)



### Dimensional Data (in., mm), 1/4" - 2"

Size (in.)	Dimension (in., mm)																					
	A		ØB		C		D		E		F		G		ØJ		K		ØL		M	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	Thrd.	in.	mm	in.	mm	Thrd.
1/4	2.32	58.9	0.43	10.9	2.13	54.1	5.31	134.9	0.94	23.9	0.59	15.0	0.37	9.4	0.31	7.9	M8-P1.25	0.20	5.1	1.42	36.1	M5
3/8	2.32	58.9	0.49	12.4	2.13	54.1	5.31	134.9	0.94	23.9	0.59	15.0	0.37	9.4	0.31	7.9	M8-P1.25	0.20	5.1	1.42	36.1	M5
1/2	2.44	62.0	0.59	15.0	2.24	56.9	5.31	134.9	1.02	25.9	0.69	17.5	0.47	11.9	0.31	7.9	M8-P1.25	0.20	5.1	1.42	36.1	M5
3/4	2.87	72.9	0.79	20.1	2.46	62.5	5.31	134.9	1.28	32.5	0.79	20.1	0.53	13.5	0.39	9.9	M10-P1.5	0.20	5.1	1.42	36.1	M5
1	3.35	85.1	1.00	25.4	2.70	68.6	6.50	165.1	1.42	36.1	0.93	23.6	0.71	18.0	0.47	11.9	M12-P1.75	0.31	7.9	1.65	41.9	M5
1 1/4	3.82	97.0	1.26	32.0	2.91	73.9	6.50	165.1	1.63	41.4	1.00	25.4	0.71	18.0	0.47	11.9	M12-P1.75	0.31	7.9	1.65	41.9	M5
1 1/2	4.53	115.1	1.50	38.1	3.56	90.4	6.89	175.0	2.01	51.1	1.06	26.9	0.71	18.0	0.55	14.0	M14-P2	0.31	7.9	1.97	50.0	M5
2	5.28	134.1	1.97	50.0	3.92	99.6	6.89	175.0	2.56	65.0	1.06	26.9	0.71	18.0	0.55	14.0	M14-P2	0.31	7.9	1.97	50.0	M6

### Parts List

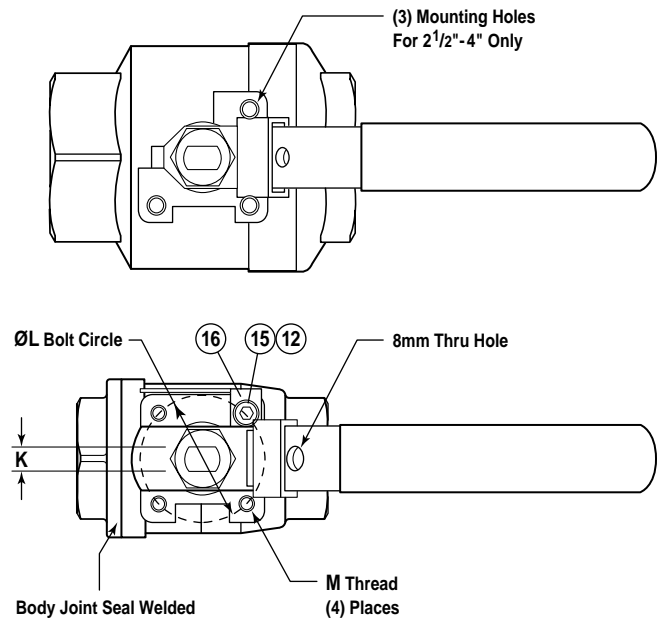
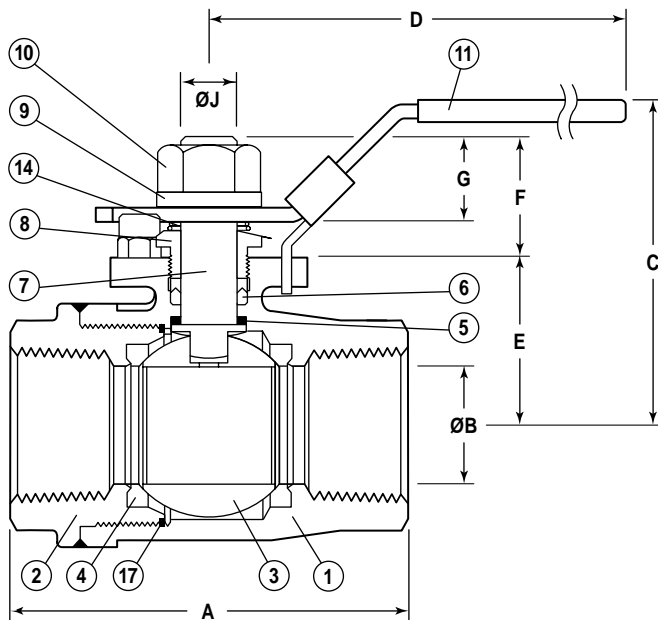
Part No.	Description	Material	
		Series 8000-M3 (SS)	Series 7000-M3 (CS)
1	Body	ASTM A351-CF8M	ASTM A216-WCB
2	End Cap	ASTM A351-CF8M	ASTM A216-WCB
3	Ball	ASTM A351-CF8M/316	ASTM A351-CF8M/316
4	Seat (04)	Uniseal™	Uniseal™
		Mineral Filled PTFE	Mineral Filled PTFE
5	Thrust Washer	PTFE	PTFE
6	Stem Packing Std GP	PTFE	PTFE
		Graphite	Graphite
7	Stem	ASTM A276-316	ASTM A276-316
8	Gland	AISI 304	AISI 304

Part No.	Description	Material	
		Series 8000-M3 (SS)	Series 7000-M3 (CS)
9	Handle Washer	AISI 304	AISI 304
10	Handle Nut	AISI 304	AISI 304
11	Handle w/Grip	AISI 304 w/PVC	AISI 304 w/PVC
12	Stop Screw	AISI 304	AISI 304
14	Anti-Static Spring 1/4" - 3/4" Only	AISI 304	AISI 304
15	Stop Nut 1" - 4" Only	AISI 304	AISI 304
16	Nameplate	Stainless Steel	Stainless Steel
17	Body Seal	PTFE	PTFE



# KF Contromatics 2-Piece Threaded Ball Valves

## Series 7200-M3/8200-M3, Dimensional Data (in, mm)



### Dimensional Data (in., mm), 1/4" - 4"

Size (in.)	Dimension (in., mm)																					
	A		ØB		C		D		E		F		G		ØJ		K		ØL		M	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	Thrd.	in.	mm	in.	mm	Thrd.
1/4	2.32	58.9	0.43	10.9	2.13	54.1	5.31	134.9	0.94	23.9	0.59	15.0	0.37	9.4	0.31	7.9	M8-P1.25	0.20	5.1	1.42	36.1	M5
3/8	2.32	58.9	0.49	12.4	2.13	54.1	5.31	134.9	0.94	23.9	0.59	15.0	0.37	9.4	0.31	7.9	M8-P1.25	0.20	5.1	1.42	36.1	M5
1/2	2.44	62.0	0.59	15.0	2.24	56.9	5.31	134.9	1.02	25.9	0.69	17.5	0.47	11.9	0.31	7.9	M8-P1.25	0.20	5.1	1.42	36.1	M5
3/4	2.87	72.9	0.79	20.1	2.46	62.5	5.31	134.9	1.28	32.5	0.79	20.1	0.53	13.5	0.39	9.9	M10-P1.5	0.20	5.1	1.42	36.1	M5
1	3.35	85.1	1.00	25.4	2.70	68.6	6.50	165.1	1.42	36.1	0.93	23.6	0.71	18.0	0.47	11.9	M12-P1.75	0.31	7.9	1.65	41.9	M5
1 1/4	3.82	97.0	1.26	32.0	2.91	73.9	6.50	165.1	1.63	41.4	1.00	25.4	0.71	18.0	0.47	11.9	M12-P1.75	0.31	7.9	1.65	41.9	M5
1 1/2	4.53	115.1	1.50	38.1	3.56	90.4	6.89	175.0	2.01	51.1	1.06	26.9	0.71	18.0	0.55	14.0	M14-P2	0.31	7.9	1.97	50.0	M5
2	5.28	134.1	1.97	50.0	3.92	99.6	6.89	175.0	2.56	65.0	1.06	26.9	0.71	18.0	0.55	14.0	M14-P2	0.31	7.9	1.97	50.0	M6
2 1/2	6.61	167.9	2.56	65.0	5.06	128.5	9.57	243.1	3.15	80.0	1.56	39.6	1.14	29.0	0.75	19.1	3/4-10UNC	0.47	11.9	2.76	70.1	M8
3	7.52	191.0	3.15	80.0	5.49	139.4	9.57	243.1	3.58	90.9	1.56	39.6	1.14	29.0	0.75	19.1	3/4-10UNC	0.47	11.9	2.76	70.1	M8
4	9.09	230.9	3.93	99.8	6.59	167.4	10.79	274.1	4.41	112.0	2.07	52.6	1.22	31.0	0.98	24.9	1-8UNC	0.63	16.0	4.01	101.9	M10

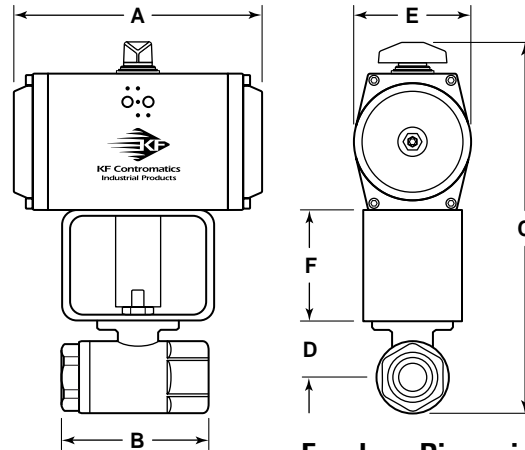
### Parts List

Part No.	Description	Material	
		Series 8000-M3 (SS)	Series 7000-M3 (CS)
1	Body	ASTM A351-CF8M	ASTM A216-WCB
2	End Cap	ASTM A351-CF8M	ASTM A216-WCB
3	Ball	ASTM A351-CF8M/316	ASTM A351-CF8M/316
4	Seat (04)	Uniseal™	Uniseal™
		Mineral Filled PTFE	Mineral Filled PTFE
5	Thrust Washer	PTFE	PTFE
6	Stem Packing Std GP	PTFE	PTFE
		Graphite	Graphite
7	Stem	ASTM A276-316	ASTM A276-316
8	Gland	AISI 304	AISI 304

Part No.	Description	Material	
		Series 8000-M3 (SS)	Series 7000-M3 (CS)
9	Handle Washer	AISI 304	AISI 304
10	Handle Nut	AISI 304	AISI 304
11	Handle w/Grip	AISI 304 w/PVC	AISI 304 w/PVC
12	Stop Screw	AISI 304	AISI 304
14	Anti-Static Spring 1/4" - 3/4" Only	AISI 304	AISI 304
15	Stop Nut 1" - 4" Only	AISI 304	AISI 304
16	Nameplate	Stainless Steel	Stainless Steel
17	Body Seal	PTFE	PTFE



# Series PAS Actuator Dimensional Data (in., mm) & Mounting Kits



Envelope Dimensional Data (In.)

Size (in.)	Actuator Model	Dimensions (in.)					
		A	B	C	D	E	F
1/4	200	5.00	2.32	6.26	.94	2.32	1.50
	300	5.24	2.32	6.81	.94	2.76	1.50
	500	6.10	2.32	7.28	.94	3.27	1.50
1/2	200	5.00	2.44	6.34	1.02	2.32	1.50
	300	5.24	2.44	6.89	1.02	2.76	1.50
	500	6.10	2.44	7.36	1.02	3.27	1.50
3/4	200	5.00	2.87	6.60	1.28	2.32	1.50
	300	5.24	2.87	7.15	1.28	2.76	1.50
	500	6.10	2.87	7.62	1.28	3.27	1.50
1	300	5.24	3.35	7.79	1.42	2.76	2.00
	500	6.10	3.35	7.90	1.42	3.27	2.00
1 1/4	300	5.24	3.82	8.00	1.63	2.76	2.00
	500	6.10	3.82	8.47	1.63	3.27	2.00
	700	6.97	3.82	8.58	1.63	3.58	2.00
1 1/2	500	6.10	4.53	8.85	2.01	3.27	2.00
	700	6.97	4.53	8.96	2.01	3.58	2.00
	1030	7.99	4.53	9.56	2.01	3.94	2.00
2	500	6.10	5.28	9.40	2.56	3.27	2.00
	700	6.97	5.28	9.51	2.56	3.58	2.00
	1030	7.99	5.28	10.11	2.56	3.94	2.00
2 1/2	700	6.97	6.61	10.10	3.15	3.58	2.00
	1030	7.99	6.61	10.70	3.15	3.94	2.00
	1400	8.50	6.61	11.60	3.15	4.72	2.00
3	1400	8.50	7.52	12.03	3.58	4.72	2.00
	2200	11.18	7.52	12.29	3.58	4.72	2.00
4	2900	11.42	9.09	14.42	4.41	5.39	2.50
	4100	13.27	9.09	16.61	4.41	6.77	2.50

Envelope Dimensional Data (mm)

Size (in.)	Actuator Model	Dimensions (mm)					
		A	B	C	D	E	F
1/4	200	127.0	58.9	159.0	23.9	58.9	38.1
	300	133.1	58.9	173.0	23.9	70.1	38.1
	500	154.9	58.9	184.9	23.9	83.1	38.1
1/2	200	127.0	62.0	161.0	25.9	58.9	38.1
	300	133.1	62.0	175.0	25.9	70.1	38.1
	500	154.9	62.0	186.9	25.9	83.1	38.1
3/4	200	127.0	72.9	167.6	32.5	58.9	38.1
	300	133.1	72.9	181.6	32.5	70.1	38.1
	500	154.9	72.9	193.5	32.5	83.1	38.1
1	300	133.1	85.1	197.9	36.1	70.1	50.8
	500	154.9	85.1	200.7	36.1	83.1	50.8
1 1/4	300	133.1	97.0	203.2	41.4	70.1	50.8
	500	154.9	97.0	215.1	41.4	83.1	50.8
	700	177.0	97.0	217.9	41.4	90.9	50.8
1 1/2	500	154.9	115.1	224.8	51.1	83.1	50.8
	700	177.0	115.1	227.6	51.1	90.9	50.8
	1030	202.9	115.1	242.8	51.1	100.1	50.8
2	500	154.9	134.1	238.8	65.0	83.1	50.8
	700	177.0	134.1	241.6	65.0	90.9	50.8
	1030	202.9	134.1	256.8	65.0	100.1	50.8
2 1/2	700	177.0	167.9	256.5	80.0	90.9	50.8
	1030	202.9	167.9	271.8	80.0	100.1	50.8
	1400	215.9	167.9	269.2	80.0	119.9	50.8
3	1400	215.9	191.0	305.6	90.9	119.9	50.8
	2200	284.0	191.0	312.2	90.9	119.9	50.8
4	2900	290.1	230.9	366.3	112.0	136.9	63.5
	4100	337.1	230.9	421.9	112.0	172.0	63.5

## M3 & M4 Actuator Mounting Kits, Series 7000 / 7200 / 8000 / 8200

Size (in.)	Actuator Model No.				
	PA200 PA300	PA500 PA700 PA1030	PA1400 PA2200 PA2900	PA4100 PA5800	PF/EA
1/4 - 1/2	0098194	0098999	—	—	0098160
3/4	0096712	0098189	—	—	0098035
1 - 1 1/4	0098235	0096783	—	—	0096656

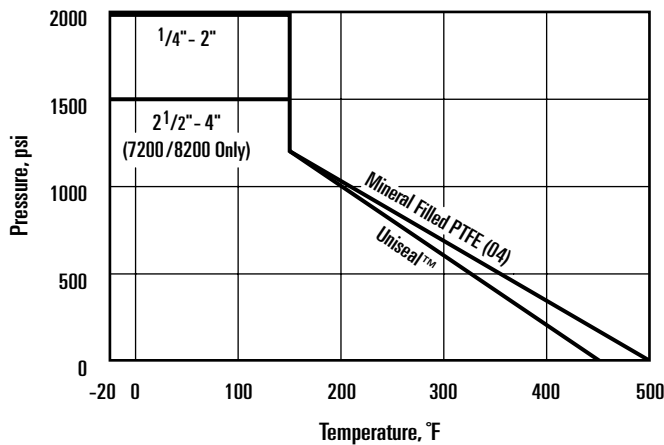
Size (in.)	Actuator Model No.				
	PA200 PA300	PA500 PA700 PA1030	PA1400 PA2200 PA2900	PA4100 PA5800	PF/EA
1 1/2 - 2	0098465	0096894	0096615	—	0096655
2 1/2 - 3	—	—	0098002	0099000	0098011
4	—	—	—	0096986	—



# KF Contromatics 2-Piece Threaded Ball Valves, Engineering Data

Series 7000-M3/8000-M3 1/4" - 2" & Series 7200-M3/8200-M3 1/4" - 4"

Pressure Temperature, Flow Coefficient (C<sub>v</sub>), Operating Torque (in.-lbs.) & Weight (lbs./kg)



Size (in.)	Flow Coefficient (C <sub>v</sub> )	Op. Torque (in.-lbs.)	Weight	
			(lbs.)	(kg)
1/4	7	60	0.8	.36
3/8	8	60	0.8	.36
1/2	15	80	0.8	.36
3/4	35	90	1.3	.59
1	60	150	2.2	1.00
1 1/4	105	230	4.0	1.81
1 1/2	150	250	4.5	2.04
2	300	400	7.5	3.40
2 1/2	480	600	14.5	6.58
3	750	1050	26	11.79
4	900	1500	45	20.41

Torque in inch-pounds @ full rated pressure.

## Temperature Rating

Seats @50 psig		
Seat Material	°F	°C
Uniseal™	450	230
Mineral Filled PTFE (04)	500	260

## Steam Rating (Saturated)

Seat Material	Rating
Uniseal™	150 WSP
Mineral Filled PTFE (04)	250 WSP

## Low Temperature Limits

Seat Material	°F	°C
Uniseal™	-50	-45
Mineral Filled PTFE (04)	-50	-45

Body Material	°F	°C
WCB	-20	-29
CF8M	-50	-45

## Torque Factors For Opt. Seat Materials (in.-lbs.)

Seat Material	Torque Factor
Mineral Filled PTFE (04)	1.25

Torque in inch-pounds at full rated pressure.

## Vacuum Rating

10 Microns of Mercury Hg w/PTFE Seats



# Worldwide Sales Offices



**KF Contromatics, a leading brand of CIRCOR Energy Products, Inc. reaches into every corner of the globe serving the oil & gas and industrial marketplace.**

**Supplying an extensive range of product offerings through a worldwide network of manufacturer representatives and distributors, KF Contromatics is the right choice for all your flow control needs.**

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