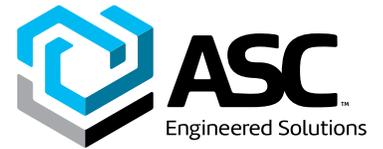


Building connections that last™



# Series M2

ASME Class 800, Three-Piece  
Ball Valve Datasheet

¼" - 2" Full Port, ½" - 2-½" Reduced Port



# ASME Class 800, Three-Piece Ball Valves Series M2



**ASME B16.34 &  
API 641 Compliant**

## Features

- 3-Piece, 8 Bolt Construction
- ¼" – 2" Full Port, ½" – 2-½" Reduced Port
- ASME B16.34, Class 800 Compliant
- Standard 316 SS Ball and Stem
- Extended Socket Weld and Butt Weld Ends Available
- API 608, 5th Edition Compliant
- Fire Safe to API 607 and ISO 1049
- API 641 Certified, fugitive emissions
- Standard 304 SS Latch Lock Handles
- ISO 5211 4-Bolt Actuator Mounting Pad
- Quadrant valves, actuators, controls, and accessories are designed to work together; delivering exceptional performance.

## Ratings

WCB with 316 SS Trim: 1973 PSIG @ 100°F

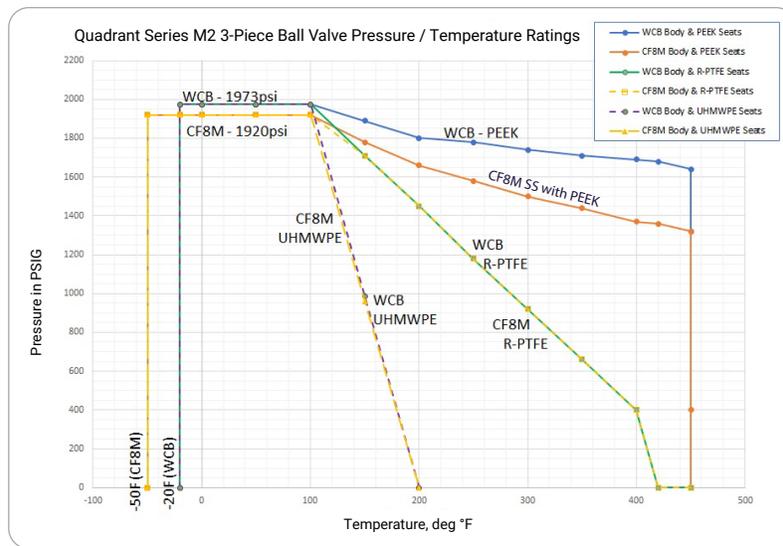
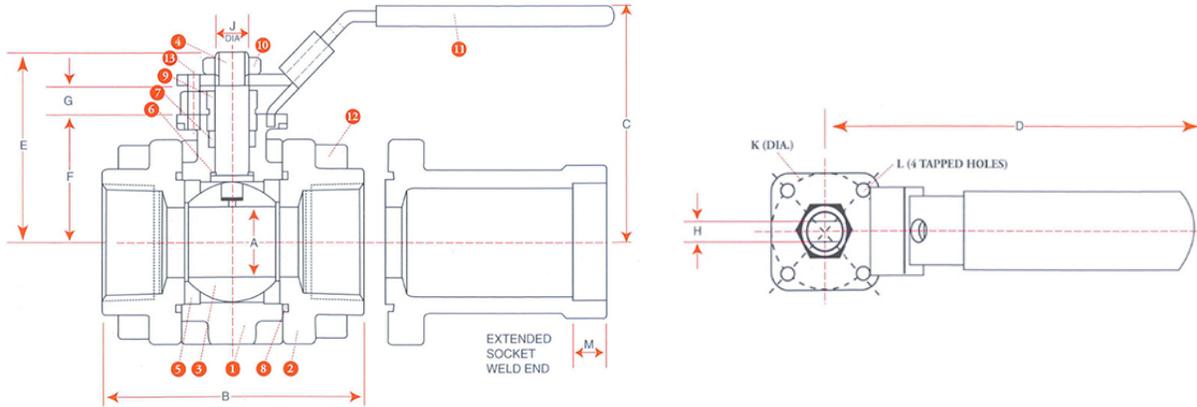
CF8M with 316 SS Trim: 1920 PSIG @ 100°F

All Sizes: 250 PSIG WSP, working steam pressure

## Materials of Construction

Part	Qty.	Description	Standard Material	Alternate Material
1	1	Body	ASTM A351 CF8M or A216 WCB	
2	2	Tailpiece	ASTM A351 CF3M or A216 WCB	
3	1	Ball	ASTM A276 316	
4	1	Stem	ASTM A276 316 or CF8M	
5	2	Seat	R-PTFE (Glass Reinforced PTFE)	PEEK, UHMWPE
6	1	Thrust Washer	R-PTFE (Glass Reinforced PTFE)	PEEK, UHMWPE
7	1	Packing Set	Graphite or R-PTFE (Glass Reinforced PTFE)	
8	2	Body Seal	Graphite or R-PTFE (Glass Reinforced PTFE)	
9	1	Packing Nut	ASTM A276 316 SS	
10	1	Handle Nut	304 SS	
11	1	Handle Assy	304 SS	
12	8	Body Bolt	A193 B8 (M2_SS) or A193 B7 (M2_CS)	
13	1	Handle Stop	304 SS	

# ASME Class 800, Three-Piece Ball Valves Series M2



## Dimensions, Weights, Cv Factors & Maximum Operating Torque

Size	A (Port)	B NPTF & STD. SW	B EXTEND SW	C	D	E	F	G	H	J DIA	K DIA	L	M	ISO Pattern	Weight Lbs.	Cv	Torque		UHMWPE IN-LBS
																	RTFE IN-LBS	PEEK IN-LBS	
¼ - ⅜" FP	0.43	2.72	N/A	2.49	4.29	1.71	1.08	0.31	0.20	0.31	1.42	¼"-20 UNC	N/A	F03	1.90	10	85	100	100
½" RP	0.43	2.72	6.00	2.49	4.29	1.71	1.08	0.31	0.20	0.31	1.42	¼"-20 UNC	0.37	F03	1.80	10	85	100	100
½" FP	0.57	2.74	7.00	2.63	4.29	1.83	1.24	0.29	0.20	0.31	1.42	¼"-20 UNC	0.37	F03	2.40	16	150	180	180
¾" RP	0.57	2.94	7.00	2.63	4.29	1.83	1.24	0.29	0.20	0.31	1.42	¼"-20 UNC	0.49	F03	2.40	25	150	180	180
¾" FP	0.81	3.19	7.50	3.05	5.59	2.34	1.50	0.37	0.20	0.31	1.65	¼"-20 UNC	0.49	F04	3.80	40	80	210	210
1" RP	0.81	3.50	7.50	3.05	5.59	2.34	1.50	0.37	0.28	0.44	1.65	¼"-20 UNC	0.49	F04	3.80	42	180	210	210
1" FP	1.00	3.74	8.00	3.39	5.67	2.69	1.81	0.4	0.28	0.44	1.65	¼"-20 UNC	0.49	F04	5.90	62	210	255	255
1-¼" RP	0.98	3.90	8.00	3.39	5.67	2.69	1.81	0.40	0.31	0.50	1.65	¼"-20 UNC	0.49	F04	5.90	55	210	255	255
1-¼" FP	1.25	4.26	8.00	3.64	7.40	2.91	1.95	0.43	0.31	0.50	1.97	¼"-20 UNC	0.49	F05	7.90	115	320	380	380
1-½" RP	1.25	4.42	8.00	3.64	7.40	2.91	1.95	0.43	0.39	0.62	1.97	¼"-20 UNC	0.49	F05	7.90	85	320	380	380
1-½" FP	1.50	4.72	9.00	3.88	7.40	3.15	2.24	0.37	0.39	0.62	1.97	¼"-20 UNC	0.49	F05	12.3	140	440	500	500
2" RP	1.50	5.04	9.00	3.88	7.40	3.15	2.24	0.37	0.39	0.62	1.97	¼"-20 UNC	0.62	F05	12.3	120	440	520	520
2" FP	2.00	5.63	10.00	5.30	11.50	4.37	3.11	0.49	0.47	0.75	2.76	⅝"-18 UNC	0.63	F07	23.6	360	550	800	800
2-½" RP	2.00	6.69	N/A	5.30	11.50	4.37	3.11	0.49	0.47	0.75	2.76	⅝"-18 UNC	0.63	F07	23.6	300	550	800	800

ASME Class 800,  
Three-Piece Ball Valves  
Series M2



## Numbering System How to order Series M2

M2	F	C	S	R	G	SL	TT	100
Series	Port Size	Body & Tailpiece Material	Ball/Stem Material	Seat Material	Seal Material	Handle Type	Ends	Size
M2	F Full (¼"–2") R Reduced (½"–2½")	C Carbon S Stainless	S 316 Stainless	R* R-PTFE P Peek U UHMWPE	R R-PTFE G* Graphite U UHMWPE	SL Stainless Latch Lock SO Stainless Oval LO Stainless Locking Oval PA Double Acting Pneumatic SA Spring Return Pneumatic XH Extended Topworks	TT FNPT WW Socket Weld WT Socket Weld x FNPT BB SCH. 80 Butt Weld XX Extended Socket Weld XT Extended SW x FNPT	025 ¼" 038 ⅜" 050 ½" 075 ¾" 100 1" 125 1-¼" 150 1-½" 200 2" 250 2-½"

\* Quadrant Series M2 valves with R-PTFE (R) seats and Graphite (G) seals comply with API 607 (American Petroleum Institute – Fire Test).

**Note:**  
Responsibility for proper selection, use and maintenance of any product remains solely with the purchaser and end user. We reserve the right to modify or improve the designs or specifications of any product at any time without notice.

### **About ASC Engineered Solutions**

ASC Engineered Solutions is defined by quality—in its products, services and support. With nearly 2,000 employees, the company's portfolio of precision-engineered piping support, valves and connections provides products to more than 4,000 customers across industries, such as mechanical, industrial, fire protection, oil and gas, and commercial and residential construction. Its portfolio of leading brands includes ABZ Valve®, AFCON®, Anvil®, Anvil EPS, Anvil Services, Basic-PSA, Beck®, Catawissa, Cooplet®, FlexHead®, FPPI®, Gruvlok®, J.B. Smith, Merit®, North Alabama Pipe, Quadrant®, SCI®, Sharpe®, SlideLOK®, SPF®, SprinkFLEX®, Trenton Pipe and VEP. With headquarters in Oak Brook, IL, ASC also has ISO 9001:2015 certified production facilities in PA, TN, IL, TX, AL, LA, KS, and RI.



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Building connections that last™

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