



Series M2-CS & SS

3-Piece Steel Ball Valve with "Live-Load" Stem Packing

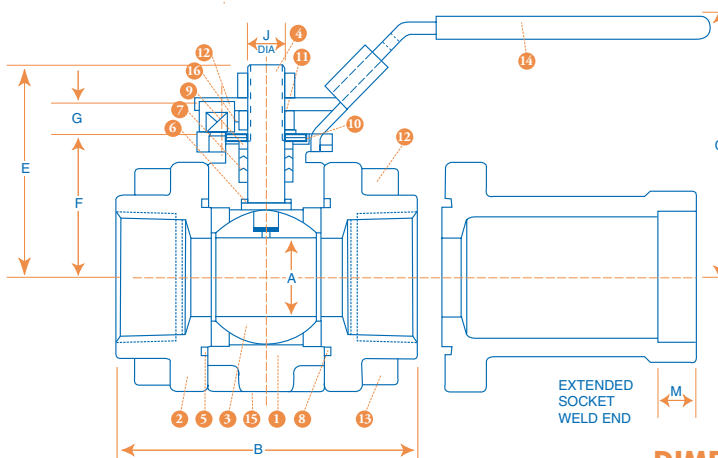
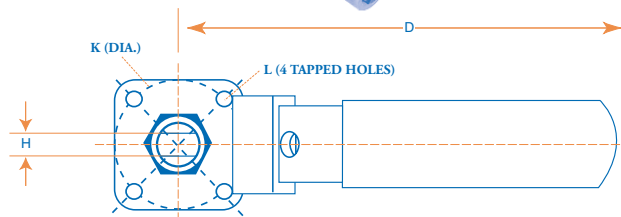
FEATURES

- 3-Piece, 8 Bolt Construction
- ASME B16.34, Class 800 Compliant
- API 608 Compliant
- Live-Load PTFE Stem Packing with PEEK Thrust Washer
- NACE MR01-75 Compliant
- ISO 5211 4 Bolt Mounting
- Standard 316SS Ball & Stem
- Standard 304SS Latch Lock Handles
- 1/4"-2" Full Port, 1/2"-2-1/2" Reduced Port
- Extended Socket Weld Ends Available
- 304SS Packing Clip Secures Packing Adjustment



RATINGS

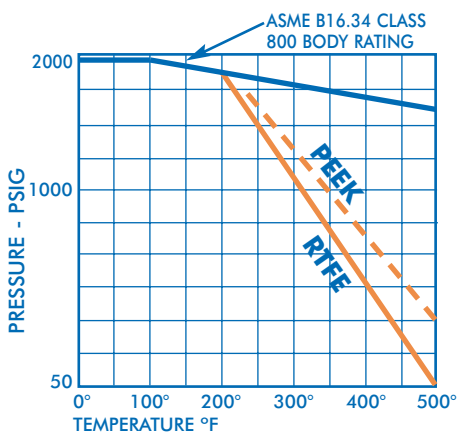
WCB/T316: 1973 PSIG @ 100°F
CF8M/T316: 1920 PSIG @ 100°F
All Sizes: 200 PSIG WSP



MATERIALS OF CONSTRUCTION

PART	QTY.	DESCRIPTION	STANDARD MATERIAL
1	1	BODY	ASTM A351 GR CF8M OR A216 GR WCB
2	2	TAILPIECE	ASTM A351 GR CF8M OR A216 GR WCB
3	1	BALL	ASTM A276 GR 316 OR CF8M
4	1	STEM	ASTM A276 GR 316 OR CF8M
5	2	SEAT	TFM (R-PTFE)
6	1	THRUST WASHER	PEEK
7	1	PACKING SET	TFE
8	2	BODY SEAL	R-PTFE
9	1	GLAND	ASTM A276 GR 316 SS
10	2	BELLEVILLE WASHER	STAINLESS STEEL
11	1	PACKING NUT	ASTM A276 GR 304 SS
12	1	STOP PIN	ASTM A276 GR 304 SS
13	8	BODY BOLT	A193 B8(M2-SS) OR A193 B7(M2-CS)
14	1	HANDLE ASSY	304SS
15	1	NAMEPLATE	304SS
16	1	PACKING CLIP	304SS
17	1	HANDLE NUT	304SS

DIMENSIONS, WEIGHTS, CV FACTORS & MAXIMUM OPERATING TORQUE



SIZE	A (PORT)	B NPTF & STD. SW	B EXTEND SW	C	D	E	F	G	H	J	K DIA	L	M	ISO PATTERN	WT. LBS.	CV	Torque RTFE IN-LBS	Torque PEEK IN-LBS
1/2" RP	0.43	2.7	6.0	2.5	4.0	1.81	1.20	0.29	0.197	0.31	1.42	1/4"-20UNC	0.38	F03	1.7	10	100	
3/4" RP	0.57	3.0	7.0	2.6	4.0	1.93	1.36	0.30	0.197	0.31	1.42	1/4"-20UNC	0.50	F03	2.2	25	200	
1" RP	0.81	3.5	7.5	3.0	4.8	2.43	1.59	0.41	0.276	0.44	1.65	1/4"-20UNC	0.50	F04	3.8	42	230	
1-1/4" RP	0.98	3.9	8.0	3.4	5.8	2.61	1.81	0.34	0.315	0.50	1.65	1/4"-20UNC	0.50	F04	5.1	55	250	
1-1/2" RP	1.25	4.5	8.0	3.7	7.5	2.91	1.95	0.37	0.394	0.62	1.97	1/4"-20UNC	0.50	F05	7.1	85	380	
2" RP	1.50	5.0	9.0	3.9	7.5	3.12	2.26	0.29	0.394	0.62	1.97	1/4"-20UNC	0.62	F05	9.8	120	520	
2-1/2" RP	2.00	6.9	N/A	5.3	11.7	4.37	3.11	0.47	0.472	0.75	2.76	5/16"-18UNC	N/A	F07	20.8	300	660	950
1/4"-3/8" FP	0.43	2.7	N/A	2.5	4.0	1.81	1.20	0.29	0.197	0.31	1.42	1/4"-20UNC	N/A	F03	1.7	10	100	
1/2" FP	0.57	2.8	7.0	2.6	4.0	1.93	1.36	0.30	0.197	0.31	1.42	1/4"-20UNC	0.38	F03	2.2	16	200	
3/4" FP	0.81	3.2	7.5	3.0	4.8	2.43	1.59	0.41	0.276	0.44	1.65	1/4"-20UNC	0.50	F04	3.8	40	230	
1" FP	1.00	3.8	8.0	3.4	5.8	2.61	1.81	0.34	0.315	0.50	1.65	1/4"-20UNC	0.50	F04	5.1	62	250	
1-1/4" FP	1.25	4.3	8.0	3.7	7.5	2.91	1.95	0.37	0.394	0.62	1.97	1/4"-20UNC	0.50	F05	7.1	115	380	
1-1/2" FP	1.50	4.8	9.0	3.9	7.5	3.12	2.26	0.29	0.394	0.62	1.97	1/4"-20UNC	0.50	F05	9.8	140	520	
2" FP	2.00	5.7	10.0	5.3	11.7	4.37	3.11	0.47	0.472	0.75	2.76	5/16"-18UNC	0.62	F07	20.8	360	660	950

Quadrant

VALVE & ACTUATOR, LLC

SERIES M2-CS & SS

REV.
2/04

NUMBERING SYSTEM ... HOW TO ORDER:

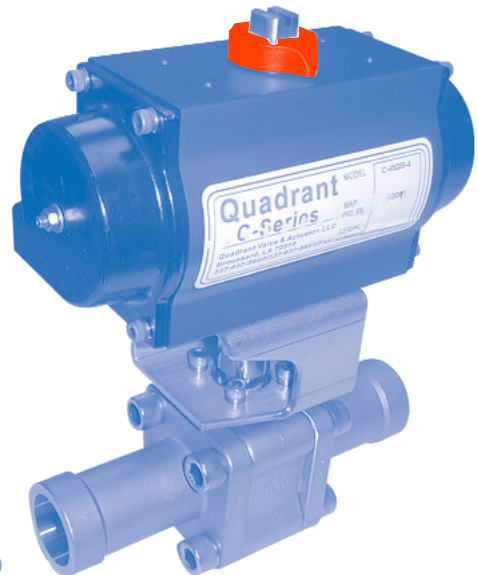
M2 F C S R Z SL II 100

SERIES	PORT SIZE	BODY & TAILPIECE MATERIAL	BALL/STEM MAT'L	SEAT MAT'L	SEAL MAT'L	HANDLE TYPE	ENDS	SIZE
M2	F = FULL R = REDUCED	C = A216 WCB CARBON STEEL S = A351 GR CR8M STAINLESS A = A351 GR CN7M ALLOY 20 I = A494 GR CZ-100 NICKEL D = A995 GRADE 4A DUPLEX SS E = A995 GRADE 6A SUPER DUPLEX SS	S = ASTM A276 GR 316 SS A = A351 GR CN7M ALLOY 20 I = A494 GR CZ-100 NICKEL D = A995 GRADE 4A DUPLEX SS E = A995 GRADE 6A SUPER DUPLEX SS	R = R-PTFE P = PEEK U = UHMW	Z = LIVE LOADED PTFE PACKING, PEEK THRUST WASHER, R-PTFE SEALS X = LIVE LOADED GRAPHITE PACKING, PEEK THRUST WASHER, GRAPHITE SEALS	SL = STAINLESS LATCH LOCK SO = STAINLESS OVAL LO = STAINLESS LOCKING OVAL PA = DOUBLE ACTING PNEUMATIC SA = SPRING RETURN PNEUMATIC SR = DEADMAN HANDLE XT = EXTENDED TOPWORKS	TT = FNPT MT = MxN NPT MM = MXM NPT WW = SOCKET WELD WT = SOCKET WELD x FNPT BB = SCH. 80 BUTT WELD XX = EXTENDED SOCKET WELD XT = EXTENDED SW x FNPT	025 = 1/4" 038 = 3/8" 050 = 1/2" 075 = 3/4" 100 = 1" 125 = 1-1/4" 150 = 1-1/2" 200 = 2" 250 = 2-1/2"



2" Full Port
M2-SS

1" Full Port
M2-SS Extended
Socket Weld
with C-Series
Actuator



Complete Range
of Extended
Socket Weld Tailpieces