

# Warren® VALVES

## Series W21

### Seal Welded High Pressure Ball Valves 1/4" - 2" ASME Class 900

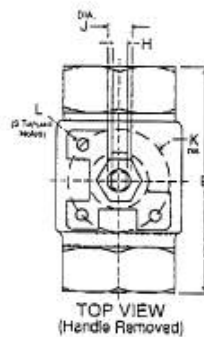
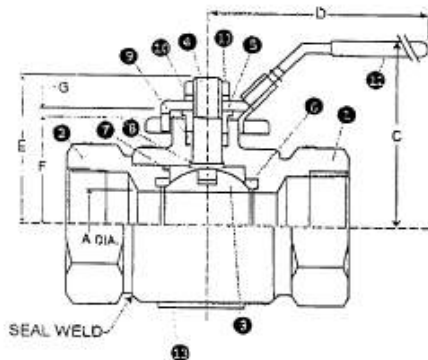


#### FEATURES

- SEAL WELDED CONSTRUCTION
- Available in WCB Carbon Steel with 316SS Trim, or Full CF8M/316 Stainless
- 2160 WOG Rating on CF8M, 2220 WOG on WCB
- Fully Compliant with ASME B16.34 Class 900
- NACE MR-01-75 Compliant
- API 607 Fourth Edition Fire Safe
- Fully Compliant with API 608
- Standard ISO Actuator Mounting Pads on all sizes
- Standard Locking Stainless Steel Handles
- Locking Stainless Steel Oval Handles Available
- "Dead-Man" Spring Return Stainless Steel Handle Available 1/4"-1" Sizes
- The Ultimate Valve for Safe High Pressure Service

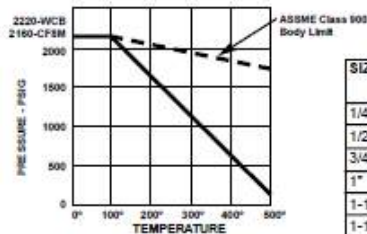
#### RATINGS

2160 PSIG @ 100F WATER, OIL, GAS (CF8M)  
2220 PSIG @ 100F WATER, OIL, GAS (WCB)  
250 PSIG SAT. STEAM



#### MATERIALS OF CONSTRUCTION

PART	DESCRIPTION	STANDARD MATERIAL
1	BODY	CF8M or WCB
2	TAILPIECE	CF8M or WCB
3	BALL	ASTM A276 Gr.316 SS
4	STEM	ASTM A276 Gr.316 SS
5	PACKING NUT	ASTM A276 Gr.316 SS
6	SEATS (2)	R-PTFE
7	TAILPIECE SEAL	GRAPHITE
8	THRUST WASHER	R-PTFE
9	STEM PACKING	GRAPHITE
10	LOCK WASHER	304 SS
11	HANDLE ASSY	304 SS
12	HANDLE NUT	304 SS
13	NAME PLATE	304 SS



#### DIMENSIONS, WEIGHTS, CV FACTORS & MAXIMUM OPERATING TORQUE

SIZE	A	B	C	D	E	F	G	H	J	K	L	ISO PATTERN	WEIGHT LBS.	Cv	MAX. TORQUE IN-LB
1/4-3/8"	0.43	2.65	2.23	5.04	1.53	0.78	0.35	0.20	0.31	1.42	1/4"-20 UNC	F03	1.00	10	40 IN-LB
1/2"	0.43	2.65	2.23	5.04	1.53	0.78	0.35	0.20	0.31	1.42	1/4"-20 UNC	F03	1.00	16	75 IN-LB
3/4"	0.59	3.06	2.72	5.75	2.06	1.03	0.43	0.28	0.44	1.65	1/4"-20 UNC	F04	1.80	27	120 IN-LB
1"	0.81	3.54	2.87	6.75	2.33	1.34	0.40	0.28	0.44	1.65	1/4"-20 UNC	F04	2.50	42	140 IN-LB
1-1/4"	1.00	4.01	3.47	7.36	2.76	1.61	0.45	0.35	0.56	1.97	1/4"-20 UNC	F05	3.90	52	250 IN-LB
1-1/2"	1.25	4.26	3.69	7.36	2.98	1.83	0.45	0.35	0.56	1.97	1/4"-20 UNC	F05	5.50	60	300 IN-LB
2"	1.50	4.94	3.39	7.36	3.18	2.00	0.47	0.35	0.56	1.97	1/4"-20 UNC	F05	8.50	115	320 IN-LB