

## Style BVM3

Ball Valve

Carbon Steel (ASTM A 216, Grade WCB)
Stainless Steel (ASTM A 351, Grade CF8M)

NPT, Socket Weld, Butt Weld, Extended Socket Weld and Extended Butt Weld Ends



### 3-Piece Maintenance Design Ball Valve

#### **APPLICATIONS**

Industrial and Oil/Gas piping applications where 3-Piece construction is desired/required to facilitate future maintenance and repair, weld-in applications requiring valve disassembly to protect internal components during the welding process, and applications that require ASME B16.34 and API 608 compliance leading to ASME B31.1 and B31.3 Code Compliance.

#### CONSTRUCTION

Keckley Style BVM3 3-Piece Maintenance Design Ball Valves employ investment cast ASTM Grade materials that are properly heat-treated and chemically finished to insure proper corrosion resistance, strength and NACE MR0175 compliance. The BVM3 series body bolts and threaded body center section insures superior body seal retention/sealing under high piping stress and elevated temperature applications. All sizes comply with ASME B16.34 and API 608 Standards for Class 800 service. Available extended socket weld and butt weld ends allow welding into the piping without disassembly. Each valve is tested to API 598, and all valves comply with API 607 6th Edition for Fire-Safe performance.

#### **FEATURES**

- •3-Piece Maintenance Design
- ASME B16.34 Class 800 Compliant
- API 608 Class 800 Compliant
- API 607 6th Edition Fire-Safe
- 1/4" 2" Full Port and 1/2" 2-1/2" Reduced Port Sizes Available
- All Models are NACE MR0175 Compliant
- Extended Packing Adjustment Nut for ease of adjustment
- •ISO 5211 Actuator Mounting Pads on All Sizes
- Standard Locking Stainless Steel Handles
- Electrically Grounded Stem
- Optional PEEK Seats for Elevated Temperature Services
- Optional Locking Stainless Steel Oval Handles
- Extended Topworks Available

#### **ORDERING**

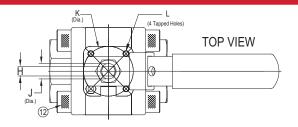
Reference *How to Order BVM3 Ball Valves* for building the Keckley Product Number.

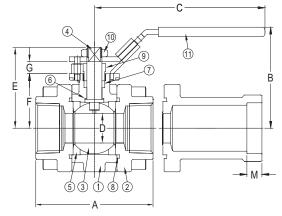
WORKING PRESSURES - NON SHOCK

MATERIAL	MEDIA	1/4" to 2-1/2"	8 mm to 65 mm	
ASTM A 216, Grade WCB	W.O.G.	1973 PSI @ 100°F	13603 KPa @ 38°C	
MATERIAL	MEDIA	1/4" to 2-1/2"	8 mm to 65 mm	
ASTM A 351, Grade CF8M	W.O.G.	1920 PSI @ 100°F	13238 KPa @ 38°C	
MATERIAL	MEDIA	1/4" to 2-1/2"	8 mm to 65 mm	
ASTM A 216, Grade WCB & ASTM A 351, Grade CF8M	Saturated Steam (WSP)	250 PSI @ 406°F	1724 KPa @ 208°C	



#### **TECHNICAL DATA DIMENSIONS AND WEIGHTS**





# Style BVM3 3-Piece Maintenance Design Ball Valve

NPT, Socket Weld, or Butt Weld Ends.

PARTS LIST								
ITEM	DESCRIPTION MATERIAL							
1	Body	A 216 Gr. WCB	A 351 Gr. CF8M					
2	Tailpiece (2)	A 216 Gr. WCB	A 351 Gr. CF8M					
3	Ball	A 276 Gr. 316	A 276 Gr. 316					
4	Stem	A 276 Gr. 316	A 276 Gr. 316					
5	Seat (2) <sup>†</sup>	R-PTFE	R-PTFE					
6	Thrust Washer	R-PTFE	R-PTFE					
7	Stem Packing	Graphite	Graphite					
8	Body Seal (2)	Graphite	Graphite					
9	Packing Gland	A 276 Gr. 316	A 276 Gr. 316					
10	Lock Nut	304SS	304SS					
11	Handle	300 Series SS	300 Series SS					
12	Body Bolts (8)	A 193, Grade B7	A 193, Grade B8					

Optional PEEK Seats for High Temp Service are available.

		DIMENSIONS													
SIZE		A NPT OR SW		A EXTENDED SW		В	C	D	E	_	G	H	-	W.	
Reduced	Full	Reduced	Full	Reduced	Full	D		, D	_	'	0	"	١	IX.	-
Port	Port	Port	Port	Port	Port										
1/2	1/4, 3/8	2.7	2.7	6.0	N/A	2.5	4.3	0.43	1.71	1.08	0.31	0.197	0.31	1.42	1/4"-20 UNC
3/4	1/2	3.0	2.8	7.0	7.0	2.6	4.3	0.57	1.83	1.24	0.31	0.197	0.31	1.42	1/4"-20 UNC
1	3/4	3.5	3.2	7.5	7.5	3.0	5.7	0.81	2.34	1.50	0.37	0.276	0.44	1.65	1/4"-20 UNC
1-1/4	1	3.9	3.8	8.0	8.0	3.4	5.8	1.00	2.69	1.81	0.40	0.315	0.50	1.65	1/4"-20 UNC
1-1/2	1-1/4	4.5	4.3	8.0	8.0	3.7	7.5	1.25	2.91	1.95	0.43	0.394	0.62	1.97	1/4"-20 UNC
2	1-1/2	5.0	4.8	9.0	9.0	3.9	7.5	1.50	3.15	2.26	0.35	0.394	0.62	1.97	1/4"-20 UNC
2-1/2	2	6.9	5.7	N/A	10.0	5.3	11.7	2.00	4.37	3.11	0.49	0.472	0.75	2.76	5/16"-18 UNC

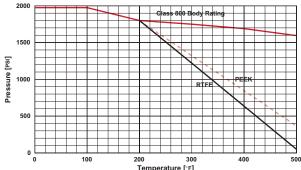
Certified dimensional drawings are available upon request.

<sup>†</sup>This table reflects only the nearest metric equivalents.

SIZE		DI	MENSIO	NS		FLOW COE	MAX TORQUE		
		IV	1	ISO	WEIGHT	C			
Reduced	Full	Reduced	Full	PATTERN	(lbs)	Reduced	Full	in/lb	
Port	Port	Port	Port	. ,		Port	Port	III/ID	
1/2	1/4, 3/8	0.38	N/A	F03	1.7	10	10	100	
3/4	1/2	0.50	0.38	F03	2.2	25	22	200	
1	3/4	0.50	0.50	F04	3.8	42	40	230	
1-1/4	1	0.50	0.50	F04	5.1	55	62	250	
1-1/2	1-1/4	0.50	0.50	F05	7.1	85	115	380	
2	1-1/2	0.62	0.50	F05	9.8	120	140	520	
2-1/2	2	N/A	0.62	F07	20.8	300	360	660	

Certified dimensional drawings are available upon request.

## PRESSURE vs. TEMPERATURE CHART



<sup>†</sup>This table reflects only the nearest metric equivalents.