

# Ball Valve Catalog



**BEHRINGER**<sup>®</sup>



# Behringer Ball Valve Ordering Code

**Behringer Ball Valve** **BBV** / **T** **2** **H** **1** **D** **1** **F** - **LO** - **P**

**Valve Type:** \_\_\_\_\_

Omit – 2 way  
 D – 3 way diverter type  
 3 – true 3 way  
 4 – 4 way

**Connection Type:** \_\_\_\_\_

T – NPTF female  
 O – SAE O-Ring type female  
 G – BSPP female  
 F3 – SAE Code 61 O-ring Flange  
 F6 – SAE Code 62 O-ring Flange  
 L3 – SAE Code 61 Face Flange  
 L6 – SAE Code 62 Face Flange  
 C – Cartridge mount  
 M – Manifold/Subplate mount

**Port Size:** \_\_\_\_\_

1 – 1/8”  
 2 – 1/4”  
 3 – 3/8”  
 4 – 1/2”  
 5 – 3/4”  
 6 – 1”  
 7 – 1-1/4”  
 8 – 1-1/2”  
 9 – 2”

**Pressure Rating:** \_\_\_\_\_

(may be reduced by connection type or seal materials)  
 H – High 5000 PSI nominal rating  
 U – Ultra High 20,000 psi (1” size 14,500 psi)

**Housing Material:** \_\_\_\_\_

1 – Carbon Steel (standard)  
 2 – 316 Stainless or equivalent (special)

**Ball seal material:** \_\_\_\_\_

D – POM (standard)  
 P – Peek (special)  
 T – PTFE (special)  
 T3 – PTFE comp.3 (special)  
 (other seals available by special order)

**Ball and Spindle Material:** \_\_\_\_\_

1 – Carbon Steel Spindle, Chrome Plated Carbon Steel Ball (standard)  
 2 – 316 Stainless or equivalent Spindle and Ball (special)  
 3 – Chrome plated brass trunion type ball (special)

**Spindle Seal Material:** \_\_\_\_\_

F – Fluoroelastomer, FPM (standard)  
 E – EPR (special)  
 B – Buna (special)  
 T – PTFE (special)  
 T3 – PTFE comp.3 (special)  
 (other seals available by special order)

**Supplementary details:** \_\_\_\_\_

LO – Lock-out device

Two way sites 1 ¼ - 2” And all diverters (valve type D)

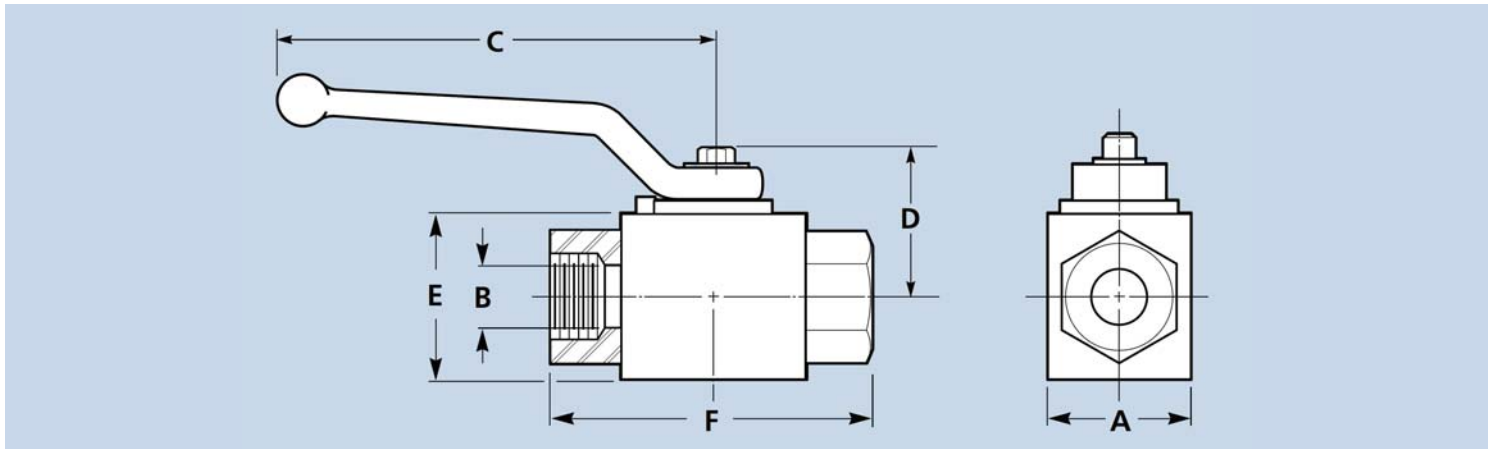
Please contact factory for price and availability on special order items

# Behringer 2-Way Ball Valves

## Block Body Valves with Threaded Connections

Size Range: 1/4" - 1"

Steel Material  
 Full Port Valves  
 Delrin Ball Seats (Others available on request)  
 Viton O-rings (Others available on request)  
 Black oxide coating resists corrosion  
 Temp range -20°F to 215°F  
 Hard chrome-plated ball



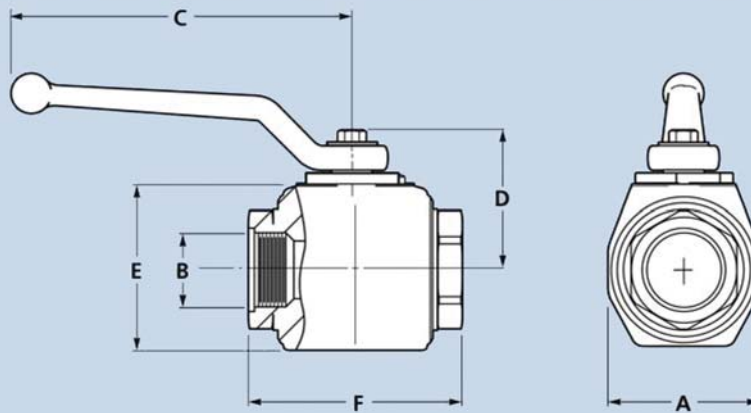
High Pressure Block Body Valves 1/4 - 1			Working Pressure		Dimensions (in.)					
Size	Thread Type	Part Number	PSI	Bar	A	B	C	D	E	F
1/4	NPT	BBV/T2H1D1F	7250	500	0.79	0.75	2.99	0.39	0.98	2.72
	BSP	BBV/G2H1D1F	7250	500	0.79	0.75	2.99	0.39	0.98	2.72
	SAE	BBV/O2H1D1F	7250	500	0.79	0.75	2.99	0.39	0.98	2.72
3/8	NPT	BBV/T3H1D1F	7250	500	1.18	0.95	3.94	0.57	1.38	2.87
	BSP	BBV/G3H1D1F	7250	500	1.18	0.95	3.94	0.57	1.38	2.87
	SAE	BBV/O3H1D1F	7250	500	1.18	0.95	3.94	0.57	1.38	2.87
1/2	NPT	BBV/T4H1D1F	7250	500	1.38	1.18	4.45	0.67	1.58	3.23
	BSP	BBV/G4H1D1F	7250	500	1.38	1.18	4.45	0.67	1.58	3.23
	SAE	BBV/O4H1D1F	7250	500	1.38	1.18	4.45	0.67	1.58	3.23
3/4	NPT	BBV/T5H1D1F	5880	400	1.77	1.62	7.36	0.95	2.17	3.66
	BSP	BBV/G5H1D1F	5880	400	1.77	1.62	7.36	0.95	2.17	3.66
	SAE	BBV/O5H1D1F	5880	400	1.77	1.62	7.36	0.95	2.17	3.66
1	NPT	BBV/T6H1D1F	5880	400	2.17	1.97	7.36	1.03	2.36	4.53
	BSP	BBV/G6H1D1F	5880	400	2.17	1.97	7.36	1.03	2.36	4.53
	SAE	BBV/O6H1D1F	5880	400	2.17	1.97	7.36	1.03	2.36	4.53

# Behringer 2-Way Ball Valves

## Round Body Valves with Threaded Connections

Size Range: 1-1/4" - 2"

Forged Body Steel Material  
 Full Port Valves  
 Delrin Ball Seats (Others available on request)  
 Viton O-rings (Others available on request)  
 Black oxide coating resists corrosion  
 Temp range -20°F to 215°F  
 Nickel-plated ball



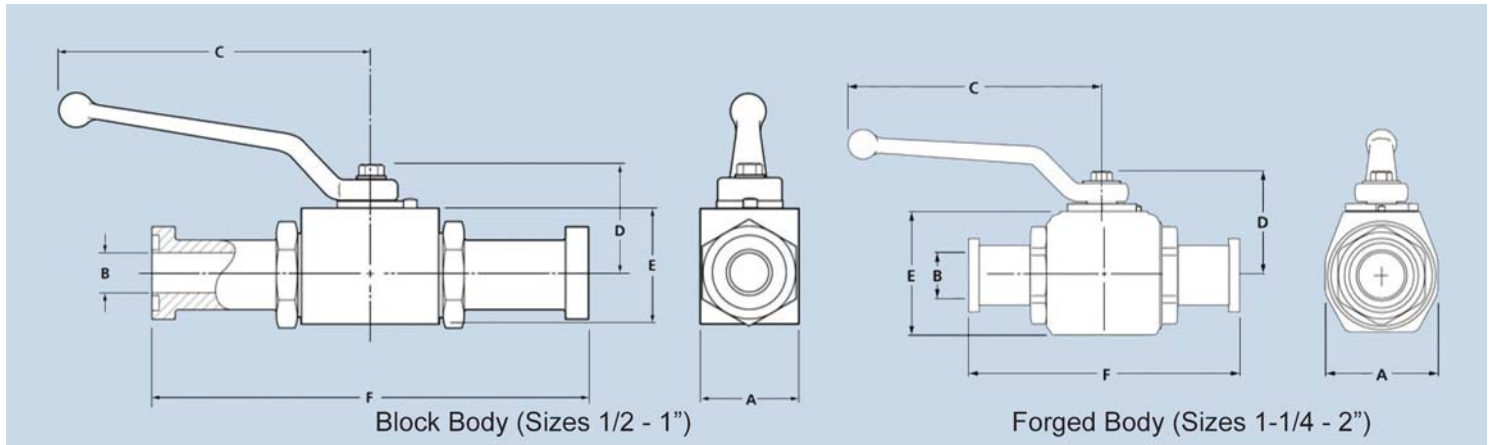
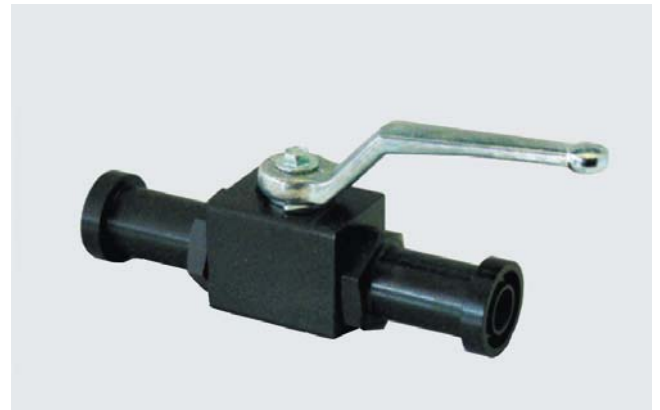
High Pressure Block Body Valves 1-1/4 - 2			Working Pressure		Dimensions (in.)					
Size	Thread Type	Part Number	PSI	Bar	A	B	C	D	E	F
1 1/4	NPT	BBV/T7H1D1F-P	5880	400	2.99	1.26	8.3	2.1	3.3	4.5
	BSP	BBV/G7H1D1F-P	5880	400	2.99	1.26	8.3	2.1	3.3	4.5
	SAE	BBV/O7H1D1F-P	5880	400	2.99	1.26	8.3	2.1	3.3	4.5
1 1/2	NPT	BBV/T8H1D1F-P	5880	400	3.27	1.5	8.3	2.73	3.62	5.3
	BSP	BBV/G8H1D1F-P	5880	400	3.27	1.5	8.3	2.73	3.62	5.3
	SAE	BBV/O8H1D1F-P	5880	400	3.27	1.5	8.3	2.73	3.62	5.3
2	NPT	BBV/T9H1D1F-P	5880	400	3.94	1.89	8.5	3.15	4.37	5.5
	BSP	BBV/G9H1D1F-P	5880	400	3.94	1.89	8.5	3.15	4.37	5.5
	SAE	BBV/O9H1D1F-P	5880	400	3.94	1.89	8.5	3.15	4.37	5.5

# Behringer 2-Way Ball Valves

## Ball Valves with Split Flange Adapters

Size Range: 1/2" - 2"

SAE Code 61 or Code 62 Split Flange Ends  
 Steel Material  
 Full Port Valves  
 Delrin Ball Seats (Others available on request)  
 Viton O-rings (Others available on request)  
 Black oxide coating resists corrosion  
 Temp range -20°F to 215°F  
 Nickel-plated ball



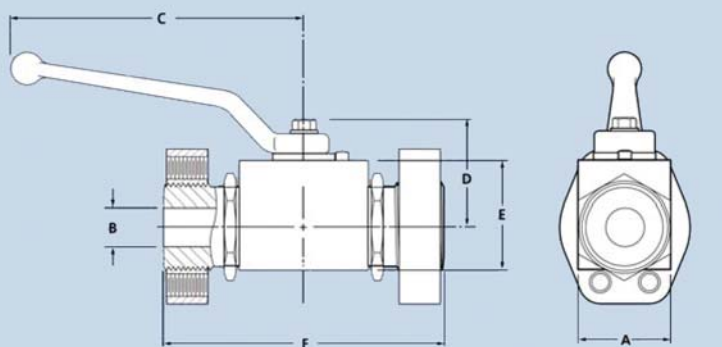
Split Flange Ball Valves Code 61/62			Working Pressure		Dimensions (in.)					
Size	Code Size	Part Number	PSI	Bar	A	B	C	D	E	F
1/2	61	BBV/F3-4H1D1F-P	4630	315	1.37	0.49	4.21	1.32	1.57	5.95
	62	BBV/F6-4H1D1F-P	5880	400	1.37	0.49	4.21	1.32	1.57	5.95
3/4	61	BBV/F3-5H1D1F-P	4630	315	1.93	0.75	6.5	1.9	2.24	6.38
	62	BBV/F6-5H1D1F-P	5880	400	1.93	0.75	6.5	1.9	2.24	6.85
1	61	BBV/F3-6H1D1F-P	4630	315	2.36	0.95	6.5	1.95	2.36	7.01
	62	BBV/F6-6H1D1F-P	5880	400	2.36	0.95	6.5	1.95	2.36	7.8
1 1/4	61	BBV/F3-7H1D1F-P	3675	250	2.99	1.25	8.3	2.6	3.3	7.5
	62	BBV/F6-7H1D1F-P	5880	400	2.99	1.25	8.3	2.6	3.3	8.78
1 1/2	61	BBV/F3-8H1D1F-P	2940	200	3.27	1.5	8.3	2.74	3.62	9.1
	62	BBV/F6-8H1D1F-P	5880	400	3.27	1.5	8.3	2.74	3.62	11.07
2	61	BBV/F3-9H1D1F-P	2940	200	3.94	1.89	8.3	3.15	4.37	9.14
	62	BBV/F6-9H1D1F-P	5880	400	3.94	1.89	8.3	3.15	4.37	12.44

# Behringer 2-Way Ball Valves

Size Range: 1/2" - 2"

## Ball Valves with Full Flange Ends

SAE Code 61 or Code 62 Full Flange Ends  
 Steel Material  
 Full Port Valves  
 Delrin Ball Seats (Others available on request)  
 Viton O-rings (Others available on request)  
 Black oxide coating resists corrosion  
 Temp range -20°F to 215°F  
 Nickel-plated ball



Shown with Flange removed

Full Bolt Flange Ball Valves Code 61/62			Working Pressure		Dimensions (in.)						Thread Size	
Size	Code Size	Part Number	PSI	Bar	A	B	C	D	E	F	Metric	UNC
1/2	61	BBV/BF3-4H1D1F-*	4630	315	1.37	0.49	4.21	1.32	1.57	4.09	M8	5/16-18
	62	BBV/BF6-4H1D1F-*	5880	400	1.37	0.49	4.21	1.32	1.57	4.09	M8	5/16-18
3/4	61	BBV/BF3-5H1D1F-*	4630	315	1.93	0.75	6.5	1.9	2.24	4.76	M10	3/8-16
	62	BBV/BF6-5H1D1F-*	5880	400	1.93	0.75	6.5	1.9	2.24	4.76	M10	3/8-16
1	61	BBV/BF3-6H1D1F-*	4630	315	2.36	0.95	6.5	1.95	2.36	5.24	M10	3/8-16
	62	BBV/BF6-6H1D1F-*	5880	400	2.36	0.95	6.5	1.95	2.36	5.24	M10	3/8-16
1 1/4	61	BBV/BF3-7H1D1F-*	3675	250	2.99	1.25	8.3	2.6	3.3	6.42	M10	7/16-18
	62	BBV/BF6-7H1D1F-*	5880	400	2.99	1.25	8.3	2.6	3.3	6.42	M14	1/2-13
1 1/2	61	BBV/BF3-8H1D1F-*	2940	200	3.27	1.5	8.3	2.74	3.62	6.61	M12	1/2-13
	62	BBV/BF6-8H1D1F-*	5880	400	3.27	1.5	8.3	2.74	3.62	6.61	M16	5/8-11
2	61	BBV/BF3-9H1D1F-*	2940	200	3.94	1.89	8.3	3.15	4.37	7.32	M12	3/4-10
	62	BBV/BF6-9H1D1F-*	5880	400	3.94	1.89	8.3	3.15	4.37	7.32	M20	3/4-10

\*NOTE: Valves come standard with metric bolt holes. For UNC bolt holes, add -UNC to end of part number. Sizes 1/2"-1" are block body, sizes 1 1/4"-2" are forged body.

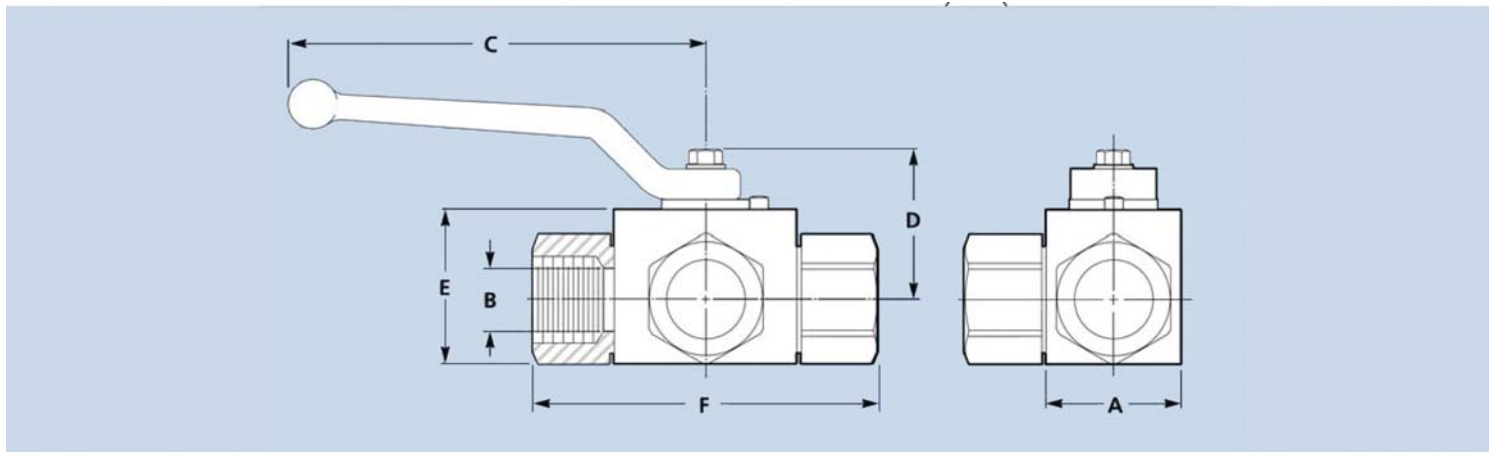
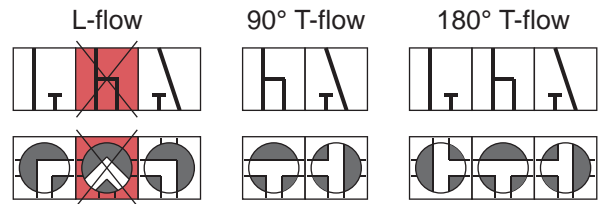


# Behringer 3-Way Ball Valves

Size Range: 1/4" - 1"

## Block Body Diverter Valves with Threaded Connections

Steel Material  
 Full Port Valves  
 Delrin Ball Seats (Others available on request)  
 Viton O-rings (Others available on request)  
 Black oxide coating resists corrosion  
 Temp range -20°F to 215°F  
 Nickel-plated ball  
 L-flow pattern standard, 90° and 180° T-flow patterns available on request



3-Way Diverter Valves 1/4 - 1			Working Pressure		Dimensions (in.)					
Size	Thread Type	Part Number	PSI	Bar	A	B	C	D	E	F
1/4	NPT	BBVD/T2H1D1F-P-*	5880	400	1.02	0.24	4.21	1.2	1.26	2.72
	SAE	BBVD/O2H1D1F-P-*	5880	400	1.02	0.24	4.21	1.2	1.26	2.72
3/8	NPT	BBVD/T3H1D1F-P-*	5880	400	1.26	0.39	4.21	1.29	1.5	2.87
	SAE	BBVD/O3H1D1F-P-*	5880	400	1.26	0.39	4.21	1.29	1.5	2.87
1/2	NPT	BBVD/T4H1D1F-P-*	5145	350	1.38	0.51	4.21	1.31	1.57	3.62
	SAE	BBVD/O4H1D1F-P-*	5145	350	1.38	0.51	4.21	1.31	1.57	3.62
3/4	NPT	BBVD/T5H1D1F-P-*	5145	350	1.93	0.79	4.21	1.91	2.24	3.82
	SAE	BBVD/O5H1D1F-P-*	5145	350	1.93	0.79	6.5	1.91	2.24	3.82
1	NPT	BBVD/T6H1D1F-P-*	5145	350	2.36	0.94	6.5	1.95	2.36	4.45
	SAE	BBVD/O6H1D1F-P-*	5145	350	2.36	0.94	6.5	1.95	2.36	4.45

\* blank = L-flow pattern, T = 90° T-flow pattern, T180 = 180° T-flow pattern

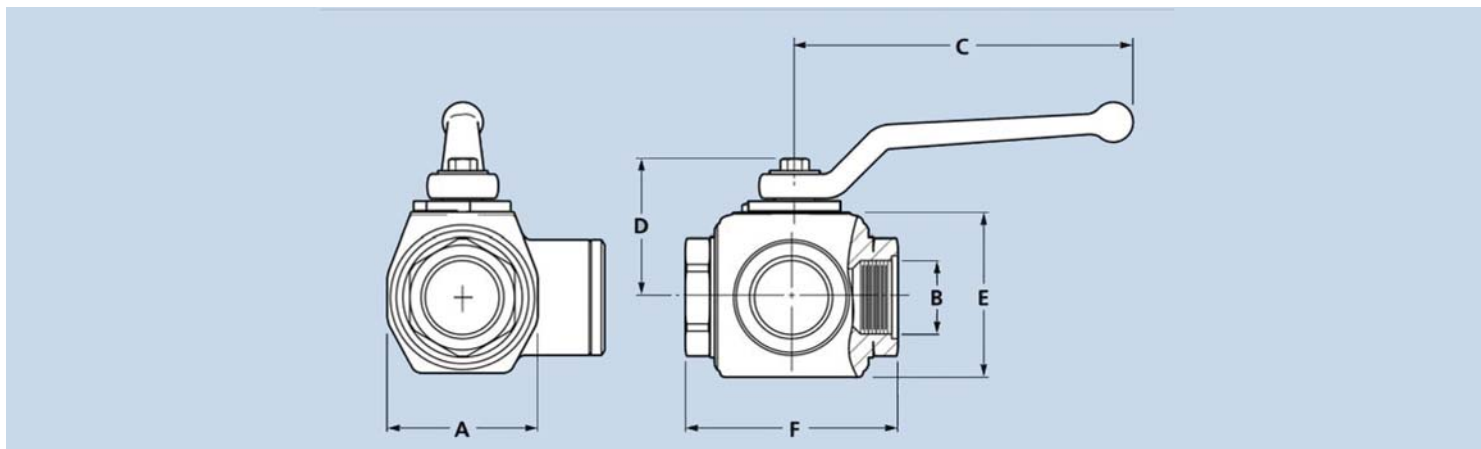
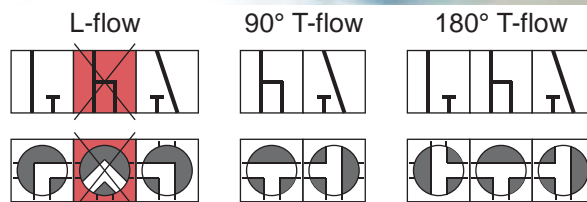
**Note:** Diverter valves utilize a floating ball principal which requires that the pressure in the open ports be greater than the pressure in the closed port in order to seal properly.

# Behringer 3-Way Ball Valves

## Round Body Diverter Valves with Threaded Connections

Steel Material  
 Full Port Valves  
 Delrin Ball Seats (Others available on request)  
 Viton O-rings (Others available on request)  
 Black oxide coating resists corrosion  
 Temp range -20°F to 215°F  
 Nickel-plated ball  
 L-flow pattern standard, 90° and 180° T-flow patterns available on request

Size Range: 1-1/4" - 2"



3-Way Diverter Valves 1-1/4 - 2			Working Pressure		Dimensions (in.)					
Size	Thread Type	Part Number	PSI	Bar	A	B	C	D	E	F
1 1/4	NPT	BBVD/T7H1D1F-P-*	5145	350	2.99	1.18	8.5	2.6	3.3	4.53
	SAE	BBVD/O7H1D1F-P-*	5145	350	2.99	1.18	8.5	2.6	3.3	4.53
1 1/2	NPT	BBVD/T8H1D1F-P-*	5145	350	3.27	1.37	8.3	2.73	3.62	4.81
	SAE	BBVD/O8H1D1F-P-*	5145	350	3.27	1.37	8.3	2.73	3.62	4.81
2	NPT	BBVD/T9H1D1F-P-*	5145	350	3.94	1.73	8.3	3.15	4.37	5.53
	SAE	BBVD/O9H1D1F-P-*	5145	350	3.94	1.73	8.3	3.15	4.37	5.53

\* blank = L-flow pattern, T = 90° T-flow pattern, T180 = 180° T-flow pattern

**Note:** Diverter valves utilize a floating ball principal which requires that the pressure in the open ports be greater than the pressure in the closed port in order to seal properly.

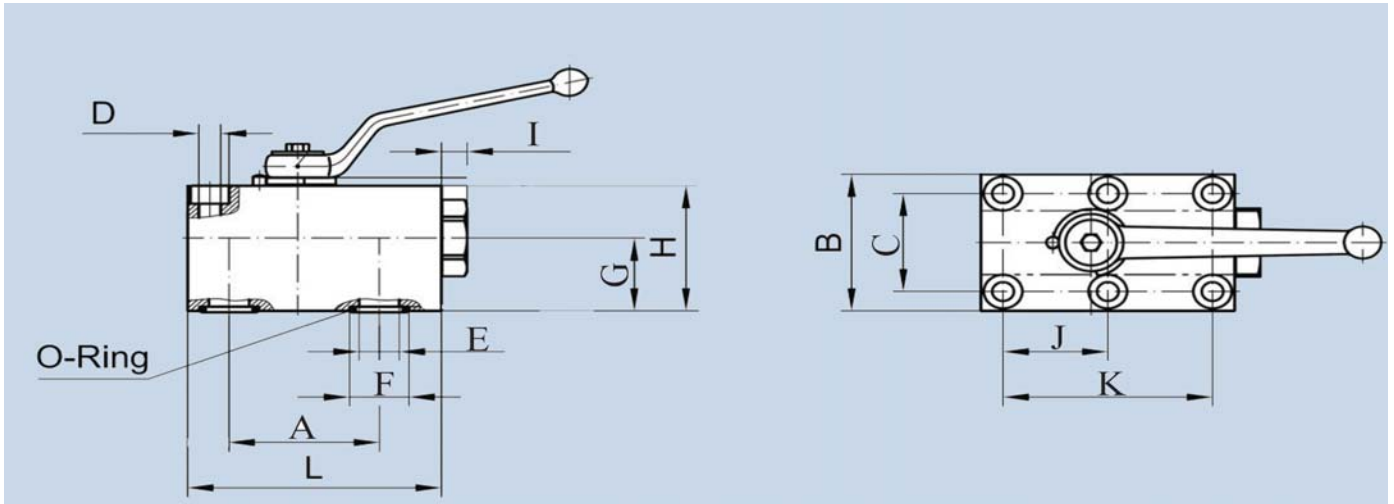


# Behringer 2 Way Manifold Mount Ball Valves

## Ball Valves for Manifold Mounting

Size Range: 1/4" - 2"

Block body  
 Full Port Valves  
 POM Ball Seats (Others available on request)  
 FKM/FPM O-rings  
 (Others available on request)  
 Black oxide coating resists corrosion  
 Temp range -20°F to 215°F  
 Nickel-plated ball



2 Way Manifold Mount Valves			Working Pressure		Dimensions (in.)											
Size	Series	Part Number	PSI	Bar	A	B	C	D	E	F	G	H	I	J	K	L
1/4	2-Way	BBV/M2H1D1F	7250	500	1.37	1.57	1.06	0.25	0.23	0.47	0.78	1.37	0.17	0.68	1.37	2.32
3/8	2-Way	BBV/M3H1D1F	7250	500	1.73	2.16	1.57	0.33	0.37	0.59	0.96	1.77	0.27	1.08	2.17	2.87
1/2	2-Way	BBV/M4H1D1F	7250	500	2.28	2.36	1.77	0.33	0.49	0.98	1.26	2.16	0.39	1.63	3.26	3.85
3/4	2-Way	BBV/M5H1D1F	5880	400	2.72	2.75	2	0.41	0.78	1.81	1.53	2.75	0.47	1.91	3.82	4.61
1	2-Way	BBV/M6H1D1F	5880	400	3.19	3.15	2.36	0.41	0.94	1.37	1.81	3.15	0.27	2.26	4.52	5.43
1 1/4	2-Way	BBV/M7H1D1F	5880	400	3.77	3.93	3.07	0.51	1.25	1.57	2.23	3.93	0.43	2.68	5.35	6.5
1 1/2	2-Way	BBV/M8H1D1F	5880	400	4.41	5.12	3.74	0.67	1.5	1.9	2.07	3.94	0.98	2.2	4.4	6.89
2	2-Way	BBV/M9H1D1F	5880	400	5.35	5.9	4.4	0.82	1.89	2.19	2.17	4.33	0.98	2.68	5.35	8.46

# Behringer 3 Way Manifold Mount Ball Valves

## Ball Valves for Manifold Mounting

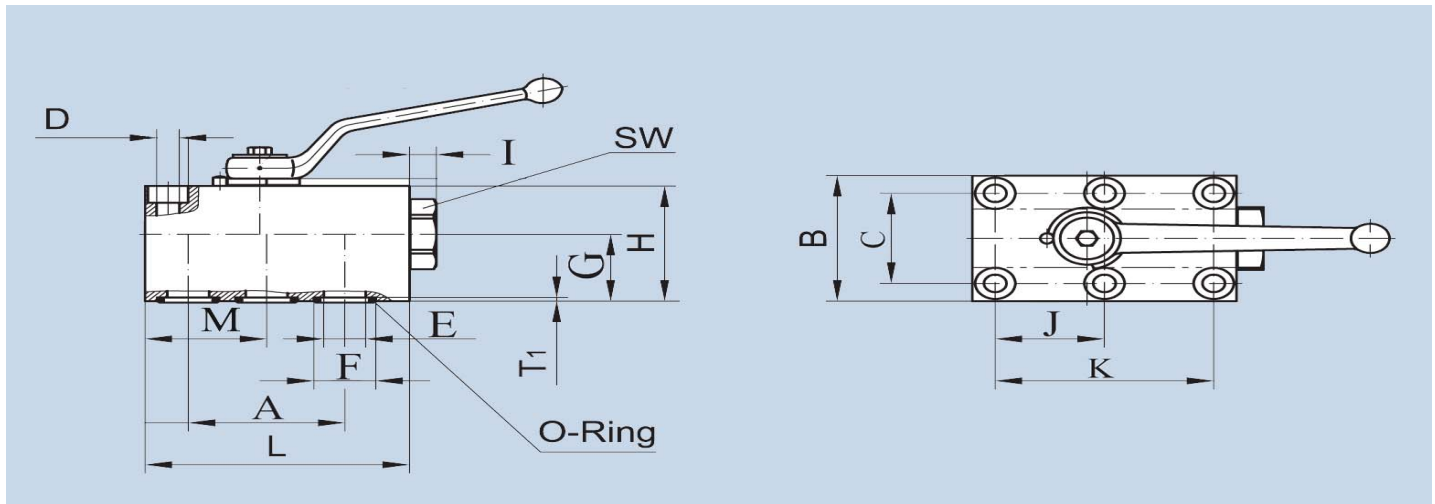
Block body  
 Full Port Valves  
 POM Ball Seats (Others available on request)  
 FKM/FPM O-rings  
 (Others available on request)  
 Black oxide coating resists corrosion  
 Temp range -20°F to 215°F  
 Nickel-plated ball

Size Range: 1/4" - 2"



L-flow

90° T-flow

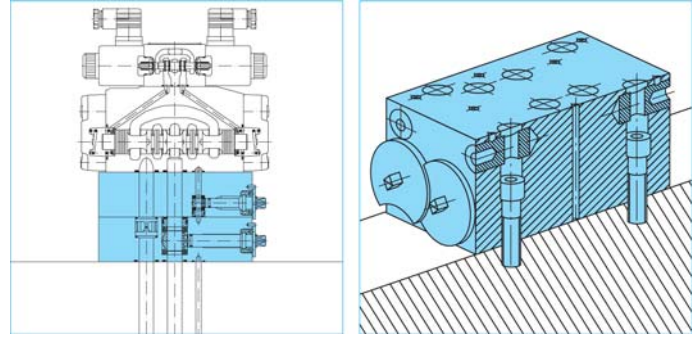


3 Way Manifold Mount Valves			Working Pressure		Dimensions (in.)												
Size	Series	Part Number	PSI	Bar	A	B	C	D	E	F	G	H	I	J	K	L	M
1/4	3-Way	BBVD/M2H1D1F	7250	500	1.37	1.57	1.06	0.25	0.23	0.47	0.78	1.37	0.17	0.68	1.37	2.32	1.02
3/8	3-Way	BBVD/M3H1D1F	7250	500	1.73	2.16	1.57	0.33	0.37	0.59	0.96	1.77	0.27	1.08	2.17	2.87	1.14
1/2	3-Way	BBVD/M4H1D1F	7250	500	2.28	2.36	1.77	0.33	0.49	0.98	1.26	2.16	0.39	1.63	3.26	3.85	1.67
3/4	3-Way	BBVD/M5H1D1F	5880	400	2.72	2.75	2	0.41	0.78	1.81	1.53	2.75	0.47	1.91	3.82	4.61	2.05
1	3-Way	BBVD/M6H1D1F	5880	400	3.19	3.15	2.36	0.41	0.94	1.37	1.81	3.15	0.27	2.26	4.52	5.43	2.44
1 1/4	3-Way	BBVD/M7H1D1F	5880	400	3.77	3.93	3.07	0.51	1.25	1.57	2.23	3.93	0.43	2.68	5.35	6.5	2.95
1 1/2	3-Way	BBVD/M8H1D1F	5880	400	4.41	5.12	3.74	0.67	1.5	1.9	2.07	3.94	0.98	2.2	4.4	6.89	3.33
2	3-Way	BBVD/M9H1D1F	5880	400	5.35	5.9	4.4	0.82	1.89	2.19	2.17	4.33	0.98	2.68	5.35	8.46	4.17

# Additional Behringer Valves

## Sandwich Plate Ball Valves

Standard Sizes D03, D05, D07, D08 & D10  
UNC & Metric Thread Bolts  
Drawings per request



## Multi-way Ball Valves

Blocked Body Sizes: 1/4" - 3/8"  
Forged Body Sizes: 1/2" - 1"  
FKM/FPM O-Rings  
POM Ball Seats  
Nickle Plated Ball  
Various Porting Patterns  
Dimensions on request.

## Cartridge Ball Valves

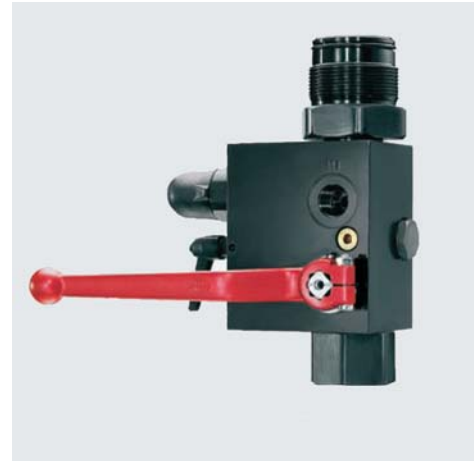
Size Range: 1/4" - 2"  
Steel or Stainless Steel Body  
Viton O-rings (Others available on request)  
2-way or 3-way versions available  
Drawings and Drilling Pattern per request  
Mounting Tool available on request



# Additional Behringer Valves

## Accumulator Safety Blocks

Two Way & Three Way Options  
Two Way Nominal Sizes: DN 10, 20, 32  
Three Way Nominal Sizes: DN 6, 10, 20  
Body Material: Steel or Stainless Steel  
Operating Pressure: 3625 psi - 4350 psi  
Ordering Scheme & Dimensions on request



## Check Valves Needle Valves Flow Control

Steel or Stainless Steel Body  
7 or 70 psi Spring Pressure for Check Valves  
5000 psi Pressure for Needle & Flow Control  
Buna Seals & O-rings  
Dimensions on request

## Locking Devices and Seal Kits

