

Specifications

- Compact Diverter Style
- 1/8"– 2" NPT and SAE Connections
- Delrin +MoS₂ Ball Seats
- Viton "O"-Rings
- Pressure Range: Up to 7250 PSI (500 bar)
- Carbon Steel Construction
- Zinc Plated Body
- Temperature Range: -30°F to 212°F (-34°C to 100°C)

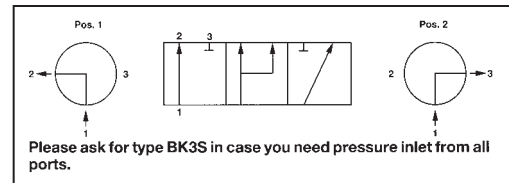
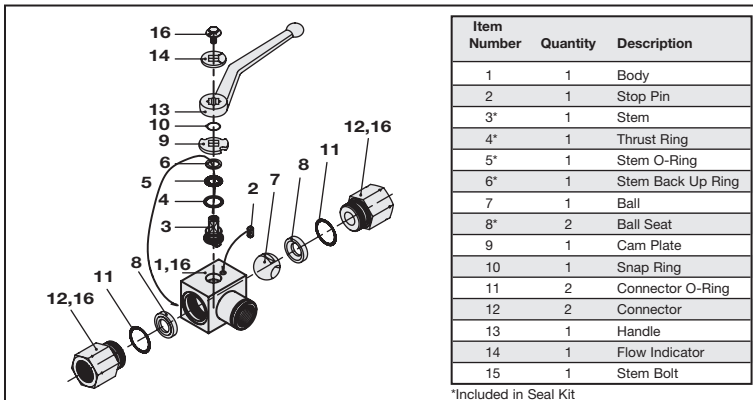
Options

- Locking Device
- Stainless Steel
- Limit Switches
- Actuator Packages Available
- Special Seat and "O"-Ring Available for Higher Temperatures or More Aggressive Media



Note: Pressurize at center point only to avoid internal leakage at all ports.

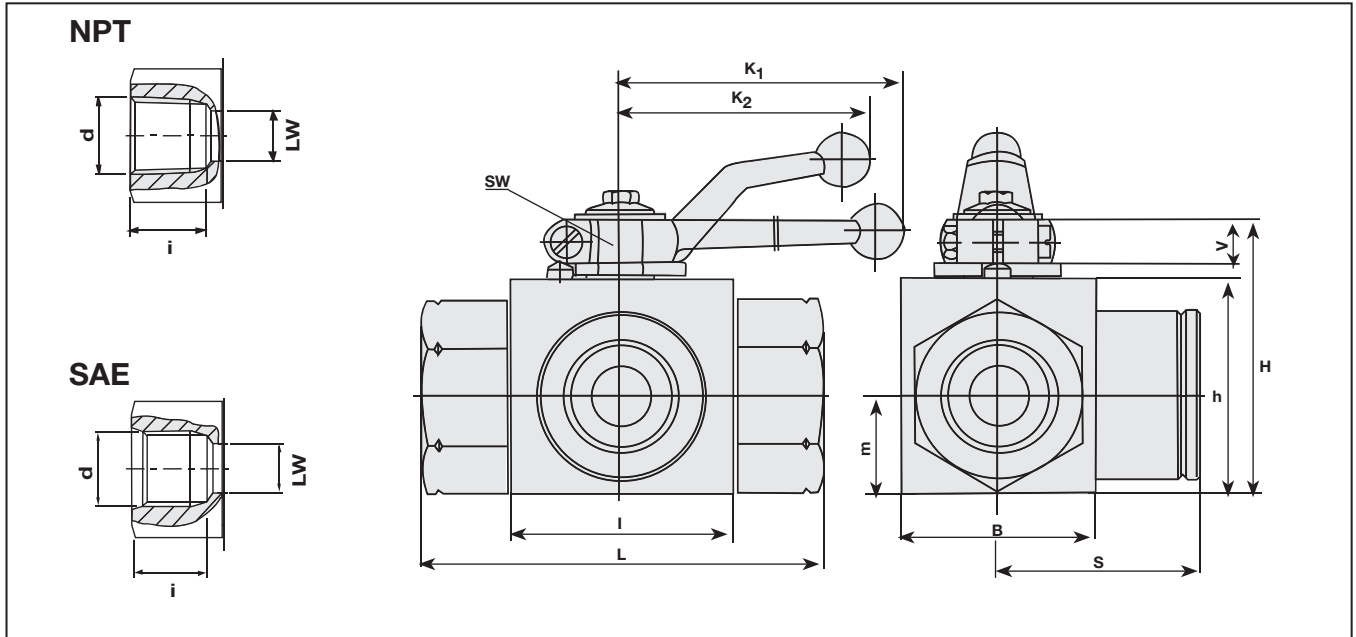
Technical Information



Size		Part Number	Maximum Working Pressure	
			PSI	Bar
1/8"	NPT	CBV30020001K	7250 PSI	500
	SAE	**		
1/4"	NPT	CBV30040001K	7250 PSI	500
	SAE	**		
3/8"	NPT	CBV30060001K	7250 PSI	500
	SAE	CBV31060001M	7250 PSI	500
1/2"	NPT	CBV30080001K	7250 PSI	500
	SAE	CBV31080001M	7250 PSI	500
3/4"	NPT	CBV30120001K	5000 PSI	345
	SAE	CBV31120001M	5000 PSI	345
1"	NPT	CBV30160001K	5000 PSI	345
	SAE	CBV31160001M	5000 PSI	345
1 1/4"	NPT	CBV30200001K	5000 PSI	345
	SAE	**		
1 1/2"	NPT	CBV30240001K	5000 PSI	345
	SAE	**		
2"	NPT	CBV30320001K	5000 PSI	345
	SAE	**		

** Contact Factory for Availability

Dimensional Information



Size	d NPT	d SAE	i NPT	i SAE	L NPT	L SAE	LW NPT	LW SAE	I	B	H	h	m	V	S	SW	K1	K2	Wt
			mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg
			in	in	in	in	in	in	in	in	in	in	in	in	in	in	in	in	lb
1/8"	1/8-27	-	13	14	69	69	6	5	40	29	47	33	13	11	35	9	150	115	0.66
1/4"	1/4-18	7/16-20	17	18	69	69	6	5	40	29	47	33	13	11	35	9	150	115	0.66
3/8"	3/8-18	9/16-18	18	19	72	72	10	10	43	35	52	38	18	11	36	9	150	115	0.99
1/2"	1/2-14	3/4-16	25	26	83	83	13	13	48	38	54	40	19	11	41	9	150	115	1.21
3/4"	3/4-14	1 1/16-12	23	24	95	95	20	20	62	52	75	57	24	14	48	14	200	160	3.30
1"	1-11 1/2	1 5/16-12	28	29	113	113	25	25	66	61	83	65	29	14	56	14	200	160	4.84
1 1/4"	1 1/4-11 1/2	1 5/8-12	28.19	29	120	110	32	32	81	80	101	8	35	17	60	17		300	10.00
1 1/2"	1 1/2-11 1/2	1 7/8-12	28	29	140	130	38	38	104	100	121	100	47	17	70	17		300	18.00
2"	2 1/2-11 1/2	2 1/2-12	30	31	150	140	48	48	118	116	131	110	52	17	75	17		300	22.00

Ordering Information

CBV 3 0 12 0 0 0 1 K - LD

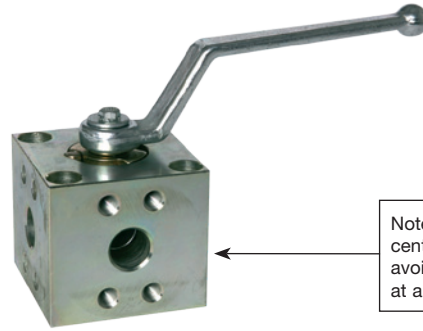
- Product Type**: CBV - Compact Body 3 Way Diverter Valve
- No. of Ports**: 3
- Connector Style**: 0 - NPT, 1 - SAE
- Body Material**: 0 - Carbon Steel Zinc Plated, 1 - 316 Stainless Steel
- Connector Size**: 02 - 1/8", 04 - 1/4", 06 - 3/8", 08 - 1/2", 12 - 3/4", 16 - 1", 20 - 1 1/4", 24 - 1 1/2", 32 - 2"
- Locking Kit**: LD - Locking Device, OMIT - No Locking Device
- Manufacturing Code**: K - NPT Shorter Design, M - SAE Standard Design
- O Ring Material**: 1 - Viton
- Ball Seat Material**: 0 - Delrin
- Ball & Stem Material**: 0 - Carbon Steel, 1 - 316 Stainless Steel

Specifications

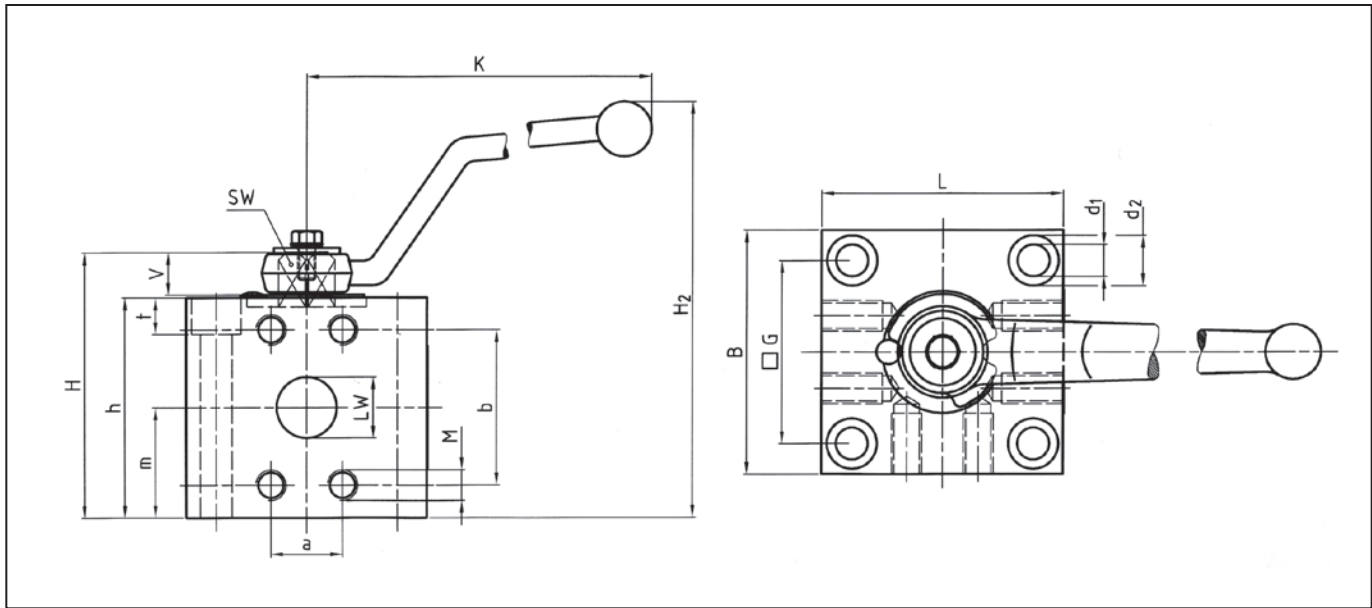
- Compact Direct Mount Diverter
- 1/2" - 2"
- SAE Code 62

Options

- Stainless Steel construction
- Flange Kits Available



Note: Pressurize at center point only to avoid internal leakage at all ports.



SAE J 518 c 6000 psi/42 MPa

Part Number	SIZE	DN	LW	L	B	H	h	m	V	SW	K	a	b	M ⁽²⁾	G	d ₁	d ₂	t	H ₂	Lever
CBV38080001M	mm	13	13	70	70	63	56	28	11	9	115	18,2	40,5	M8	43	8,5	13,5	9	101	St
	in	0.51	0.51	2.76	2.76	2.48	2.2	1.1	0.43	0.35	4.53	0.72	1.59	5/16-18 UNC	1.69	0.33	0.53	0.35	3.98	St
CBV38120001M	mm	20	20	80	80	87	72	36	14	14	170	23,8	50,8	M10	60	10,1	16,5	11	137	St
	in	0.79	0.79	3.15	3.15	3.43	2.83	1.42	0.55	0.55	6.69	0.94	2	3/8-16 UNC	2.36	0.43	0.65	0.43	5.39	St
CBV38160001M	mm	25	25	94	94	96	81	42	14	14	170	27,8	57,2	M12	70	10,1	16,5	11	146	St
	in	0.98	0.98	3.7	3.7	3.78	3.19	1.66	0.55	0.55	6.69	1.09	2.25	7/16-14 UNC	2.76	0.41	0.65	0.43	5.75	St
CBV38200001M	mm	32	32	100	100	117	100	50,5	16,5	17	306	31,8	66,7	M14	76	13	19	13	181	St
	in	1.26	1.26	3.94	3.94	4.61	3.94	1.99	0.65	0.67	12.04	1.25	2.63	1/2-13 UNC	2.99	0.51	0.75	0.51	7.13	St
CBV38240001M	mm	40	38	110	110	129	112	55	16,5	17	306	36,5	79,4	M16	84	13	19	13	193	St
	in	1.57	1.5	4.33	4.33	5.08	4.41	2.17	0.65	0.67	12.04	1.44	3.13	5/8-11 UNC	3.31	0.51	0.75	0.51	7.6	St
CBV38320001M	mm	50	48	135	135	147	135	67,5	16,5	17	306	44,5	96,8	M20	108	13	19	13	211	St
	in	1.97	1.89	5.31	5.31	5.79	5.31	2.66	0.65	0.67	12.04	1.75	3.81	3/4-10 UNC	4.25	0.51	0.75	0.51	8.31	St

Specifications

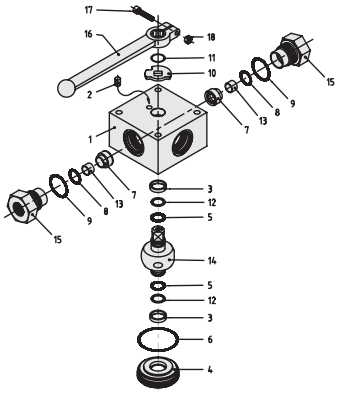
- Multi-Way Style
- 1/8" - 1" Full Bore
- 1/4" - 1 1/2" Reduced Bore
- NPT Connections
- Trunnion Style Ball Hard Chromium Plated
- Pressure Range: Up to 7250 PSI (500 bar)
- Zinc Plated Body
- Pressure Loaded Seats at All Ports
- Temperature Range: -20°F to 212°F (-28°C to 100°C)

Options

- SAE Ports Available On Request
- Special Porting Patterns Available
- Actuator Packages Available
- Locking Devices
- Limit Switches
- Special Seat and "O"-Ring Materials Available for Higher Temperatures and More Aggressive Media
- Stainless Steel construction



Technical Information

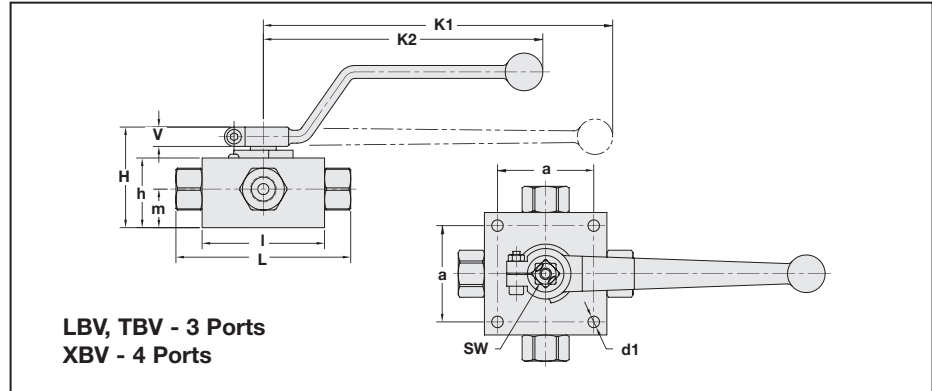
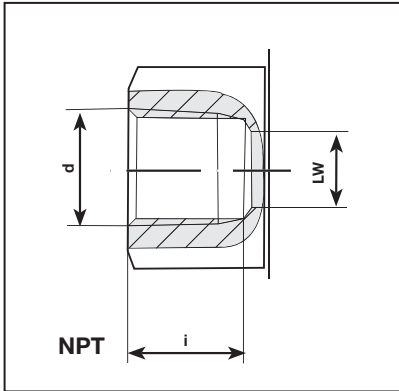


Item Number	Quantity	Description
1	1	Body
2	1	Stop Pin
3*	2	Bearing
4	1	Trunnion Retainer
5*	2	Trunnion O-Ring
6*	1	Retainer O-Ring
7*	4	Ball Seat
8*	4	Seat O-Ring
9*	4	Connector O-Ring
10	1	Cam Plate
11	1	Snap Ring
12*	2	Trunnion Back Up Ring
13	4	Seat Support
14	1	Tunnion Ball
15	4	Connector
16	1	Handle
17	1	Handle Bolt

*Included in Seal Kit

Size		Part Number	Maximum Working Pressure	
			PSI	Bar
1/4"	NPT	LBV30040001M	7250 PSI	500
		TBV30040001M		
		XBV40040001M		
3/8"	NPT	LBV30060001M	7250 PSI	500
		TBV30060001M		
		XBV40060001M		
1/2"	NPT	LBV30080001M	5800 PSI	400
		TBV30080001M		
		XBV40080001M		
3/4"	NPT	LBV30120001M	4500 PSI	310
		TBV30120001M		
		XBV40120001M		
1"	NPT	LBV30160001M	4500 PSI	310
		TBV30160001M		
		XBV40160001M		
1 1/4"	NPT	LBV30200001M	4500 PSI	310
		TBV30200001M		
		XBV40200001M		
1 1/2"	NPT	LBV30240001M	3600 PSI	250
		TBV30240001M		
		XBV40240001M		

Dimensional Information



Size	d NPT	LW		L		i		a		H		h		m		K ₁		K ₂		V		SW		i		d ₁		Weight	
		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg
1/4"	1/4-18	0.24	6	3.94	100	2.76	70	2.17	55	2.28	58	1.57	40	0.87	22			6.30	160	0.51	13	0.47	12	0.67	17	0.26	7	3.60	2
3/8"	3/8-18	0.31	8	4.53	115	3.15	80	2.56	65	2.68	68	1.97	50	1.06	27	7.87	200	6.30	160	0.55	14	0.55	14	0.69	18	0.26	7	5.10	2
1/2"	1/2-14	0.51	13	6.30	160	3.94	100	3.15	80	3.07	78	2.36	60	1.22	31	7.87	200	6.30	160	0.55	14	0.55	14	0.98	25	0.35	9	11.50	5
3/4"	3/4-14	0.71	18	6.46	154	4.45	113	3.35	85	3.46	88	2.64	67	1.44	37			12.60	320	0.65	17	0.67	17		0.33	8	15.15	7	
1"	1-1 1/2	0.91	23	7.32	186	4.68	119	3.35	85	4.06	103	3.23	82	1.87	48			12.60	320	0.65	17	0.67	17	1.11	28	0.33	8	19.10	9
1 1/4"	1 1/4-11 1/2	0.91	23	7.32	186	4.68	119	3.35	85	4.06	103	3.23	82	1.87	48			12.60	320	0.65	17	0.67	17	1.09	28	0.33	8	19.70	9
1 1/2"	1 1/2-11 1/2	0.91	23	7.32	186	4.68	119	3.35	85	4.06	103	3.23	82	1.87	48			12.60	320	0.65	17	0.67	17	1.10	28	0.33	8	19.90	9

Standard Porting Patterns for Multi-Position Valves

REF NO.	VALVE STYLE	CYCLING	PORTING SYMBOLS	HYDRAULIC SCHEMATIC SYMBOLS	CROSS-OVER POSITION SYMBOLS	DESCRIPTIONS
1	3/2 - Position Valve with L bore LBV...	90°				Trunnion ball, all ports closed in cross-over position, full bore.
2	3/2 - Position Valve with T bore TBV...	90°				Trunnion ball, all ports closed in cross-over position, full bore.
3	3/3 - Position Valve with T bore and detent	2 x 90°				Trunnion ball, all ports closed in cross-over position, full bore; detent at center position is recommended.
4	4/2 - Position Valve with double L bore XBV...	90°				Trunnion ball, temporary connection of all ports in cross-over position but with full shut-off at center point; reduced bore; detent at center position is recommended.

Ordering Information

LBV 3 0 08 0 0 0 1 M - LD

Product Type LBV - 3/2 L Ported Valve TBV - 3/2 T Ported Valve XBV - 4/2 X Ported Valve	Connector Size 04 - 1/4" 06 - 3/8" 08 - 1/2" 12 - 3/4" 16 - 1" 20 - 1 1/4" 24 - 1 1/2"	Locking Kit LD - Locking Device OMIT - No Locking Device
No. of Ports 3 - LBV, TBV 4 - XBV	Manufacturing Code	O Ring Material 1 - Viton
Connector Style 0 - NPT 1 - SAE	Ball Seat Material 0 - Delrin	Trunnion Material 0 - Chrome Plated Steel 1 - 316 Stainless Steel
Body Material 0 - Carbon Steel Zinc Plated 1 - 316 Stainless Steel		