

3T3100/3L3200 Series 3T3101/3L3201 Series

Lever Operated & Direct Mount Three Way Brass Ball Valves

The 3T3100/3L3200 Series valve is a 3-way, 2-seat, 180° rotation, bottom entry, lever operated brass ball valve.

The 3T3101/3L3201 Series valve is a 3-way, 2-seat, 180° rotation, bottom entry, direct mount brass ball valve.

- Sizes 1/2" through 3" full port valve
- Pressure rating up to 360 psi WOG
- The 3T3100/3101 Series is a transflow valve (inlet cannot be isolated from both outlets at the same time)
- The 3L3200/3101 Series is a non-transflow valve (direct flow cannot occur across run outlets during position change, and flow is completely blocked at 90° rotation)
- Versatile valves are designed for flow either into or out of the common bottom port, and are ideally suited for diverting from a single line to two different lines, or directing flow from either of two lines to a single line
- Pneumatic actuators are available for 180° rotation and electric actuators can be readily adapted for 180° rotation
- Two position (0° and 180°) or three position (0°, 90° and 180°) must be specified
- Agency Approvals: CE/PED for those sizes where required



3T3100/3L3200 Series Ordering Schematic

1	2	—	3	4	5	6	7	8	—	9
3	T	—	31	00	F	T	T	S	—	100
3	L	—	32	01	F	T	T	S	—	100

1	Body Port, Configuration
3	3-Way

2	Ball Port, Configuration
L	"L" Port
T	"T" Port

3	Series
31	3100, 3101
32	3200, 3201

4	Design
00	Lever Operated*
01	Direct Mount with Lever**

5	Port Design
F	Full Port

6	Stem Packing
T	PTFE

7	Seat
T	PTFE

8	End Connections
S	FNPT

9	Size
050	1/2" (3T3101, 3L3201)
075	3/4" (3T3100, 3L3201)
100	1" (3T3100, 3L3201)
125	1-1/4" (3L3200)
150	1-1/2" (3T3100, 3L3201)
200	2" (3T3100, 3L3201)
300	3" (3T3100, 3L3200)

* 3L: Available in sizes 1-1/4", 3"; 3T: Available in 3/4" – 3"

** 3L: Available in sizes 1/2" – 1", 2"; 3T: Available in 1/2"



Marwin Valve, a division of Richards Industries
 3170 Wasson Road • Cincinnati, OH 45209
 513.533.7340 • 800.628.2583 • 513.533.7343 (f)
 marwin@richardsind.com • www.marwinvalve.com

Technical Specifications

Size	Torque in-lbs	Weight lbs (kgs)	3T3100 Cv "L" (Kv)	3L3200 Cv "T" (Kv)
1/2"	45	0.7 (0,3)	4.5 (3,9)	7.0 (6,0)
3/4"	89	1.1 (0,5)	9.2 (7,9)	13.4 (11,6)
1"	133	1.7 (0,8)	15.1 (13,0)	21.3 (18,4)
1-1/4"	178	2.6 (1,2)	n/a	31.6 (27,2)
1-1/2"	239	3.4 (1,5)	45.0 (38,8)	55.0 (47,4)
2"	284	5.8 (2,6)	62.8 (54,1)	84.9 (73,2)
3"	974	25 (14,5)	170 (146)	206 (178)

3" weight includes NPT adaptor bushings

3L3200/3201 Series Port Arrangement

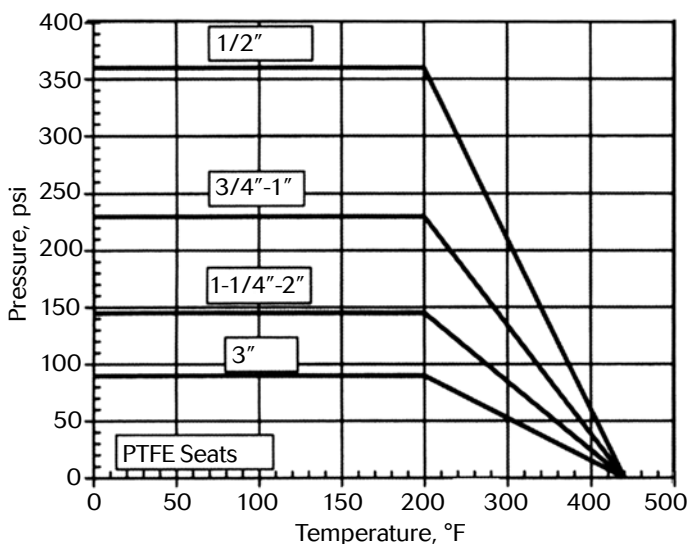
Position Flow Pattern	A	B	C
BL1			
	0°	90°	180°

3T3100/3101 Series Port Arrangement

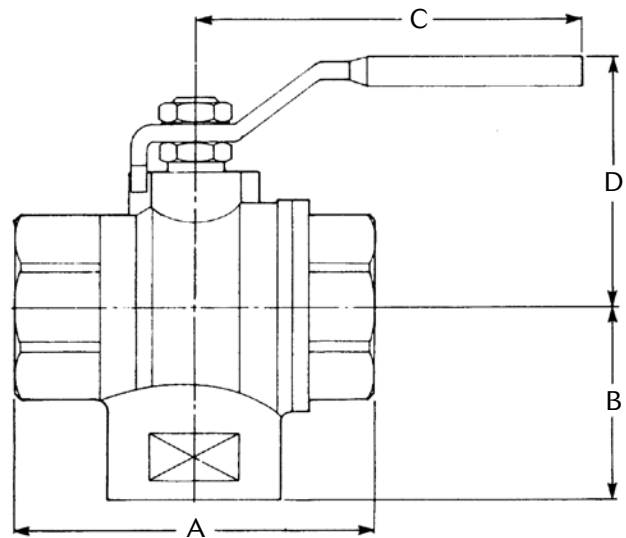
Position Flow Pattern	A	B	C
BLT			
	0°	90°	180°

For automation, specify 2-position or 3-position 180° actuators

Pressure-Temperature Chart



Dimensions



Size	A	B	C**	D**	ISO†	Stem Sq.
1/2"	2.52	1.32	3.9 / 4.5	1.8 / 2.4	F03	0.354
DN15	64	33,5	98 / 115	45 / 62		9,00
3/4"	2.91	1.56	4.6 / 4.5	2.2 / 2.5	F03	0.354
DN20	74	39,5	118 / 115	57 / 63		9,00
1"	3.50	1.85	4.6 / 4.5	2.4 / 3.0	F05	0.354
DN25	89	47	118 / 115	60 / 76		9,00
1-1/4"	3.94	2.15	4.6 / 4.5	2.6 / 3.1	F05	0.354
DN32	100	54,5	118 / 115	66 / 79,5		9,00
1-1/2"	4.33	2.42	6.0 / 6.7	3.2 / 3.7	F05	0.433
DN40	110	61,5	153 / 170	81 / 95		11,00
2"	5.12	2.87	6.7 / 6.7	4.1 / 4.0	F07	0.433
DN50	130	73	170 / 170	103 / 101		11,00
3"	12.66	6.57	10.2	6.0	—	0.787
DN80*	321,5	167,0	260	152		20,00

* 3" (DN80) dimensions "A" and "B" include NPT adaptors (not shown)

** First No. for 3T3100 / 3L3200 lever operated / Second No. for 3T3101 / 3L3201 DM with lever

† ISO mounting pad on 3T3101 / 3L32200 only

Materials of Construction

Part Name	Specification	Quantity
Body	*Brass CuZn40Pb2, Ni. Plated	1
End Cap	*Brass CuZn40Pb2, Ni. Plated	1
Ball	*Brass CuZn40Pb2, Chr. Plated	1
Stem	**Brass CuZn39Pb3, Ni. Plated	1
Seats	PTFE	2
Thrust Washer	PTFE	1
Packing	PTFE	1
Gland	**Brass CuZn39Pb3, Ni. Plated	1
Nut, Gland	Steel, Plated	1
Handle	Steel, Plated	1
Nut, Handle	Steel, Plated	1

* UNI EN 12165 CW617N (58Cu-40Zn-2Pb) equivalent to Hot Forging Brass UNS C37700 (60Cu-39Zn-2Pb). ** UNI EN 12164 CW614N (58Cu-39Zn-3Pb) equivalent to Architectural Brass bar UNS C38500 (57Cu-40Zn-3Pb)