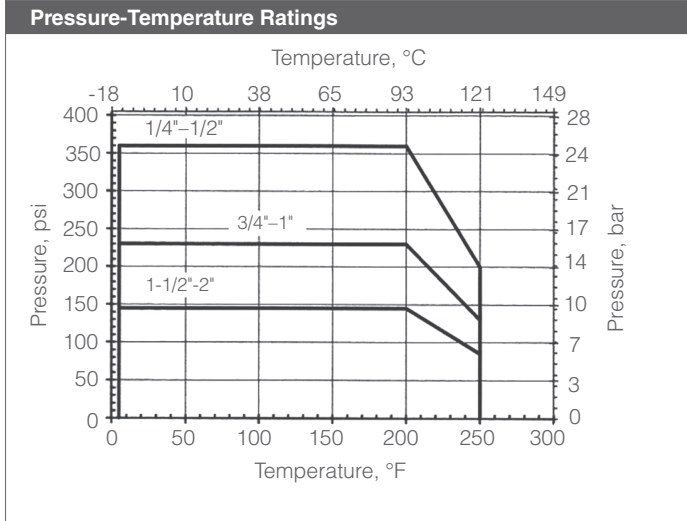




**Features**

- High integrity hot forged brass body
- ISO 5211 actuator mounting pad
- Blow-out proof stem
- PTFE seats
- O-ring stem seals
- 100% tested
- Lever Operator



**Technical Specifications**

Valve Size Inches (NPS)	Operating Torque, in-lb (NM)		Flow Coefficient, Cv (Kv)	
	3T3101	3L3201	3T3101	3L3201
1/4" (DN8)	18 (2,1)	18 (2,1)	1.7 (1,5)	1.7 (1,5)
3/8" (DN10)	18 (2,1)	18 (2,1)	2.1 (1,8)	2.1 (1,8)
1/2" (DN15)	45 (5,2)	45 (5,2)	4.5 (3,9)	4.5 (3,9)
3/4" (DN20)	89 (10,4)	89 (10,1)	9.2 (7,9)	9.2 (7,9)
1" (DN25)	133 (15,5)	133 (15,0)	15.1 (13)	15.1 (13)
1-1/2" (DN40)	239 (27,0)	239 (27,0)	45,0 (39)	45,0 (39)
2" (DN50)	284 (32,1)	284 (32,1)	62.8 (54)	62.8 (54)

**3T-3101F-XXX-BR Series Multi-Port Valve**  
**3L-3201F-XXX-BR Series Multi-Port Valve**

**Quick Spec**

Product Scope	
Size Range	1/4" - 2", Full Port, NPT Ends
Port Type	L-Port or T-Port
Port Orientation	Bottom Entry
Pressure Rating	See chart
Temperature	+5° to 250°F (-15°C to 120°C)
Body	Brass, Hot Forged, Ni Plated
Ball & Stem	Brass, Chrome Plated
Ball Seats	PTFE
Stem Seals	Viton O-Rings
Thrust Washer	PTFE
Operator	Manual Locking Lever / ISO 5211
Design Standards	
Threaded End Design	*BSPP
Testing Standards	
Pressure Testing	100% @ 80 psi in open & closed position

\*With care, female BSPP (British Standard Pipe Parallel) thread mates with male NPT thread through 2" NPS in low-pressure applications

**Materials of Construction**

Part	Material Specification
Body	*Brass CuZn40Pb2, Ni. Plated
End Cap	*Brass CuZn40Pb2, Ni. Plated
Ball	*Brass CuZn40Pb2, Chr. Plated
Stem	**Brass CuZn40Pb2, Chr. Plated
Seats	PTFE (2)
Thrust Washer	PTFE
O-Ring, Stem Seal	Viton (2)
Bearing Sleeve, Stem	PTFE
Bearing Washer, Handle	Nylon 6
Handle	Steel, Plated
Spacer Washer, Handle	Brass
Screw, Handle	Steel, Plated
Pin, Stop	Brass

\* UNI EN 12165 CW617N (58Cu-40Zn-2Pb) equivalent to Hot Forging Brass  
 UN C37700 (60Cu-39Zn-2Pb)

\*\* UNI EN 12164 CW614N (58Cu-39Zn-3Pb) equivalent to Architectural Brass  
 bar UNS C38500 (57Cu-40Zn-3Pb)

**Seat Tightness Note:** If closed port pressure exceeds open port pressure, the ball may be forced slightly off the seat, which would allow mixing from all ports. Occurrence may vary depending upon flow and ambient conditions.

**3T3101 Series Port Arrangement**

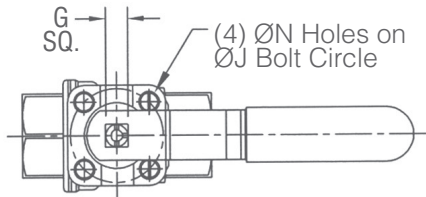
Position Flow Pattern	A	B	C
BT			
	0°	90°	180°

**3L3201 Series Port Arrangement**

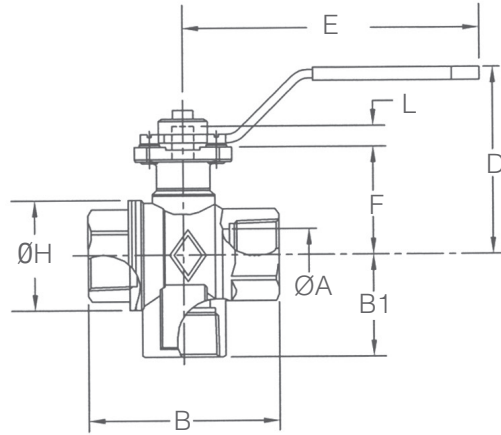
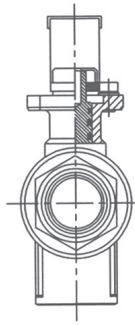
Position Flow Pattern	A	B	C
BL			
	0°	90°	180°

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

Actuator operating time is normally given for 90° rotation, and will be doubled for 180° rotation



ART0830



Dimensions, Inches													
3T3101/3L3201 Series													
Valve Size Inches	A Port	B Length	B1 C/L-Bot	D C/L-Handle	E Handle	F C/L Pad	ØH Bod OD	ISO 5211	ØJ BC	ØN Hole	L Stem Ext.	G Stem Sq	Wt (lbs)
1/4" - 3/8"	0.39	3.20	1.60	2.4	4.5	1.2	1.4	F03	1.42	M7	0.35	0.354	1.1
1/2"	0.59	2.52	1.32	2.4	4.5	1.2	1.4	F03	1.42	M7	0.35	0.354	0.9
3/4"	0.79	2.91	1.56	2.5	4.5	1.7	1.7	F03	1.42	M7	0.35	0.354	1.3
1"	0.98	3.50	1.85	3.0	4.5	1.8	2.1	F05	1.42	M7	0.35	0.354	2.0
1-1/2"	1.57	4.33	2.42	3.7	6.7	2.4	3.0	F05	1.97	0.28	0.43	0.433	7.5
2"	1.97	5.12	2.87	4.0	6.7	2.6	3.7	F07	1.97	0.28	0.43	0.433	12.8

\* 1/2" valve with bushings; dimensions include bushings

Dimensions, mm													
3T3101/3L3201 Series													
Valve Size NPS	A Port	B Length	B1 C/L-Bot	D C/L-Handle	E Handle	F C/L Pad	ØH Bod OD	ISO 5211	ØJ BC	ØN Hole	L Stem Ext.	G Stem Sq	Wt (kgs)
DN8-10	10	81	41	60	115	30,5	36	F03	36,0	M7	9,0	9,0	0,5
DN15	15	64	33,5	62	115	31,0	35	F03	36,0	M7	9,0	9,0	0,4
DN20	20	74	39,5	63	115	42,0	43	F03	36,0	M7	9,0	9,0	0,6
DN25	25	89	47	76	115	45,0	53	F05	36,0	M7	9,0	9,0	0,9
DN40	40	110	61,5	95	170	61,5	77	F05	50,0	7,0	11,0	11,0	2,0
DN50	50	130	73	101	170	67,0	93	F07	50,0	7,0	11,0	11,0	3,0

Model	Size	Body Mat'l	1	2	3	4	5	6	7	8	9	10

Model Number	
3T-3101F	3 Way Ball Valve (T-Port)
3L-3201F	3 Way Ball Valve (L-Port)

Size	
025	1/4"
038	3/8"
050	1/2"
075	3/4"
100	1"
150	1-1/2"
200	2"

\* 1/2" valve with bushings; dimensions include bushings

Body Material	
BR	Brass

1&2	End Connections
PT	Threaded

3&4	Operation
HL	Handle
NN	None

5,6,7,8	Pneumatic Actuator
NN00	None

9&10	Start Position
TA	3-way BT3A
TB	3-way BT3B
TC	3-way BT3C
LA	3-way BL1A
LB	3-way BL1B
LC	3-way BL1C