

Duo-Bloc® Ball Valve

Standard Features (Sizes 1/2" – 2")

- True Union design for easier installation or repairs without expanding the pipe system.
- Rated up to 150 psi.
- Full vacuum rated.
- Blocks in two directions, upstream and downstream, leaving full pressure on the opposite end of the valve.
- PTFE seats with elastomeric backing cushions insure bubble-tight shut-off and a low fixed torque, while at the same time compensating for wear.
- Two sets of end connectors (socket and threaded) included.

Options

- Pneumatic and electric actuators & accessories
- Stem extensions
- 2" square operating nut or "T" nut
- Locking and/or spring return handles
- Limit switches
- Vented ball

Caution

- Never remove valve from pipeline under pressure.
- Always wear protective gloves and goggles.
- Watch out for trapped fluid in valve. It is safe to close valve before removing it from the pipeline.
- Do not use ball valves where media has suspended particles. Use the following valves:
Butterfly Valves – PVDF disc is most abrasion resistant and make sure of chemical compatibility.
Diaphragm Valves – Elastomeric diaphragm is designed for handling suspended particles.
- Volatile fluids such as sodium hypochlorite (NaClO) and hydrogen peroxide (H₂O₂) could be trapped and gasified within the valve. We can provide you with a Type 21 ball valve with a *vented ball* to relieve pressure build-up inside the valve.

Specifications

- Sizes:** 1/2" – 2"
Models: Socket, Threaded, Flanged (ANSI), Butt
Bodies: PVC, CPVC
Seats: PTFE backed with EPDM or Viton®†
Seals: EPDM or Viton®† or AFLAS®‡

† Trademarks of E. I. du Pont de Nemours and Company

‡ Trademark of Asahi Glass Co., Ltd.

Parts List (Sizes 1/2" – 2")

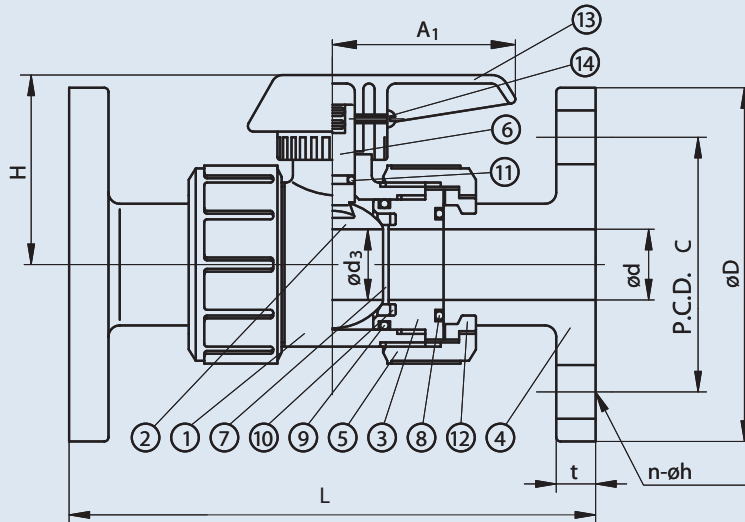
PARTS			
NO.	DESCRIPTION	PCS.	MATERIAL
1	Body	1	PVC, CPVC
2	Ball	1	PVC, CPVC
3	Carrier	1	PVC, CPVC
4	End Connector	2	PVC, CPVC
5	Union Nut	2	PVC, CPVC
6	Stem	1	PVC, CPVC
7	Seat	2	PTFE
8	O-Ring (A)	2	EPDM, Viton®, Others
9	O-Ring (B)	1	EPDM, Viton®, Others
10	Cushion	2	EPDM, Viton®, Others
11	O-Ring (C)	1	EPDM, Viton®, Others
12	Stop Ring*	2	PVDF
13	Handle	1	ABS
14	Screw	1	304 Stainless Steel
4a	Ring**	2	304 Stainless Steel

* Used for flanged end

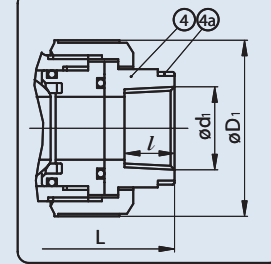
** Used for CPVC body, threaded end, 1/2" – 1"



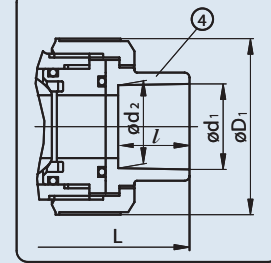
FLANGED END



THREADED END



SOCKET END



Dimensions (Sizes 1/2" - 2")

NOMINAL SIZE		FLANGED							SOCKET				THREADED			d3	D1	H	A1
		ANSI CLASS 150							PVC, CPVC				d1	l	L				
		d	D	C	n	h	L	t	d1	d2	l	L							
INCHES	mm																		
1/2	15	0.59	3.50	2.38	4	0.62	5.63	0.47	0.848	0.836	0.688	3.86	1/2-14 NPT	0.59	3.90	0.59	1.89	1.97	1.97
3/4	20	0.79	3.88	2.75	4	0.62	6.77	0.55	1.058	1.046	0.719	4.53	3/4-14 NPT	0.67	4.65	0.79	2.36	2.24	2.26
1	25	0.98	4.25	3.12	4	0.62	7.36	0.55	1.325	1.310	0.875	5.28	1-11 1/2 NPT	0.79	5.35	0.98	2.76	2.64	2.56
1 1/4	30	1.22	4.62	3.50	4	0.62	7.48	0.63	1.670	1.655	0.938	5.83	1 1/4-11 1/2 NPT	0.87	5.87	1.22	3.15	3.07	2.56
1 1/2	40	1.57	5.00	3.88	4	0.62	8.35	0.63	1.912	1.894	1.094	6.65	1 1/2-11 1/2 NPT	0.98	6.69	1.57	3.78	3.35	2.95
2	50	2.01	6.00	4.75	4	0.75	9.21	0.63	2.387	2.369	1.156	7.56	2-11 1/2 NPT	1.10	7.76	2.01	4.17	3.86	3.35

Pressure vs. Temperature (PSI, WATER, NON-SHOCK)

NOMINAL SIZE		PVC		CPVC			
		30° F	120° F	30° F	121° F	141° F	176° F
INCHES	mm						
1/2-2	15-50	150	150	120	85	55	

Cv Values

NOMINAL SIZE		Cv
INCHES	mm	
1/2	15	14
3/4	20	29
1	25	47
1 1/4	32	72
1 1/2	40	155
2	50	190

Weight (POUNDS)

NOMINAL SIZE		SOCKET	FLANGED
INCHES	mm		
1/2	15	0.38	2.00
3/4	20	0.66	2.25
1	25	1.00	2.50
1 1/4	32	1.39	3.25
1 1/2	40	2.18	4.00
2	50	2.93	4.75

Sample Specification

All True Union DUO-BLOC® Ball Valves, sizes 1/2" to 2", shall be of True Union design with two-way blocking capability. All O-rings shall be EPDM or Viton® with PTFE seats. PTFE seats shall have elastomeric backing cushion of the same material as the valve seals. PVC shall conform to ASTM D1784 Cell Classification 12454-A, CPVC shall conform to ASTM D1784 Cell Classification 23567-A. All True Union DUO-BLOC Ball Valves shall have a pressure rating up to 150 psi at 70° F. True Union Duo-Bloc Ball Valves must carry a two-year guarantee, as manufactured by Asahi/America Inc.

Caution

- Never remove valve from pipeline under pressure.
- Always wear protective gloves and goggles.
- Watch out for trapped fluid in valve. It is safe to close valve before removing it from the pipeline.

FOR TROUBLESHOOTING, REFER TO PAGE 9.