

Single Union Ball Valve

FEATURES

- Quarter turn on/off
- Full port design
- All engineered Thermoplastic - PVC, CPVC, PP or PVDF construction
- Viton® or EPDM O-Rings, self-lubricating Teflon seats
- Available with removable interface fit handle, electric or pneumatic actuation
- Externally adjustable for seat wear
- Socket dimensions conform to ASTM D-2467, D-2464, F-439 and F-437
- Easily disassembled for service

This valve is cost effective in systems requiring only one union nut for dismantling.

Maximum Torque Valves (in-lbs)

Valve Size (in)	Valve Size (mm)	Opening Torque
1/2	15	5
3/4	20	35
1	25	60
1-1/4	32	100
1-1/2	40	110
2	50	180

Maximum Suggested Design Pressure (PSI) @ 73°F

Nom Size (in)	Nom Size (mm)	PVC CPVC	PP PVDF
1/2	15	235	150
3/4	20	235	150
1	25	235	150
1-1/4	32	200	150
1-1/2	40	200	150
2	50	200	150

Fluid Flow Coefficient

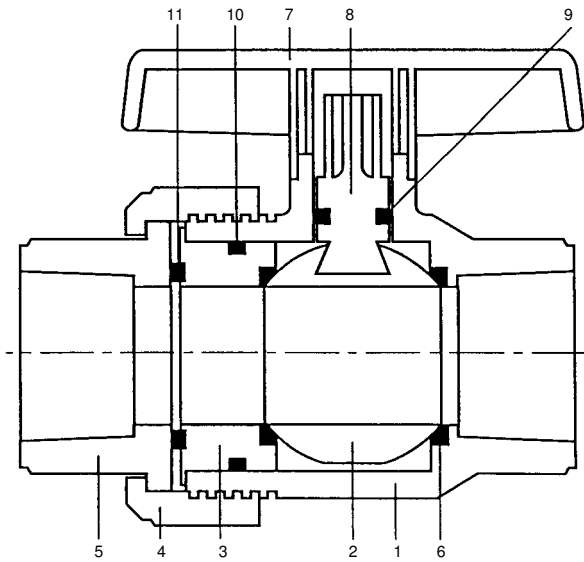
Valve Size (in)	Valve Size (mm)	Cv*
1/2	15	22
3/4	20	55
1	25	112
1-1/4	32	178
1-1/2	40	285
2	50	540

* U.S. Gallons per minute @ 1 psi

Single Union Ball Valve - Part Numbers

Material	Size/ No.	11	12
Body/ O'Ring	Type/ Size	1-1/2" 40mm	2" 50mm
PVC/ EPDM	SOCKET	W PSUB015	W PSUB020

Single Union Ball Valve Specifications



Components and Materials

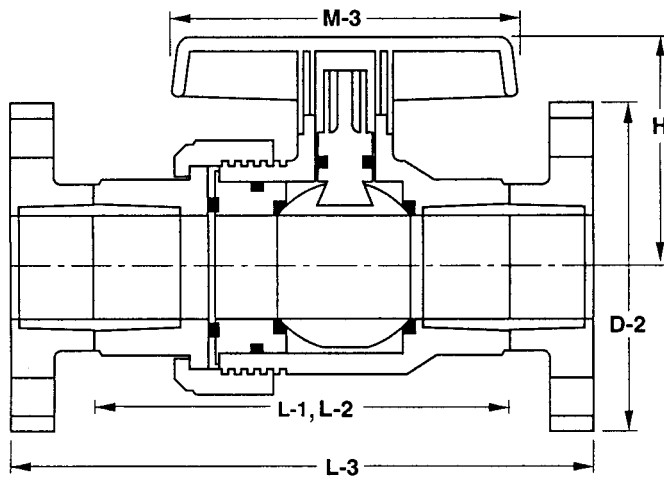
Part No.	Component	Qty	Material
1	Body	1	PVC, CPVC, PP, PVDF
2	Ball	1	PVC, CPVC, PP, PVDF
3	Carrier	1	PVC, CPVC, PP, PVDF
4	Union Nut	1	PVC, CPVC, PP, PVDF
5	Connector	1	PVC, CPVC, PP, PVDF
6	Ball Seat	2	Teflon®
7	Handle	1	ABS
8	Stem	1	PVC, CPVC, PP, PVDF
9	Stem-O-Ring	1	EPDM, Viton®
10	Carrier O-Ring	1	EPDM, Viton®
11	Face O-Ring	1	EPDM, Viton®

Teflon® is a registered trademark of DuPont. Only DuPont makes Teflon.
Viton® is a registered trademark of Dupont Dow Elastomers.

Temperature Correction Factors

Operating Temp (F)	Factors			
	PVC	CPVC	PP	PVDF
70	1.00	1.00	1.00	1.00
80	0.90	0.96	0.97	0.95
90	0.75	0.92	0.91	0.87
100	0.62	0.85	0.85	0.80
110	0.50	0.77	0.80	0.75
115	0.45	0.74	0.77	0.71
120	0.40	0.70	0.75	0.68
125	0.35	0.66	0.71	0.66
130	0.30	0.62	0.68	0.62
140	0.22	0.55	0.65	0.58
150	N.R.	0.47	0.57	0.52
160	N.R.	0.40	0.50	0.49
170	N.R.	0.32	0.26	0.45
180	N.R.	0.25	*	0.42
200	N.R.	0.18	N.R.	0.36
210	N.R.	0.15	N.R.	0.33
240	N.R.	N.R.	N.R.	0.25
280	N.R.	N.R.	N.R.	0.18

N.R. - Not Recommended



Dimensions

Valve Size		M3		H		D2		End to End					
								L1 Socket		L2 Threaded		L3 Flanged	
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
1/2"	15	3.22	81.79	1.92	48.77	3.49	88.65	2.04	51.82	2.04	51.82	6.00	152.40
3/4"	20	3.43	87.12	2.31	58.67	3.86	98.04	2.52	64.01	2.89	73.41	7.44	188.98
1"	25	4.00	101.60	2.67	67.82	4.24	107.70	2.76	70.10	3.14	79.76	7.56	192.02
1-1/4"	32	4.33	109.98	2.79	70.87	4.63	117.60	2.89	73.41	3.31	84.07	8.23	209.04
1-1/2"	40	5.02	127.51	3.38	85.85	4.99	126.75	3.42	86.87	4.04	102.62	9.32	236.73
2"	50	5.96	151.38	3.90	99.06	5.89	149.61	3.95	100.33	4.52	114.81	10.25	260.35