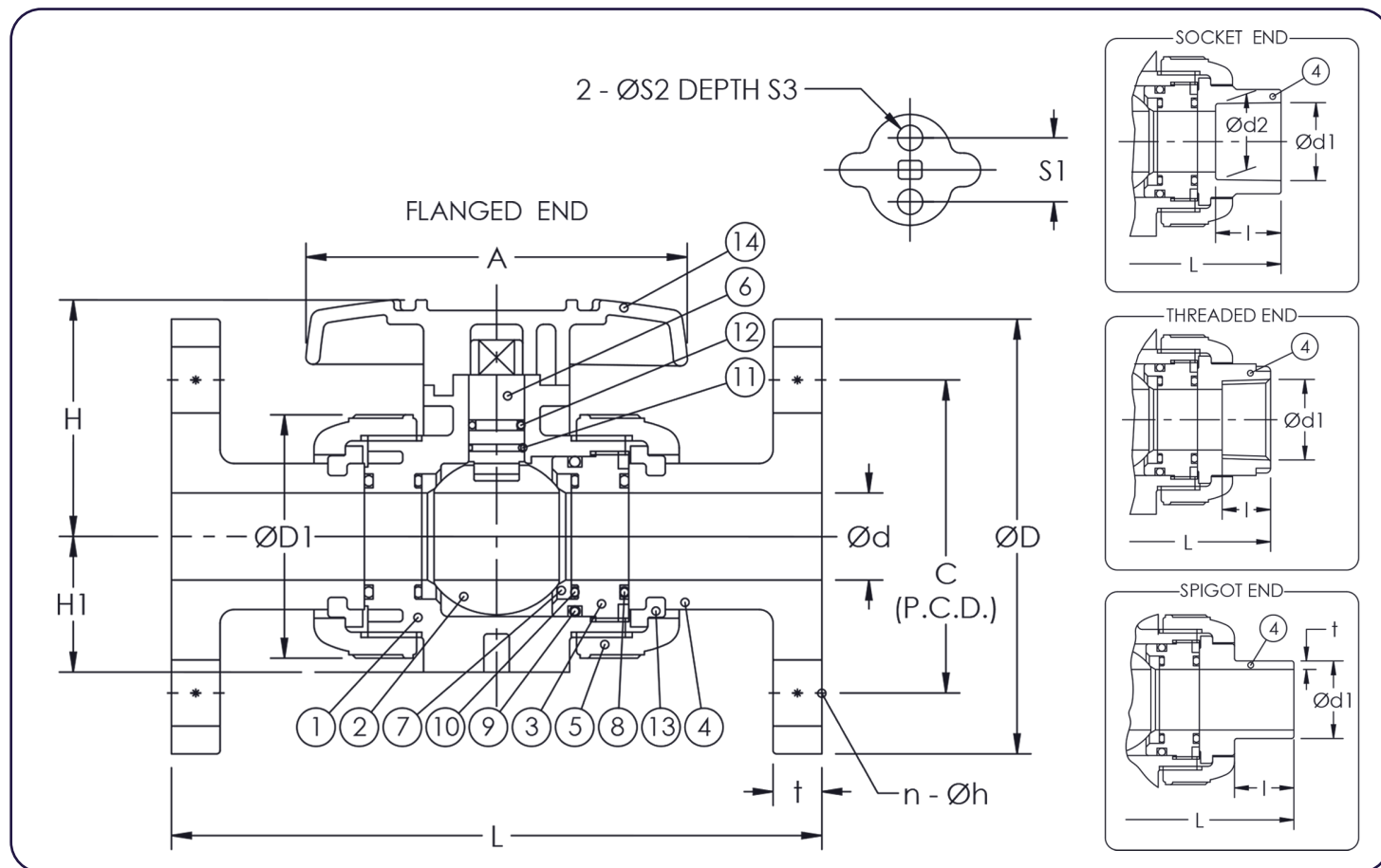


Type-21/21a Ball Valve

Dimensional Guide

DIMENSIONS (SIZES 1/2" - 2") (INCHES):



Nominal Size		d	Flanged						Socket										
			ANSI Class 150				L	t	PVC, CPVC				PP, PVDF (DIN)				PP, PVDF (IPS)		
			D	C	n	h			ATSM SCH 80				DIN 16962				d1	l	L
inch	mm								d1	d2	l	L	d1	d2	l	L	d1	l	L
1/2	15	0.59	3.50	2.38	4	0.62	5.63	0.47	0.848	0.836	0.875	4.45	0.768	0.760	0.57	3.90	0.83	0.87	4.45
3/4	20	0.79	3.88	2.75	4	0.62	6.77	0.55	1.058	1.046	1.000	5.08	0.965	0.957	0.63	4.45	1.03	1.00	5.08
1	25	0.98	4.25	3.12	4	0.62	7.36	0.55	1.325	1.310	1.125	5.75	1.240	1.232	0.71	4.84	1.30	1.13	5.75
1-1/4	32	1.26	4.62	3.50	4	0.62	7.48	0.63	1.670	1.655	1.250	6.46	1.553	1.543	0.81	5.47	1.65	1.25	6.46
1-1/2	40	1.57	5.00	3.88	4	0.62	8.35	0.63	1.912	1.894	1.375	7.24	1.947	1.937	0.93	5.87	1.89	1.37	7.24
2	50	2.01	6.00	4.75	4	0.75	9.21	0.63	2.387	2.369	1.500	8.23	2.461	2.445	1.08	6.93	2.36	1.50	8.23

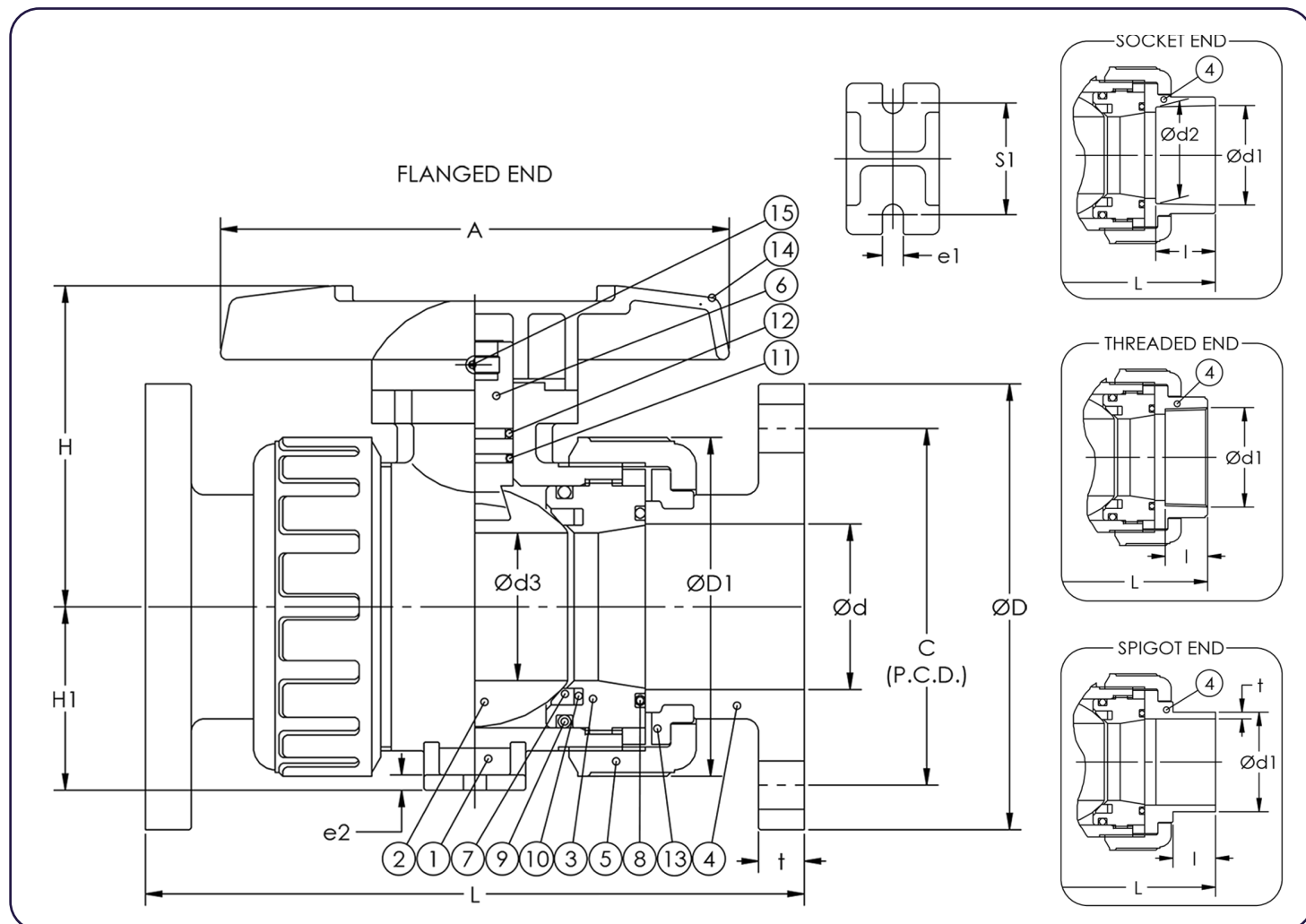
Nominal Size		Threaded			Spigot (Butt End)					D1	H	H1	A	S1	S2	S3
		d1	ℓ	L	PP, PVDF											
					DIN 3442		PP	PVDF	L							
					d1	ℓ	t	t								
inch	mm	1/2 - 14 NPT	0.59	4.02	0.787	0.728	0.098	0.075	4.882	1.89	2.03	1.14	3.62	0.75	0.29	0.43
3/4	20	3/4 - 14 NPT	0.67	4.72	0.984	0.866	0.106	0.075	5.669	2.36	2.34	1.38	3.94	0.75	0.29	0.43
1	25	1 - 11-1/2 NPT	0.79	5.16	1.260	0.886	0.118	0.094	6.063	2.76	2.68	1.54	4.33	0.75	0.29	0.43
1-1/4	32	1-1/4 - 11-1/2 NPT	0.87	5.91	1.575	1.024	0.146	0.094	6.850	3.23	3.17	1.85	4.76	1.18	0.35	0.59
1-1/2	40	1-1/2 - 11-1/2 NPT	0.98	6.42	1.968	1.260	0.181	0.118	7.638	3.94	3.50	2.17	5.16	1.18	0.35	0.59
2	50	2 - 11-1/2 NPT	1.10	7.76	2.480	1.417	0.228	0.118	8.819	4.96	4.04	2.60	6.26	1.18	0.35	0.59

Note: The shape and appearance of assembly differ slightly with nominal size compared to the drawing.

Type-21/21a Ball Valve

Dimensional Guide

DIMENSIONS (SIZES 2-1/2" - 4")(INCHES):



Nominal Size		d	Flanged								Socket													
			ANSI Class 150								PVC, CPVC				PP, PVDF (DIN)				PP, PVDF (IPS)					
			D	C	n	h	L			t	ASTM SCH 80				DIN 16962		PP	PVDF	d1	l	PP	PVDF		
PVC, CPVC	PP	PVDF					d1	d2	l		L	d1	d2	l	L	L	L	L			L			
inch	mm																							
2-1/2	65	2.56	7.0	5.5	4	0.75	10.20	10.12	10.08	0.71	2.889	2.868	1.750	9.45	2.923	2.911	1.22	8.07	8.03	2.88	1.752	9.37	9.33	
3	80	3.07	7.5	6.0	4	0.75	12.05	12.07	11.89	0.71	3.516	3.492	1.875	11.14	3.512	3.498	1.40	9.92	9.80	3.48	1.874	11.10	10.28	
4	100	3.94	9.0	7.5	8	0.75	14.72	14.72	14.53	0.71	4.518	4.491	2.000	13.89	4.293	4.278	1.63	12.28	12.09	4.48	2.252	14.37	14.13	

Nominal Size		Threaded						Spigot (Butt End)													
														PP, PVDF							
inch	mm	d1	l	PVC, CPVC	PP	PVDF	DIN 3442	PP	PVDF	PP	PVDF	d3	D1	H	H1	A	e1	e2	S1		
2-1/2	65	2-1/2 - 8 NPT	1.26	8.46	8.39	8.35	2.953	1.496	0.272	0.142	9.648	9.606	2.28	5.24	4.96	2.83	7.87	0.35	0.24	1.89	
3	80	3 - 8 NPT	1.38	10.43	10.39	10.28	3.543	1.496	0.323	0.169	11.654	11.535	2.70	5.98	5.51	3.35	9.45	0.43	0.28	2.17	
4	100	4 - 8 NPT	1.77	14.25	14.25	14.06	4.331	1.752	0.394	0.209	13.978	13.779	3.54	8.27	7.01	4.33	11.81	0.43	0.31	2.56	

* For 6" size, consult factory.

Note: The shape and appearance of assembly differ slightly with nominal size compared to the drawing.

Type-21/21a Ball Valve

Dimensional Guide

PARTS LIST (SIZES 1/2" - 2"):

Parts List			
No.	Description	Pcs.	Material
1	Body	1	PVC, CPVC, PP, PVDF
2	Ball	1	PVC, CPVC, PP, PVDF
3	Carrier	1	PVC, CPVC, PP, PVDF
4	End connector	2	PVC, CPVC, PP, PVDF
5	Union nut	2	PVC, CPVC, PP, PVDF
6	Stem	1	PVC, CPVC, PP, PVDF
7	Seat	2	PTFE
8	O-ring (A)	2	EPDM, FKM, Others
9	O-ring (B)	1	EPDM, FKM, Others
10	O-ring (C)	2	EPDM, FKM, Others
11	O-ring (D)	1	EPDM, FKM, Others
12	O-ring (E)	1	EPDM, FKM, Others
13	Stop ring*	2	PVDF
14	Handle	1	ABS
4a	Ring**	2	304 Stainless Steel

* Used for flanged end

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

PARTS LIST (SIZES 2-1/2" - 4"):

Parts List			
No.	Description	Pcs.	Material
1	Body	1	PVC, CPVC, PP, PVDF
2	Ball	1	PVC, CPVC, PP, PVDF
3	Carrier	2	PVC, CPVC, PP, PVDF
4	End connector	2	PVC, CPVC, PP, PVDF
5	Union nut	2	PVC, CPVC, PP, PVDF
6	Stem	1	PVC, CPVC, PP, PVDF
7	Seat	2	PTFE
8	O-ring (A)	2	EPDM, FKM, Others
9	O-ring (B)	2	EPDM, FKM, Others
10	Cushion	2	EPDM, FKM, Others
11	O-ring (D)	1	EPDM, FKM, Others
12	O-ring (E)	1	EPDM, FKM, Others
13	Stop ring*	2	PVDF
14	Handle	1	ABS
15	Screw	1	304 Stainless Steel
4a	Ring**	2	304 Stainless Steel

* Used for flanged end

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