

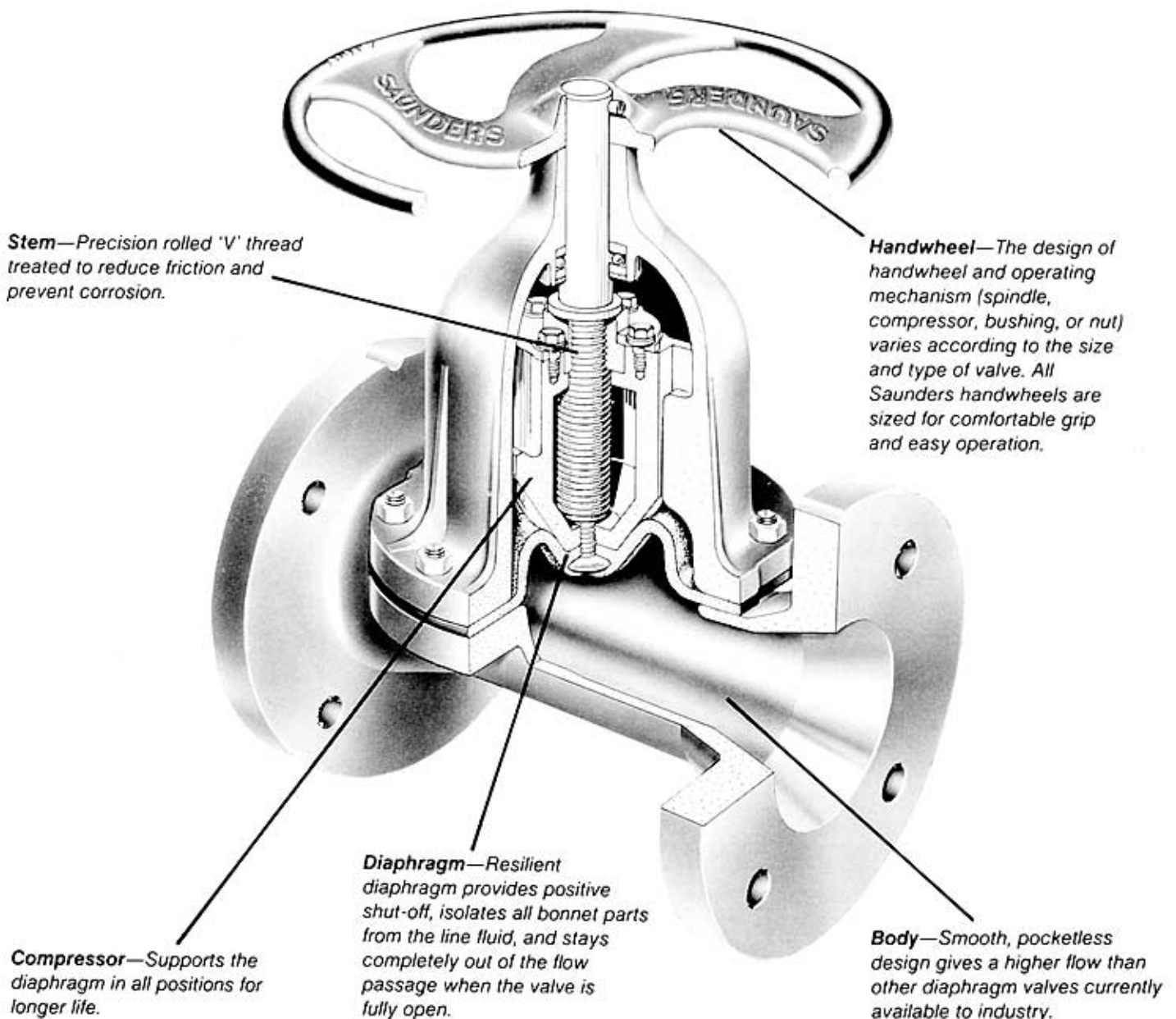
# HIGH FLOW GENERAL INFORMATION

The Saunders High Flow Valve is available in a wide range of body and diaphragm materials for high flow services. Saunders body linings often replace the need for more costly and exotic valve materials.

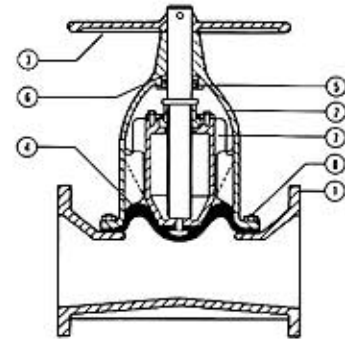
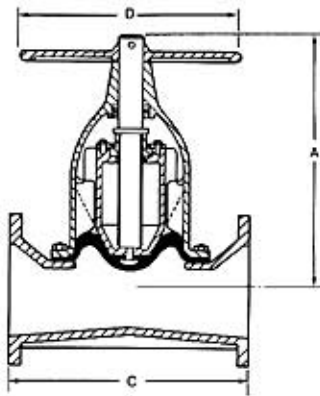
Saunders also offers a wide variety of High Flow bonnets designed for specific applications. These are

the sealed, padlocked, extended stem, sliding stem, and chainwheel operated.

All High Flow valves are supplied with non-indicating bonnet assemblies as standard. Indicating bonnets are available on request.



## OVERALL SPECIFICATIONS



## HIGH FLOW DIMENSIONS

Size	1½"	2"	2½"	3"	4"	5"	6"	8"	10"	12"	14"
<b>Body Type</b>											
<b>Flanged Unlined</b>											
A	6½	7½	9½	10½	11	14½	16½	22½	25½	26½	26½
C	6½	7½	8½	10	12½	14	16	20½	25	29½	36½
Weight lbs.	13	19	33	49	65	142	158	300	460	670	1000
<b>Flanged Rubber Lined</b>											
A	6½	7½	9½	10½	11	14½	16½	22½	25½	26½	26½
C	6½	7½	8½	10	12½	14	16	20½	25	29½	36½
Weight lbs.	14	20	33	50	67	142	160	303	463	674	1004
<b>Flanged Glass/Plastic Lined</b>											
A	6½	7½	9½	10½	11	14½	16½	22½	25½	—	—
C	6½	7½	8½	10	12½	14	16	22½	25½	—	—
Weight lbs.	13	19	33	49	65	142	159	302	462	—	—
<b>Handwheel Dimension</b>											
D	4½	6½	11	11	12½	14	14	19	23	27½	27½

All Dimensions - or - 1/4" All Dimensions given in inches

## FLOW COEFFICIENT — C<sub>v</sub>

<b>Flanged End — Unlined</b>											
% Open	1½"	2"	2½"	3"	4"	5"	6"	8"	10"	12"	14"
10	16.6	33	54	64	91	163	283	530	906	1212	1236
20	33	66	108	127	181	326	566	1061	1812	2424	2472
30	51	102	167	196	279	503	873	1635	2794	3737	3811
40	69	138	225	265	378	680	1180	2210	3775	5050	5150
50	83	165	270	318	453	816	1416	2652	4530	6060	6180
60	97	193	315	371	529	952	1652	3094	5285	7070	7210
70	106	212	347	408	581	1047	1817	3403	5813	7777	7931
80	117	234	383	451	642	1156	2006	3757	6418	8585	8755
90	128	256	419	493	702	1265	2195	4111	7021	9393	9579
100	138	275	450	530	755	1360	2360	4420	7550	10100	10300
<b>Flanged End — Rubber Lined</b>											
% Open	1½"	2"	2½"	3"	4"	5"	6"	8"	10"	12"	14"
10	15.6	31	50	58	86	156	270	510	870	1176	1194
20	31	62	101	115	173	312	540	1020	1740	2352	2388
30	48	95	155	178	266	481	833	1573	2683	3626	3682
40	65	130	210	240	350	650	1125	2125	3625	4900	4975
50	78	156	252	288	432	780	1350	2550	4350	5880	5970
60	91	182	294	336	504	910	1575	2975	5075	6860	6965
70	100	200	323	370	554	1001	1733	3273	5583	7546	7662
80	111	221	357	408	612	1105	1913	3613	6163	8330	8458
90	121	242	391	446	670	1209	2093	3953	6743	9114	9254
100	130	260	420	480	720	1300	2250	4250	7250	9800	9950
<b>Flanged End — Glass/Plastic Lined</b>											
% Open	1½"	2"	2½"	3"	4"	5"	6"	8"	10"		
10	17.5	35	56	65	95	173	298	552	942		
20	35	70	112	130	190	346	595	1104	1884		
30	54	107	172	200	292	533	918	1702	2905		
40	73	145	233	270	395	720	1240	2300	3925		
50	88	174	279	324	474	864	1488	2760	4710		
60	102	203	326	378	553	1008	1736	3220	5495		
70	112	223	358	416	608	1109	1910	3542	6045		
80	124	247	395	459	672	1224	2108	3910	6673		
90	136	270	432	502	735	1339	2306	4278	7300		
100	146	290	465	540	790	1440	2480	4600	7850		

By definition, the valve flow coefficient, C<sub>v</sub>, is "the number of gallons per minute of water which will pass through a given flow restriction with a pressure drop of 1 psi."

## MATERIALS OF CONSTRUCTION

### 1½" thru 14" Flanged

Item	Part Name	Material
1	Body	as Specified
2	Bonnet	Cast Iron
3	Handwheel	Cast Iron
4	Diaphragm	as Specified
5	Thrust Race	Carbon Steel
6	Stem	Carbon Steel
7	Compressor	Cast Iron
8	Body/Bonnet Studs & Nuts	Carbon Steel

## BODY MATERIALS AND LININGS

Material	Flanged	
Cast Iron Unlined	1½"-14"	
Cast Iron Lined:	Hard Rubber	1½"-14"
	Soft Rubber	1½"-14"
	Butyl	1½"-14"
	Hypalon	1½"-14"
	Neoprene	1½"-14"
	Glass	1½"-10"
	Polypropylene	1½"-14"
	ETFE	1½"-14"

## DIAPHRAGM MATERIALS

Grade	Material	Size	Temperature
KA	Natural Rubber	1½"-14"	-40°F to 195°F
KB	Butyl Rubber	1½"-14"	- 5°F to 195°F
KC	Nitrile Rubber	1½"-14"	- 5°F to 195°F
KD(300)	Butyl Rubber	1½"-14"	- 5°F to 250°F
KE	Ethylene Propylene	1½"-10"	-50°F to 280°F
KHT	Neoprene	1½"-14"	-32°F to 195°F
KQ	Natural Rubber	1½"-14"	-30°F to 195°F
KU(237)	Hypalon	1½"-14"	- 0°F to 195°F
KV(226)	Viton	1½"-10"	40°F to 250°F
KW	White Natural Rubber	1½"- 6"	-40°F to 195°F
KW1 (215)	White Butyl	1½"-14"	- 5°F to 212°F