

**PDC Elastomer Lined Series 27  
Butterfly Valve  
2" thru 36" for  
125/150 lb. Flanging**



**General Description:**

The PDC "Elastomer Lined" series butterfly valves are available in both full lug and wafer styles. Designed for rugged service in industrial, utility and HVAC systems.

**Features:**

- **BODY:** One piece cast bodies are available in a wide choice of materials in both wafer and tapped lug design. Standard long neck body provides full clearance for 2 inches of insulation on ANSI 150 pipe flanges.
- **DISC:** Streamlined for maximum flow and minimum seat wear. Less maintenance and ease of assembly, due to elimination of bolts, pins, etc., as stem connectors.
- **STEMS:** Heavy duty, two piece design for easy maintenance. Pins retain stem in body at all times, allowing removal of handle or actuator while under full line pressure.
- **STEM/DISC ATTACHMENT:** Rectangular drive ensures proper stem-to-disc assembly. No pins or bolts are exposed to flow.
- **DEAD-END SERVICE:** A lip, integral to the body, prevents the liner from moving downstream eliminating seat and flange leakage. This feature allows lug valve to be used in dead end service applications at full rated pressure without the use of downstream flange.
- **PRESSURE RATING:**  
 (2"-12") 250 PSIG WOG (non-shock)  
 (14"-36") 150 PSIG WOG (non-shock) TEF  
 (2"-12") 250 PSIG WOG (non-shock) Dead End Service  
 (14"-36") 150 PSIG WOG (non-shock) Dead End Service

**Standard Materials and Seat Construction:**

<b>Body Styles:</b>	Lug (2"-6") or Wafer (8"-12")
<b>Body Material :</b>	Cast Iron
<b>Disc:</b>	Aluminum Bronze
<b>Stem/Bushing:</b>	416 Stainless Steel
<b>Seat:</b>	EPDM

### Optional Materials and Seat Construction:

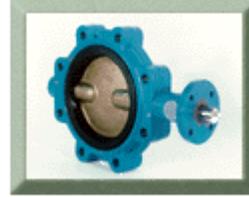
<b>Body Styles:</b>	Lug or Wafer
<b>Body Material:</b>	Ductile Iron, 316 Stainless Steel, X1= Special,
<b>Disc:</b>	Nickel Plated Ductile Iron, 316 Stainless Steel, X2= Special,
<b>Stem/Bushing:</b>	316 Stainless Steel, 416 Stainless Steel w/Teflon, 316 Stainless Steel w/Teflon, x4= Special
<b>Seat:</b>	Buna-N, Viton, x3= Special

### Temperature:

To 250°F with standard materials. To 300°F with optional materials. (Consult Factory)

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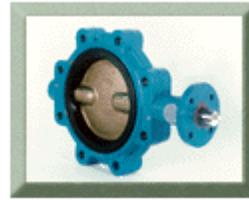


**Torque Data**

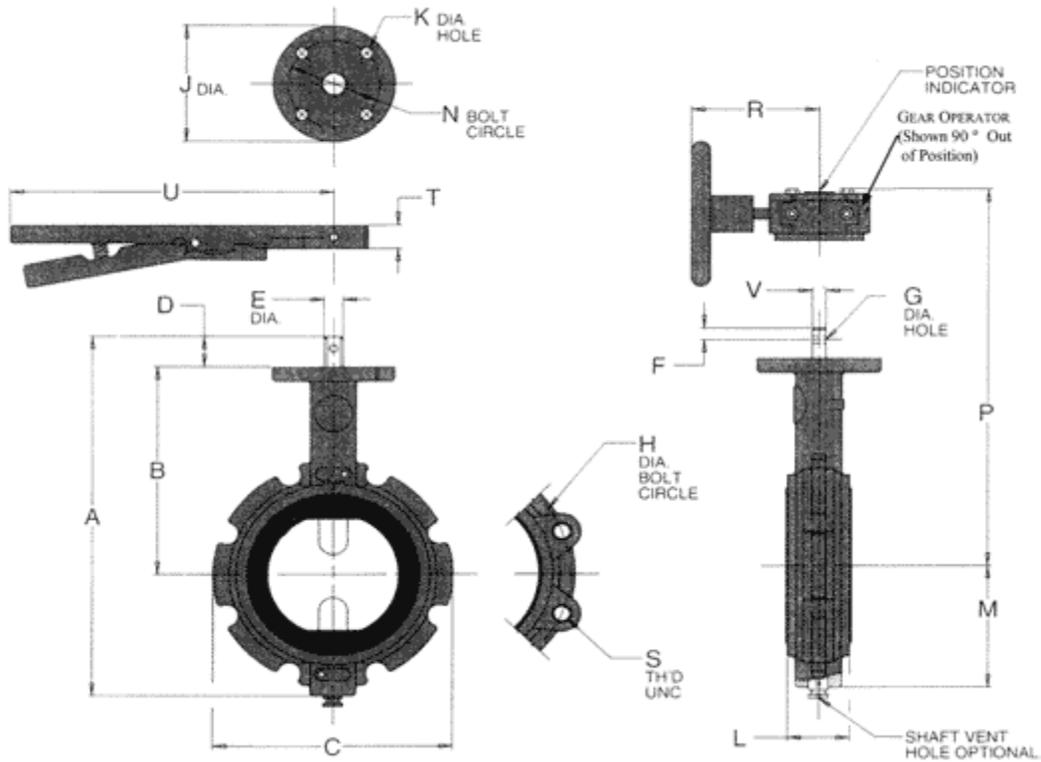
LINE PRESSURE	VALVE SIZE													
	2"	2.5"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	24"
<b>50</b>	85	126	180	355	562	918	1,440	2,466	3,510	5,200	6,900	9,000	11,000	16,000
<b>100</b>	108	153	207	414	652	1,035	1,692	3,010	4,140	6,000	8,000	10,500	14,000	21,000
<b>150</b>	126	175	256	472	715	1,152	1,944	3,550	5,616	7,500	9,500	12,000	15,200	28,000
<b>200</b>	144	198	297	531	787	1,269	2,205	4,095	7,686					

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**2" thru 12"  
Butterfly Valve Dimensions**



(see dimensional tables on next page for above drawing)

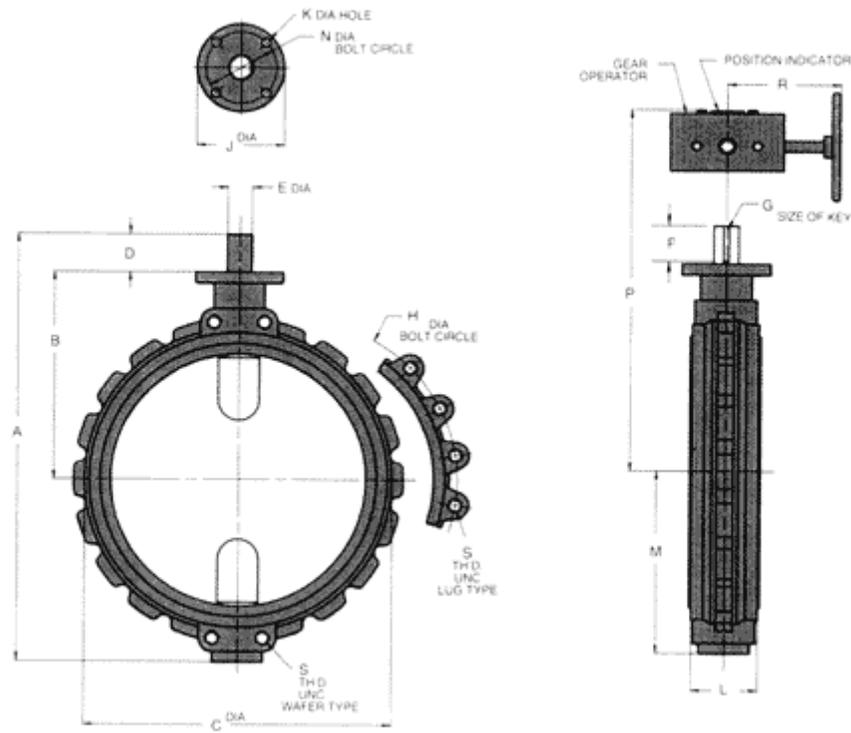
Valve Size	A	B	C	D	E	F	G	H	J	K	L
2"	9.40	5.75	4.12	1.09	.56	.45	.25	4.75	4.00	.41	1.62
2-1/2"	10.22	6.25	4.84	1.09	.56	.45	.25	5.50	4.00	.41	1.75
3"	10.84	6.50	5.34	1.09	.56	.45	.25	6.00	4.00	.41	1.75
4"	12.59	7.25	6.88	1.09	.62	.45	.25	7.50	4.00	.41	2.00
5"	14.16	7.75	7.72	1.09	.88	.45	.25	8.50	4.00	.41	2.12
6"	14.47	8.38	8.75	1.09	1.00	.45	.25	9.50	4.00	.41	2.12
8"	18.81	9.62	11.00	1.62	1.12	.56	.38	11.75	6.00	.53	2.37
10"	21.62	11.00	13.38	1.62	*1.12	.56	.38	14.25	6.00	.53	2.63
12"	24.44	12.50	16.12	1.62	*1.12	.56	.38	17.00	6.00	.53	3.00

\* Actual shaft size is 1.38" diameter for 10" and 1.50" for 12"

Valve Size	M	N	P	R	S	No. of Lugs	T	U	V	Gear Operator
2"	2.56	3.00	8.00	4.12	5/8 - 11 UNC	4	.81	10.5	.44	PDC-5
2-1/2"	2.87	3.00	8.50	4.12	5/8 - 11 UNC	4	.81	10.5	.44	PDC-5
3"	3.25	3.00	8.75	4.12	5/8 - 11 UNC	4	.81	10.5	.44	PDC-5
4"	4.25	3.00	9.50	4.12	5/8 - 11 UNC	8	.81	10.5	.44	PDC-5
5"	5.31	3.00	10.00	4.12	3/4 - 10 UNC	8	.81	10.5	.44	PDC-5
6"	6.00	3.00	10.62	4.12	3/4 - 10 UNC	8	.81	10.5	.44	PDC-5
8"	7.56	5.00	12.56	9.87	3/4 - 10 UNC	8	1.25	15	.75	PDC-8
10"	9.00	5.00	14.00	9.87	7/8 - 9 UNC	12	1.25	15	.75	PDC-8
12"	10.31	5.00	15.50	9.87	7/8 - 9 UNC	12	1.25	15	.75	PDC-8

\* Actual shaft size is 1.38" diameter for 10" and 1.50" for 12"

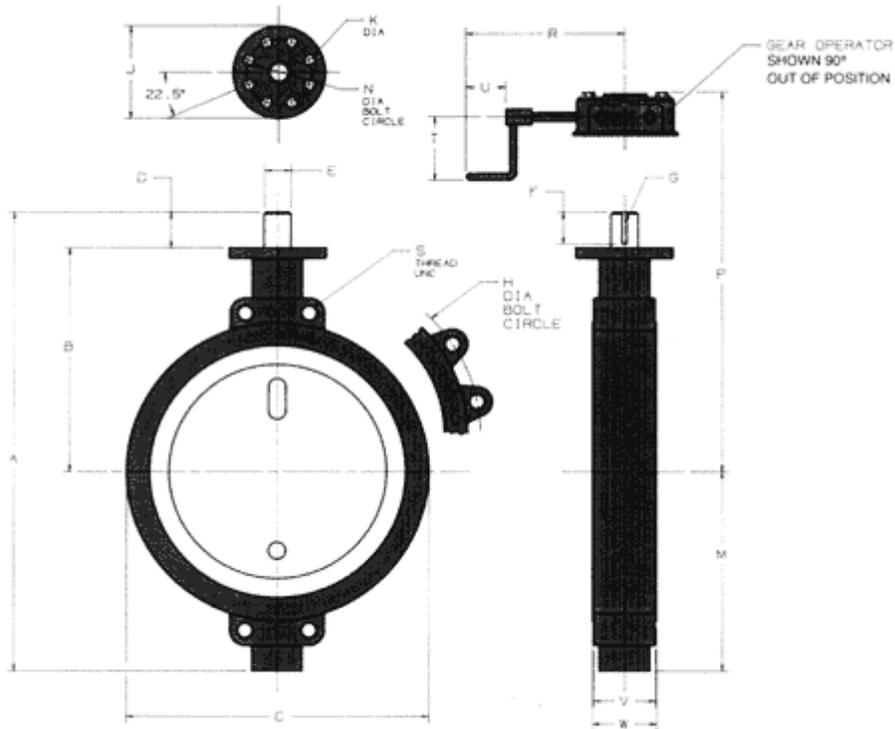
## 14" thru 24" Butterfly Valve Dimensions



Valve Size	A	B	C	D	E	F	G	H	J	K	L
14"	26.25	13.25	17.50	2.25	1.50	2.00	3/8x3/8	18.75	6.00	0.53	3.06
16"	29.50	14.75	20.06	2.25	1.50	2.00	3/8x3/8	21.25	6.00	0.53	3.83
18"	32.75	15.75	21.44	3.00	1.75	2.37	3/8x3/8	22.75	6.75	0.53	4.40
20"	34.00	16.25	23.69	3.00	1.75	2.60	3/8x3/8	25.00	6.75	0.53	4.87
24"	39.38	19.12	28.06	3.50	2.25	3.25	1/2x1/2	29.50	9.50	0.81	6.01

Valve Size	M	N	P	R	S	No. of Bolts	Gear Operator
14"	10.75	5.00	17.94	10.00	1"-8 UNC	12	PDC-17
16"	12.50	5.00	19.44	10.00	1"-8 UNC	16	PDC-17
18"	14.00	5.00	20.44	10.00	1-1/8"-7 UNC	16	PDC-17
20"	15.00	5.00	20.94	10.00	1-1/8"-7 UNC	20	PDC-17
24"	16.75	6.50	24.38	10.25	1-1/4"-7 UNC	20	PDC-35

## 30" thru 36" Butterfly Valve Dimensions



Valve Size	A	B	C	D	E	F	G	H	J	K
30"	55.38	24.75	38.75	5.38	3.00	4.375	3/4x1/2	36.00	9.25	8.68
36"	63.38	28.38	45.75	5.38	3.62	4.875	7/8x5/8	42.75	11.75	8.68

Valve Size	M	N	P	R	S	T	U	V	W	Gear Operator
30"	25.25	7.50	56.00	22.50	1-1/4-7 UNC	18.00	4.00	6.51	6.75	PDC48
36"	29.62	10.25	64.00	16.00	1-1/2-6 UNC	6.00	4.00	7.88	8.09	PDC49

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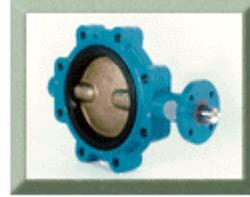


**Cv Data**

SIZE	DISC POSITION (DEGREES OPEN)							
	25°	30°	40°	50°	60°	70°	80°	90°
2"	3	7	19	36	63	84	115	120
2-1/2"	4	10	24	47	78	113	182	194
3"	14	21	45	84	133	203	382	430
4"	30	52	100	165	270	420	703	830
5"	85	130	210	345	525	825	1,350	1,500
6"	165	225	360	570	820	1,260	1,875	1,980
8"	210	300	480	780	1,320	2,280	3,780	3,870
10"	405	575	850	1,200	1,900	3,300	6,100	6,450
12"	550	750	1,200	1,875	2,850	5,025	9,300	9,800
14"	650	825	1,500	2,300	3,500	6,200	9,700	10,500
16"	800	1,000	1,850	2,900	4,600	7,500	10,600	13,500
18"	1,100	1,400	2,450	3,800	5,000	9,700	13,850	18,000
20"	1,400	1,650	3,050	4,800	7,400	12,500	17,750	23,000
24"	2,000	2,400	4,200	6,600	10,500	17,000	23,000	31,000
Cv for sizes above 24", consult factory								

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**How To Order**

\*Material Option Followed By an Asterisk, May Not be Routinely Carried in Inventory, and May Result in Longer Deliveries Than Normal.

**Use the following table to determine your part number:**

Example: to code an 8 " wafer style butterfly valve with cast iron body, aluminum bronze disc, EPDM seat, 416 stainless steel shaft, bronze bushing, 10 position lock lever and no special configuration would be coded as follows:

**27-0080-W-1-1-1-1-2-1**

**When "Special" materials are selected, be sure to completely describe on purchase order.**

**Please provide the following information:**

- **Flow Media**
- **Operating Temperature F°**
- **No. of [open/close] cycles/day**
- **Line Pressure (PSIG) = \_\_\_\_\_.**
- **Delta P = \_\_\_\_\_.**

## Valve Series 27

Nominal Size Code	Body Style	Body Material	Disc Material	Seat Material	Stem/Bushing Material	Operators	Special Configuration
0020= 2"	W = Wafer	1= Cast Iron	1= Alum. Bronze	1= EPDM	1= 416 S/S w/ Bronze	1= None	1= Leave Blank
0030= 3"	L = Lug	2= Ductile Iron	2= Nickle Plated Ductile Iron	2= Buna-N	2= 316 S/S w/ Bronze	2= 10 Position Lock Lever	2= 50 PSI Under Cut Disc
0040= 4"		3 = 316 S/S	3 = 316 S/S	3= Viton	3= 316 S/S w/ Tef	3= Gear Operator	X7 = Special
0060= 6"		X1 = Special	X2 = Special	X3 = Special	4= 316 S/S w/ Tef	4= Double Acting Pneumatic	
0080= 8"					X4 = Special	5= Electric	
0100= 10"						6= Spring return Pneumatic	
0120= 12"						X5 = Special	
0140= 14"							
0160= 16"							
0180= 18"							
0200= 20"							
0240 = 24"							
0300 = 30"							
0360 = 36"							

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