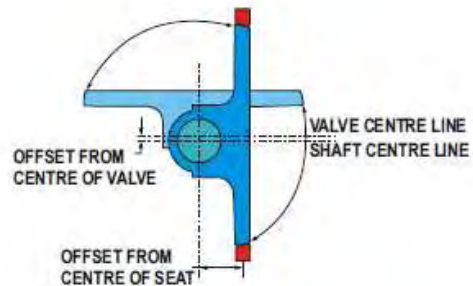


Design Construction



Double Offset

AMMtech Srl High Performance Butterfly Valves are available in Wafer and Lug type designs conforming to API 609 standard. The Disc construction is Double Offset providing excellent controllability, bubble tight shut off, greater seat life and smooth operation. Valves are specially designed for applications in Chemical, Petroleum, Hydro Carbons Processing, Pulp & Paper and HVAC industries.

Well supported shaft with heavy duty bearings ensure perfect alignment of seat and disc for smooth and trouble free operations. Valves have been rigorously tested to ensure industry performance requirements.

Features

- ▶ Valve body is solid, heavy duty. Seat Retainer construction allows Gasket conforming to API 609.
- ▶ Optimal disc geometry and cavity free flow passage offers minimum flow resistance and high Cv values.
- ▶ Heavy duty pins connecting valve shaft to disc avoids lost motion under high torque conditions.
- ▶ Long life, easy field replaceable seat placed in body, away from flow steam, provides bubble tight shut off. Valves are equally suitable for control and tight shut off applications.
- ▶ Low friction bearings provide maximum radial support for higher shaft loads. The PTFE lined bearings having low co-efficient of friction minimizes operating torque and reduces actuator size. They are slip in-place type, easy for assembly and disassembly.
- ▶ Seat option includes PTFE, EPDM, Viton Soft Seats and Flexible Metal Seats to suit variety of fluids and applications.
- ▶ Recommended for critical applications including high temperature services, throttling steam control, liquor services, gas applications, vacuum applications, corrosive fluids, refinery services, chemical services, hydrocarbon services, etc.

Specifications

Valve Sizes	:	2" (50mm) to 80" (2032mm)
Ratings	:	Class 150 , Class 300 , Equivalent to DIN
Body Style	:	Wafer , Lug (Single Flange)
Design Standard	:	API 609 , ANSI B 16.34 , ANSI B 16.5
Testing Standard	:	API 598 , FCI 70-2
Seat Leakage Option	:	Class VI for PTFE, EPDM, Viton Soft Seats, Class IV for Flexible Metal Seats
Flow Direction	:	Bi Directional

Conformity To Codes

Design & Manufacturing	:	API 609 Category B BS 5155 API 607 (Fire Safe)
Face to Face Dimensions	:	API 609 BS 5155 BS EN 558-1 ISO 5752
Flange Dimensions	:	ANSI B 16.5 (DN 50 to DN 600) ANSI B 16.47 (DN 650 to DN 1500)
Pressure Temperature Rating	:	ANSI B 16.34
Valve Inspection	:	API 598 FCI 70-2

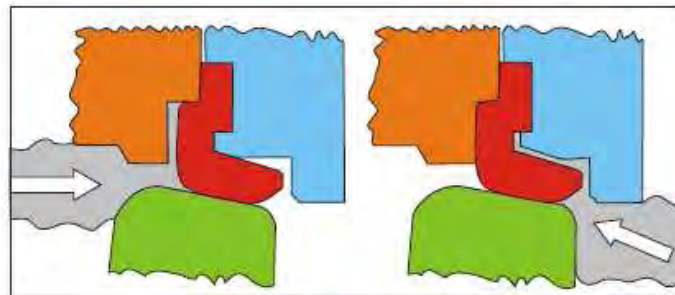
Testing and Inspection

Test	Test Pressures	Test Stds	Test Medium	Acceptance Criteria
Hydro Test	30 Bar (ANSI 150#)	API 598	Water	No Leakage
	80 Bar (ANSI 300#)	API 598	Water	No Leakage
Seat Leakage Test	Max ΔP Shut Off	FCI 70-2	Water	Class VI
	20 Bar (ANSI 150#)	API 598	Water	No Leakage
	54 Bar (ANSI 300#)	API 598	Water	No leakage

Seat Design Options

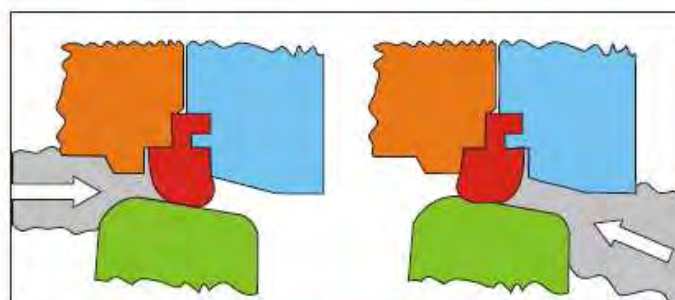
AMMtech Srl offers a wide variety of seat design options which are cost-effective and provide solutions to your service requirements. The Double Offset disc construction minimizes the interference between seat & disc edges allowing longer seat life even under frequent valve operations. Seats are available in both rigid & flexible construction to suit specific requirements. The seats are held rigidly by the seat retainer which is inserted within the body per API 609 design requirements. This construction allows use of Gasket conforming to API 601 (ANSI 16.5) Standard and eliminate the possibility of JOINT LEAKAGE from body to the atmosphere.

Virgin PTFE seat having a flexi lip provides bubble tight shut off in both the directions. Suits to wide range of applications. Maximum working Temperature 200°C.



Flexible PTFE Seat

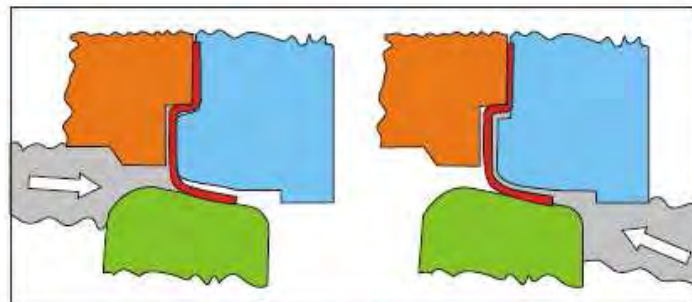
Rubber seats are available in EPDM, NBR and Viton materials. Rigid seats allow a clean flow passage & prevents fluid deposition within the seat. These seats are ideal for many applications in Sugar Industry Rigid seats allows unidirectional flow (i.e. shaft side inlet) providing tight shut off under positive & vacuum applications. With this configuration the shaft side is upstream side.



Flexible Rubber (EPDM / NBR / Viton) Seat

Most suitable for high consistency fluids having suspended hard particles, for erosive services, for high temperature services >200°to 550°C.

Die pressed stainless steel seats with inbuilt flexible property gives Class IV leakage with minimal torque requirements



Flexible Metal

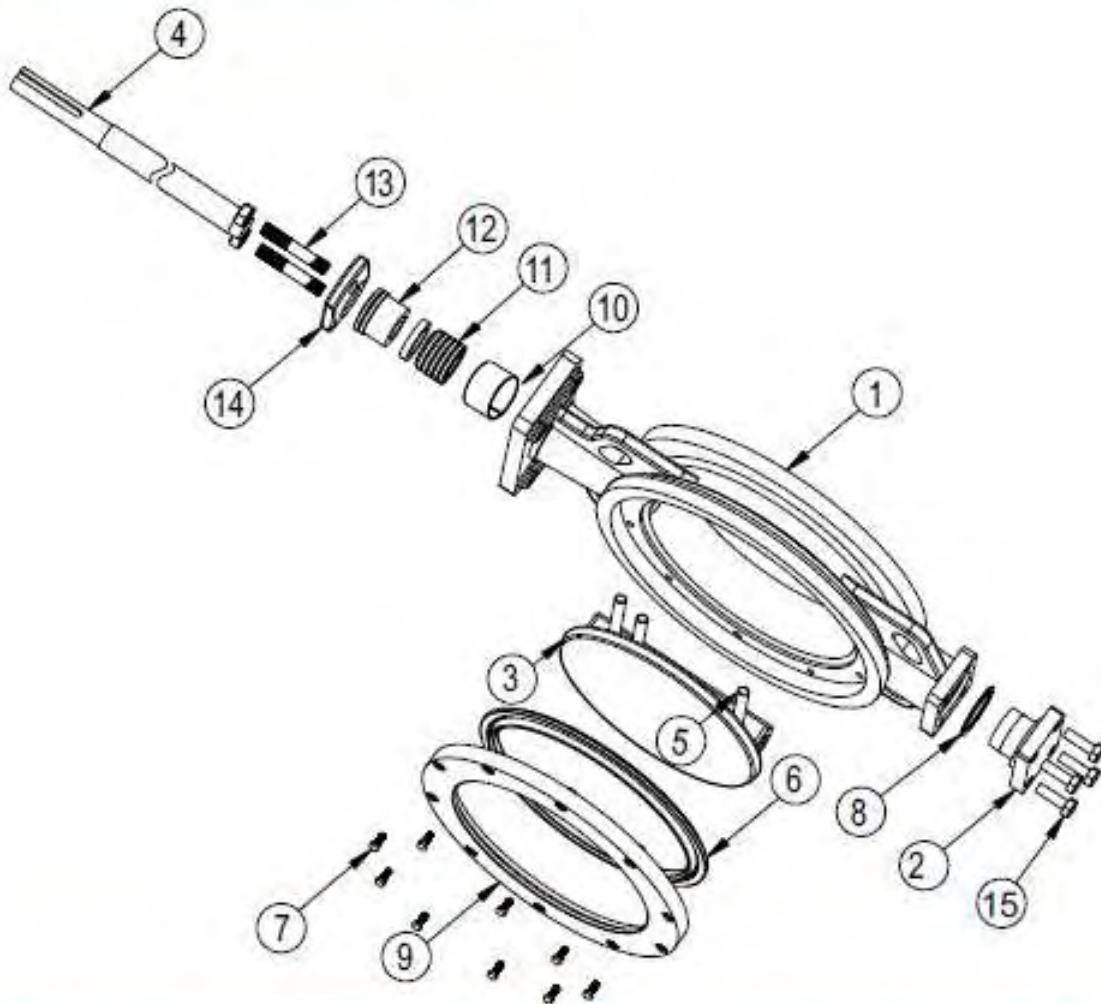
Flow from Seat Retainer Side The lip shaped PTFE Seat moves axially in the direction of flow with the assistance of line pressure. The tightness between seat and disc increases with increases in line pressure.

Flow from Shaft Side With the line pressure acting on the disc, it tries to move towards the seat which is supported by Seat Retainer. Seat does not move giving simple leak tight seal.



Fire Safe Design

Material Of Construction

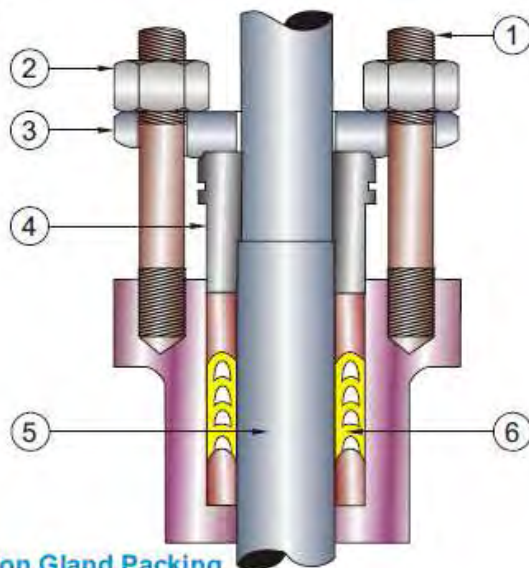


Sr. No.	Part Name
1	Valve Body
2	End Cover
3	Disc
4	Valve Shaft
5	Disc
6	Seat Ring
7	Seat Retainer Screw

Sr. No.	Part Name
8	Body Gasket
9	Seat Retainer
10	Guide Bush
11	Gland Packing
12	Gland Bush
13	Gland Studs
14	Gland Flange
15	End cover bolts

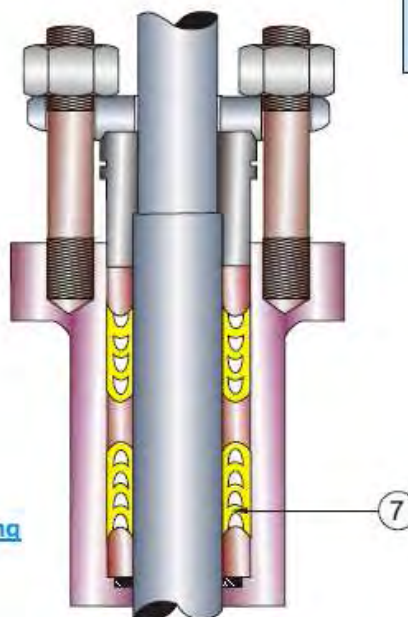
Gland Packing Options

AMMtech Srl offers Single and Double set of V-Teflon rings (up to 200°C) and Graphite Moulded rings (>200°C up to 600°C) as standard. Inverted V-fered for vacuum application with upper set of V-Rings positioned Teflon packings are of reverse direction. Low fugitive Emission packings are provided on The LFE packing arrangement request. comprises of live loaded packings. The packing gland is loaded with spring washers to maintain a continuous compressive lead to gland packings as shown in figure below



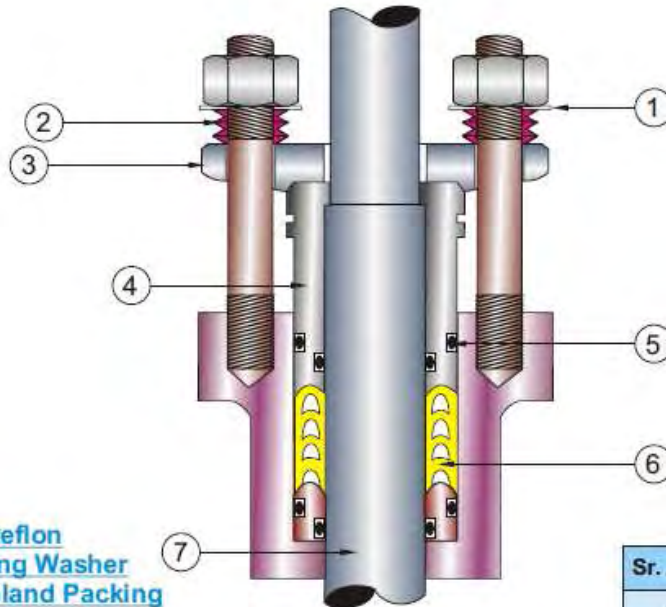
Single V-teflon Gland Packing

Sr. No.	Part Name
1	GLAND STUD
2	NUT
3	GLAND FLANGE
4	GLAND BUSH
5	VALVE SHAFT
6	V-RING TEFLON GLAND PACKING
7	V-RING TEFLON GLAND PACKING



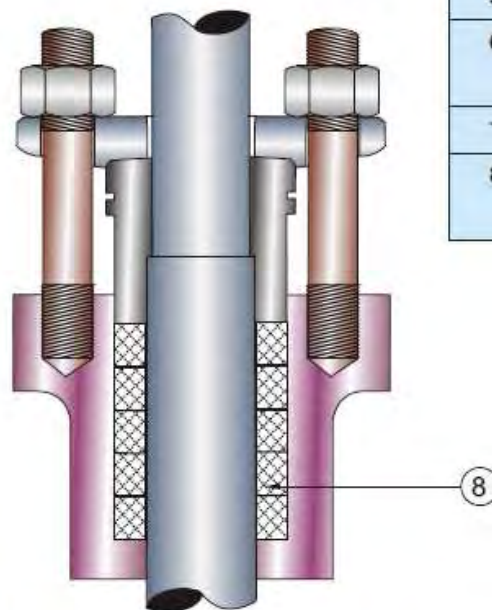
Inverted V-teflon Gland Packing
For Vacuum Application

Gland Packing Options



**Single V-teflon
With Spring Washer
Loaded Gland Packing**

Sr. No.	Part Name
1	WASHER
2	SPRING WASHER
3	GLAND FLANGE
4	GLAND BUSH
5	'O'RING
6	V-RING TEFLON GLAND PACKING
7	VALVE SHAFT
8	GRAFOIL GLAND PACKING



Single Grafoil Packing



HIGH PERFORMANCE BUTTERFLY VALVES

AMM180

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Valve Torques (N m)

ANSI Class 150
 ΔP , Bar

VALVE SIZE		SOFT SEATED VALVE				FIRE SAFE DESIGNED VALVE				METAL SEATED VALVE			
INCH	MM	$\Delta P=5$	$\Delta P=10$	$\Delta P=15$	$\Delta P=20$	$\Delta P=5$	$\Delta P=10$	$\Delta P=15$	$\Delta P=20$	$\Delta P=5$	$\Delta P=10$	$\Delta P=15$	$\Delta P=20$
2"	50	27	30	32	33	43	46	47	48	53	59	60	61
2.5"	65	29	31	33	36	45	48	49	50	58	61	62	64
3"	80	30	33	35	41	48	50	51	53	61	64	66	67
4"	100	37	44	50	59	65	71	74	77	82	90	94	97
5"	125	52	59	64	83	77	89	91	97	67	109	116	123
6"	150	62	77	90	97	94	100	106	114	120	127	135	146
8"	200	96	135	142	164	144	159	176	194	184	202	224	247
10"	250	157	199	239	277	211	247	290	323	269	314	370	411
12"	300	217	284	351	418	265	341	416	500	336	433	531	635
14"	350	327	424	541	687	470	617	763	911	598	784	971	1158
16"	400	444	604	769	1009	587	822	969	1145	747	1046	1233	1457
18"	450	613	822	1007	1308	822	1057	1291	1585	1046	1345	1644	2017
20"	500	784	1238	1345	1879	939	1233	1585	1937	1366	1793	2305	2818
22"	550	1110	1537	1802	2305	1318	1804	2255	2775	1622	2220	2775	3416
24"	600	1366	1879	2348	2818	1699	2220	2764	3330	2092	2732	3373	4099
26"	650	1696	2208	2828	2828	2087	2713	3478	4173	2568	3338	4280	5136
28"	700	2149	2771	3449	3449	2643	3408	4243	5217	3253	4195	5222	6421
30"	750	2376	3111	3902	3902	2922	3826	4799	5704	3595	4708	5907	7020
32"	800	2771	3619	4524	4524	3408	4451	5564	6607	4195	5479	6849	8133
34"	850	3393	4411	5372	5372	4173	5425	6607	8347	5136	6677	8133	10272
36"	900	3958	5089	6220	6220	4869	6260	7651	9738	5993	7705	9416	11985
38"	950	4524	5655	7352	7352	5564	6956	9043	11128	6849	8560	11128	13697
40"	1000	5089	6786	8482	8482	6260	8347	10433	12520	7705	10272	12841	15409
42"	1050	5655	7917	9614	9614	6956	9738	11825	13215	8560	11985	14553	16264
44"	1100	6786	9047	10462	10462	8347	11128	12868	14955	10272	13697	15836	18405
46"	1150	7917	9614	11310	11310	9738	11825	13911	16693	11985	14553	17121	20545
48"	1200	9047	10744	12723	12723	11128	13215	15650	18779	13697	16264	19261	23114
50"	1250	10005	11832	13919	13919	12306	14553	17121	20331	15195	18084	21294	25253
52"	1300	11136	13224	15573	15573	13697	16265	19154	22792	16907	20117	23542	27929
54"	1350	12266	14615	17225	17225	15088	17977	21187	25146	19261	22472	26430	31031
56"	1400	14355	16877	19922	19922	17657	20759	24504	28891	21829	25681	29961	34670
58"	1450	16616	18530	21662	21662	20438	22792	26644	31353	25253	29747	34776	40341
60"	1500	19226	22445	26186	26186	23648	27607	32209	37666	29105	34242	39591	45477
64"	1600	23750	27491	31840	31840	29213	33814	39164	45798	35954	42481	49222	56712
66"	1650	26272	30449	35320	35320	32315	37452	43443	50827	39805	46974	54037	62062
72"	1800	31057	36016	41410	41410	38200	44300	50934	59066	47082	55535	63881	73512



HIGH PERFORMANCE BUTTERFLY VALVES

AMM180

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ANSI Class 300 ΔP , Bar

VALVE SIZE		SOFT SEATED VALVE				FIRE SAFE DESIGNED VALVE				METAL SEATED VALVE			
INCH	MM	$\Delta P=25$	$\Delta P=35$	$\Delta P=40$	$\Delta P=51$	$\Delta P=25$	$\Delta P=35$	$\Delta P=40$	$\Delta P=51$	$\Delta P=25$	$\Delta P=35$	$\Delta P=40$	$\Delta P=51$
2"	50	42	43	44	45	54	57	58	59	68	71	73	74
2.5"	65	43	45	46	47	57	59	60	62	71	74	75	79
3"	80	46	49	50	52	61	63	64	71	77	79	80	89
4"	100	68	72	75	82	90	96	106	112	112	121	132	140
5"	125	90	97	105	116	115	125	131	141	144	153	164	176
6"	150	116	127	135	142	141	150	160	173	176	188	201	217
8"	200	184	199	215	232	237	256	275	288	297	320	345	361
10"	250	329	366	389	433	410	442	468	500	512	553	585	624
12"	300	508	568	613	657	769	833	929	1089	961	1041	1161	1361
14"	350	961	1161	1201	1321	1249	1388	1596	1734	1441	1601	1841	2001
16"	400	1321	1441	1601	1761	1734	2012	2289	2428	2001	2321	2642	2802
18"	450	1008	1921	2081	2241	2359	2740	3122	3435	2722	3163	3605	3963
20"	500	2348	2519	2775	2989	3138	3736	4259	4632	3810	4536	5171	5625
22"	550	2818	3245	3415	3629	3736	4632	5230	5977	4536	5625	6352	7258
24"	600	3415	3842	4227	4525	4483	5379	6052	6724	5443	6532	7349	8165

ANSI Class 600 ΔP , Bar

VALVE SIZE		SOFT SEATED VALVE				FIRE SAFE DESIGNED VALVE				METAL SEATED VALVE			
INCH	MM	$\Delta P=55$	$\Delta P=70$	$\Delta P=80$	$\Delta P=102$	$\Delta P=55$	$\Delta P=70$	$\Delta P=80$	$\Delta P=102$	$\Delta P=55$	$\Delta P=70$	$\Delta P=80$	$\Delta P=102$
3"	80	82	94	103	112	115	125	138	147	144	156	171	185
4"	100	136	153	171	200	263	314	346	371	329	393	432	464
5"	125	176	206	235	265	359	442	487	564	448	553	608	704
6"	150	235	290	323	352	468	576	704	833	585	720	881	1041
8"	200	376	464	528	646	833	1025	1153	1217	1041	1281	1441	1521
10"	250	646	793	939	998	1281	1537	1729	1857	1601	1921	2161	2321
12"	300	1057	1233	1379	1526	2049	2530	2818	3138	2562	3163	3522	3922
14"	350	1665	2012	2220	2428	2983	3746	4163	4510	3442	4323	4803	5203
16"	400	2151	2636	2914	3122	3816	4856	5411	5620	4403	5604	6244	6484
18"	450	2348	3330	3608	3885	4856	6105	6799	7631	5604	7044	7845	8806
20"	500	3469	4163	4856	5203	6724	8966	1044	11207	8165	10887	12701	13608
22"	550	4510	5550	6105	6244	8966	11954	12701	14195	10887	14516	15424	17237
24"	600	5550	6660	8325	9019	11954	14195	15690	17184	14516	17240	19052	20870

Cv Values (usgpm)

ANSI 150#

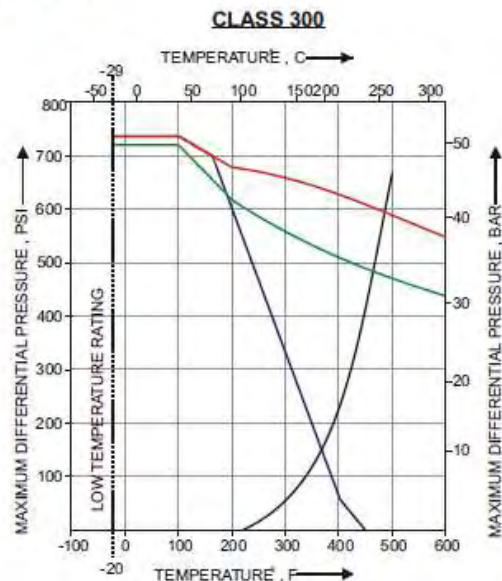
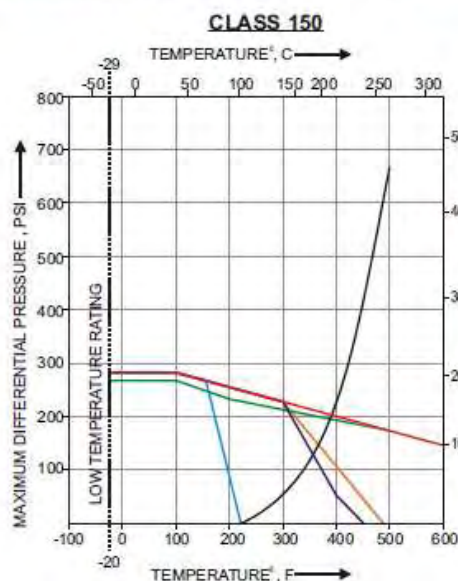
VALVE SIZE		150#	
INCH	MM	60°	90°
2	50	25	50
2½	65	39	78
3	80	82.5	165
4	100	200	400
5	125	325	650
6	150	525	1050
8	200	1100	2200
10	250	1650	3300
12	300	2550	5100
14	350	2900	5800
16	400	4000	8000
18	450	5250	10500
20	500	7000	14000
24	600	10800	21600
28	700	14935	29870
30	750	17000	34000
32	800	20585	41170
36	900	27750	55500
40	1000	36800	73600
42	1050	41325	82650
44	1100	45600	91200
48	1200	54150	108300
52	1300	60840	121680
54	1350	66750	133500
56	1400	71000	142000
60	1500	79500	159000
64	1600	92160	184320
66	1650	98010	196020
72	1800	116640	233280

ANSI 300#

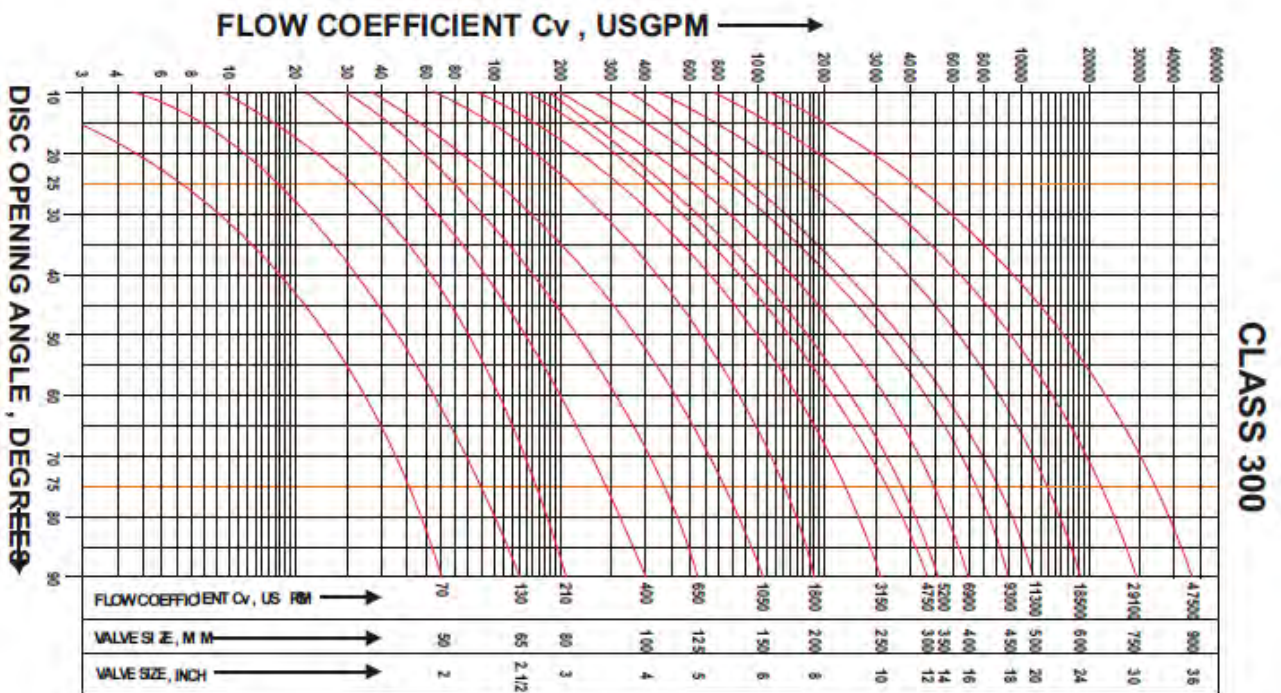
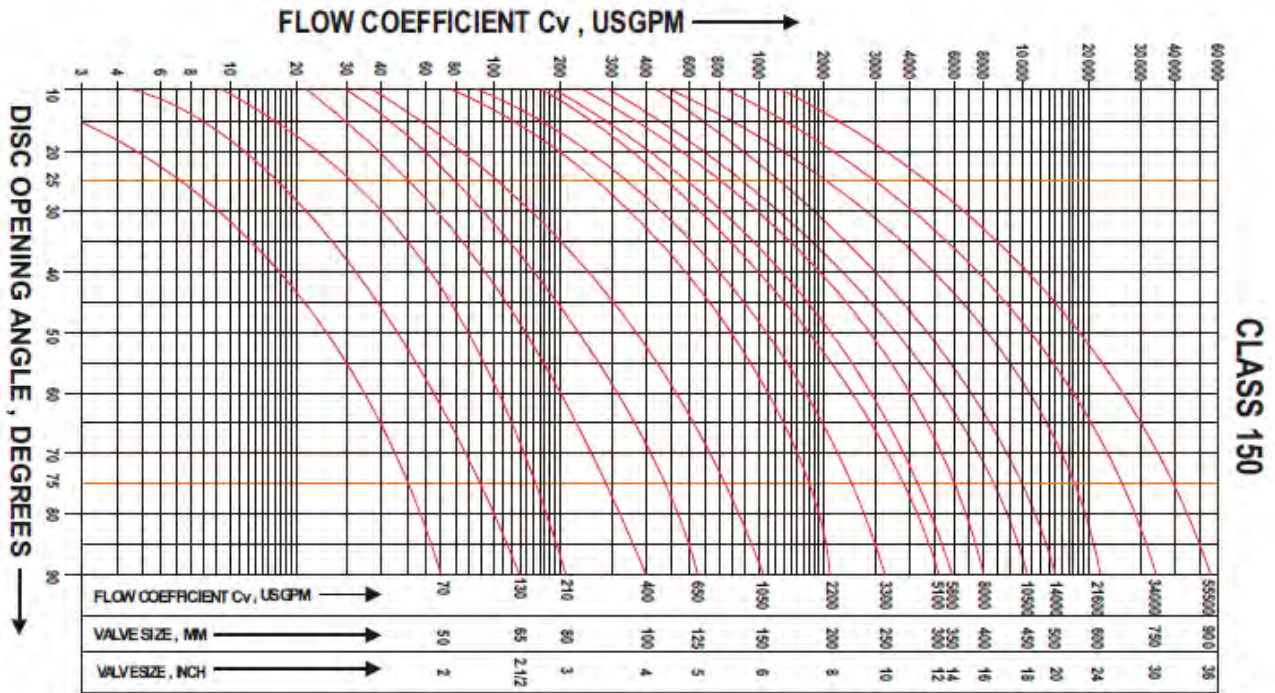
VALVE SIZE		300#	
INCH	MM	60°	90°
2	50	25	50
2½	65	39	78
3	80	82.5	165
4	100	200	400
5	125	325	650
6	150	525	1050
8	200	900	1800
10	250	1575	3150
12	300	2375	4750
14	350	2600	5200
16	400	3450	6900
18	450	4650	9300
20	500	5650	11300
24	600	9250	18500
28	700	12785	25570
30	750	14550	29100
32	800	17620	35235
36	900	23750	47500

Pressure-Temperature Ratings

- A 351 Gr. CF8M , CAST STAINLESS STEEL
- A 216 Gr. WCB , CAST CARBON STEEL
- PTFE
- EPDM
- VITON
- SATURATED STEAM



Flow Characteristic Curves



Actuators

Piston Actuator (single / Double Acting)

Series 'E' and Series 'P' actuators are powerful, compact and durable units for use on quarter turn applications. These are available in Double acting and spring return versions. Various models are available to suit a large range of torque requirements. All actuators have mounting flanges and drives to ISO 5211.



Diaphragm Actuator

Series 'Ldp' actuators are Diaphragm operated rotary actuators using linkage arrangement for motion transfer from linear to rotary. These actuators are exclusively designed for Butterfly Valves and are suitable for regulating and on-off applications. The actuators provide accurate, safe and reliable valve operation at low supply pressures. Heavy-duty lever arrangement offers great stability under high torque and shock conditions. Low friction operation allows more accurate control, low maintenance and long service life.



Hand Lever

Series 'H' Hand lever arrangement provides latching system in open, closed and eight intermediate positions. A pointer indicates the position of disc and an additional lock facility is provided to prevent unauthorized valve operation. Lever actuators are provided on size 2" (50mm) to 6" (150mm) only. For size 8" (200mm) and above, Gear Operators are recommended.



Gear Operator

Series 'MOR' Gear operators offer simple and reliable manual positioning of the valves. These actuators consist of worm gear arrangement housed in a robust cast iron housing. Sturdy design provides long life and maintenance free services. The high gear ratios enable the minimum input efforts for high torque conditions.



Accessories Options

Following Accessories are offered
as per Customers requirements :

- ▶ Pneumatic Valve Positioners,
- ▶ Electro Pneumatic Valve Positioners,
- ▶ Air Filter Regulators,
- ▶ Air Lock Relays,
- ▶ Air Volume Boosters,
- ▶ Limit Switches,
- ▶ Proximity Switches,
- ▶ Solenoid Valves,
- ▶ Position Feedback Transmitters,
- ▶ Quick Exhaust Valves,
- ▶ I/P Converters.



Limit Switch

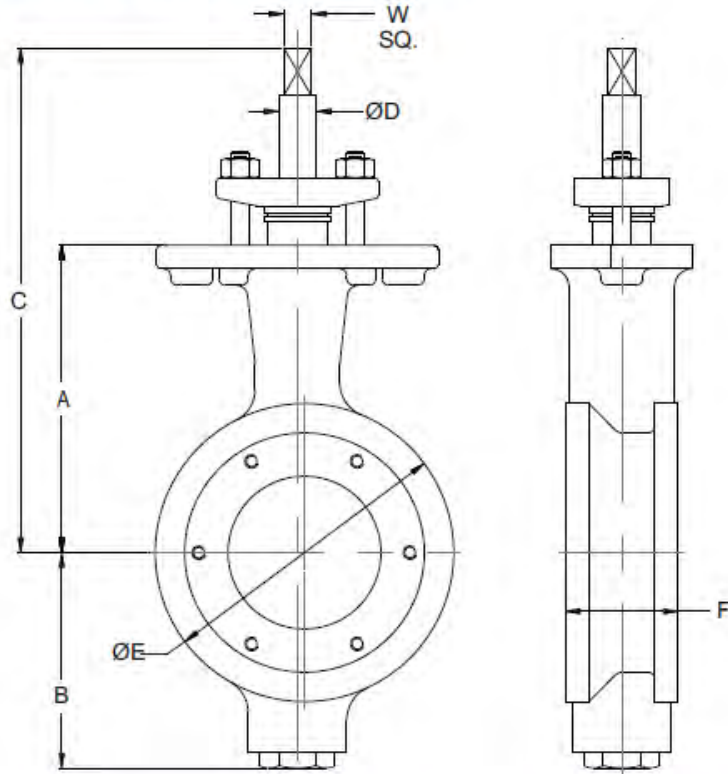


Smart Positioner



Electro Pneumatic Positioner

Dimension Wafer Design



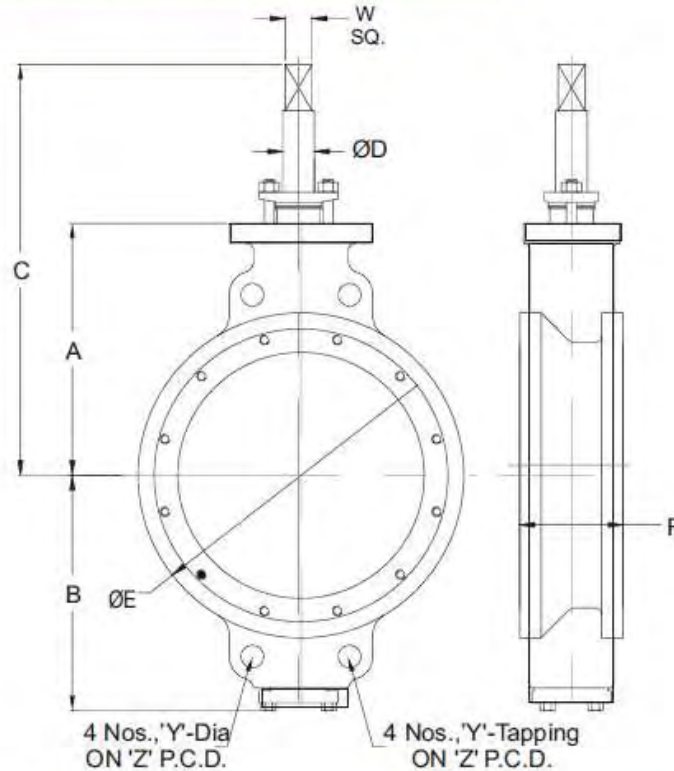
150#

VALVE SIZE		150#-WAFER DESIGN						
INCH	(DN)	A	B	C	ØD	ØE	F	W SQ.
2"	(50.0)	100.0	70.0	166.0	11.5	92.0	43.0	8.5
2.1/2"	(65.0)	110.0	75.0	176.0	11.5	105.0	46.0	8.5
3"	(80.0)	131.0	92.0	215.0	14.0	127.0	48.0	11.5
4"	(100.0)	133.0	117.0	233.0	14.0	157.0	54.0	11.5
5"	(125.0)	187.0	147.0	267.0	20.0	186.0	57.0	14.5
6"	(150.0)	187.0	147.0	267.0	20.0	216.0	57.0	14.5

300#

VALVE SIZE		300#-WAFER DESIGN						
INCH	(DN)	A	B	C	ØD	ØE	F	W SQ.
2"	(50.0)	100.0	70.0	166.0	13.0	92.0	43.0	8.5
2.1/2"	(65.0)	110.0	75.0	176.0	13.0	105.0	46.0	8.5
3"	(80.0)	131.0	92.0	215.0	16.0	127.0	48.0	11.5
4"	(100.0)	153.0	117.0	237.0	16.0	157.0	54.0	11.5
5"	(125.0)	187.0	147.0	267.0	20.0	186.0	59.0	14.5
6"	(150.0)	187.0	147.0	267.0	22.0	216.0	59.0	16.0

Dimension Wafer Design



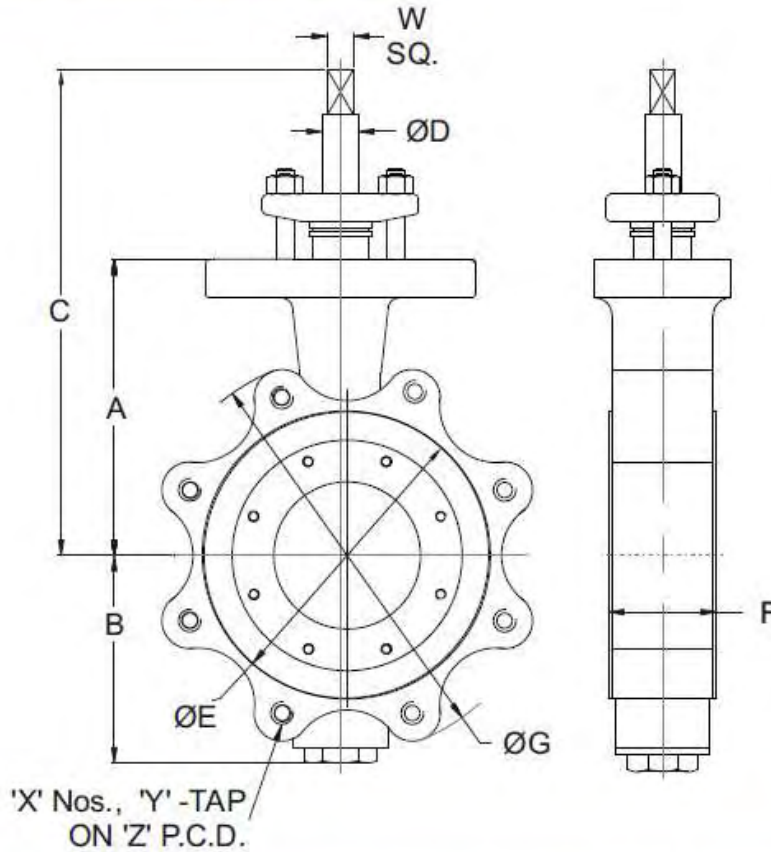
150#

VALVE SIZE	150#-WAFER DESIGN										
INCH, (DN)	A	B	C	ØD	ØE	F	W SQ.	ØY Hole	Y Tapping	Z	
8" (200.0)	217.0	210.0	357.0	20.0	270.0	64.0	14.5	22.2	-	298	
10" (250.0)	250.0	240.0	388.0	26.0	324.0	71.0	19.0	25.4	-	362	
12" (300.0)	310.0	285.0	457.0	33.0	381.0	81.0	24.0	25.4	-	432	
14" (350.0)	320.0	300.0	473.0	38.0	413.0	92.0	30.0	28.6	-	476	
16" (400.0)	340.0	345.0	493.0	43.0	470.0	102.0	30.0	28.6	-	540	
18" (450.0)	375.0	380.0	546.0	48.0	533.0	114.0	30.0	31.75	-	578	
20" (500.0)	406.0	400.0	605.0	58.0	584.0	127.0	38.0	-	1.1/8"	635.0	
24" (600.0)	510.0	460.0	760.0	68.0	692.0	154.0	38.0	-	1.1/4"	749.0	
36" (900.0)	666.0	628.0	941.0	82.0	1022.0	241.0	58.0	-	1.1/2"	1086.0	

300#

VALVE SIZE	300#-WAFER DESIGN									
INCH (DN)	A	B	C	ØD	ØE	F	W SQ.	Y	Z	
8" (200.0)	217.0	225.0	357.0	28.0	270.0	73.0	20.0	7/8"	330.0	
10" (250.0)	250.0	250.0	395.0	35.0	324.0	83.0	25.0	1"	387.0	
12" (300.0)	310.0	300.0	465.0	45.0	381.0	92.0	32.0	1.1/8"	451.0	
14" (350.0)	335.0	320.0	530.0	50.0	413.0	117.0	35.0	1.1/8"	514.0	
16" (400.0)	365.0	365.0	545.0	60.0	470.0	133.0	42.0	1.1/4"	571.5	
18" (450.0)	400.0	400.0	590.0	70.0	533.0	149.0	49.5	1.1/4"	629.0	
20" (500.0)	425.0	420.0	675.0	80.0	584.0	159.0	57.0	1.1/4"	686.0	
24" (600.0)	510.0	495.0	760.0	100.0	692.0	181.0	71.0	1.1/2"	813.0	
36" (900.0)	666.0	628.0	941.0	152.0	1022.0	286.0	107.5	1.5/8"	1089.0	

Dimension Lug Design



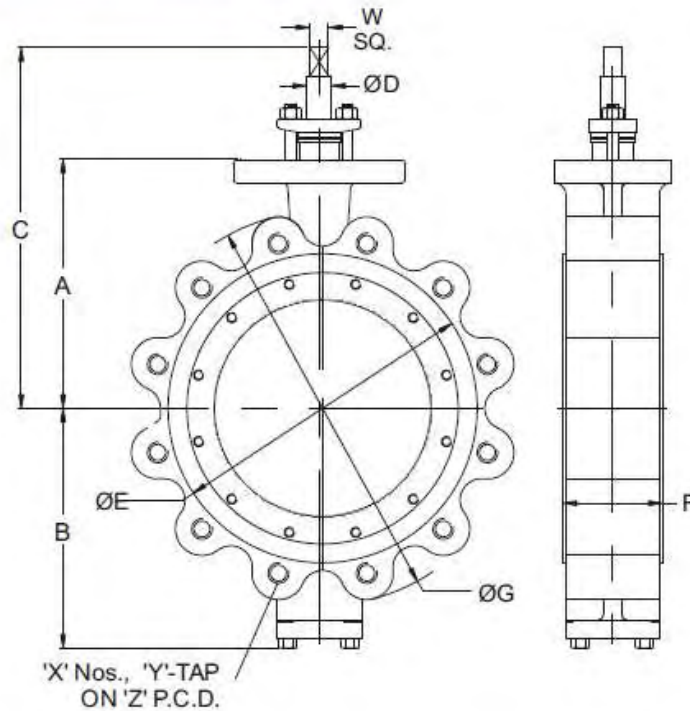
150#

VALVE SIZE		150#-LUGGED DESIGN										
INCH	(DN)	A	B	C	ØD	ØE	F	ØG	W SQ.	X	Y	Z
2"	(50.0)	100.0	70.0	166.0	11.5	92.0	43.0	152.5	8.5	4	5/8"	121.0
2½"	(65.0)	110.0	75.0	176.0	11.5	105.0	46.0	178.0	8.5	4	5/8"	140.0
3"	(80.0)	131.0	92.0	215.0	14.0	127.0	48.0	190.5	11.5	4	5/8"	152.0
4"	(100.0)	153.0	117.0	233.0	14.0	157.0	54.0	228.5	11.5	8	5/8"	190.5
5"	(125.0)	187.0	147.0	267.0	20.0	186.0	57.0	254.0	14.5	8	3/4"	216.0
6"	(150.0)	187.0	147.0	272.0	20.0	216.0	57.0	279.5	14.5	8	3/4"	241.0

300#

VALVE SIZE		300#-LUGGED DESIGN										
INCH	(DN)	A	B	C	ØD	ØE	F	ØG	W SQ.	X	Y	Z
2"	(50.0)	100.0	70.0	166.0	13.0	92.0	43.0	165.1	8.5	8	5/8"	127.0
2.1/2"	(65.0)	110.0	75.0	176.0	13.0	105.0	46.0	190.5	8.5	8	3/4"	149.0
3"	(80.0)	131.0	92.0	215.0	16.0	127.0	48.0	209.5	11.5	8	3/4"	168.0
4"	(100.0)	153.0	117.0	237.0	16.0	157.0	54.0	254.0	11.5	8	3/4"	200.0
5"	(125.0)	187.0	147.0	267.0	20.0	186.0	59.0	279.4	14.5	8	3/4"	235.0
6"	(150.0)	187.0	147.0	267.0	22.0	216.0	59.0	317.5	16.0	12	3/4"	270.0

Dimension Lug Design



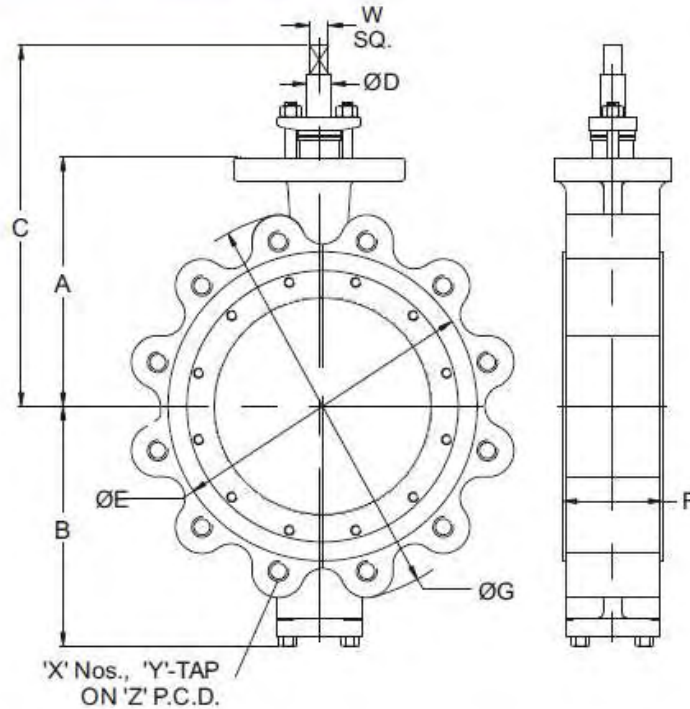
150#

VALVE SIZE	150#-LUGGED DESIGN										
INCH (DN)	A	B	C	ØD	ØE	F	ØG	W SQ	X	Y Tap	Z
8" (200.0)	217.0	210.0	357.0	20.0	270.0	64.0	343.0	14.5	8	3/4"	298.0
10" (250.0)	250.0	240.0	388.0	26.0	324.0	71.0	406.5	19.0	12	7/8"	362.0
12" (300.0)	310.0	285.0	457.0	33.0	381.0	81.0	482.5	24.0	12	7/8"	432.0
14" (350.0)	320.0	300.0	473.0	38.0	413.0	92.0	533.5	30.0	12	1"	476.0
16" (400.0)	340.0	345.0	493.0	43.0	470.0	102.0	597.0	30.0	16	1"	540.0
18" (450.0)	375.0	380.0	546.0	48.0	533.0	114.0	635.0	30.0	16	1.1/8"	578.0
20" (500.0)	406.0	400.0	605.0	58.0	584.0	127.0	698.5	38.0	20	1.1/8"	635.0
24" (600.0)	510.0	460.0	760.0	68.0	692.0	154.0	813.0	38.0	20	1.1/4"	749.0
36" (900.0)	666.0	628.0	941.0	82.0	1022.0	241.0	1168.0	58.0	32	1.1/2"	1086.0

300#

VALVE SIZE	300#-LUGGED DESIGN										
INCH (DN)	A	B	C	ØD	ØE	F	ØG	W SQ	X	Y Tap	Z
8" (200.0)	217.0	225.0	357.0	28.0	270.0	73.0	381.0	20.0	12	7/8"	330.0
10" (250.0)	250.0	250.0	395.0	35.0	324.0	83.0	444.5	25.0	16	1"	387.0
12" (300.0)	310.0	300.0	465.0	45.0	381.0	92.0	520.7	32.0	16	1.1/8"	451.0
14" (350.0)	335.0	320.0	530.0	50.0	413.0	117.0	584.2	35.0	20	1.1/8"	514.0
16" (400.0)	365.0	365.0	545.0	60.0	470.0	133.0	647.7	42.0	20	1.1/4"	571.5
18" (450.0)	400.0	400.0	590.0	70.0	533.0	149.0	711.2	49.5	24	1.1/4"	629.0
20" (500.0)	425.0	420.0	675.0	80.0	584.0	159.0	774.7	57.0	24	1.1/4"	686.0
24" (600.0)	510.0	495.0	760.0	100.0	692.0	181.0	914.4	71.0	24	1.1/2"	813.0
36" (900.0)	666.0	628.0	941.0	152.0	1022.0	286.0	1168.0	107.5	32	1.5/8"	1089.0

Dimension Lug Design



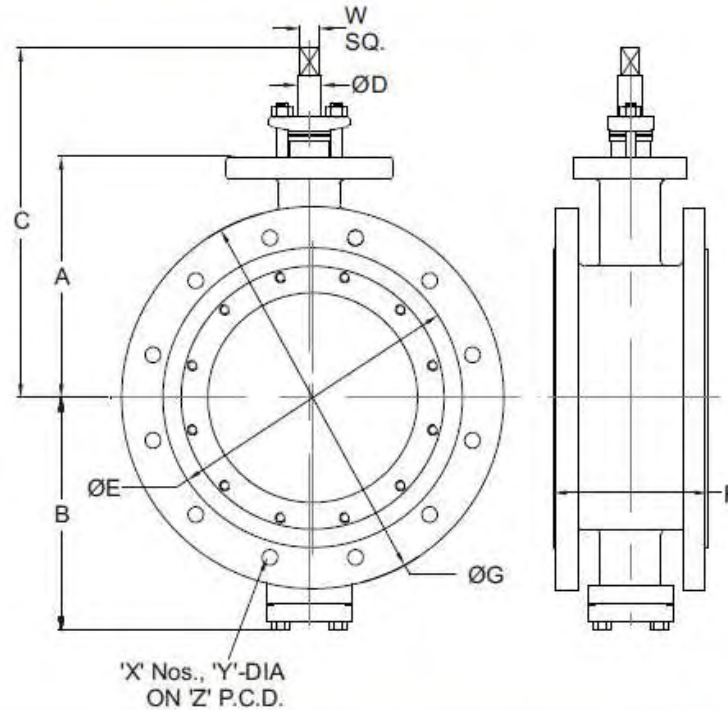
150#

VALVE SIZE	150#-LUGGED DESIGN										
INCH (DN)	A	B	C	ØD	ØE	F	ØG	W SQ	X	Y Tap	Z
8" (200.0)	217.0	210.0	357.0	20.0	270.0	64.0	343.0	14.5	8	3/4"	298.0
10" (250.0)	250.0	240.0	388.0	26.0	324.0	71.0	406.5	19.0	12	7/8"	362.0
12" (300.0)	310.0	285.0	457.0	33.0	381.0	81.0	482.5	24.0	12	7/8"	432.0
14" (350.0)	320.0	300.0	473.0	38.0	413.0	92.0	533.5	30.0	12	1"	476.0
16" (400.0)	340.0	345.0	493.0	43.0	470.0	102.0	597.0	30.0	16	1"	540.0
18" (450.0)	375.0	380.0	546.0	48.0	533.0	114.0	635.0	30.0	16	1.1/8"	578.0
20" (500.0)	406.0	400.0	605.0	58.0	584.0	127.0	698.5	38.0	20	1.1/8"	635.0
24" (600.0)	510.0	460.0	760.0	68.0	692.0	154.0	813.0	38.0	20	1.1/4"	749.0
36" (900.0)	666.0	628.0	941.0	82.0	1022.0	241.0	1168.0	58.0	32	1.1/2"	1086.0

300#

VALVE SIZE	300#-LUGGED DESIGN										
INCH (DN)	A	B	C	ØD	ØE	F	ØG	W SQ	X	Y Tap	Z
8" (200.0)	217.0	225.0	357.0	28.0	270.0	73.0	381.0	20.0	12	7/8"	330.0
10" (250.0)	250.0	250.0	395.0	35.0	324.0	83.0	444.5	25.0	16	1"	387.0
12" (300.0)	310.0	300.0	465.0	45.0	381.0	92.0	520.7	32.0	16	1.1/8"	451.0
14" (350.0)	335.0	320.0	530.0	50.0	413.0	117.0	584.2	35.0	20	1.1/8"	514.0
16" (400.0)	365.0	365.0	545.0	60.0	470.0	133.0	647.7	42.0	20	1.1/4"	571.5
18" (450.0)	400.0	400.0	590.0	70.0	533.0	149.0	711.2	49.5	24	1.1/4"	629.0
20" (500.0)	425.0	420.0	675.0	80.0	584.0	159.0	774.7	57.0	24	1.1/4"	686.0
24" (600.0)	510.0	495.0	760.0	100.0	692.0	181.0	914.4	71.0	24	1.1/2"	813.0
36" (900.0)	666.0	628.0	941.0	152.0	1022.0	286.0	1168.0	107.5	32	1.5/8"	1089.0

Dimension Flanged Design



150#

VALVE SIZE		150#-FLANGED DESIGN										
INCH	(DN)	A	B	C	ØD	ØE	F	ØG	W SQ	X	ØY	Z
8"	(200.0)	217.0	210.0	357.0	20.0	270.0	152.0	343.0	14.5	8	22.0	298.0
10"	(250.0)	250.0	240.0	388.0	26.0	324.0	165.0	406.5	19.0	12	25.0	362.0
12"	(300.0)	310.0	285.0	457.0	33.0	381.0	178.0	482.5	24.0	12	25.0	432.0
14"	(350.0)	320.0	300.0	473.0	38.0	413.0	190.0	533.5	30.0	12	28.5	476.0
16"	(400.0)	340.0	345.0	493.0	43.0	470.0	216.0	597.0	30.0	16	28.5	540.0
18"	(450.0)	375.0	380.0	546.0	48.0	533.0	222.0	635.0	30.0	16	32.0	578.0
20"	(500.0)	406.0	400.0	605.0	58.0	584.0	229.0	698.5	38.0	20	32.0	635.0
24"	(600.0)	510.0	460.0	760.0	68.0	692.0	267.0	813.0	38.0	20	35.0	749.0
36"	(900.0)	666.0	628.0	941.0	82.0	1022.0	330.0	1168.0	58.0	32	44.4	1086.0

300#

VALVE SIZE		300#-FLANGED DESIGN										
INCH.	(DN)	A	B	C	ØD	ØE	F	ØG	W SQ	X	ØY	Z
8"	(200.0)	217.0	225.0	357.0	28.0	270.0	230.0	381.0	20.0	12	25.4	330.0
10"	(250.0)	250.0	250.0	395.0	35.0	324.0	250.0	444.5	25.0	16	28.5	387.0
10"	(300.0)	310.0	300.0	465.0	45.0	381.0	270.0	520.7	32.0	16	32.0	451.0
12"	(300.0)	335.0	320.0	530.0	50.0	413.0	290.0	584.2	35.0	20	32.0	514.0
14"	(400.0)	365.0	365.0	545.0	60.0	470.0	310.0	647.7	42.0	20	35.0	571.0
18"	(450.0)	400.0	400.0	590.0	70.0	533.0	330.0	711.2	49.0	24	35.0	629.0
20"	(500.0)	425.0	420.0	675.0	80.0	584.0	350.0	774.7	57.0	24	35.0	686.0
24"	(600.0)	510.0	495.0	760.0	100.0	692.0	390.0	914.4	71.0	24	41.0	813.0
36"	(900.0)	666.0	628.0	941.0	152.0	1022.0	510.0	1168.0	107.5	32	44.5	1089.0