



# Butterfly Valve

High-Performance **U-500** SERIES



II 2GDc IIC T6

ATEX **CE** 2195 PED



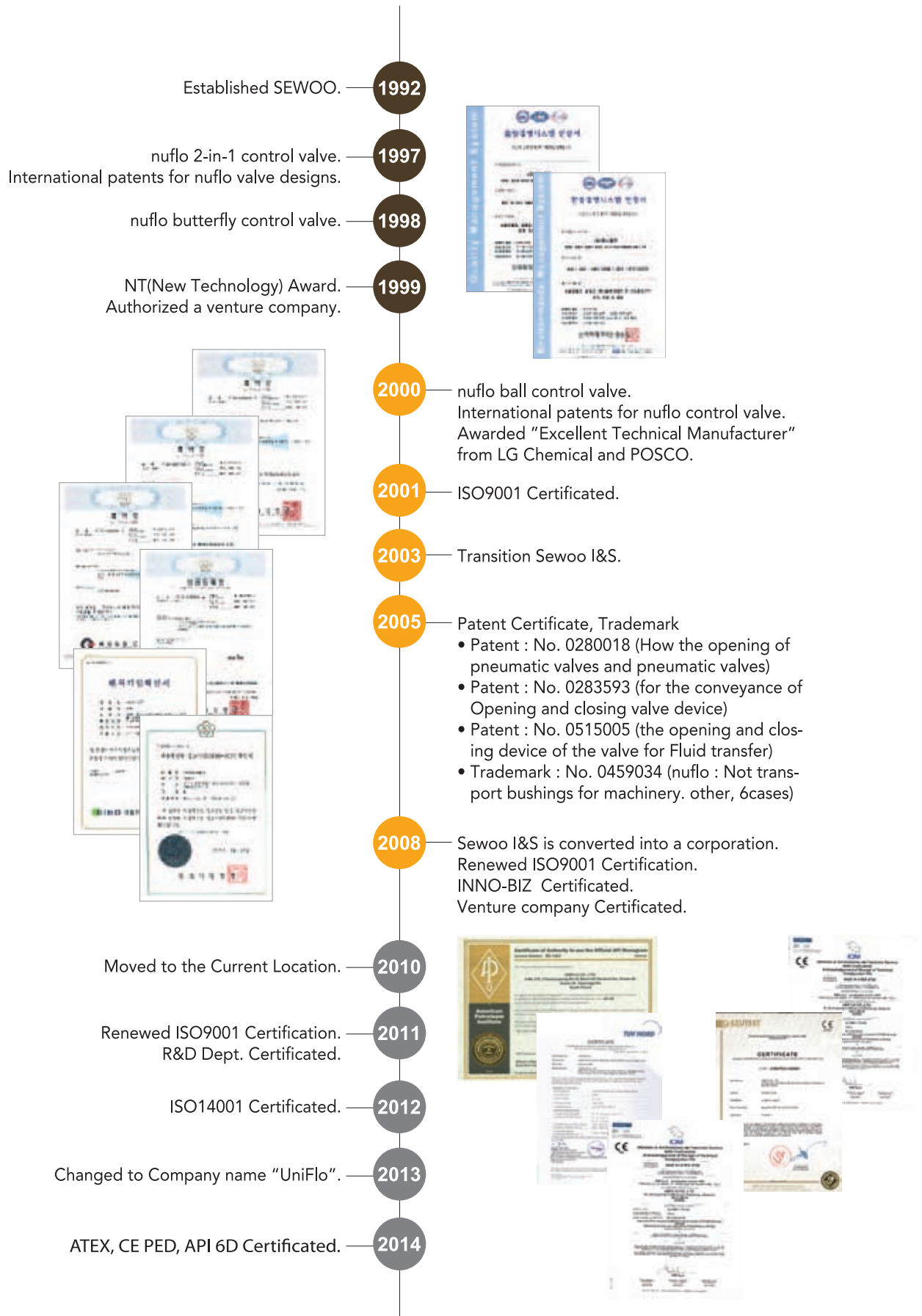
INNOBIZ  
Innovation Association

Venture for  
Tomorrow



# UNIFLO

# Company History



# UniFlo Valve A New Leader

## UniFlo Valve a new leader in design, manufacturing and support of various Butterfly valves for all industries.

With total valve solutions and service, UniFlo Valve is a new leader in design, manufacturing and service of ball valves for all kinds of industries.

We are specialized in industrial valve applications with high pressure, extreme temperature, critical media and etc.

UniFlo valve has solutions for special safety requirements.

Our comprehensive range of quality standards cater for most applications. We also provide engineering, development and manufacturing solutions for strict specifications.

## Quality Standards Cater

Our valves for high-grade and general plants are made to highest safety standards. Specifications are subject to ongoing review incorporating technical advances.

UniFlo Valves play an important part in all processing stages of power plants, oil and gas, petrochemical plants and other processing applications.

We cooperate closely with planners, plant manufacturers, operators and investors for optimum cost effectiveness, technical perfection and durability.

Our aim is to be a good partners to our customers.



## About the company

UniFlo Valve has been inspiring our employees to think from outside of the box and to come up with innovative ideas.

When we first started this new business, we promised ourselves that we would create and produce products that all customers can trust. To continue this, we constantly need to be on the edge of ourselves and create high quality products that we can be proud of.



## Technology



The goal for UniFlo Valve is to put a quality product in every field.

We produce our Valves only with the highest quality materials, so that we can guarantee that all of our products will have a long sustainability. We can offer a good competitive price to the market using our efficient technology and relationship with other collaborators.

## Manufacturing

UniFlo Valve is manufactured on modern machine tools and efficient production lines in order to offer high volume capacity.

Besides, we also put a genuine effort to assure the highest possible quality of the valves. In every step of the manufacturing processes, all our products are put through strict inspections according to ASME so that we can meet the very demanding requirements of our clients.

# U-500 Series Feature

1. Water & lug bodies butterfly valve for bi-directional dead-end service are offered as standard in full ANSI Class 150 and 300 ratings. The design of double offset sealing assure smooth low-torque operation and reduce seat wear. Extended neck length allows adequate insulation and is easily accessible for mounting actuators.

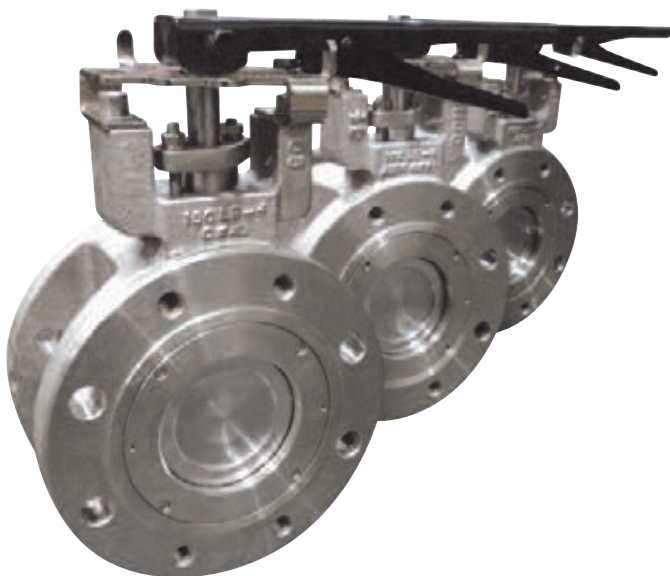
2. Valve has a disc stopper to prevent disc overtravel of disc, minimizing possible seat damage with extending the service life of valve operator.

3. The disc has been hydromechanically designed to maximize flow and minimize resistance, providing a high Cv valve. The disc is spherically machined and hand polished disc edge provides bubble-tight shut-off at minimum torque.

4. One piece through stem design achieves high strength and positive disc control optional mounting plate is available to international standard. Non-lubricated, coated bearings securely support the stem and minimize bearing friction and operating torque.



## Feature



5. Securing the butterfly disc to the valve shaft and permitting accurate disc closure for consistent sealing and positive shut-off.

6. V-Packings are designed to give excellent resistance to pressure and effective at both low and high pressures with little or no gland adjustment required. Gratoil packings are also available for high temperature applications and are standard on firesafe valve & metal seat.

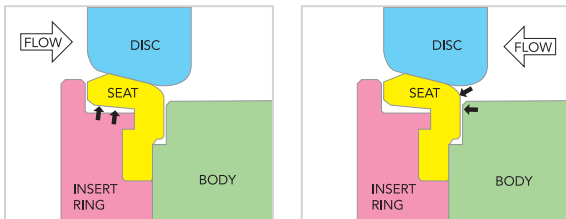
7. All valve shall be tested for leakage at rated internal pressure and we can accomplish zero defects through a wide range testing process.

8. With a locking spring loaded, lever operator has directional pointer for valve disc position indication with easy-grip handle.

# Seat Explanation

## Soft Seat

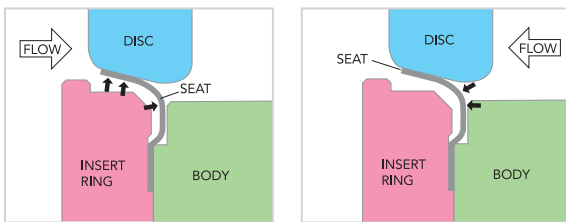
Material : PTFE & RTFE



Blowout Proof Stem Design  
Lower Operating Torque  
Tight Shut-Off  
BI-Direction Application  
Leakage Class VI(Zero)

## Metal Seat

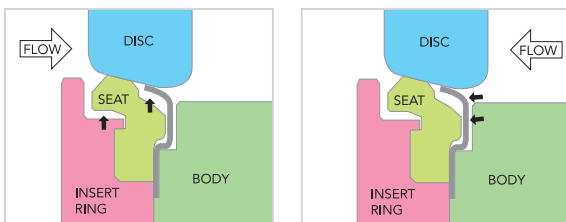
Material : 316L & INCONEL



Blowout Proof Stem Design  
Inherent Fire Safe Design  
Sultability for High  
Temperature Service  
Leakage Class IV, V

## Fire Safety Seat

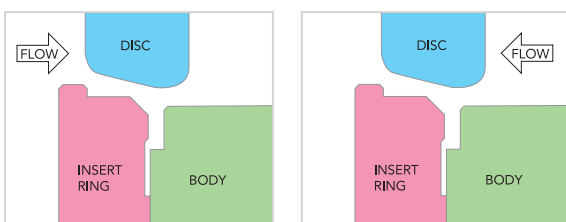
Metal & Soft Seat



Blowout Proof Stem Design  
Tight Shut-Off  
BI-Direction Application  
Inherent Fire Safe Design  
Leakage Class VI(Zero)

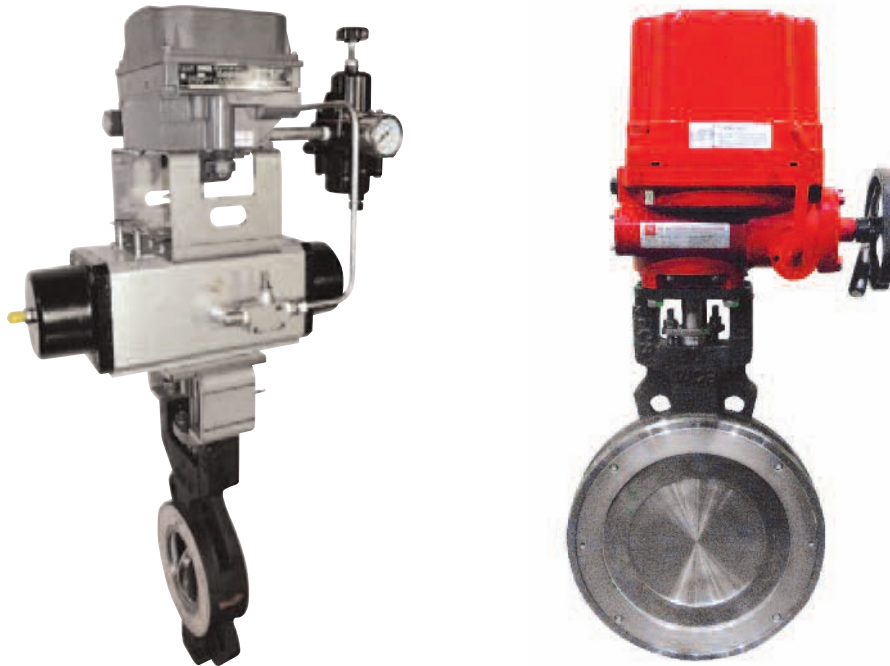
During and after a fire, when the soft(Teflon) seat material has burned away, the metal seat activates automatically and prevents excessive flow.

## Non- Seat



Blowout Proof Design  
High Temperature Service  
Non-Seat or Tadpole Step  
Leakage Class II or III

# Construction

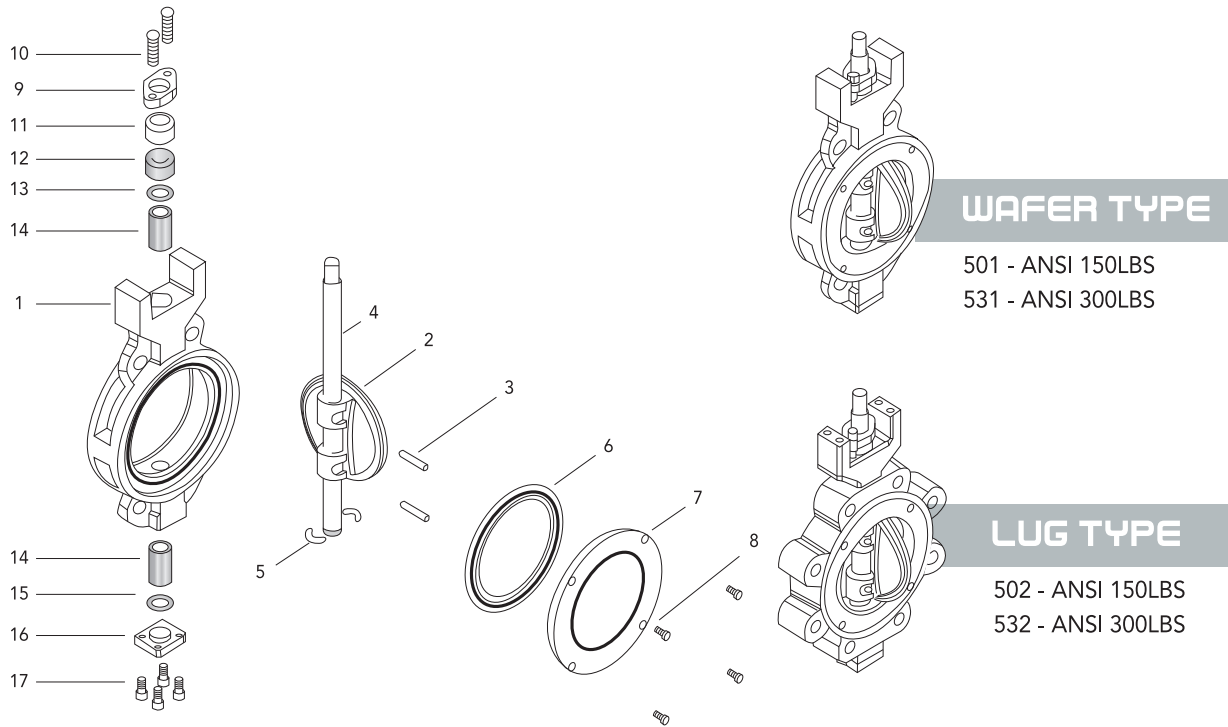


<b>Size</b>	40A ~1500A (1½"-60")
<b>Body Material</b>	Carbon Steel , Stainless Steel, etc
<b>Rating</b>	ANSI 150#, 300#/ DIN 2501 PN 10,16,25,40 (On Request : ANSI 600# / PN 100)
<b>Types of operator</b>	Lever, Gear, Actuator
<b>Seat Material</b>	PTFE / RTFE / PEEK / METAL , etc
<b>Packing</b>	PTFE / Grafoil
<b>Temperature</b>	- 196 ℃ , + 850 ℃
<b>End Connection</b>	WATER, LUG, RF FLANGE

## Applicable Code

ANSI	B16.34	Steel valves
	B31.1	Power piping
	B31.3	Chemical plant and petroleum refinery piping
	B16.47	Large diameter steel flanges
	B16.5	Steel pipe flanges and flanges fittings
MSS	SP-6	Standard finishes for pipe flanges
	SP-25	Standard marking systems for valves
	SP-44	Steel pipe line flanges
	SP-55	Quality standard for steel casting
	SP-61	Pressure testing of steel valves
	SP-67	Butterfly valves
	SP-68	High pressure offset disc butterfly valves
	609	Butterfly valves
API	607	Fire test for soft seated quarter-turn valves
	598	Valve inspection and test
	BS	5146
4504		Flanges and bolting for pipes, valve and fittings
ISO	5752	Metal valves for use in flanged pipe systems
	2084	Pipeline flanges for general use
JIS	2215	Basic dimension for steel pipe Flanges

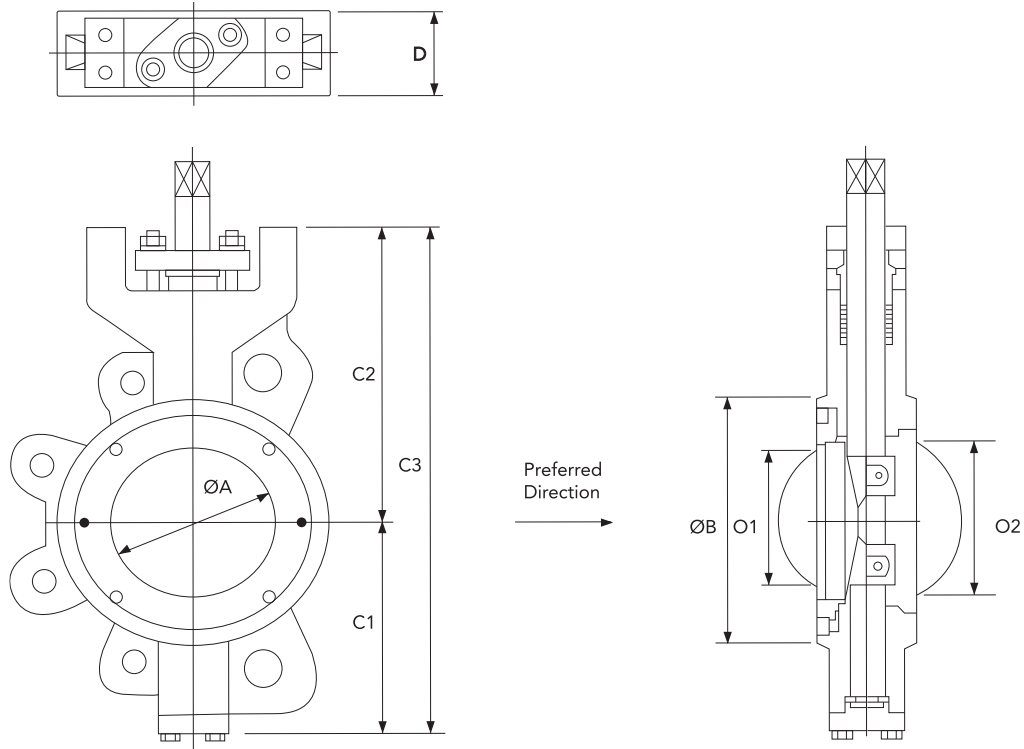
# Construction



## NO Part Material Standards

- |  |  |
|--|--|
| <p>1 <b>Body</b> A216-WCB/A217-WC6/A217-WC9<br/>A352- LCB, LCC<br/>A351-CF8, CF8M, CF3, CF3M<br/>MONEL, INCONEL, ETC.</p> <p>2 <b>Disc</b> A351-CF8, CF8M, CF3, CF3M<br/>MONEL, INCONEL, ETC.<br/>Option : Hardfacing / Stellite or ENP</p> <p>3 <b>Disc Pin</b> A276-304, 316, A564-630<br/>MONEL, INCONEL, ETC.</p> <p>4 <b>Stem</b> A276-304, 316, A564-630<br/>MONEL, INCONEL, ETC.</p> <p>5 <b>Stem Retainer</b> A276-304, 316, A564-630<br/>MONEL, INCONEL, ETC.</p> <p>6 <b>Seat</b> PTFE/Polytetrafluoroethylene<br/>RTFE/Reinforced, Polytetrafluoroethylene<br/>316 Stainless Steel / ASTM A240-316L<br/>Fire-safe / RTFE / 316 Stainless Steel<br/>MONEL, INCONEL, ETC.</p> | <p>7 <b>Insert Ring</b> A36, A240-304, 316<br/>MONEL, INCONEL, ETC.</p> <p>8 <b>Wrench Bolt</b> 304/316, MONEL, INCONEL, ETC.</p> <p>9 <b>Gland Bridge</b> Stainless Steel / ASTM A351-CF8</p> <p>10 <b>Stud Bolt</b> Stainless Steel / 304/316</p> <p>11 <b>Gland Bridge</b> Stainless Steel / 304/316</p> <p>12 <b>Packing</b> PTFE or Grafoil , Etc.</p> <p>13 <b>Packing Retainer</b> Stainless Steel / 304/316</p> <p>14 <b>Upper &amp; Lower Bushing</b> RTFE/ 316 Stainless Steel<br/>MONEL, INCONEL, ETC.</p> <p>15 <b>Bottom Packing</b> PTFE or Grafoil , Etc.</p> <p>16 <b>Bottom Cover</b> A216-WCB/A217-WC6/A217-WC9<br/>A352- LCB, LCC<br/>A351-CF8, CF8M, CF3, CF3M<br/>MONEL, INCONEL, ETC.</p> <p>17 <b>Hex. Bolt</b> Stainless Steel / 304/316</p> |
|--|--|

# U-501 & 502 Dimension



U-501 \_ WATER TYPE CL.150

U-502 \_ LUG TYPE CL.150

Applicable Flange Standard

- ANSI CL.150

- ISO / DIN PN 10/16/20

- JIS 10K/16K/20K

## U-501 & 502 Dimension

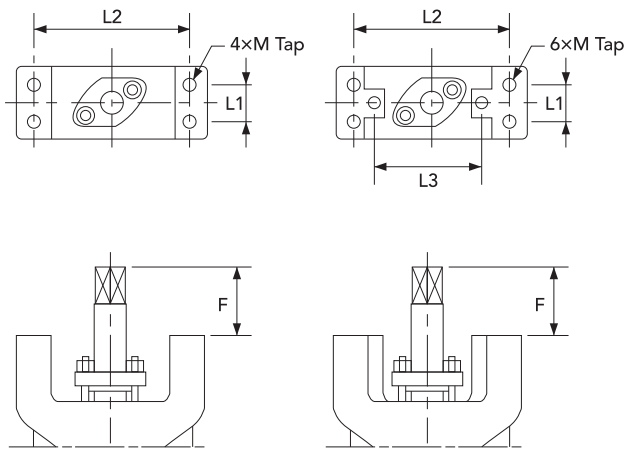
Valve Size	mm	50A	65A	80A	100A	125A	150A	200A	250A	300A	350A	400A	450A	500A	550A	600A	650A	700A	750A	800A	900A
inch		2	2.5	3	4	5	6	8	10	12	14	16	18	20	22	24	26	28	30	32	36
ØA		Ø47	Ø64	Ø75	Ø95	Ø113	Ø140	Ø190	Ø238	Ø280	Ø321	Ø365	Ø419	Ø469	Ø509	Ø553	Ø602	Ø657	Ø710	Ø760	Ø872
ØB		Ø104	Ø120	Ø130	Ø156	Ø186	Ø213	Ø266	Ø324	Ø372	Ø418	Ø480	Ø536	Ø590	Ø644	Ø694	Ø740	Ø804	Ø860	Ø910	Ø1012
C1		95	115	116	130	148	162	202	232	262	294	346	376	406	465	490	520	549	585	625	675
C2		150	170	175	185	208	222	265	300	330	365	424	454	479	520	555	585	615	650	675	740
C3		245	285	291	315	356	384	467	532	592	659	770	830	885	985	1045	1105	1164	1235	1300	1415
D		44	46	48	54	57	57	64	71	81	92	102	114	127	154	154	165	165	190	190	203
Q1		Ø32	Ø54	Ø65	Ø86	Ø102	Ø132	Ø181	Ø228	Ø270	Ø310	Ø355	Ø407	Ø457	Ø494	Ø537	Ø582	Ø638	Ø670	Ø740	Ø855
Q2		Ø46	Ø65	Ø76	Ø97	Ø116	Ø144	Ø192	Ø242	Ø285	Ø326	Ø370	Ø425	Ø475	Ø514	Ø558	Ø608	Ø664	Ø714	Ø764	Ø878

Dimension - "Q1", "Q2" is the dimension ensuring the pipes or flanges are properly aligned so that the valve disc does not contact them in any setting misalignment will result in damage to the valve.

All dimensions are approximate, pls contact the factory for more details.

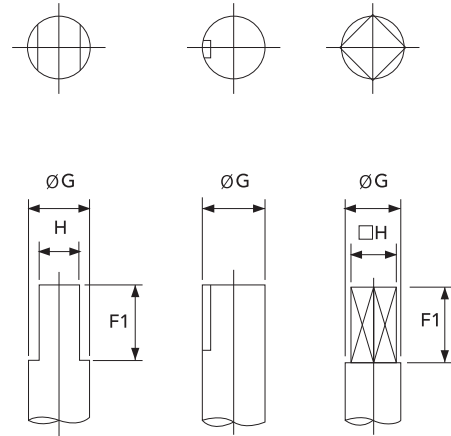


# U-501 & 502 Top View & Stem



**2" - 20"**  
50A-500A

**22" - 32"**  
550A-800A



**2" - 20"**  
50A-500A

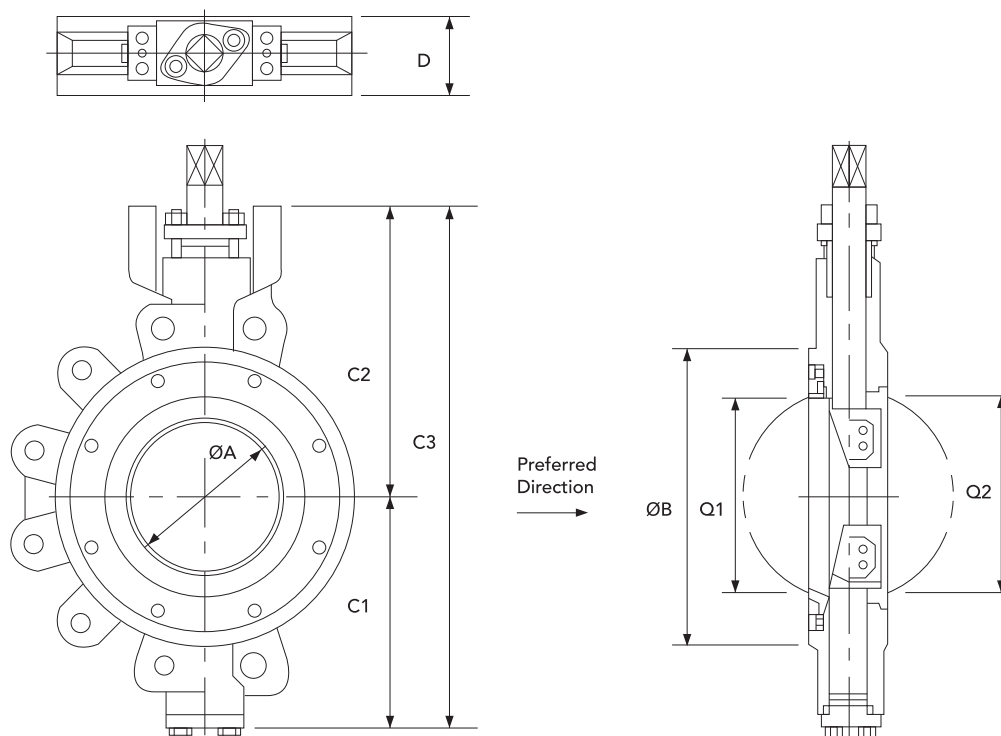
**8" - 36"**  
200A-900A

**2" - 20"**  
50A-500A

## U-501 & 502 Top View & Stem

Valve Size	mm	50A	65A	80A	100A	125A	150A	200A	250A	300A	350A	400A	450A	500A	550A	600A	650A	700A	750A	800A	850A	900A
	inch	2	2.5	3	4	5	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36
Top View	L1	18	18	18	22	22	22	28	28	36	36	44	44	44	44	44	68	68	68	68	68	68
	L2	98	98	98	98	98	98	116	116	158	158	204	204	204	288	288	328	328	328	328	328	328
	L3	-	-	-	-	-	-	-	-	-	-	-	-	-	220	220	254	254	254	254	254	254
Flat Stem	M	M10	M10	M10	M10	M10	M10	M12	M12	M16	M16	M20	M20	M20	M20	M20	M20	M20	M20	M20	M20	M20
	F	61	61	61	61	61	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	F1	31	31	31	31	31	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Keyed Stem	ØG	Ø14	Ø16	Ø16	Ø19	Ø19	Ø19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	H	10	12	12	15	15	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	F	-	-	-	-	-	-	80	80	95	95	121	121	121	135	155	155	155	155	155	185	185
Square Stem	ØG	-	-	-	-	-	-	Ø28	Ø32	Ø35	Ø42	Ø48	Ø48	Ø60	Ø60	Ø60	Ø75	Ø75	Ø80	Ø80	Ø90	Ø90
	Key Size	-	-	-	-	-	-	8x7-50L	10x8-50L	10x8-60L	12x8-60L	14x9-75L	14x9-75L	18x11-75L	18x11-85L	18x11-100L	22x14-100L	22x14-100L	22x14-105L	22x14-105L	25x14-130L	25x14-130L
	F1	16	16	16	21	23	23	29	33	33	40	45	45	52	-	-	-	-	-	-	-	-
Square Stem	ØG	Ø13.2	Ø14	Ø14	Ø18	Ø21	Ø21	Ø27	Ø32	Ø34	Ø40	Ø46	Ø46	Ø58	-	-	-	-	-	-	-	-
	□H	□11	□11	□11	□14	□17	□17	□22	□27	□27	□32	□36	□36	□46	-	-	-	-	-	-	-	-

# U-531 & 532 Dimension



## U-531 \_ WATER TYPE CL.300    U-532 \_ LUG TYPE CL.300

Applicable Flange Standard    - ANSI CL.300    - ISO / DIN PN 25/40/50

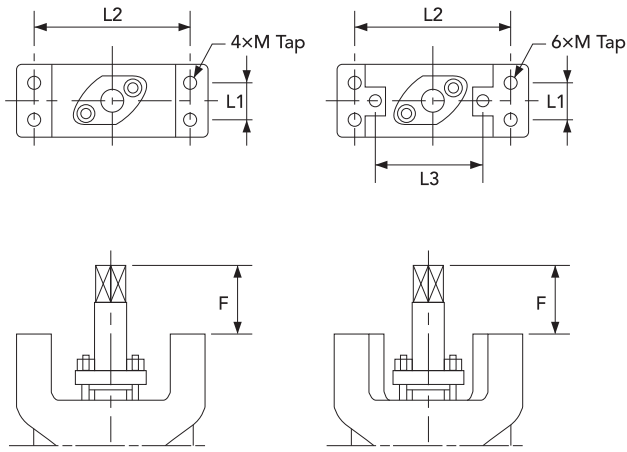
### U-531 & 532 Dimension

Valve Size	mm	50A	65A	80A	100A	125A	150A	200A	250A	300A	350A	400A	450A	500A	600A
	inch	2	2.5	3	4	5	6	8	10	12	14	16	18	20	24
ØA		Ø47	Ø64	Ø75	Ø95	Ø113	Ø140	Ø186	Ø228	Ø276	Ø315	Ø358	Ø405	Ø447	Ø549
ØB		Ø104	Ø120	Ø130	Ø156	Ø190	Ø220	Ø280	Ø336	Ø390	Ø436	Ø502	Ø560	Ø614	Ø724
C1		96	115	116	130	155	185	217	250	292	323	366	425	455	545
C2		150	170	175	185	210	245	275	320	355	105	450	488	525	600
C3		245	285	291	315	365	430	492	470	647	728	838	913	960	1145
D		44	46	48	54	59	59	73	83	92	117	133	149	159	181
Q1		Ø32	Ø54	Ø65	Ø86	Ø102	Ø122	Ø178	Ø218	Ø266	Ø304	Ø345	Ø391	Ø439	Ø519
Q2		Ø46	Ø65	Ø76	Ø97	Ø115	Ø143	Ø190	Ø232	Ø280	Ø316	Ø359	Ø406	Ø448	Ø540

Dimension - "Q1", "Q2" is the dimension ensuring the pipes or flanges are properly aligned so that the valve disc does not contact them in any setting misallgnment will result in damage to the valve.

All dimensions are approximate, pls contact the factory for more details.

# U-531 & 532 Top View & Stem



**2"- 16"**

50A-400A

**18"- 24"**

450A-600A

**2"- 6"**

50A-150A

**8"- 24"**

200A-600A

**2"- 20"**

50A-500A

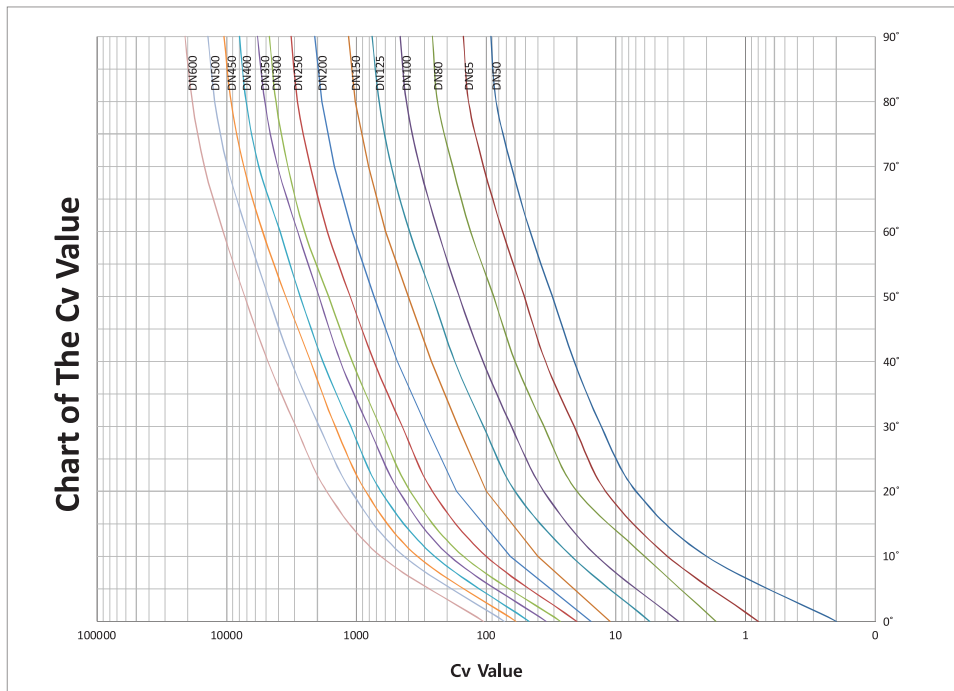
## U-531 & 532 Top View & Stem

Valve Size	mm	50A	65A	80A	100A	125A	150A	200A	250A	300A	350A	400A	450A	500A	600A	
	inch	2	2.5	3	4	5	6	8	10	12	14	16	18	20	24	
Top View	L1	18	18	18	22	22	22	28	36	36	44	44	44	60	60	
	L2	98	98	98	98	98	98	116	158	158	204	204	204	204	328	
	L3	-	-	-	-	-	-	-	-	-	-	-	254	254	254	
Flat Stem	M	M10	M10	M10	M10	M10	M10	M12	M16	M16	M16	M16	M16	M20	M20	M20
	F	61	61	61	61	61	61	-	-	-	-	-	-	-	-	
	F1	31	31	31	31	31	31	-	-	-	-	-	-	-	-	
Keyed Stem	ØG	Ø14	Ø16	Ø16	Ø19	Ø19	Ø19	-	-	-	-	-	-	-	-	
	H	10	12	12	15	15	15	-	-	-	-	-	-	-	-	
	F	-	-	-	-	-	-	80	95	95	121	121	155	155	155	
Square Stem	ØG	-	-	-	-	-	-	Ø32	Ø35	Ø42	Ø48	Ø60	Ø60	Ø75	Ø80	
	Key Size	-	-	-	-	-	-	10x8-50L	10x8-60L	12x8-60L	14x9-75L	18x11-75L	18x11-100L	22x14-100L	22x14-100L	
	F	34	34	34	38	41	41	54	59	66	81	87	-	-	-	
Square Stem	F1	16	16	16	21	23	23	33	33	40	45	52	-	-	-	
	ØG	Ø13.2	Ø14	Ø14	Ø18	Ø21	Ø21	Ø32	Ø34	Ø40	Ø46	Ø56	-	-	-	
	□H	□11	□11	□11	□14	□17	□17	□27	□27	□32	□36	□46	-	-	-	

# Cv-Values-Valve Sizing Coefficient

## Eccentric Valve

Valve Size			Degree of Dis Rotation(Cv)								
Inch	mm	Class	10	20	30	40	50	60	70	80	90
2	50	150-300	2	7	13	21	31	46	64	84	92
2.5	65	150-300	4	12	21	35	51	75	105	137	150
3	80	150-300	6	20	36	60	88	132	182	238	260
4	100	150-300	14	36	64	106	162	235	326	414	460
5	125	150-300	22	60	105	175	260	390	540	670	760
6	150	150	40	100	165	265	400	600	805	1025	1150
		300	30	76	125	200	305	460	616	789	880
8	200	150	65	170	290	485	735	1080	1490	1850	2100
		300	60	155	265	440	665	980	1350	1675	1900
10	250	150	100	260	445	735	1120	1680	2270	2850	3200
		300	90	230	390	645	980	1470	1985	2495	2800
12	300	150	150	385	660	1080	1645	2520	3385	4185	4700
		300	130	335	575	945	1435	2200	2955	3650	4100
14	350	150	190	470	810	1335	1950	2850	4060	5105	5800
		300	180	445	770	1265	1850	2705	3850	4840	5500
16	400	150	250	650	1110	1820	2720	3900	5670	7100	8000
		300	235	615	1055	1730	2585	3705	5385	6745	7600
18	450	150	340	850	1460	2265	3520	5300	7400	9289	10500
		300	320	800	1375	2265	3320	5000	6980	8750	9900
20	500	150	430	1100	1940	3200	4800	7000	9900	12390	14000
		300	400	1020	1800	2970	4460	6500	9190	11500	13000
24	600	150	650	1700	2940	4630	7300	10700	14900	18500	21000
		300	605	1580	2730	4485	6780	9940	13840	17180	19500
26	650	150	780	2000	3500	5700	8600	12700	17700	22100	25000
28	700	150	800	2350	4100	6700	10000	14700	20550	25600	29000
30	750	150	980	2750	4700	7800	11700	17000	23700	29600	33500
32	800	150	1150	3300	5700	9400	14000	20900	29100	36200	41000
36	900	150	1500	4200	7600	12500	18800	28000	38900	48600	55000
40	1000	150	2000	6500	7900	6000	24000	35700	49500	61800	70000
44	1100	150	2500	6700	12000	19800	29800	44300	61300	76600	87000
48	1200	150	3050	8200	14500	23700	35800	53000	73600	92000	104000



# Torque & Pressure

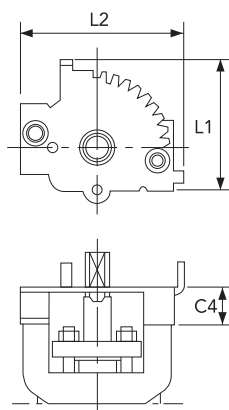
## ANSI 150LBS - U-501 & 502

Valve Size		Teflon Seat						Metal Seat	
Inch	mm	10 Bar	150 pai	16 Bar	225 pai	20 Bar	285 psi	N · m	lb · in
		N · m	lb · in	N · m	lb · in	N · m	lb · in		
2	50A	18	159	21	186	23	204	45	398
2.5	65A	21	186	27	239	33	292	60	531
3	80A	33	292	43	381	54	478	87	770
4	100A	49	434	63	558	79	699	119	1053
5	125A	67	593	91	805	107	947	160	1416
6	150A	84	743	110	974	137	1213	206	1823
8	200A	137	1213	187	1655	225	1991	338	2992
10	250A	210	1859	295	2611	388	3257	552	4886
12	300A	347	3071	488	4319	608	5381	912	8072
14	350A	551	4877	767	6789	957	8470	1435	12701
16	400A	618	5470	1140	10090	1140	10090	1710	15135
18	450A	878	7771	1390	12303	1731	15321	2597	22985
20	500A	1219	10789	1670	14781	2000	17701	3000	26552
22	550A	1587	14046	2341	20720	2705	23941	4058	35916
24	600A	1886	16693	2775	24561	3328	29455	4992	44183
26	650A	2523	22330	2710	32836	4449	39377	6229	55131
28	700A	2979	26366	4368	28660	5038	44590	7053	62424
30	750A	3300	29207	4780	42308	5936	52538	8311	73559
32	800A	3940	34872	5933	52511	7069	62566	9896	87587
36	900A	5558	49192	7662	67814	8667	76709	12134	107395

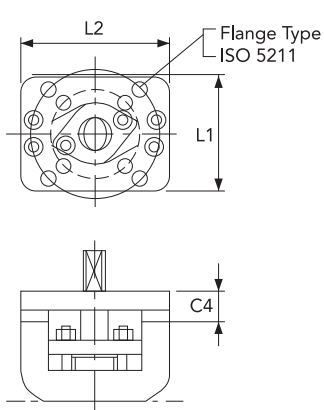
## ANSI 300LBS - U-531 & 532

Valve Size		Teflon Seat						Metal Seat					
Inch	mm	25 Bar	400 psi	40 Bar	500 psi	50 Bar	740 psi	25 Bar	400 psi	40 Bar	500 psi	50 Bar	740 psi
		N · m	lb · in	N · m	lb · in	N · m	lb · in	N · m	lb · in	N · m	lb · in	N · m	lb · in
2	50A	26	230	41	363	52	460	52	460	74	655	93	823
2.5	65A	39	345	62.3	551	77.9	689	58.4	517	93.5	828	116.9	1035
3	80A	60	531	90	797	113	1000	90	797	135	1195	169	1496
4	100A	93	623	123	1089	148	1310	139	1230	185	1637	222	1965
5	125A	117	1036	160	1416	191	1690	175	1549	240	2124	287	2540
6	150A	159	1407	255	2257	319	2823	239	2115	382	3381	478	4231
8	200A	293	2593	451	3992	541	4788	440	3894	676	5983	811	7178
10	250A	446	3947	686	6072	824	7293	669	5921	1029	9107	1236	10940
12	300A	732	6479	1169	10347	1460	12922	1098	9718	1754	15524	2190	19383
14	350A	1126	9966	1722	15241	1964	17383	1688	14940	2583	22861	2948	26074
16	400A	1691	14967	2312	20463	2647	23428	2536	22445	3466	30694	3970	35137
18	450A	2001	17710	2057	18206	3485	30845	3001	26561	4280	37881	4531	40103
20	500A	2656	23508	3881	34350	4624	40926	3983	35253	5821	51520	6937	61398
24	600A	3895	34474	5356	47405	6685	59167	5453	48263	7499	66372	9358	82825

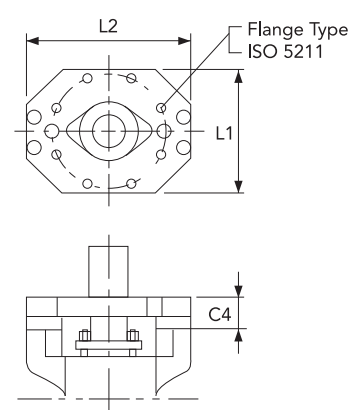
# Notch Plate & Top Mounting Dimension



**Notch Plate** For 2" - 12"



**Top Mounting** For F07" - F16"



**Top Mounting** For F20" - F30"

## Notch Plate

Valve Size		150LB			300LB		
Inch	mm	C4	L1	L2	C4	L1	L2
2	50A	29	106	132	29	106	132
2.5	65A	29	106	132	29	106	132
3	80A	29	106	132	29	106	132
4	100A	29	106	132	29	106	132
5	125A	29	106	132	29	106	132
6	150A	29	106	132	29	106	132
8	200A	40	145	165	-	-	-
10	250A	40	145	165	-	-	-
12	300A	40	138	199	-	-	-

## 300LB Top View

Valve Size		Top Plate			Flange Type
Inch	mm	C4	L1	L2	ISO 5211
2	50A	22	96	120	F07/F10
2.5	65A	22	96	120	F07/F10
3	80A	22	96	120	F07/F10
4	100A	22	96	120	F07/F10
5	125A	22	96	120	F07/F10
6	150A	22	96	120	F07/F10
8	200A	25	116	142	F10/F12
10	250A	30	136	190	F10/F12/F14
12	300A	30	136	190	F10/F12/F14
14	350A	41	170	242	F14/F16
16	400A	41	170	242	F14/F16
18	450A	45	280	370	F25
20	500A	45	280	370	F25
24	600A	45	280	370	F25

## 150LB Top View

Valve Size		Top Plate			Flange Type
Inch	mm	C4	L1	L2	ISO 5211
2	50A	22	96	120	F07/F10
2.5	65A	22	96	120	F07/F10
3	80A	22	96	120	F07/F10
4	100A	22	96	120	F07/F10
5	125A	22	96	120	F07/F10
6	150A	22	96	120	F07/F10
8	200A	25	116	142	F10/F12
10	250A	25	116	142	F10/F12
12	300A	30	136	190	F10/F12/F14
14	350A	30	136	190	F10/F12/F14
16	400A	41	170	242	F14/F16
18	450A	41	170	242	F14/F16
20	500A	41	170	242	F14/F16
22	550A	45	250	332	F16/F20
24	600A	45	250	332	F16/F20
26	650A	45	280	370	F16/F20
28	700A	45	280	370	F25
30	750A	45	280	370	F25
32	800A	45	280	370	F25
34	850A	45	280	370	F25
36	900A	45	330	426	F30

## ISO 5211 Flange Dimensions

Flange Type	Diameter of Bolt Circle	Diameter of Bolt Holes	Number of Bolts
F07	Ø70	Ø10	4
F10	Ø102	Ø12	4
F12	Ø125	Ø14	4
F14	Ø140	Ø19	4
F16	Ø165	Ø23	4
F20	Ø205	Ø19	8
F25	Ø254	Ø19	8
F30	Ø298	Ø23	8

# Handle Capacity & Extension Brackets

## Handle Capacity

Handle	Size	Valve	RTFE / PTFE			Metal Fire - Safe
			10kg/cm <sup>2</sup>	16kg/cm <sup>2</sup>	20kg/cm <sup>2</sup>	
240		2	Yes	Yes	Yes	Yes
265		2.5	Yes	Yes	Yes	Yes
265		3	Yes	Yes	Yes	Yes
265		4	Yes	Yes	Yes	Yes
265		5	Yes	Yes	Yes	Yes
265		6	Yes	Yes	Yes	Yes

Above(following) information in this chart is based on the Max. working pressure.  
It shall be usually recommended that lever operators be used for valves 6.

## Extension Brackets For Various Temperature

Pipeline Fluid Temperature	Handle	Gear	Pneumatic Std. Act
-38°C to 190°C	None	None	None
191°C to 238°C	100	None	None
239°C to 293°C	150	100	100
294°C to 343°C	150	100	100
344°C to 385°C	150	150	150
386°C to 440°C	200	200	200
441°C to 496°C	250	200	200
497°C to 538°C	250	250	250

1. By standardizing on the external temperature as 21°C, the values over 38°C in the above (following) temperature range chart shall be multiplied by 2.0 in case ambient temperature is 38°C above.
2. All valve need to be insulated or not.
3. The standard bracket structure shall be the stem extension type.
4. The construction of the actuator shall be suitable for continuous exposure to ambient temperatures regardless of extension length, all valve operators & actuators shall be properly operated.

# Butterfly Valve Certificate



Fire safety API 607

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**UNIFLO** Co., Ltd. \_\_\_\_\_

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