BEST HIGH PERFORMANCE

STAYFLOW

www.stayflowproducts.com

Stayflow

Class 150 100L & Class 300 200L

V TYPE 100L / 200L Series
Low Temperature and Cryogenic Butterfly Valve

Type： Wafer, Lug, Flanged

Size： DN50~DN900
2" - 36"

Pressure Rating： Class 150, Class 300, PN10, PN16, PN20, PN25, PN40, PN50, JIS10K, JIS16K, JIS20K, JIS30K, JIS40K

Temperature Rating： -320°F to 250°F
-196°C to 121°C

- Patented Floating Seat Retainer
- Bi-directional Zero Leakage
- Low Fugitive Emission System
- Cryogenic Design

General Applications

- Chemistry
- Oil Refinery
- Energy LNG
- Petrochemical

SPECIFICATIONS

Testing：API 598, ISO 5208

Leakage：Soft seat Bi-directional Bubble Tight

Valve Design：ASME B16.34, MSS-SP-68

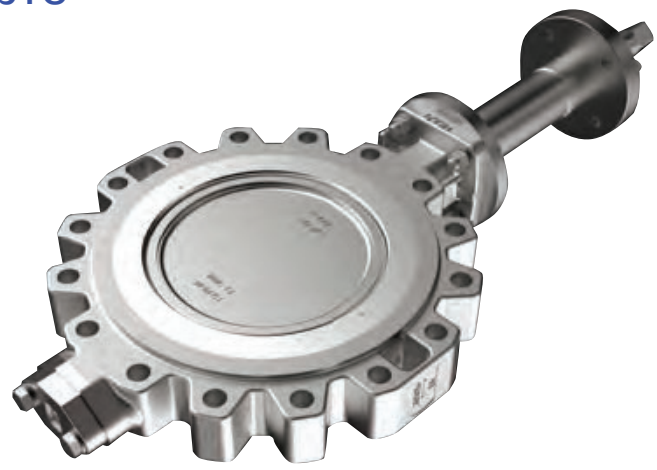
Anti-Blow-Out Stem：API 609

Face-to-Face：API 609, MSS-SP-68, ISO 5752

Cryogenic：BS 6364, ISO 28921

Low Fugitive Emission
Gland Packing System：DIN3780, MSS-SP-143

Marking：MSS-SP-25, API 609 Top
Mounting：ISO 5211 Suitable
Flange：
ANSI：150LB, 300LB,
DIN：PN10, 16, 20, 25, 40, 50



FEATURES

Gland Flange

A fully adjustable two-piece gland flange to make sure an even packing load over 360 °.

Gland Bush

Standing alone with Gland Flange, preventing uneven down-pressure on gland packing.

Gland Packing

PTFE or same as Valve Seat. Performance is compliance with API 598's testing pressure.

Self-Lubricant Bush

Woven Fabric Metal material used to lower down stem's friction factor.

Patented Retainer Ring

A no-screw-floating design to eliminate cold flow. This design provides positive tight shut-off of the seat. Surface roughness is 125-200AARH.

Valve Seat

Bi-directional zero leakage design. PTFE is used.

Taper Pin

Tangentially positioned half in the disc and half in the stem to eliminate the potential of failure.

Thrust Ring

SS316L material is used, Positioned in the bottom of the stem for preventing incorrect stem shift.

Bottom Cover

Rigid SS316L material is used to prevent abnormal leakage.

Bottom Gasket

PTFE or GRAPHITE material

Valve Stem

Stainless steel with hard chrome plating is used. A strong and rigid one piece stem design, which largely increases the overall strength. Stem and corresponding components sizes are all compliant with ISO 5211. Stem material and disc position are marked on the top of stem.

Anti-Blow-Out Stem

Protecting stem blow-out caused by pressure.

Extended Bonnet

According to ISO28921, extended bonnet is used to in order to perform in cryogenic working environments.

Bush Retainer

Provides precise positioning of the bush to make sure it always stands in the correct position under cryogenic working environments.

Valve Disc

Stainless steel with hard chrome plate. A streamlined design enhanced to lower noise and turbulence.

Valve Body

Compliance with API 609 & ASME B16.34. In order to make the valve context intuitive and straightforward. An additional name plate is designed to mark detailed information.

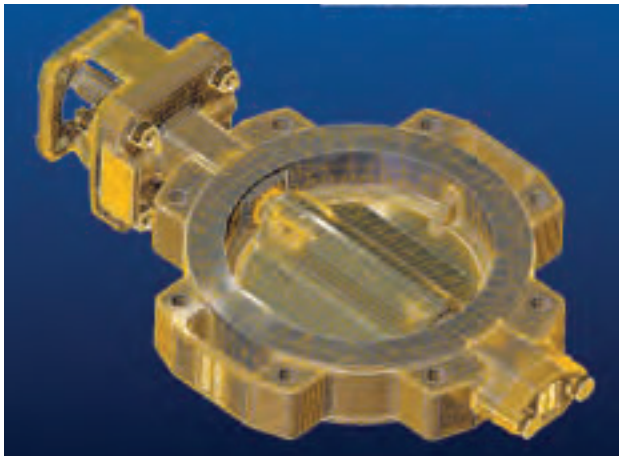
Thrust Plate

Stainless steel Woven Fabric Metal is used to reduce operating friction between stem and the bottom cover.

FEATURES

Valve Body

Stayflow's V-Type 100L/200L Series High Performance Butterfly Valves are designed **with** 100% compliance with API 609 and ASME B16.34. Utilizing PTC Creo Parametric (Pro/E) Computer-add-design in every component result**ing** in **superior reliability.**

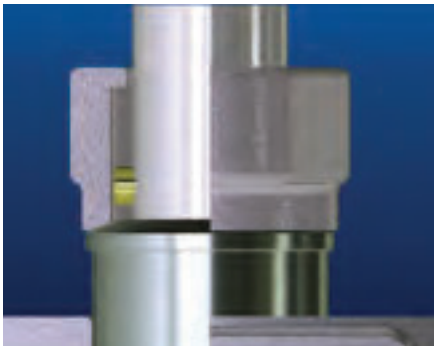


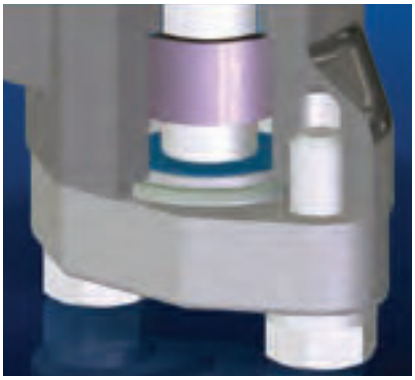
Top Mounting

Compliant with ISO 5211. Yoke designed with draining system for outdoor service.

Anti-Blow-out Stem (Upside) and Anti-Electrostatic System

An anti-Blow-out design and ***optional*** Anti-electrostatic system. Compliance with API 609 and ATEX.



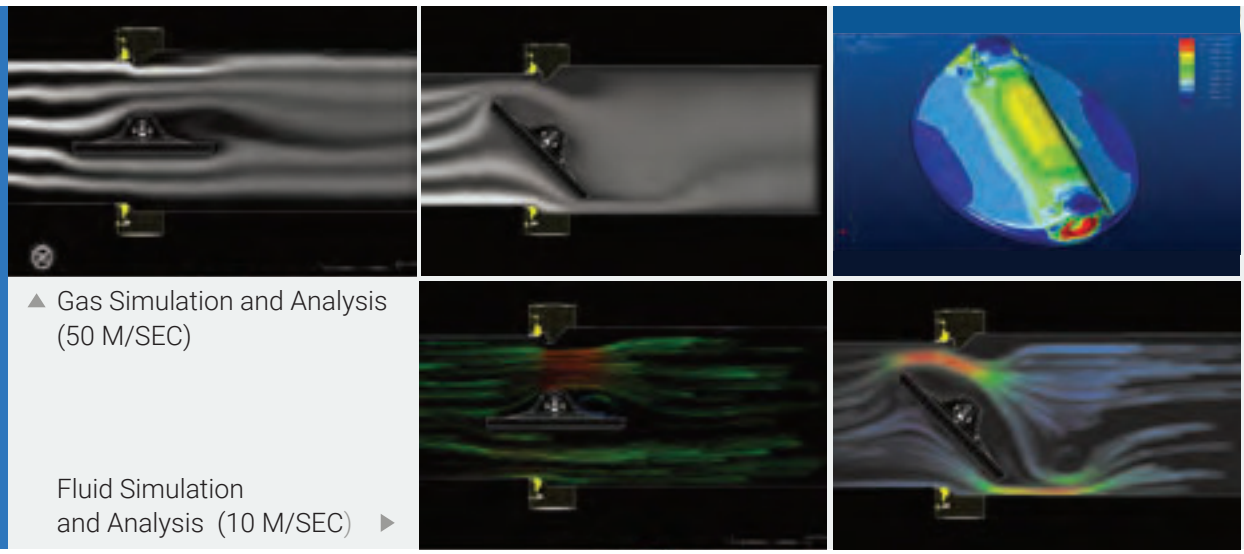


Anti-Blow-Out Stem(Downside)and Thrust Ring for Positioning

A Rigid Thrust Ring always keeps the stem in an accurate position. The Thrust Ring and stem thread are also designed to prevent blow-out.

Valve Disc

The valve disc uses stainless steel with computer-added PTC Creo Parametric software to analyze stress performance to achieve API 598. Based on advanced 3D CAD simulation,, Max-Seal has developed a streamlined disc with lower noise and turbulence. Meanwhile, all our disc's and stem's surfaces are hard-chrome-plated. This feature significantly advances disc performance with anti-rubbing and anti-shocking, which results in better life cycle.



▲ Gas Simulation and Analysis (50 M/SEC)

Fluid Simulation and Analysis (10 M/SEC) ▶

Marking and Name Plate

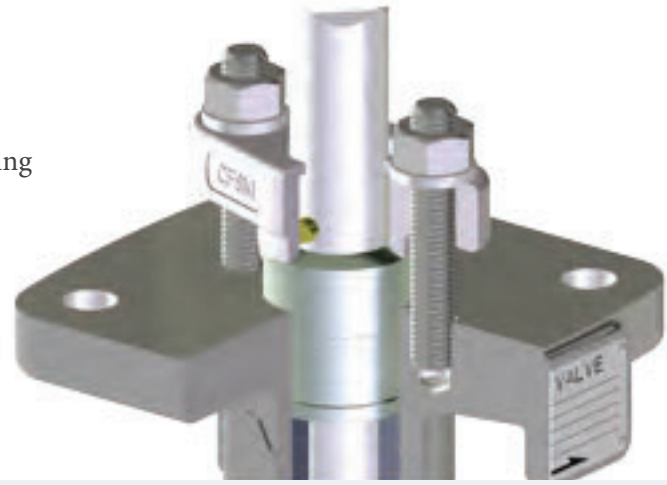
The Stayflow Valve is designed with a name plate which provides all the valve's details. Complies with MSS-SP-25 & API 609.

Low Fugitive Emission Gland Packing System

Compliant with latest DIN3780 and MSS-SP143

Gland Flange and Gland Bush

A fully adjustable two-piece gland with spherical mating surfaces to ensure an even packing load over 360 °



Gland Packing System

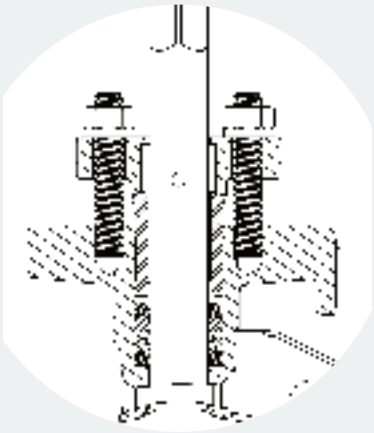
Five Types:

1. Standard V-Type PTFE or RTFE
2. Live - Loaded Low Fugitive Emission V-Type PTFE or RTFE
3. Standard GRAPHITE
4. Live -Loaded Low Fugitive Emission GRAPHITE

   Having EVSP 9000 or 3300W is Optional.
5. Live -Loaded with Lantern Ring

1

Standard V Type PTFE or RTFE Gland Packing System



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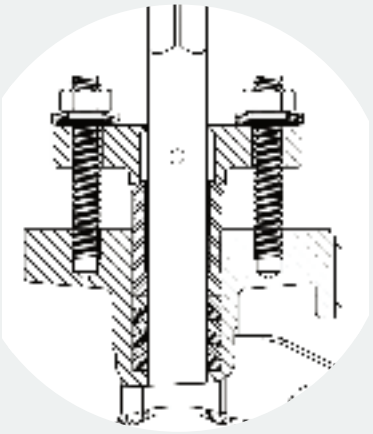
Live-Loaded Low Fugitive Emission GRAPHITE Gland Packing System

Having EVSP 9000 or 3300W as an option.

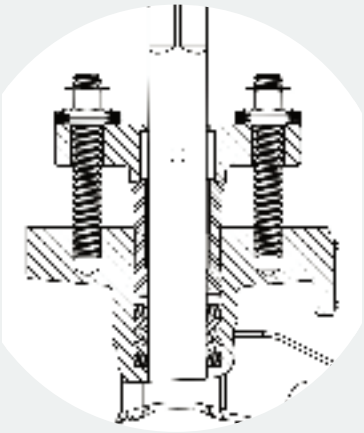


Long Gland Bush for Positioning

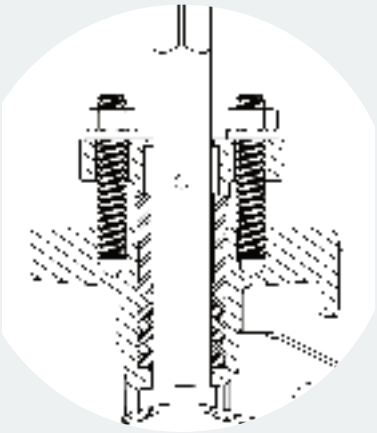
Long gland bush ensures the gland flange is always kept in the center while adjusting packing gland.

Prevents the gland bush from rubbing and jamming the stem.

2 **Live -Loaded Low Fugitive Emission V-Type PTFE or RTFE Packing System**

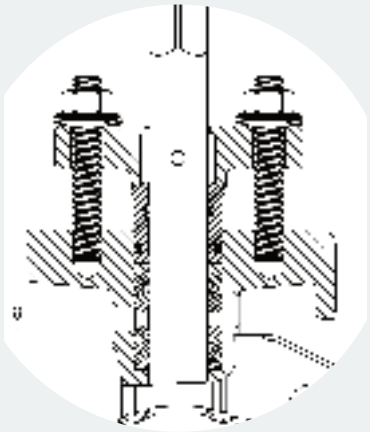


3 **Standard GRAPHITE Packing System**



5 **Live -Loaded with Lantern Ring Gland Packing System**

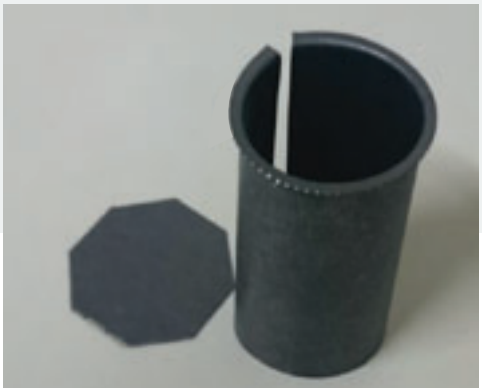
A lantern ring with double packing leak-off-monitoring, provides functionality of purge and monitors leakage from bottom packing.

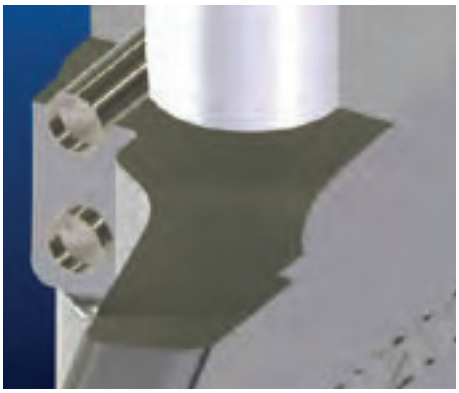


Self-Lubricating Bush

Uses Woven Fabric Metal stem bush.

Has an excellent working temperature, strength rating, and low friction factor.





Taper Pin

Disc taper pins are tangentially positioned half in the disc and half in the stem, placing them in compression rather than shear, which eliminates the potential of failure. This method is 3 times stronger than the traditional shear way.

Valve Seat

The V TYPE 100L/200L Series design uses Soft Seats. Pressure and Temperature Ratings are compliant with API 609. Using reliable section and a corresponding floating seat design to fulfill bi-directional, drop-tight, zero leakage shut-off throughout all pressure ranges, as well as fully rated bi-directional pressure. This design reduces rubbing and friction between the disc and the seat, which significantly extends the operation life cycle.

Soft Seat

Soft Seated design is certified with BS 6364, ISO 28921. These certifications provide high safety in harzardous applications.

QUALITY ASSURANCE

We are extremely proud of the various certifications we have successfully passed around the world. As a supplier, we are delighted to list some of our major certifications and patents Through these certification, we believe that Max-Seal will be your best option in the Butterfly Valve Industry.

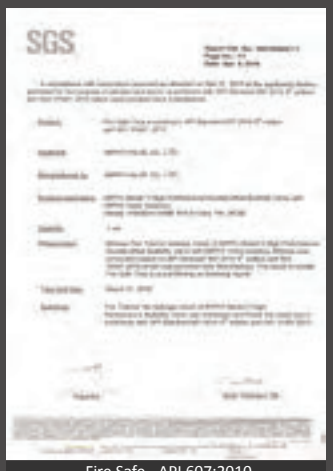
- Fugitive Emission:TUV ISO 15848-1
- ISO 9001:2008
- CE/PED Module H 2014/68/EU
- CE/PED Module H 2014/68/EU
- Fire Safe - ISO 10497:2010
- Fire Safe - API 607:2010
- Anti-Loose Lever Operator Ring Certificate Of Patent
- Reliable Gear Operator Certificate Of Patent
- Screwless Valve Retainer Ring Certificate Of Patent

ISO 9001:2008

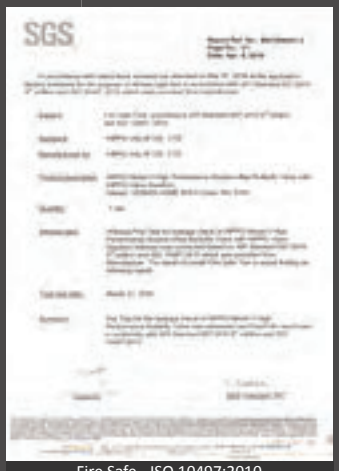
Fugitive Emission:TUV ISO 15848-1


CE/PED Module H 2014/68/EU - Certified


Anti-Loose Lever Operator Ring Certificate Of Patent



Fire Safe - API 607:2010

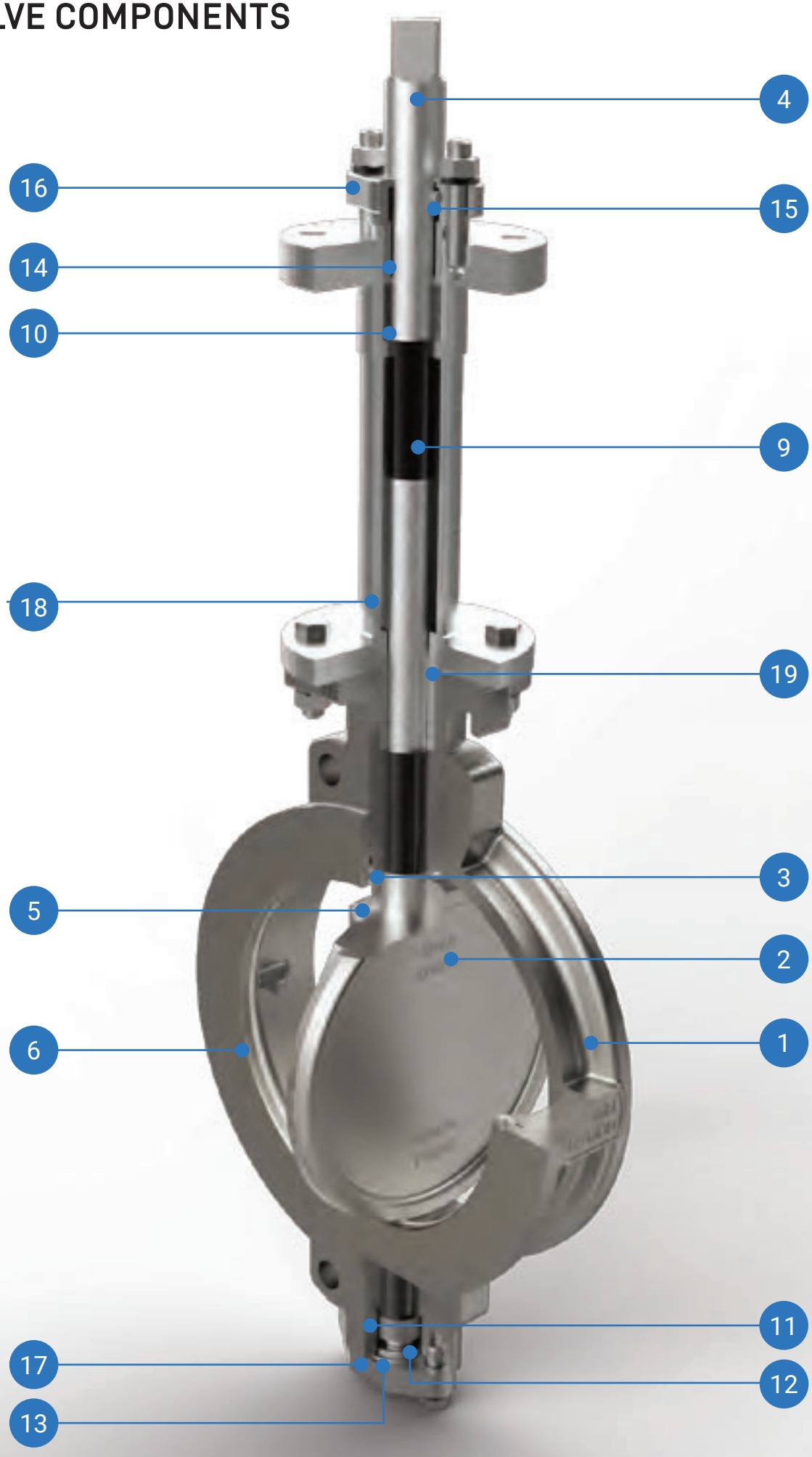


Fire Safe - ISO 10497:2010


Reliable Gear Operator Certificate Of Patent


Screwless Valve Retainner Ring Certificate Of Patent

VALVE COMPONENTS



ITEM	NAME	QTY	MATERIAL			REMARK
1	Body	1	A351 Gr. CF8	A351 Gr. CF8M		
2	Disc	1	A351 Gr. CF8	A351 Gr. CF8M		●
3	Seat	1	PCTFE			★
4	Stem	1	A182 Gr. F6A	A182 Gr. F304	A182 Gr. F316	●
5	Taper Pin	2	A182 Gr. F316L			
6	Retainer Ring	1	A351 Gr. CF8	A351 Gr. CF8M		
9	Stem Bush	1	Woven Fabric Metal	A182 Gr. F316		
10	Gland Packing	1	PCTFE	RTFE	GRAPHITE	
11	Thrust Ring	3	A351 Gr. CF8M			
12	Thrust Plate	1	Woven Fabric Metal			
13	Gasket	1	PCTFE	RTFE	GRAPHITE	
14	Gland Bush	1	A351 Gr. CF8M			
15	Anti-Blow-Out Pin	1	A182 Gr. F316			
16	Gland Flange	1	A351 Gr.CF8			
17	Bottom Cover	1	A351 Gr. CF8M			
18	Extend Bonnet	1	A351 Gr. CF8M			
19	Bush Retainer	1	A351 Gr. CF8M			

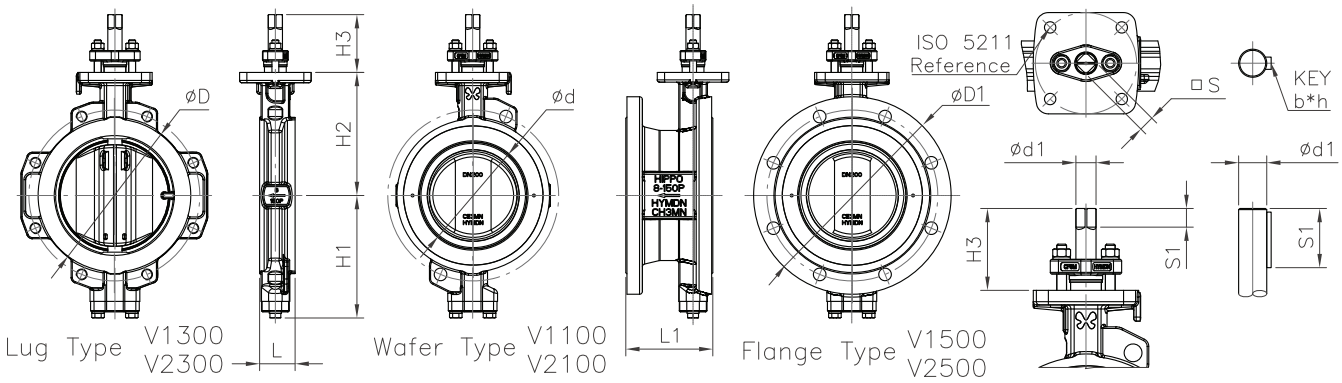
Remark

● Surface is Hard Chrome Plated

★ Working temperature: PCTFE - **-384.8 °F ~ 248°F**

-196℃～120℃

Low-temperature Bare Shaft



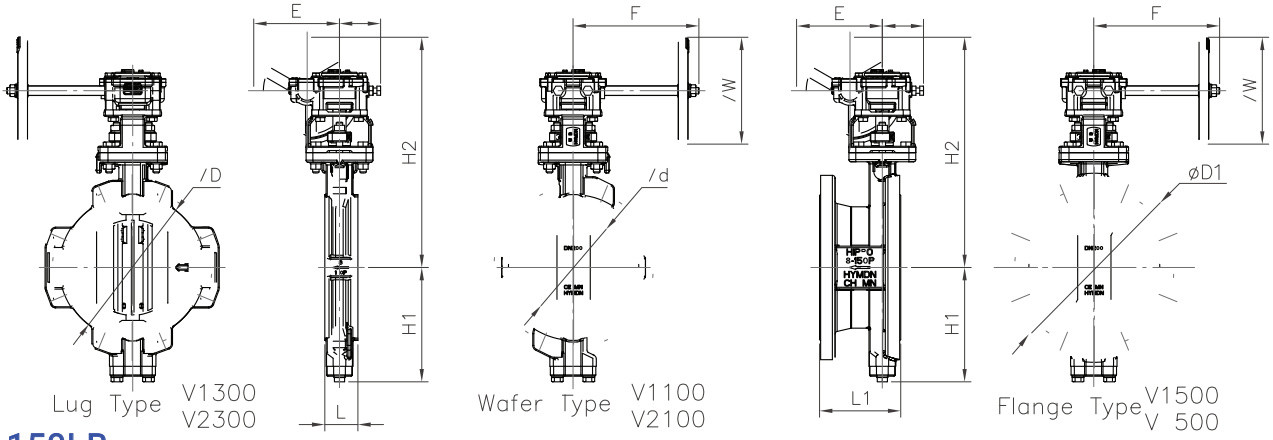
150LB

SIZE		L	L1	D	D1	d	H1	H2	H3	S1	d1	S	ISO	Weight					
mm	in											(b*h)		Wafer(kg)	Wafer(lb)	Lug(kg)	Lug(lb)	Flange(kg)	Flange(lb)
50	2	45	-	95	150	46	118	128	86	18	18	14	F10	10	22	11	24.2	-	-
65	2.5	48	-	112	180	61	126	136	86	18	18	14	F10	11	24.2	12	26.4	-	-
80	3	48	114	126	190	76	134	140	86	18	18	14	F10	12	26.4	13	28.6	18	39.6
100	4	54	127	155	230	96	144	150	86	18	18	14	F10	13	28.6	17	37.4	23	50.6
125	5	57	-	184	255	118	178	170	89	21	22	17	F10	16	35.2	22	48.4	-	-
150	6	57	140	215	280	143	190	185	89	21	22	17	F10	18	39.6	24	52.8	32	70.4
200	8	62	152	267	345	188	214	215	101	23	25	19	F12	28	61.6	37	81.4	53	116.6
250	10	70	165	326	405	236	254	260	104	26	28	22	F12	40	88	55	121	71	156.2
300	12	81	178	375	485	281	298	290	129	31	35	27	F14	60	132	81	178.2	111	244.2
350	14	92	190	416	535	320	328	320	134	36	42	32	F14	77	169.4	104	228.8	140	308
400	16	102	216	480	595	371	377	370	158	40	50	36	F16	121	266.2	160	352	196	431.2
450	18	114	222	534	635	420	402	395	158	40	50	36	F16	154	338.8	196	431.2	229	503.8
500	20	127	229	588	700	469	437	430	168	50	60	46	F16	194	426.8	265	538	286	629.2
600	24	154	267	692	815	549	492	480	240	90	65	18*12	F25	327	719.4	430	946	457	1005.4
700	28	165	292	800	927	655	570	555	245	95	75	20*12	F25	437	961.4	577	1269.4	686	1509.2
750	30	190	318	857	984	698	605	600	300	100	85	25*14	F30	606	1333.2	716	1575.2	889	1955.8
800	32	190	318	910	1060	755	630	625	310	110	90	25*14	F30	647	1423.4	864	1900.8	1014	2230.8
900	36	203	330	1000	1168	870	690	665	320	120	100	28*16	F30	763	1678.6	963	2118.6	1282	2820.4
1000	40	216	410	1115	1289	943	768	765	360	130	115	32*18	F35	1050	2310	1330	2926	1651	3632.2
1100	44	254	410	1220	1403	1045	818	815	360	130	115	32*18	F35	1287	2831.4	1639	3605.8	2173	4780.6
1200	48	254	470	1330	1510	1145	884	880	360	130	125	36*20	F35	1513	3328.6	1898	4175.6	2651	5832.2

300LB

SIZE		L	L1	D	D1	d	H1	H2	H3	S1	d1	S	ISO	Weight					
mm	in											(b*h)		Wafer(kg)	Wafer(lb)	Lug(kg)	Lug(lb)	Flange(kg)	Flange(lb)
50	2	45	-	95	-	46	118	128	86	18	18	14	F10	10	22	12	26.4	-	-
65	2.5	48	-	112	-	61	126	136	86	18	18	14	F10	11	24.2	13	28.6	-	-
80	3	48	114	126	190	76	134	140	86	18	18	14	F10	12	26.4	15	33	18	39.6
100	4	54	127	155	230	96	144	150	86	18	18	14	F10	13	28.6	17	37.4	23	50.6
125	5	57	-	184	-	118	178	170	89	21	22	17	F10	16	35.2	22	48.4	-	-
150	6	59	140	224	318	143	199	200	101	23	25	19	F12	26	57.2	34	74.8	50	110
200	8	73	152	280	381	188	234	240	104	26	28	22	F12	36	79.2	51	112.2	76	167.2
250	10	83	165	345	445	236	278	270	129	31	35	27	F14	64	140.8	83	182.6	107	235.4
300	12	92	178	395	521	281	318	310	134	36	42	32	F14	84	184.8	114	250.8	161	354.2
350	14	117	190	440	585	320	367	360	158	40	50	36	F16	128	281.6	184	404.8	215	473
400	16	133	216	495	648	371	392	385	168	50	60	46	F16	171	376.2	241	530.2	283	622.6
450	18	149	222	560	712	420	437	425	240	90	65	18*12	F25	266	585.2	368	809.6	464	1020.8
500	20	159	229	622	775	469	465	450	245	95	75	20*12	F25	323	710.6	447	983.4	578	1271.6
600	24	181	267	720	915	549	535	530	310	110	90	25*14	F30	528	1161.6	739	1625.8	906	1993.2

Low-temperature Gear Operation



150LB

● Operator chosen is according to following condition: △10 Bar

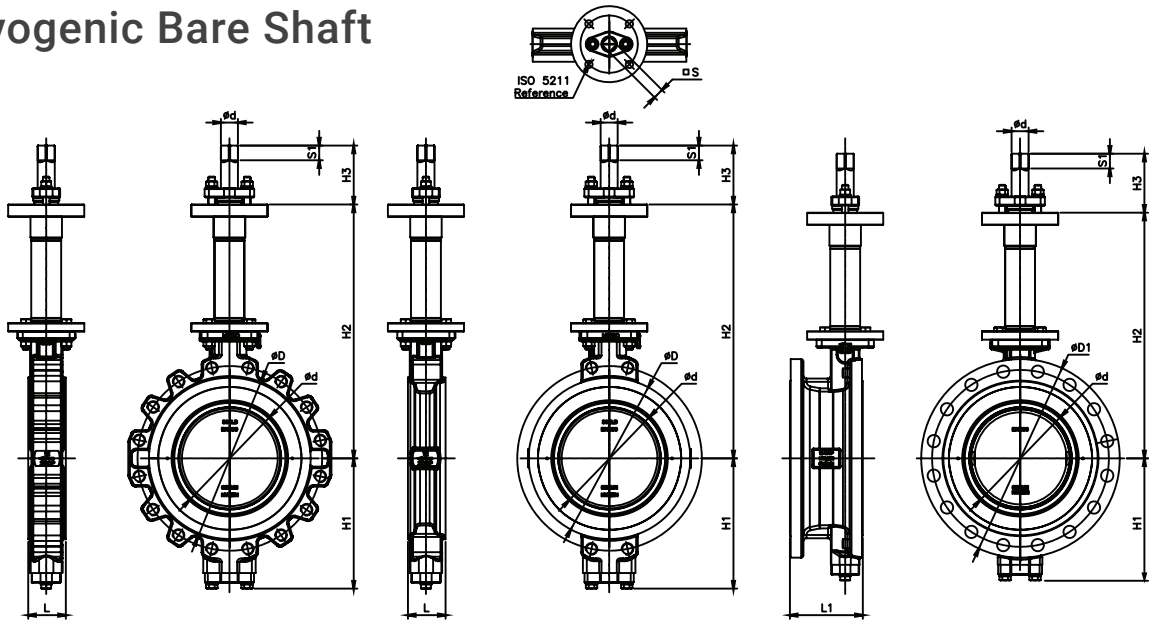
SIZE		L	L1	D	D1	d	H1	H2	W	G	E	F	Weight (kg)			Gear Model	Gear Model
mm	in												Wafer	Lug	Flange		
50	2	45	-	95	150	46	118	282	100	66	97	133	10	11	-	G07	1:40
65	2.5	48	-	112	180	61	126	290	100	66	97	133	11	12	-	G07	1:40
80	3	48	114	126	190	76	134	319	150	66	122	133	12	13	18	G07	1:40
100	4	54	127	155	230	96	144	329	150	66	122	133	13	17	23	G07	1:40
125	5	57	-	184	255	118	178	349	150	66	122	133	16	22	-	G07	1:40
150	6	57	140	215	280	143	190	364	150	66	122	133	18	24	32	G07	1:40
200	8	62	152	267	345	188	214	431	200	77	161	236	28	37	53	G10	1:40
250	10	70	165	326	405	236	254	476	200	77	161	236	40	55	71	G10	1:40
300	12	81	178	375	485	281	298	529	200	94	183	236	60	81	111	G12	1:60
350	14	92	190	416	535	320	328	559	200	94	183	236	77	104	140	G12	1:60
400	16	102	216	480	595	371	377	690	300	120	257	324	121	160	196	G14	1:64
450	18	114	222	534	635	420	402	715	300	120	257	324	154	196	229	G14	1:64
500	20	127	229	588	700	469	437	750	300	120	257	324	194	265	286	G14	1:64
600	24	154	267	692	815	549	492	888	400	153	352	374	327	430	457	G16	1:96
700	28	165	292	800	927	655	570	963	400	153	352	374	437	577	686	G16	1:96
750	30	190	318	857	984	698	605	1165	600	185	512	446	606	716	889	G25	1:125
800	32	190	318	910	1060	755	630	1190	600	185	512	446	647	864	1014	G25	1:125
900	36	203	330	1000	1168	870	690	1230	600	185	512	446	763	963	1282	G25	1:125
1000	40	216	410	1115	1289	943	768	1360	600	185	512	446	1050	1330	1651	G30	1:125
1100	44	254	410	1220	1403	1045	818	1410	600	185	512	446	1287	1639	2173	G30	1:125
1200	48	254	470	1330	1510	1145	884	1475	600	185	512	446	1513	1898	2651	G30	1:125

300LB

● Operator chosen is according to following condition: △20 Bar

SIZE		L	L1	D	D1	d	H1	H2	W	G	E	F	Weight (kg)			Gear Model	Gear Model
mm	in												Wafer	Lug	Flange		
50	2	45	-	95	-	46	118	282	100	66	97	133	10	12	-	G07	1:40
65	2.5	48	-	112	-	61	126	290	100	66	97	133	11	13	-	G07	1:40
80	3	48	114	126	190	76	134	319	150	66	122	133	12	15	18	G07	1:40
100	4	54	127	155	230	96	144	329	150	66	122	133	13	17	23	G07	1:40
125	5	57	-	184	-	118	178	349	150	66	122	133	16	22	-	G07	1:40
150	6	59	140	224	318	143	199	416	200	77	161	236	26	34	50	G10	1:40
200	8	73	152	280	381	188	234	456	200	77	161	236	36	51	76	G10	1:40
250	10	83	165	345	445	236	278	509	200	94	183	236	64	83	107	G12	1:60
300	12	92	178	395	521	281	318	549	200	94	183	236	84	114	161	G12	1:60
350	14	117	190	440	585	320	367	680	300	120	257	324	128	184	215	G14	1:64
400	16	133	216	495	648	371	392	705	300	120	257	324	171	241	283	G14	1:64
450	18	149	222	560	712	420	437	833	400	153	352	374	266	368	464	G16	1:96
500	20	159	229	622	775	469	465	858	400	153	352	374	323	447	578	G16	1:96
600	24	181	267	720	915	549	535	1095	600	185	512	446	528	739	906	G25	1:125

Cryogenic Bare Shaft



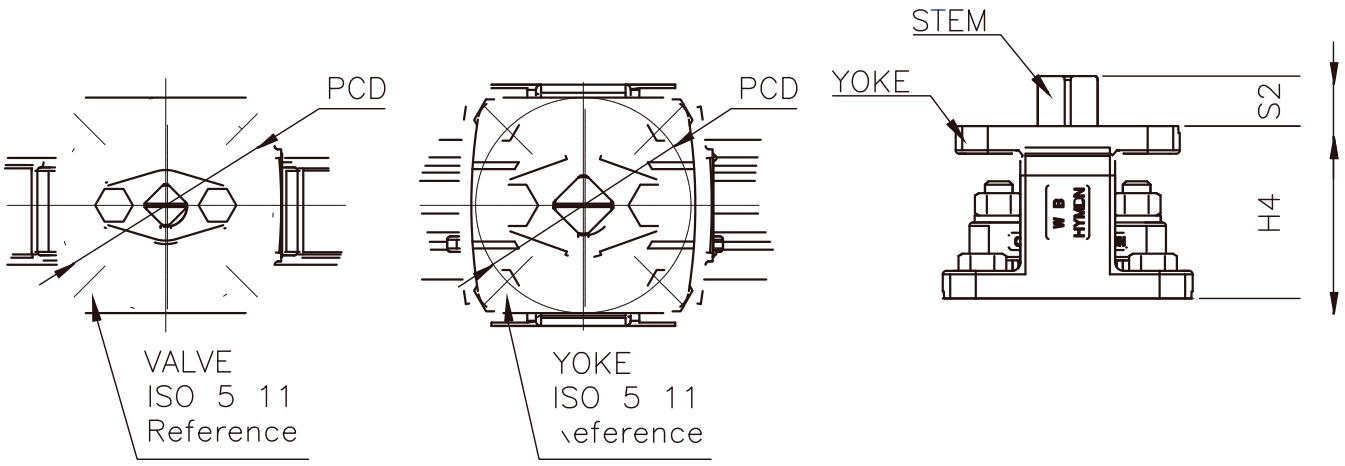
150LB

SIZE		L	L1	D	D1	d	H1	H2	H3	S1	d1	S	ISO
mm	in											(b*h)	
50	2	45	-	95	-	46	118	378	86	18	18	14	F10
65	2.5	48	-	112	-	61	126	386	86	18	18	14	F10
80	3	48	114	126	190	76	134	440	86	18	18	14	F10
100	4	54	127	155	230	96	144	450	86	18	18	14	F10
125	5	57	-	184	-	118	178	470	89	21	22	17	F10
150	6	57	140	215	280	143	190	535	89	21	22	17	F10
200	8	62	152	267	345	188	214	565	101	23	25	19	F12
250	10	70	165	326	405	236	254	660	104	26	28	22	F12
300	12	81	178	375	485	281	298	690	129	31	35	27	F14
350	14	92	190	416	535	320	328	770	134	36	42	32	F14
400	16	102	216	480	595	371	377	820	158	40	50	36	F16
450	18	114	222	534	635	420	402	895	158	40	50	36	F16
500	20	127	229	588	700	469	437	930	168	50	60	46	F16
600	24	154	267	692	815	549	492	980	240	90	65	18*12	F25
700	28	165	292	800	927	655	570	1155	245	95	75	20*12	F25
750	30	190	318	857	984	698	605	1200	300	100	85	25*14	F30
800	32	190	318	910	1060	755	630	1225	310	110	90	25*14	F30
900	36	203	330	1000	1168	870	690	1365	320	120	100	28*16	F30

300LB

SIZE		L	L1	D	D1	d	H1	H2	H3	S1	d1	S	ISO
mm	in											(b*h)	
50	2	45	-	95	-	46	118	378	86	18	18	14	F10
65	2.5	48	-	112	-	61	126	386	86	18	18	14	F10
80	3	48	114	126	190	76	134	440	86	18	18	14	F10
100	4	54	127	155	230	96	144	450	86	18	18	14	F10
125	5	57	-	184	-	118	178	470	89	21	22	17	F10
150	6	59	140	224	318	143	199	550	101	23	25	19	F12
200	8	73	152	280	381	188	234	590	104	26	28	22	F12
250	10	83	165	345	445	236	278	670	129	31	35	27	F14
300	12	92	178	395	521	281	318	710	134	36	42	32	F14
350	14	117	190	440	585	320	367	810	158	40	50	36	F16
400	16	133	216	495	648	371	392	835	168	50	60	46	F16
450	18	149	222	560	712	420	437	925	240	90	65	18*12	F25
500	20	159	229	622	775	469	465	950	245	95	75	20*12	F25
600	24	181	267	720	915	549	535	1030	310	110	90	25*14	F30

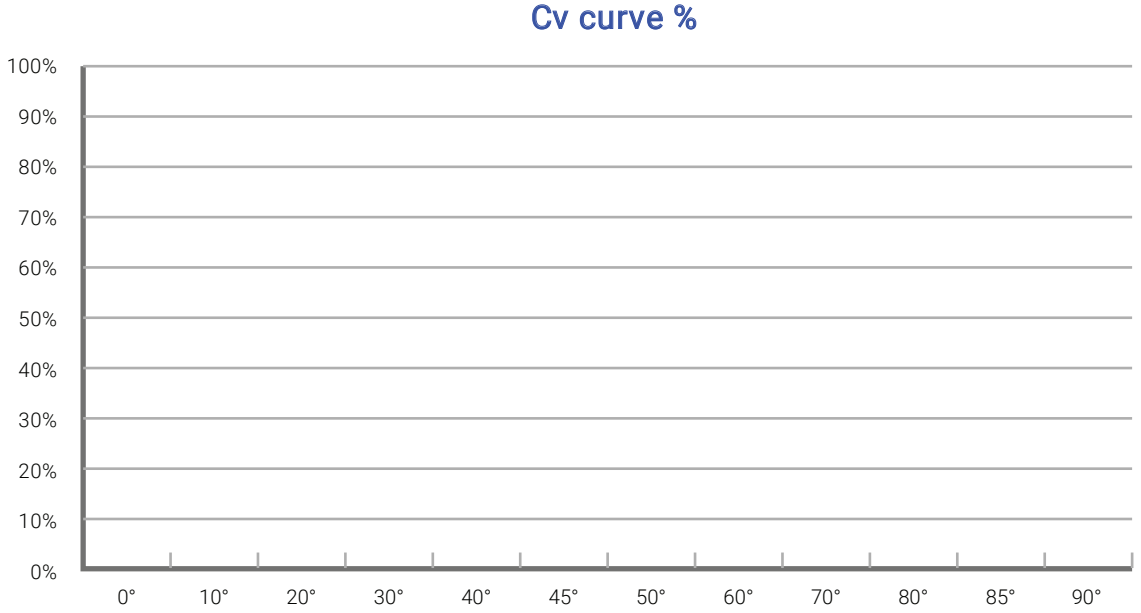
Yoke



150LB
DN50 - DN1200

SIZE		H4	S2	Yoke		Valve
mm	in			ISO	PCD	ISO
50	2	70	16	F07	70	F10
65	2.5	70	16	F07	70	F10
80	3	70	16	F07	70	F10
100	4	70	16	F07	70	F10
125	5	70	19	F07	70	F10
150	6	70	19	F07	70	F10
200	8	80	21	F10	102	F12
250	10	80	24	F10	102	F12
300	12	100	29	F12	125	F14
350	14	100	34	F12	125	F14
400	16	120	38	F14	140	F16
450	18	120	38	F14	140	F16
500	20	120	48	F14	140	F16
600	24	150	90	F16	165	F25
700	28	150	95	F16	165	F25
750	30	200	100	F25	254	F30
800	32	200	110	F25	254	F30
900	36	200	120	F25	254	F30

Cv FLOW COEFFICIENT



150LB

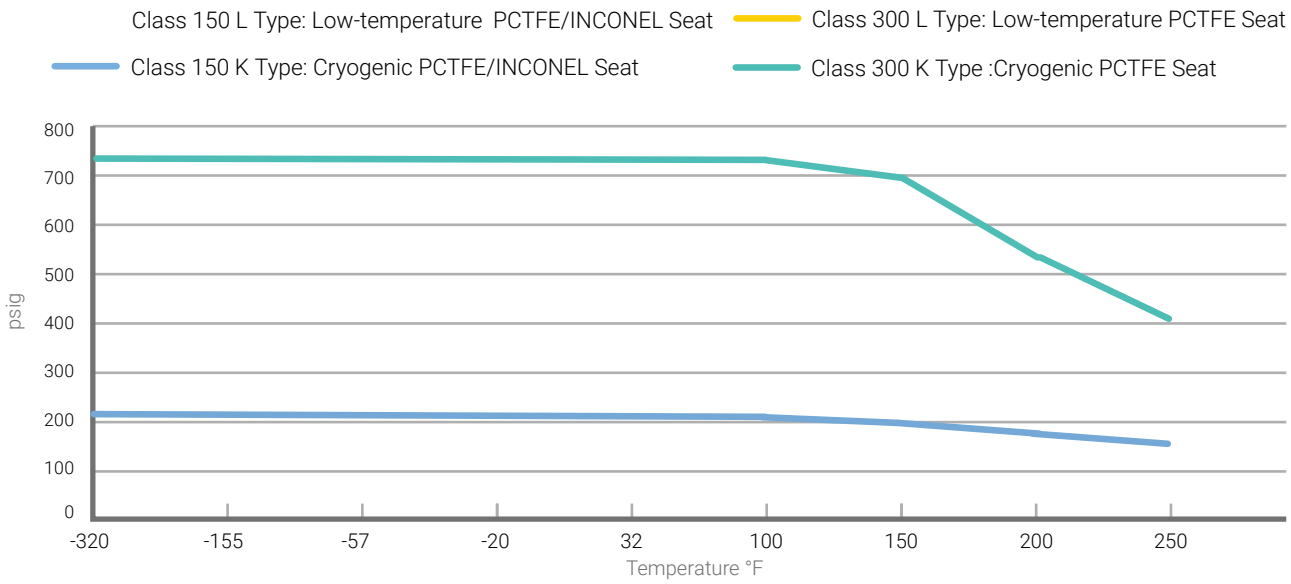
SIZE		*Cv* Value										
mm	in	10°	20°	30°	40°	45°	50°	60°	70°	80°	85°	90°
50	2	0	8	22	36	44	51	60	69	72	70	70
65	2.5	2	16	38	61	71	83	109	135	146	152	150
80	3	6	33	62	94	108	118	143	176	208	230	227
100	4	16	58	106	155	178	213	274	349	433	465	473
125	5	20	94	167	230	263	310	391	488	561	604	605
150	6	40	147	242	335	382	422	560	729	925	975	1010
200	8	66	237	368	509	606	712	985	1296	1640	1715	2004
250	10	139	390	595	807	963	1168	1606	2134	2814	3180	3199
300	12	204	548	820	1138	1357	1591	2219	3067	4085	4484	4672
350	14	264	674	972	1386	1658	1994	2840	3925	5164	5828	5947
400	16	384	864	1196	1765	2155	2611	3755	5105	6975	7920	8182
450	18	508	1092	1551	2341	2881	3522	5125	7134	9511	10599	11548
500	20	626	1294	1792	2651	3304	4082	5919	8256	11429	13126	13813
600	24	1047	2251	3178	4563	5543	6568	9277	12932	17093	18328	19021

300LB

SIZE		*Cv* Value										
mm	in	10°	20°	30°	40°	45°	50°	60°	70°	80°	85°	90°
80	3	6	33	62	94	108	118	143	176	208	230	227
100	4	16	58	106	155	178	213	274	349	433	465	473
125	5	20	94	167	230	263	310	391	488	561	604	605
150	6	37	137	225	312	355	393	521	678	860	907	939
200	8	62	220	343	473	563	662	916	1206	1525	1595	1864
250	10	129	362	554	750	896	1087	1493	1985	2617	2957	2975
300	12	190	510	762	1059	1262	1480	2064	2852	3799	4170	4345
350	14	246	627	904	1289	1542	1854	2641	3650	4803	5420	5531
400	16	357	803	1112	1642	2004	2428	3492	4748	6487	7365	7609
450	18	473	1015	1442	2177	2679	3275	4766	6634	8845	9857	10739
500	20	583	1204	1667	2466	3073	3797	5504	7678	10629	12207	12846
600	24	974	2093	2956	4244	5155	6108	8627	12027	15897	17045	17689

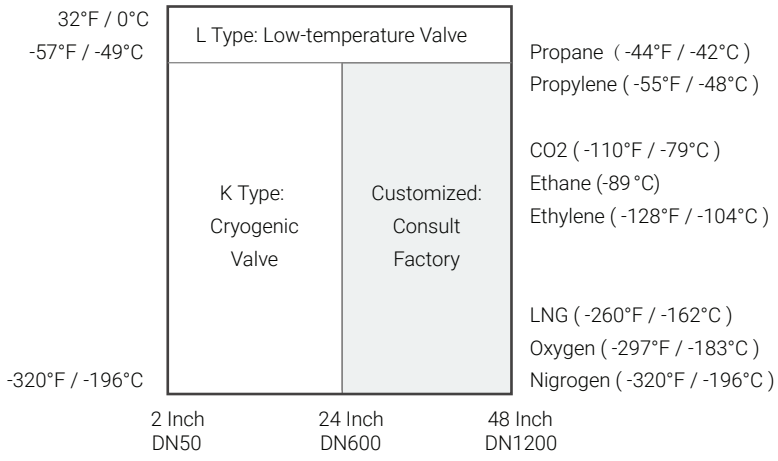
PRESSURE-TEMPERATURE RATING

Seat Type Ratings



Body and Seat / Temperature		Class 150								Class 300			
		L Type: Low-temperature				K Type: Cryogenic				L Type		K Type	
		PCTFE		INCONEL		PCTFE		INCONEL		PCTFE		PCTFE	
°F	°C	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar
-320	-196	-	-	-	-	285	19.7	285	19.7	-	-	740	51
-155	-104	-	-	-	-	285	19.7	285	19.7	-	-	740	51
-57	-49	285	19.7	285	19.7	285	19.7	285	19.7	740	51	740	51
-20	-29	285	19.7	285	19.7	285	19.7	285	19.7	740	51	740	51
32	0	285	19.7	285	19.7	285	19.7	285	19.7	740	51	740	51
100	38	285	19.7	285	19.7	285	19.7	285	19.7	740	51	740	51
150	66	273	18.8	273	18.8	273	18.8	273	18.8	708	48.8	708	48.8
200	93	260	17.9	260	17.9	260	17.9	260	17.9	550	37.9	550	37.9
250	121	245	16.9	245	16.9	245	16.9	245	16.9	425	29.3	425	29.3

Fluid Service Range



Propane (-44°F / -42°C)
Propylene (-55°F / -48°C)

CO2 (-110°F / -79°C)
Ethane (-89 °C)
Ethylene (-128°F / -104°C)

LNG (-260°F / -162°C)
Oxygen (-297°F / -183°C)
Nigrogen (-320°F / -196°C)

NOTES

(a) The factory acceptance test is done with Nitrogen or Helium gas at lowest temperature.

(b) The detail test criteria may vary or can be customized according to the target application.

(c) Please contact factory for any further details.