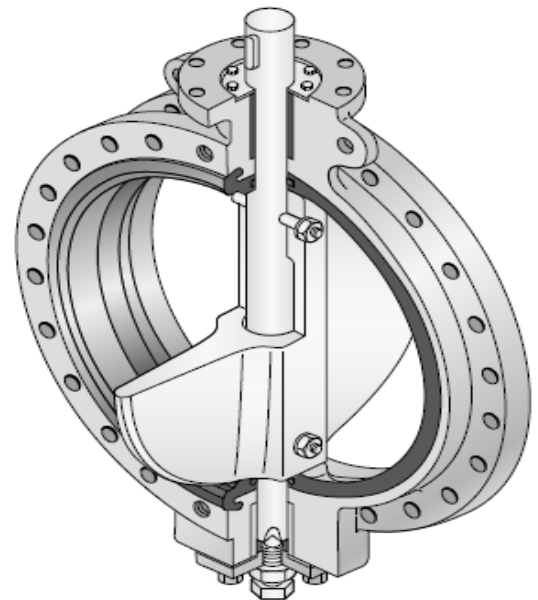
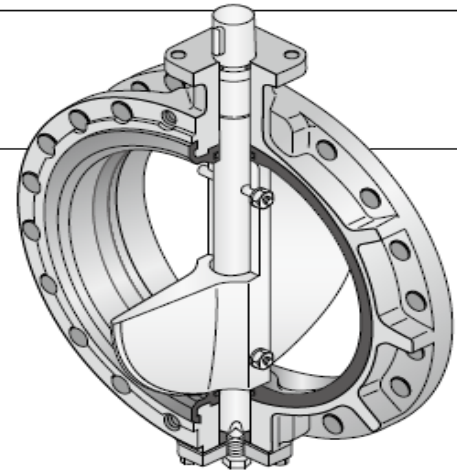
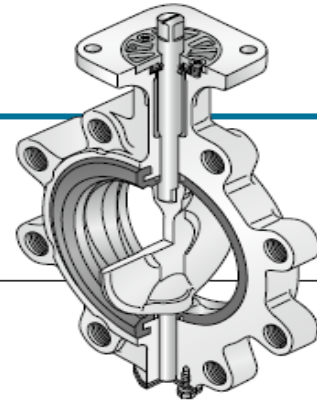


10 BAR Rated Butterfly Valve for General & Marine Use

704G Lugged

722F Double flanged

720F Double flanged



Today's ships have to work hard. With the extensive use of automated systems, minimum manning levels, extended journeys and quick turn round times, maintenance time is at a premium. Equipment must be ultra reliable and also meet the latest standards.

Features and Benefits

Long life and leak tight

The 704G/722F/720F are designed to meet all of these requirements. They are tough valves made to international standards with worldwide marine approvals. Long term leak tightness was achieved through attention to detail in the spindle sealing and seat design.

Low cost maintenance

The seat and disc can easily be replaced under a planned maintenance schedule. This ease of replacement does not affect the valve's function as the seat is positively located in machined grooves in the valve body.

Certification/Approval

Satisfies requirements of the major certification/approval bodies such as:

- Lloyd's Register of Shipping (LR)
- American Bureau of Shipping (ABS)
- Nippon Kaiji Kyokai (NK)
- Bureau Veritas (BV)
- Korean Register of Shipping (KR)

Standard Specifications

Type	704G	722F	720F
	Lugged type		Flanged type
Valve nominal size	50mm to 100mm *1	125mm to 800mm	850mm to 1350mm
Applicable flange standard *2	JIS 10K, (JIS 5K, ANSI 125/150, BS 4504 PN10)		
Max. working pressure	1.0MPa		
Body shell test	1.5MPa		
Seat leak test	1.1MPa		
Working temperature range	NBR : -10 to 80 degrees C, *EPDM : -20 to 120 degrees C		
Working temperature in continuous use *3	NBR : 0 to 60 degrees C, *EPDM : 0 to 70 degrees C		
Standard materials *4	Body	Cast steel, SCPH2	
	Disc	SCS 14 (316SS)	SCS 13 (304SS)
	Stem	SUS 420J2	SUS 403
	Seat ring *5	NBR, *EPDM	
Coating	Lacquer primer (Munsell N7)		

*1 Available up to 600mm.

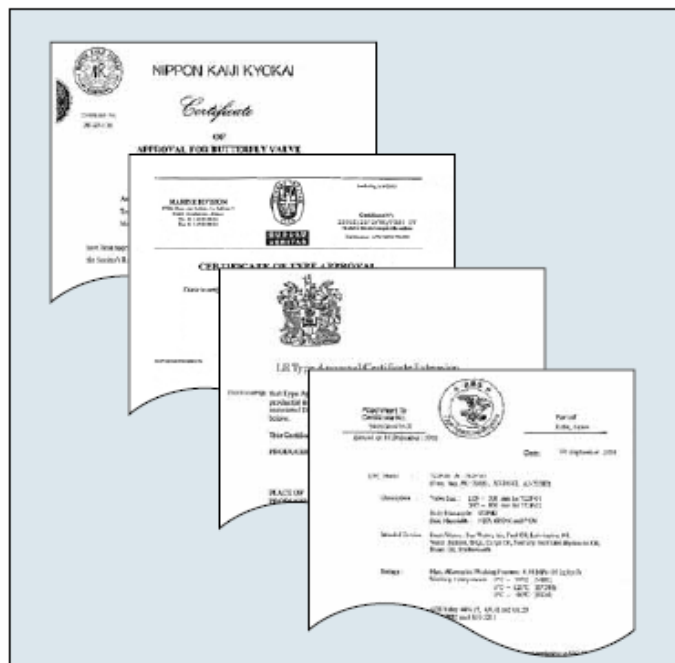
*2 Semi-standard. Consult us.

*3 'Working temperature in continuous use' stands for the temperature continuously kept exceeding one hour.

*4 Other materials, such as ductile iron body, aluminium bronze disc, etc, are also available. Consult us.

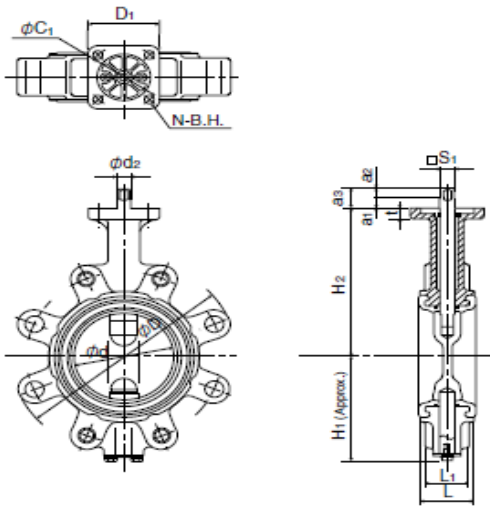
*5 Seating on 1000mm types and above are vulcanized to the body.

* Never use an EPDM rubber seat ring if the valve is being used for oil or for a fluid containing even a slight amount of oil.



704G / 722F / 720F Dimension List

704G

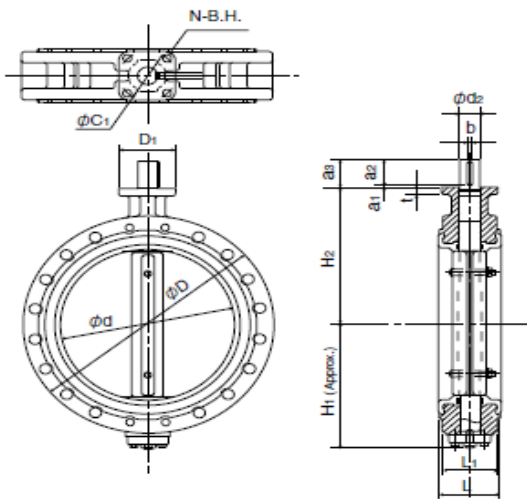


704G Dimensions

Nominal size	Dimension (mm)																	Approx. Weight (kg)
	mm	inch	φd	L	L ₁	φD	H ₁	H ₂	d ₂	a ₁	a ₂	a ₃	S ₁	D ₁	t	φC ₁	N	
50	2	56	43	33	155	67	138	10	11	10.5	21.5	8	70	12	70	4	9	3.4
65	2 1/2	69	46	36	175	78	151	10	11	10.5	21.5	8	70	12	70	4	9	4.4
80	3	84	46	36	187	85(109)	156	12	11	11.5	22.5	10	70	12	70	4	9	5
100	4	104	52	42	220	117	167	14	11	11.5	22.5	12	70	12	70	4	9	7.7

Remark: Value in brackets is for JIS 10K flanges.

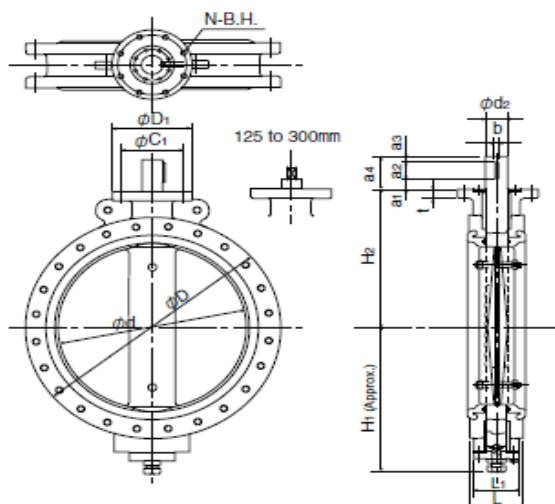
722F



722F Dimensions

Nominal size	Dimension (mm)																	Approx. Weight (kg)	
	mm	inch	φd	L	L ₁	φD	H ₁	H ₂	φd ₂	a ₁	a ₂	a ₃	S ₁	b	D ₁	t	φC ₁		N
125	5	129	100	—	250	139	165	18	11	16.5	27.5	14	—	102	14	102	—	11	18
150	6	154	100	—	280	157	180	18	11	16.5	27.5	14	—	102	14	102	—	11	19
200	8	194	100	—	330	181	210	22	10	20	30	18	—	102	14	102	—	11	37
250	10	250	110	—	400	221	250	30	5	30	35	24	—	102	14	102	—	11	43
300	12	296	110	—	445	251	280	32	5	30	35	24	—	125	16	125	—	13	52
350	14	334	120	110	490	298	320	40	6	45	54	—	12	140	20	140	4	19	70
400	16	384	130	116	560	334	360	46	6	56	65	—	14	140	20	140	4	19	93
450	18	435	150	134	620	356	390	50	6	70	79	—	14	140	20	140	4	19	132
500	20	482	160	140	675	382	420	50	6	70	79	—	14	140	25	140	4	19	182
550	22	531	170	156	745	418	460	55	6	70	79	—	16	165	25	165	4	23	225
600	24	581	170	156	795	476	490	55	6	70	79	—	16	165	25	165	4	23	270
650	26	627	170	156	845	586	510	65	10	60	75	—	18	260	32	220	4	23	415
700	28	670	180	160	905	629	560	75	10	80	95	—	20	320	35	280	8	23	585
750	30	723	190	170	970	659	590	75	10	80	95	—	20	320	35	280	8	23	680
800	32	772	200	180	1020	679	620	75	10	80	95	—	20	320	35	280	8	23	810

720F



720F Dimensions

Nominal size	Dimension (mm)																	Approx. Weight (kg)	
	mm	inch	φd	L	L ₁	φD	H ₁	H ₂	φd ₂	a ₁	a ₂	a ₃	a ₄	b	φD ₁	t	φC ₁		N
850	34	822	210	—	1070	709	650	75	10	80	5	95	20	320	40	280	8	23	※
900	36	858	230	—	1120	759	685	75	10	80	5	95	20	320	40	280	8	23	※
1000	40	975	250	210	1235	819	745	95	10	100	10	120	24	320	45	280	8	23	※
1100	44	1070	280	210	1345	874	820	95	10	100	10	120	24	320	45	280	8	23	※
1200	48	1170	300	225	1465	948	880	95	10	100	10	120	24	320	45	280	8	23	※
1350	54	1314	330	300	1630	1030	960	120	60	140	10	210	32	320	45	280	8	23	※

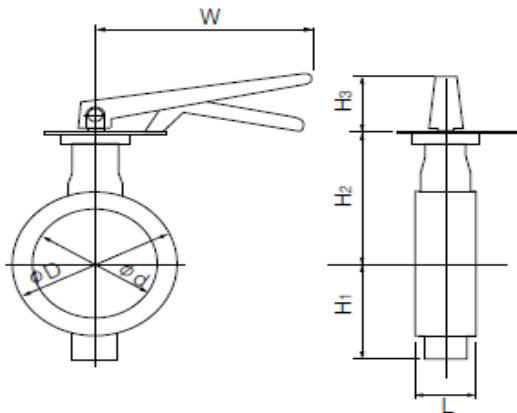
※Please consult us.

Lock lever type 704G-1T(50mm to 100mm) / 722F-1T(125mm to 200mm)

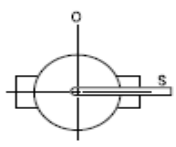
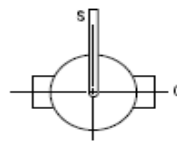
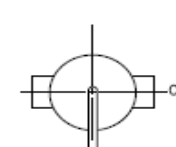
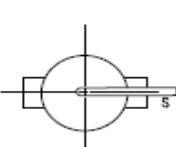
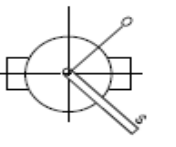
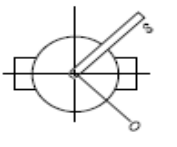
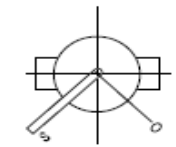
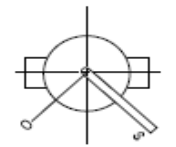
Type	Nominal size		Dimension (mm)							Lever type	Approx. Mass (kg)
	mm	inch	ϕd	ϕD	L	H ₁	H ₂	H ₃	W		
704G	50	2	56	155	43	67	138	66	200	1T-1	4
	65	2 1/2	69	175	46	78	151	66	200	1T-1	5
	80	3	84	187	46	85 (109)	156	66	200	1T-1	5.6 (6.1)
	100	4	104	220	52	117	167	66	200	1T-1	8.3
722F	125	5	129	250	100	139	165	92	300	1T-2	19.3
	150	6	154	280	100	157	180	92	300	1T-2	20.3
	200	8	194	330	100	181	210	97	350	1T-3	38.7

Remark: Value in brackets is for JIS 10K flanges.

704G / 722F-1T



1T Installation direction

			
1 T L S (standard)	1 T L R	1 T R S	1 T R R
			
1 T X S	1 T X R	1 T V S	1 T V R

Worm Gear Type 704G-2U(50mm to 100mm) / 722F-2U(125mm to 600mm) / 722F-2S(650mm to 800mm) / 720F-2S(850mm to 1350mm)

704G-2U (50mm to 100mm)

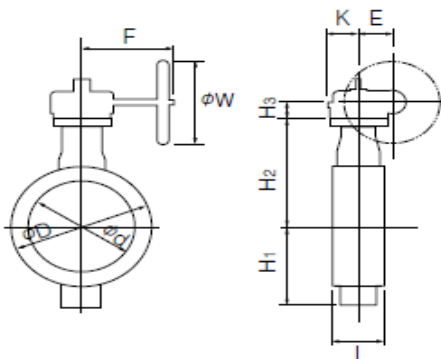
Type	Nominal size		Dimension (mm)										Gear type	Approx. Weight (kg)
	mm	inch	ϕd	ϕD	L	H ₁	H ₂	H ₃	E	K	F	ϕW		
704G	50	2	56	155	43	67	138	29.5	36	46	160	100	2U-0	5.7
	65	2 1/2	69	175	46	78	151	29.5	36	46	160	100	2U-0	6.7
	80	3	84	187	46	85 (109)	156	29.5	36	46	160	100	2U-1	7.3(7.8)
	100	4	104	220	52	117	167	29.5	36	46	160	100	2U-1	10

Remark: Value in brackets is for JIS 10K flanges.

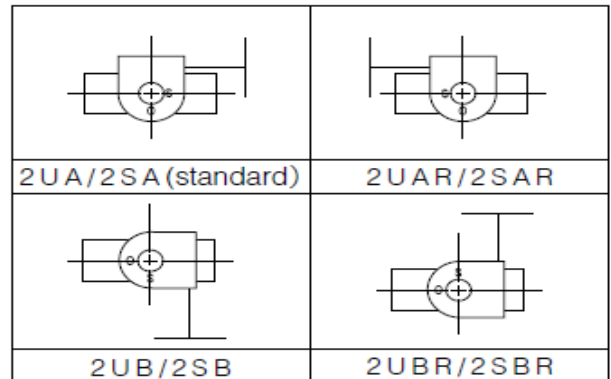
722F-2U (125mm to 600mm) / 722F-2S (650mm to 800mm) / 720F-2S (850mm to 1350mm)

Type	Nominal size		Dimension (mm)										Gear type	Approx. Weight (kg)
	mm	inch	ϕd	ϕD	L	H ₁	H ₂	H ₃	E	K	F	ϕW		
722F	125	5	129	250	100	139	165	34.5	44	53	173.5	160	2U-2	22.2
	150	6	154	280	100	157	180	34.5	44	53	173.5	160	2U-2	23.2
	200	8	194	330	100	181	210	41.5	67	75	198	200	2U-3	45
	250	10	250	400	110	221	250	41.5	67	75	198	200	2U-3	51
	300	12	296	445	110	251	280	48	87.5	90	222.5	200	2U-4	66
	350	14	334	490	120	298	320	50	90	105	266	280	2U-5	84
	400	16	384	560	130	334	360	50	90	105	266	280	2U-5	107
	450	18	435	620	150	356	390	50	90	105	266	280	2U-5	146
	500	20	482	675	160	382	420	50	90	105	266	280	2U-5	196
	550	22	531	745	170	418	460	61	113	140	352	400	2U-6	256
	600	24	581	795	170	476	490	61	113	140	352	400	2U-6	301
	650	26	627	845	170	586	510	65	140	198	400	450	MGH-4	463
	700	28	670	905	180	629	560	75	185	267	457	500	MGH-4 1/2	692
	750	30	723	970	190	659	590	75	185	267	457	500	MGH-4 1/2	782
800	32	772	1020	200	679	620	75	185	267	457	500	MGH-4 1/2	907	
720F	850	34	822	1070	210	709	650	100	210	293	490	500	MGH-5	1050
	900	36	858	1120	230	759	685	100	210	293	490	500	MGH-5	1150
	1000	40	975	1235	250	819	745	100	210	293	490	500	MGH-6	1384
	1100	44	1070	1345	280	874	820	100	210	293	490	500	MGH-6	1584
	1200	48	1168	1465	300	949	880	100	210	293	490	500	MGH-6	1984
	1350	54	1314	1630	330	1030	960	151	280	293	675	600	MGH-7	2330

704G / 722F / 720F-2U / 2S



2U / 2S Installation Direction



Center handle type 704G-2G (50mm to 100mm) / 722F-2G (125mm to 300mm) / 722F-2R (350mm to 600mm)

■ 704G-2G (50mm to 100mm)

Nominal size		Dimension (mm)							Center handle type	Approx. Mass (kg)
mm	inch	ϕd	ϕD	L	H ₁	H ₂	H ₃	ϕW		
50	2	56	155	43	67	138	136	100	2G-1	6.3
65	2 1/2	69	175	46	78	151	136	100	2G-1	7.3
80	3	84	187	46	85 (109)	156	136	100	2G-1	7.9(8.4)
100	4	104	220	52	117	167	136	100	2G-1	10.6

Remark: Value in brackets is for JIS 10K flanges.

■ 722F-2G (125mm to 300mm) / 722F-2R (350mm to 600mm)

Nominal size		Dimension (mm)							Center handle type	Approx. Mass (kg)
mm	inch	ϕd	ϕD	L	H ₁	H ₂	H ₃	ϕW		
125	5	129	250	100	139	165	136	100	2G-2	22
150	6	154	280	100	157	180	136	100	2G-2	23
200	8	194	330	100	181	210	151	200	2G-3	45
250	10	250	400	110	221	250	151	200	2G-3	51
300	12	296	445	110	251	280	161	200	2G-4	60
350	14	334	490	120	298	320	409	355	2R-3	106
400	16	384	560	130	334	360	409	355	2R-3	128
450	18	435	620	150	356	390	409	355	2R-3	168
500	20	482	675	160	382	420	409	355	2R-3	218
550	22	531	745	170	418	460	498	450	2R-4	283
600	24	581	795	170	476	490	498	450	2R-4	328

■ 704G / 722F-2G / 2R

