

▶ Product Code Table

MODEL	OPERATION	SIZE	MATERIAL
54HA	G	150A	-13A
			-14A
			-16A
54HB	G	150A	-13A
			-14A
			-16A

Caution When Handling Valve

Be sure to read the "High-Performance Butterfly Valve Instructions Manual" attached to parts, and use the valve correctly.

Storage

- The PTFE seat ring is easily damaged, so do not detach the protection plates on either side of the body till installing the valve. Prevent dust or oil from entering the body; otherwise a leak may occur.
- If you store the valve for a long period, keep it in a cool and dark place, if possible; avoid temperatures out of the range of -10°C and 40°C, high humidity, and/or vibration.

Piping Installation

- Be sure to hold the valve by the flange before installation.
- Carry out a flushing blow inside the pipe before installing the valve.
- Fit a pipe gasket correctly at the center of the pipe flange and the valve, and check it for displacement.
- When fluid is steam, install the valve so that the stem side is the upstream of flow direction.
- Do not use a pipe flange packing made from a soft material such as rubber. Joint seats (two seats) are recommended for a pipe gasket. If you use a special gasket such as thin roller type, contact us for assistance.
- When fitting the automatic valve, be careful not to set its actuator downward. When the actuator stands sideways, include a support.
- When removing a valve that has been attached to the pipe, have the valve element fully open.
- Do not install the valve immediately after welding the pipe flange. Be sure not to complete piping work until flange temperature becomes normal.
- Never weld the valve after fitting it to the flange.
- Insert the valve in the flange so that the pitch of the pipe flange faces is 6 to 10mm longer than the side-to-side length of the valve.

**Warranty Period** Our products are guaranteed for either a period of 18 months from shipment out of our factory or 12 months from trial operation, whichever is the shorter.

• Because specifications and designs are subject to change without notice, be sure to contact us when considering a purchase.

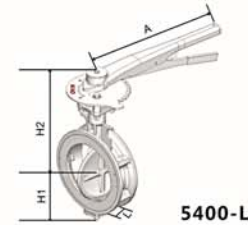


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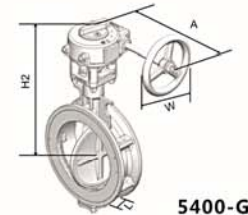
CAT-5400-1701-B-C-FXZ

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▶ Dimensions



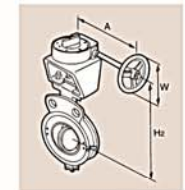
5400-L



5400-G



5400-L Lever-Operated



5400-G Worm-Gear

5400 Series-K Specification Max. Service Pressure: 1.0MPa (Max. Service Temperature: 232°C) Standard

Nominal Size	inch	mm	L	d	g	H1	5400-L Lever-Operated			5400-G Worm-Gear		
							H2	A	Weight	H2	A	Weight
2		50	43	40	92	62	179	160	3.7	169	141	5.3
2 1/2		65	46	55	108	72	189	160	4.2	179	141	5.8
3		80	46	70	127	82	199	200	4.9	189	141	6.4
4		100	52	94	147	92	209	200	5.7	199	141	7.2
5		125	56	119	180	109	248	360	10.5	220	182	11.3
6		150	56	144	209	123	263	360	11.8	235	182	12.6
8		200	60	195	265	180	-	-	-	271	211	20.6
10		250	68	244	327	215	-	-	-	330	255	31.6
12		300	78	293	367	240	-	-	-	350	255	36.2

(Size: mm, Weight: kg) \*Please contact us for sizes of 350mm or more.

5400 Series Specification Max. Service Pressure: 2.0MPa (Max. Service Temperature: 232°C)

Nominal Size	inch	mm	L	d	g	H1	5400-L Lever-Operated			5400-G Worm-Gear		
							H2	A	Weight	H2	A	Weight
2		50	43	40	94	67	249	260	4.0	228	141	5.8
2 1/2		65	46	55	108	74	264	260	5.0	243	141	6.8
3		80	46	70	125	82	272	260	8.0	252	182	10
4		100	52	94	155	92	282	260	9.0	262	182	10
5		125	56	119	180	119	332	360	15.0	304	211	12.5
6		150	56	144	209	132	345	360	18.0	317	211	15.0
8		200	60	195	265	169.5	-	-	-	349	255	20.0
10		250	68	244	319	224	-	-	-	407	335	25.0
12		300	78	293	367	259	-	-	-	477	320	30.0
14		350	78	328	413	313	-	-	-	530	331	35.0
16		400	102	366	470	343	-	-	-	580	331	40.0
18		450	114	415	534	375	-	-	-	620	392	45.0
20		500	127	463	584	409	-	-	-	790	513	50.0
22		550	154	518	643	429	-	-	-	820	549	55.0
24		600	154	570	692	479	-	-	-	870	549	60.0

(Size: mm, Weight: kg) \*The height dimension is subject to change if fluid temperature is 300°C or above.



5400

High-Performance Butterfly Valves

OKUMURA ENGINEERING CORP.

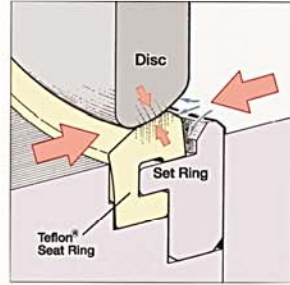
# 5400

**1.0Mpa(50 to 300mm)SERIES**  
**2.0Mpa(50 to 1200mm)SERIES**

The valve body and parts in the wetted area are wafer-shaped industrial butterfly valve made of stainless steel. The parts in the wetted area are polished and undergo oil-free processing in order to minimize particle accumulation and adhesion.

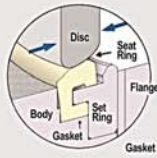
## Self-sealing mechanism ensures tight shutoff.

As illustrated below, fluid pressure to the disc and seat ring ensures a secure seal; in other words, the higher the pressure, the better the sealing performance. The sealing performance remains unchanged even when the flow direction changes from one way to the other.



**54HA 54HB**  
**Teflon® Ring(PTFE-50 to 230°C)**

The Teflon® seat ring is designed to withstand extremely corrosive chemical solutions and high-temperature fluids of up to 230°C (446°F). (eg. demineralized water, air-conditioning chilled/hot water, sea water, white liquor, formaldehyde solution, organic solvent, compressed air, oxygen, exhaust gas, town gas, coke-oven gas)

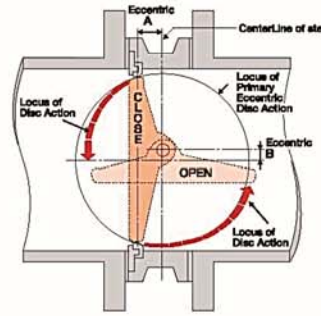


OKM 54 Series is a high-performance butterfly valve designed for extreme temperature, high pressure and vacuum conditions that are unsuitable for conventional universal butterfly valves. The 54 Series features a self-sealing seat ring, double eccentric disc, and a choice of three seat rings. It outperforms ball valves and gate valves and can perfectly seal fluids such as corrosive slurry and high-pressure steam.

## Double eccentric disc ensures longer service life, low seating torque and leak-tight shutoff.

Since the stem is eccentric from the seat ring (as indicated by A and B), the disc is in contact with the seat ring only when the valve is completely closed. The benefits from the double eccentric disc design include:

- Longer service life due to hard-to-wear seat ring.
- When in the closed position, the force of the disc on the seat ring ensures complete sealing.
- Easy operation with less seating torque.
- The offset stem design allows easy replacement of the seat ring without removing the stem.



## Standard Specifications (5400 Series)

Model	54HA	54HB
Seat Ring	PTFE	PTFE
Size	50 to 600	50 to 600
Applicable Flange Std.	JISS5K/10K/16K/20K/ANSI150Lb	
Max. Service Pressure	2.0Mpa	
Service Temperature Range		
Without Insulation	-29 to 232°C	-50 to 232°C
With Insulation	-	-
Hydrostatic Shell Test	1.5Mpa(10K仕様)	3.0Mpa(20K仕様)
Hydrostatic Seat Test	1.1Mpa(10K仕様)	2.2Mpa(20K仕様)
Face To Face	International Standard (ISO 5752) Dimension between Shorter Faces	
Seat Leakage	Tight Shutoff	Tight Shutoff <sup>2</sup>
Fluid Used	CDA/O2/Ar	
Cycle Life	100,000 Cycles	

\*1: For ANSI 125/150Lb. Contact us for assistance separately.  
 \*2: Applicable to the MSS SP-61 standard.

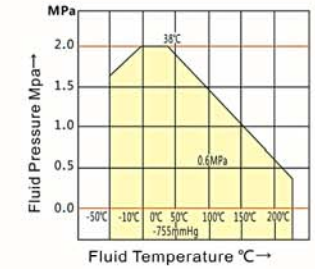
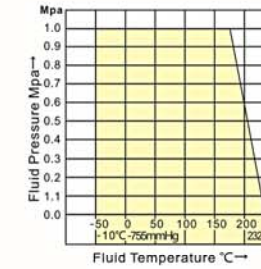
Teflon is manufactured by Mitsui-Dupont Fluoro Chemical

## Standard Specifications

Part Name	54HA	54HB
Cleaning Surface Roughness	Degreasing B none	ultrasonic cleaning Ra≤0.5um Ry≤0.8um
Clean Room Environment Packing	Glass 1000 or under Single bagged package	Glass 1000 or under Double bagged package
Seat leakage Purge	Tight Shutoff 99.9999%	Tight Shutoff 99.9999%
Gland Structure	V-Packng(PTFE)Spec	Gland Packing Spec(PTFE, Graphite Foil)
Body	SCS13A, 14A, 16A	
Disc	SCS13A, 14A, 16A	
Set Ring	SUS304, SUS316, SUS316L	
Seat Ring	Teflon® Seat Ring 541-T	PTFE(White), R-PTFE(Black)
Stem	SUS304, SUS316, SUS316L	

\*The standard material of the body and valve element is SCS 13A, and that of the stem is SCS14A and SCS16A, contact us for assistance separately.  
 \*Be sure to inform us of fluid name, end temperature when you place an order.

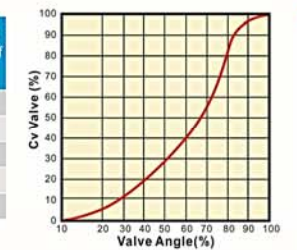
## Temperature and Pressure Ratings(5400 Series)



## Min. Internal Diameters Of Piping

Nominal Size (mm)	Min. Internal Diameters Of Piping A	Nominal Size (mm)	Min. Internal Diameters Of Piping A
50	27.3	150	137.7
65	47.8	200	192.3
80	64.9	250	241.6
100	81.5	300	290.5
125	110.6		

## Flow Characteristics



## Cv Values with Valve Fully Open

Size(mm)	10/20W, O, G
*50	60
*65	100
80	190
100	380
125	730
150	1250
200	2400
250	4000
300	5800
350	7600
400	9200
450	11900
500	14200
*550	17000
600	21700

\*Model 54HA/54HB only