

Catalogue

OKM Butterfly Valve
Model 602



Butterfly 602

Aluminium Die-Cast Air Piping Valve

Condensation Resistant
Max. Application Pressure / 1.0MPa
Fabrication Size / 40mm ~ 300mm

A JIS Conformed Product



CERT NO. Q17412



CONDENSATION RESISTANT ALUMINIUM DIE CAST BODY AIR CONDITIONING INDUSTRY

Towards Tomorrow With High Technology Valve

OKM

OKUMURA ENGINEERING CORP.
OKM VALVE (M) SDN. BHD.

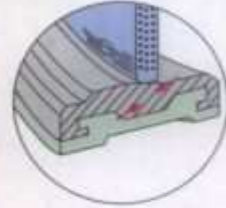
**A Unique OKM New Soft Touch Seat
Condensation Resistant Valve**

<Application>
Air Conditioning,
Water Treatment
General Industries



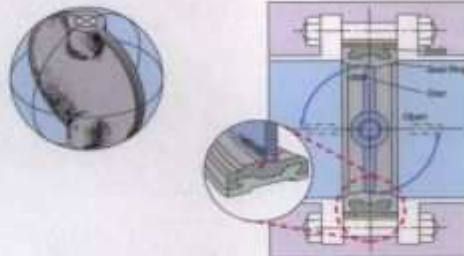
More economical due to its unique new OKM soft touch seat

A newly developed soft touch seat that presses at an obtuse angle when the disc touches or closes at the rubber seat surface. Without straining contact with the seat, Therefore giving an economical and longer seat ring life.



A lighter and smaller actuator due to the lower torque requirement

Due to the unique OKM seat development, no other products have this kind of patented seat structure. With the reduction of its torque requirement, the actuators selected could be made smaller and lighter.

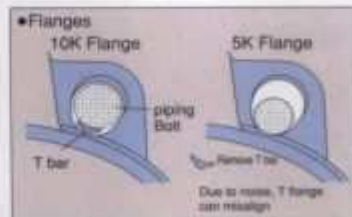


Aluminium body and stainless steel neck combination. A JIS conformed product, which is strong against condensation.

The unit material is lightweight, with an aluminium die-cast body and stainless steel neck, and through OKM uniquely developed condensation resistant (patented) performance, this valve shows great performance. This aluminium die-cast butterfly valve also conforms to JIS Standard.

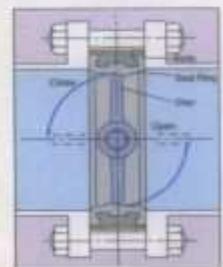
Applicable for both JIS 5K and 10K piping guide and prevent hole and center misalignment.

With the usage of "T bar" designed (patented) by OKM at the bolt guide hole, piping positioning is easier and more accurate. Center misalignment is not a problem any longer.

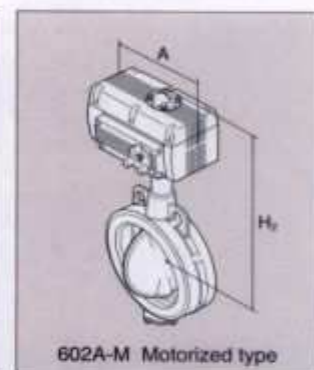
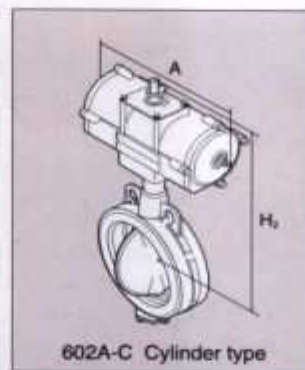
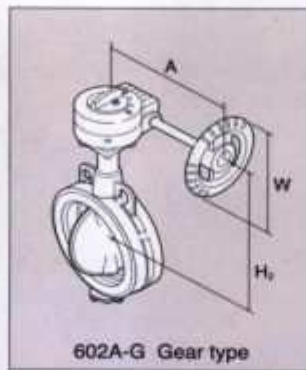
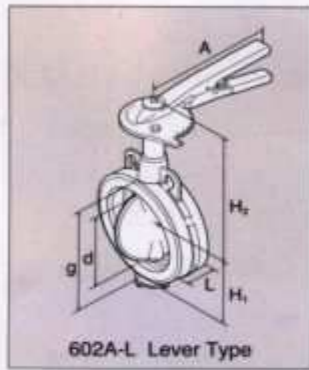


Liquid Contacting Parts have Excellent Corrosion Resistance and Long Service Life.

Valve's liquid contacting parts have excellent corrosion resistance, even to tap water contained in germicide. This gives longer valve life. To counter this type of liquid, a high grade stainless steel disc and a high temperature resistance rubber for its seat ring is used.



602A



Dimension and Weight

Shape of products vary according to its sizes

(Dimension:mm, Weight:kg)

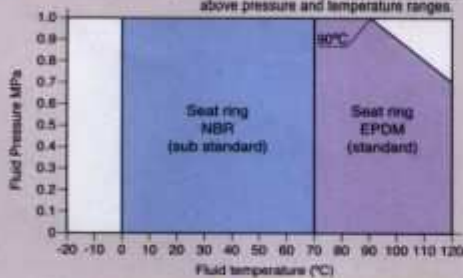
Size		602A-L (Lever type)					602A-G (Gear type)					602A-C (Cylinder type)			602A-M (Motorized-type)			
INCH	mm	L	d	g	H1	H2	A	weight	H2	A	W	weight	H2	A	weight	H2	A	weight
1 1/2	40	33	43	80	86	166	160	1.6	159	133	100	2.2	270	236	3.1	303	247	10.0
2	50	43	55	90	99	174	160	1.8	164	133	100	2.4	278	236	3.3	311	247	10.2
2 1/2	65	46	66	114	80	187	160	2.4	174	133	100	3.0	288	236	3.9	321	247	10.8
3	80	46	84	126	89	192	200	2.7	179	133	100	3.1	293	236	4.0	326	247	10.9
4	100	52	100	146	106	204	200	3.4	191	133	100	3.8	305	236	4.7	338	247	11.6
5	125	56	130	179	123	234	260	5.6	215	172	125	5.8	358	276	7.4	358	247	13.0
6	150	56	154	210	138	249	260	6.6	230	172	125	6.8	404	342	11.1	373	247	14.0
8	200	60	200	256	168	-	-	-	259	197	160	10.9	457	420	17.9	416	275	19.9
10	250	68	251	300	223	-	-	-	323	222	200	20.0	507	420	25.0	466	275	27.0
12	300	78	297	346	260	-	-	-	353	222	200	29.0	583	506	41.0	496	275	34.0

Standard Specification

Valve Nominal Size Range	40mm - 300mm	Actuator Flange	ISO 5211
Applicable Flange Standard	JIS: 5K, 10K (Standard) ANSI: 125, 150Lb (Sub standard)	Standard Material	Body: ADC 12 Disc: SCS14 Stem: SUS420J2 Seat ring: EPDM (NBR)
Max. Service Pressure	1.0MPa	Coating Specification	Polyester powder spray coating Light blue color
Max. Service Temperature	EPDM seat ring (standard): 0 - 120°C NBR seat ring (sub standard): 0 - 70°C		
Seat Test	1.1MPa		
Shell Test	1.5MPa		
Face to Face	JIS B 2032 46 series		
Actuator	lever type, gear type, cylinder type, motorized type		

Temperature and Pressure Rating

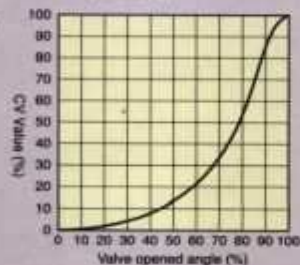
This table conforms to JIS Standard (JIS B 2032). Contact us if you operate your valve outside the above pressure and temperature ranges.



CV Value & Flow Characteristics

Full open CV Value

Normal Size	CV Value
40mm	102
50mm	165
65mm	250
80mm	390
100mm	650
125mm	1100
150mm	1790
200mm	3300
250mm	4400
300mm	6200



Piping Bolt Sizes

Piping bolt diagram is as shown



Bolt length applies to flange thickness that conform to JIS standard. The hexagonal bolt should use an 8UN splitnut.

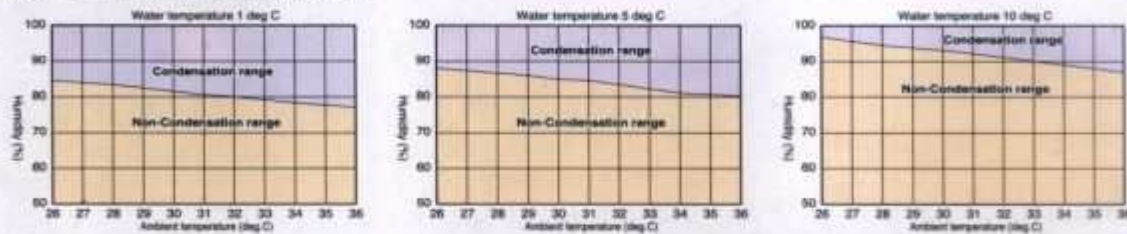
Normal radius		JIS 5K		JIS 10K	
inch	mm	Qty	d x L x S	Qty	d x L x S
1 1/2	40	4	M12X 75X30	4	M16X 65X38
2	50	4	M12X 90X30	4	M16X100X38
2 1/2	65	4	M12X 90X30	4	M16X110X38
3	80	4	M16X100X38	8	M16X110X38
4	100	8	M16X110X38	8	M16X110X38
5	125	8	M16X110X38	8	M20X120X46
6	150	8	M16X120X38	8	M20X130X52
8	200	8	M20X130X52	12	M20X130X52
10	250	12	M20X140X52	12	M22X150X58
12	300	12	M20X150X52	16	M22X160X58

Condensation Estimated Value and Temperature

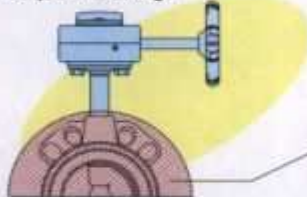
Below graphs show the generated condensation estimated value at water temperature of 1°C, 5°C, 10°C.

When ambient temperature humidity is above the graph lines, condensation will occur. However, when its below the graph lines, condensation will not occur.

Butterfly 602 Condensation Estimation Graph



Recommended Temperature Range



Insulator can be made until 50mm from the flange external. However, it is recommended that if valve is to be used in cold water, insulator can be made until the flange body.

This data is based on constant temperature/humidity and plotted into a graph. Take note that in ambient temperature/humidity condition, the data changes will be more pronounced.

Precautions during handling When using this product please read [Widely used Butterfly Valve Handling Instruction] packed together in the box for correct handling of product.

Storage

- For long term storage, when possible, store in a cool dark room. Avoid storing in a room with temperatures less than -10 °C or more than 40 °C, humid or with vibration.
- When stored in opened boxes, prevent dust, rubbish or oil from contaminating the product.
- During packaging, the disc has been slightly turned open. Continue to store in this same condition.

Piping Installation

- When installing or dismantling the valve, the disc should be turned slightly at about 10 ° rather than in fully closed condition.
- Confirm that there are no scratches or distortion of flange and stem misalignment to valve. Failure in these could lead to leakage problem.
- Clean the internal pipe as well as the flange surface before fixing. Remove any foreign particles if any. Failure in this will lead to leakage.
- Enlarge flange pipe app. 6-10mm wider than the valve pipe when fixing. Do not push in by force or it could lead to seat peeling or malfunctioning of product.

- For 5K flange, remove T bar before installing.
- Do not fix valve soon after welding of flange. Only install valve once temperature is cooled to room temperature.
- When tightening bolts, tighten diagonally. One-sided tightening will lead to leakage. Stop tightening once the seat ring is not visible.
- For installation of product at non ideal areas (dusty, extreme temperatures (less than -10 °C or more than 60 °C), freezing or foggy, contact our dealers or our company for more information.

Operation

- During piping pressure endurance test, where the valve's standard pressure is to be exceeded, do not treat valve so as to simulate a closed flange. Make sure that the disc is fully open during the test.
- For manual valves, do not use any other equipment such as a pipe wrench to open or close the valve.
- Contact us if the valve is to be installed in a condition where the valve opening is below 30° or in a vacuum condition.
- To ensure valve's smooth operation, carry out maintenance 1-2 times a year.

GUARANTEE PERIOD Within 18 months from date shipped out of factory or within 12 months from date of trial run or whichever period that expires earlier.

- The contents of this catalog is based on JIS B2032 standard for general usage condition and performance.
- Specifications, designs and contents of this catalog may be altered without prior notice.

Towards Tomorrow With High Technology Valve

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