

# BUTTERFLY VALVE TYPE 57

- HIGH DURABILITY AND FLOW CHARACTERISTICS IN ADDITION TO EXCELLENT OPERABILITY THANKS TO 19-STEP FINE OPENING ADJUSTMENT
- PLASTIC GEAR BOX WITH EXCELLENT CORROSION RESISTANCE
- EASY SWITCHING FROM LEVER TYPE TO GEAR TYPE OR AUTOMATIC VALVE
- HANDLE LEVER OPEN/CLOSE DIRECTION CAN BE CHANGED.

## BASIC SPECIFICATIONS

VALVE TYPE ————— BUTTERFLY VALVE TYPE 57

SIZE / LEVER TYPE ————— 40 mm—200 mm (1 1/2 inch—8 inch)

GEAR TYPE ————— 40 mm—350 mm (1 1/2 inch—14 inch)

BODY MATERIAL ————— **U-PVC** **PP** **PVDF**

SEAL MATERIAL / SEAT ————— **EPDM** **FKM** etc.

CONNECTION / WAFER ————— **JIS10K, JIS5K, DIN, ANSI**

	FLUID TEMPERATURE	MAXIMUM WORKING PRESSURE (NORMAL TEMPERATURE) MPa(kg/cm <sup>2</sup> )	
		40mm—250mm	300mm, 350mm
<b>U-PVC</b>	0°C ~ 50°C	1.0 {10.2}	0.75 {7.7}
<b>PP</b>	-20°C ~ 80°C	1.0 {10.2}	0.75 {7.7}
<b>PVDF</b>	-20°C ~ 120°C	1.0 {10.2}	0.75 {7.7}

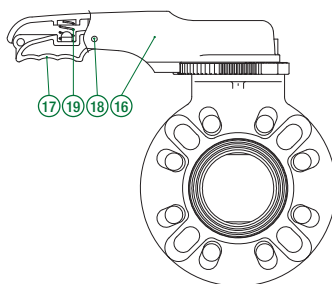
**NOTE** The maximum working pressure is the value including the water hammer pressure. Be careful that the maximum working pressure is not exceeded during use.

\* Concerning the allowable pressure for each temperature and material, see the technical documents at the end of this catalog.

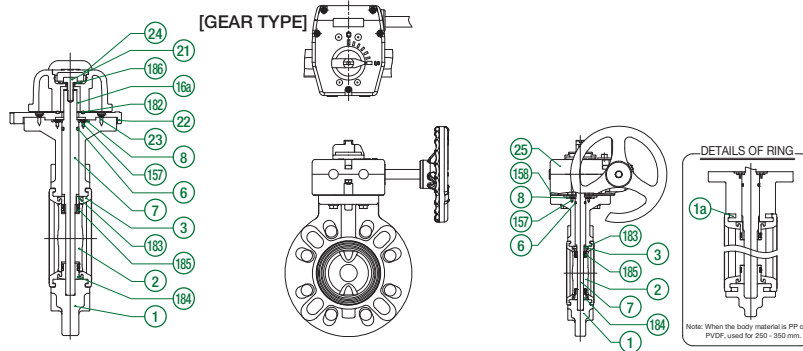


## PARTS LIST **MANUAL**

[LEVER TYPE]



[GEAR TYPE]



PART NO. / NAME	QTY	MATERIAL
① BODY		BODY — DISC / SEAT BUSH
② DISC	1	U-PVC — PP
⑬ SEAT BUSH (A)	1	PP — PP
⑭ SEAT BUSH (B)	1	PVDF — PVDF
③ SEAT	1	
⑥ O-RING (C)	1	EPDM, FKM, etc.
⑮ O-RING (I)	4	
⑦ STEM	1	SUS403, SUS316
⑧ STEM HOLDER (A)	1	PP
⑯ SET SCREW (F)	4	SUS304

ONLY USED FOR LEVER TYPE

PART NO. / NAME	QTY	MATERIAL
⑫ HANDLE (A)	1	PP
⑮ EMBEDDED HANDLE FITTING	1	SUS316L
⑰ HANDLE LEVER	1	PPG
⑰ PIN	1	PPG
⑱ SPRING	1	SUS304
⑲ BOLT (B)	1	SUS304

ONLY USED FOR GEAR TYPE

PART NO. / NAME	QTY	MATERIAL
⑳ GEAR BOX	1	RESIN, etc.
㉑ BOLT (C)	4	SUS304
㉒ GASKET (L)	1	EPDM
㉓ RING	2	SS400 (Unichrome plating) When the body material is PP or PVDF, used for 250 - 350 mm.

## SPECIFICATION LIST **MANUAL**

LEVER TYPE	SIDE GEAR TYPE	TOP GEAR TYPE	
○	○	○	
CHAIN TYPE	LONG STEM TYPE	FLOAT TYPE	WITH LIMIT SWITCH
○	○	○	○

\* For other specifications, contact our sales office in your area.

## COMPATIBLE ACTUATOR **AUTOMATIC**

**PNEUMATIC TYPE TA** For detailed specifications, see **P.123**

**ELECTRIC TYPE T** For detailed specifications, see **P.139**

**ELECTRIC TYPE S** For detailed specifications, see **P.133, 135**

PRODUCT MODEL CODE LIST

MANUAL

ACTUATION	TYPE	OPERATING SYSTEM	BODY MATERIAL	SEAL MATERIAL	CONNECTION	STANDARD	SIZE	
V	57	**	*	*	W	*	***	
V	MANUAL VALVE	57 TYPE 57	LV LEVER TYPE SG SIDE GEAR TYPE	U U-PVC P PP F PVDF	E EPDM V FKM	W WAFER	1 JIS10K 5 JIS5K W — D DIN A ANSI	040 40mm ? 350 350mm

PRODUCT MODEL CODE LIST

AUTOMATIC

ACTUATION	TYPE	ACTUATOR TYPE	ACTION / POWER SOURCE	BODY MATERIAL	SEAL MATERIAL	CONNECTION	STANDARD	SIZE	
A	57	*	*	*	*	W	*	***	
A	AUTOMATIC VALVE	57 TYPE 57	PNEUMATIC K TYPE TA ELECTRIC T TYPE T S TYPE S	F DOUBLE ACTING G AIR TO OPEN S AIR TO CLOSE	U U-PVC P PP F PVDF	E EPDM V FKM	W WAFER	1 JIS10K 5 JIS5K W — D DIN A ANSI	040 40mm ? 350 350mm
		ELECTRIC							
		1 Single-Phase 100V							
		2 Single-Phase 200V							
		3 Three-Phase AC200V							
		4 Three-Phase AC400V							

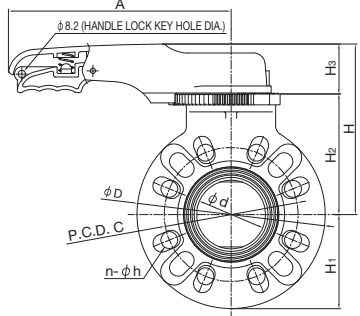
MANUAL

# BUTTERFLY VALVE TYPE 57

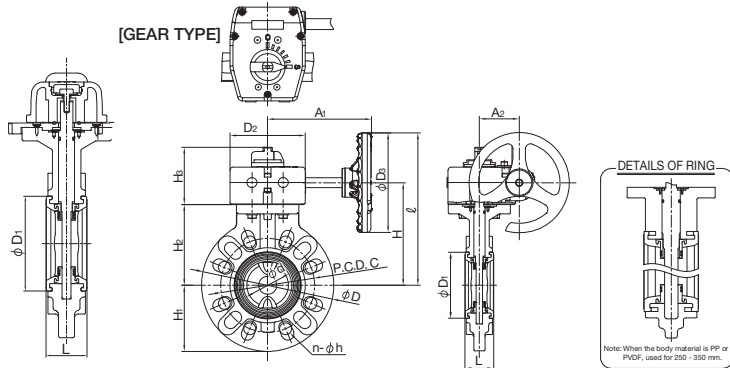
TYPE—V57LV, V57SG

CONNECTION / WAFER—JIS, DIN, ANSI

[LEVER TYPE]



[GEAR TYPE]



DETAILS OF RING

Note: When the body material is PP or PVDF, used for 250 - 350 mm.

■ JIS, DIN (Unit: mm)

mm	d	D	D1	D2	D3	L	I	A	A1	A2	H			H1			H2			H3			JIS5K			JIS10K			WATERWORKS			DIN PN10		
											LEVER TYPE	GEAR TYPE	GEAR TYPE	LEVER TYPE	GEAR TYPE	LEVER TYPE	GEAR TYPE	LEVER TYPE	GEAR TYPE	LEVER TYPE	GEAR TYPE	C	n	h	C	n	h	C	n	h	C	n	h	
40	45	150	71	122	160	39	210	220	167	64	156	130	75	100	95	56	92	95	4	15	105	4	19	—	—	—	110	4	18					
50	56	165	81	122	160	42	220	220	167	64	166	140	83	110	105	56	92	105	4	15	120	4	19	—	—	—	125	4	18					
65	69	185	95	122	160	46	230	220	167	64	176	150	93	120	115	56	92	130	4	15	140	4	19	—	—	—	145	4	18					
80(75)	77	211	105	122	160	46	245	250	167	64	191	165	106	135	130	56	92	145	4	19	150	8	19	—	—	—	160	8	18					
100	102	238	134	122	160	56	260	250	167	64	206	180	119	150	145	56	92	165	8	19	175	8	19	—	—	—	180	8	18					
125	129	255	169	122	160	66	275	320	167	64	237	195	128	168	160	69	92	200	8	19	210	8	23	—	—	—	210	8	18					
150	150	285	190	122	160	71	290	320	167	64	252	210	143	183	175	69	92	230	8	19	240	8	23	—	—	—	240	8	22					
200	195	350	242	122	160	87	321	400	167	64	283	241	170	214	206	69	92	280	8	23	290	12	23	—	—	—	295	8	22					
250	250	421	302	122	160	112	356	—	167	64	—	276	211	—	241	—	92	345	12	23	355	12	25	—	—	—	350	12	22					
300	303	488	360	188	300	129	490	—	272	99	—	340	244	—	298	—	108	390	12	23	400	16	25	—	—	—	400	12	22					
350	351	539	393	188	300	129	517	—	272	99	—	367	270	—	325	—	108	435	12	23	445	16	25	—	—	—	460	16	22					

■ ANSI (UNIT: inch)

inch	mm	d	D	D1	D2	D3	L	I	A	A1	A2	H			H1			H2			H3			ANSI CLASS 150			GEAR BOX TYPE
												LEVER TYPE	GEAR TYPE	GEAR TYPE	LEVER TYPE	GEAR TYPE	LEVER TYPE	GEAR TYPE	LEVER TYPE	GEAR TYPE	LEVER TYPE	GEAR TYPE	C	n	h	C	
1 1/2	40	1.77	5.91	2.80	4.80	6.30	1.54	8.27	8.66	6.57	2.52	6.14	5.12	2.95	3.94	3.74	2.20	3.62	3.88	4	0.62						
2	50	2.20	6.50	3.19	4.80	6.30	1.65	8.66	8.66	6.57	2.52	6.54	5.51	3.27	4.33	4.13	2.20	3.62	4.75	4	0.75						
2 1/2	65	2.72	7.28	3.74	4.80	6.30	1.81	9.06	8.66	6.57	2.52	6.93	5.91	3.66	4.72	4.53	2.20	3.62	5.50	4	0.75						
3	80(75)	3.03	8.31	4.13	4.80	6.30	1.81	9.65	9.84	6.57	2.52	7.52	6.50	4.17	5.31	5.12	2.20	3.62	6.00	4	0.75						
4	100	4.02	9.37	5.28	4.80	6.30	2.20	10.24	9.84	6.57	2.52	8.11	7.09	4.69	5.91	5.71	2.20	3.62	7.50	8	0.75						
5	125	5.08	10.04	6.65	4.80	6.30	2.60	10.83	12.60	6.57	2.52	9.33	7.68	5.04	6.61	6.30	2.72	3.62	8.50	8	0.88						
6	150	5.91	11.22	7.48	4.80	6.30	2.80	11.42	12.60	6.57	2.52	9.92	8.27	5.63	7.20	6.89	2.72	3.62	9.50	8	0.88						
8	200	7.68	13.78	9.53	4.80	6.30	3.43	12.64	15.75	6.57	2.52	11.14	9.49	6.69	8.43	8.11	2.72	3.62	11.75	8	0.88						
10	250	9.84	16.57	11.89	4.80	6.30	4.41	14.02	—	6.57	2.52	—	10.87	8.31	—	9.49	—	3.62	14.25	12	1.00						
12	300	11.93	19.21	14.17	7.40	11.81	5.08	19.29	—	10.71	3.90	—	13.39	9.61	—	11.73	—	4.25	17.00	12	1.00						
14	350	13.82	21.22	15.47	7.40	11.81	5.08	20.35	—	10.71	3.90	—	14.45	10.63	—	12.80	—	4.25	18.75	12	1.12						

AUTOMATIC

PNEUMATIC

TYPE TA

DOUBLE ACTING

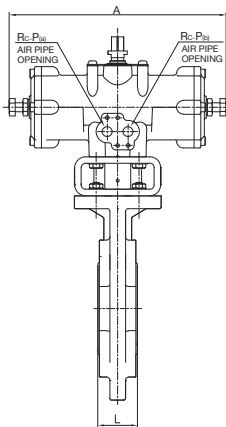
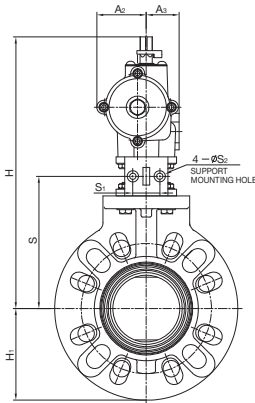
AIR TO OPEN

AIR TO CLOSE

# BUTTERFLY VALVE TYPE 57

TYPE—A57K

CONNECTION / WAFER—JIS, DIN, ANSI



### ACTUATOR SELECTION CHART

SIZE	ACTUATOR TYPE
40mm (1 1/2inch)	TA2A-050D
50mm ( 2inch)	TA2A-063D
65mm (2 1/2inch)	TA2A-080D
80mm ( 3inch)	TA2A-100D
100mm ( 4inch)	TA2A-125D
125mm ( 5inch)	TA2A-160D
150mm ( 6inch)	TA2A-160D
200mm ( 8inch)	TA2A-160D
250mm ( 10inch)	TA2A-160D
300mm ( 12inch)	TA2A-160D
350mm ( 14inch)	TA-200D

For detailed specifications, see **P.123**

■ JIS, DIN (Unit: mm)

mm	L	H	H <sub>1</sub>	A	A <sub>2</sub>	A <sub>3</sub>	S	S <sub>1</sub>	S <sub>2</sub>	P
40	39	263	75	210	46	36	117.5	32	7	1/4
50	42	273	83	210	46	36	127.5	32	7	1/4
65	46	298	93	250	57	38	137.5	32	7	1/4
80	46	313	106	250	57	38	152.5	32	7	1/4
100	56	361	119	292	71	45	167.5	32	7	1/4
125	66	413	128	362	85.5	57	185.5	42	9	1/4
150	71	428	143	362	85.5	57	200.5	42	9	1/4
200	87	493	175	440	90	60	—	—	—	1/4
250	112	584	211	532	113	68	—	—	—	1/4
300	129	641	244	532	113	68	—	—	—	1/4
350	129	732	270	664	139	68	—	—	—	3/8

■ ANSI (Unit: inch)

inch	mm	L	H	H <sub>1</sub>	A	A <sub>2</sub>	A <sub>3</sub>	S	S <sub>1</sub>	S <sub>2</sub>	P
1 1/2	40	1.54	10.35	2.95	8.27	1.81	1.42	4.63	1.26	0.28	1/4
2	50	1.65	10.75	3.27	8.27	1.81	1.42	5.02	1.26	0.28	1/4
2 1/2	65	1.81	11.73	3.66	9.84	2.24	1.50	5.41	1.26	0.28	1/4
3	80	1.81	12.32	4.17	9.84	2.24	1.50	6.00	1.26	0.28	1/4
4	100	2.20	14.21	4.69	11.50	2.80	1.77	6.59	1.26	0.28	1/4
5	125	2.60	16.26	5.04	14.25	3.37	2.24	7.30	1.65	0.35	1/4
6	150	2.80	16.85	5.63	14.25	3.37	2.24	7.89	1.65	0.35	1/4
8	200	3.43	19.41	6.89	17.32	3.54	2.36	—	—	—	1/4
10	250	4.41	22.99	8.31	20.94	4.45	2.68	—	—	—	1/4
12	300	5.08	25.24	9.61	20.94	4.45	2.68	—	—	—	1/4
14	350	5.08	28.82	10.63	26.14	5.47	2.68	—	—	—	3/8

AUTOMATIC

PNEUMATIC

TYPE TA

DOUBLE ACTING

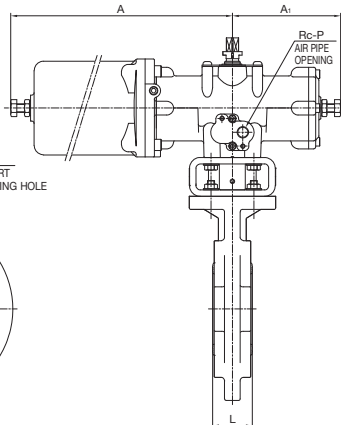
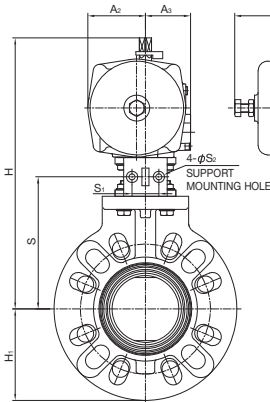
AIR TO OPEN

AIR TO CLOSE

# BUTTERFLY VALVE TYPE 57

TYPE—A57K

CONNECTION / WAFER—JIS, DIN, ANSI



### ACTUATOR SELECTION CHART

SIZE	ACTUATOR TYPE
40mm (1 1/2inch)	TA2A-050R
50mm ( 2inch)	TA2A-063R
65mm (2 1/2inch)	TA2A-080R
80mm ( 3inch)	TA2A-100R2
100mm ( 4inch)	TA2A-125R2
125mm ( 5inch)	TA2A-160R2
150mm ( 6inch)	TA2A-160R2
200mm ( 8inch)	TA2A-160R2
250mm ( 10inch)	TA2A-160R2
300mm ( 12inch)	TA2A-160R2
350mm ( 14inch)	TA-200R

For detailed specifications, see **P.123**

■ JIS, DIN (Unit: mm)

mm	L	H	H <sub>1</sub>	A	A <sub>1</sub>	A <sub>2</sub>	A <sub>3</sub>	S	S <sub>1</sub>	S <sub>2</sub>	P
40	39	263	75	240	105	53	50	117.5	32	7	1/4
50	42	273	83	240	105	53	50	127.5	32	7	1/4
65	46	298	93	288	125	66.5	52	137.5	32	7	1/4
80	46	313	106	288	125	66.5	52	152.5	32	7	1/4
100	56	361	119	341	146	82.5	59	167.5	32	7	1/4
125	66	413	128	417	181	103	71	185.5	42	9	1/4
150	71	428	143	417	181	103	71	200.5	42	9	1/4
200	87	493	175	542	220	118.5	74	—	—	—	1/4
250	112	584	211	658	266	149	82	—	—	—	1/4
300	129	641	244	658	266	149	82	—	—	—	1/4
350	129	732	270	943	332	182	118	—	—	—	3/8

■ ANSI (Unit: inch)

inch	mm	L	H	H <sub>1</sub>	A	A <sub>1</sub>	A <sub>2</sub>	A <sub>3</sub>	S	S <sub>1</sub>	S <sub>2</sub>	P
1 1/2	40	1.54	10.35	2.95	9.45	4.13	2.09	1.97	4.63	1.26	0.28	1/4
2	50	1.65	10.75	3.27	9.45	4.13	2.09	1.97	5.02	1.26	0.28	1/4
2 1/2	65	1.81	11.73	3.66	11.34	4.92	2.62	2.05	5.41	1.26	0.28	1/4
3	80	1.81	12.32	4.17	11.34	4.92	2.62	2.05	6.00	1.26	0.28	1/4
4	100	2.20	14.21	4.69	13.43	5.75	3.25	2.32	6.59	1.26	0.28	1/4
5	125	2.60	16.26	5.04	16.42	7.13	4.06	2.80	7.30	1.65	0.35	1/4
6	150	2.80	16.85	5.63	16.42	7.13	4.06	2.80	7.89	1.65	0.35	1/4
8	200	3.43	19.41	6.89	21.34	8.66	4.67	2.91	—	—	—	1/4
10	250	4.41	22.99	8.31	25.91	10.47	5.87	3.23	—	—	—	1/4
12	300	5.08	25.24	9.61	25.91	10.47	5.87	3.23	—	—	—	1/4
14	350	5.08	28.82	10.63	37.13	13.07	7.17	4.65	—	—	—	3/8

AUTOMATIC

ELECTRIC

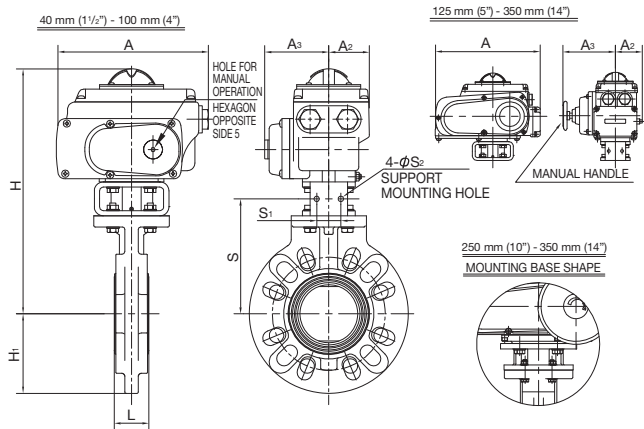
TYPE T

Single-Phase 100V  
Single-Phase 200V

# BUTTERFLY VALVE TYPE 57

TYPE—A57T

CONNECTION / WAFER—JIS, DIN, ANSI



### ACTUATOR SELECTION CHART

SIZE	ACTUATOR TYPE
40mm (1 1/2inch)	T-0
50mm ( 2inch)	
65mm (2 1/2inch)	
80mm ( 3inch)	
100mm ( 4inch)	T-1
125mm ( 5inch)	
150mm ( 6inch)	
200mm ( 8inch)	T-2.5
250mm ( 10inch)	T-3
300mm ( 12inch)	
350mm ( 14inch)	

For detailed specifications, see P.139

■ JIS, DIN (Unit: mm)

mm	L	H	H <sub>1</sub>	A	A <sub>2</sub>	A <sub>3</sub>	S	S <sub>1</sub>	S <sub>2</sub>
40	39	290	75	202	53.8	85	117.5	32	7
50	42	300	83	202	53.8	85	127.5	32	7
65	46	310	93	202	53.8	85	137.5	32	7
80	46	325	106	202	53.8	85	152.5	32	7
100	56	340	119	202	53.8	85	167.5	32	7
125	66	376	128	252	65	126	185.5	42	9
150	71	424	143	310	85	154	200.5	42	9
200	87	458	175	310	85	154	231.5	42	9
250	112	541	211	388	136	245.5	—	—	—
300	129	598	244	388	136	245.5	—	—	—
350	129	625	270	388	136	245.5	—	—	—

■ ANSI (Unit: inch)

inch	mm	L	H	H <sub>1</sub>	A	A <sub>2</sub>	A <sub>3</sub>
1 1/2	40	1.54	11.42	2.95	7.95	2.12	3.35
2	50	1.65	11.81	3.27	7.95	2.12	3.35
2 1/2	65	1.81	12.20	3.66	7.95	2.12	3.35
3	80	1.81	12.80	4.17	7.95	2.12	3.35
4	100	2.20	13.39	4.69	7.95	2.12	3.35
5	125	2.60	14.80	5.04	9.92	2.56	4.96
6	150	2.80	16.69	5.63	12.20	3.35	6.06
8	200	3.43	18.03	6.89	12.20	3.35	6.06
10	250	4.41	21.30	8.31	15.28	5.35	9.67
12	300	5.08	23.54	9.61	15.28	5.35	9.67
14	350	5.08	24.61	10.63	15.28	5.35	9.67

AUTOMATIC

ELECTRIC

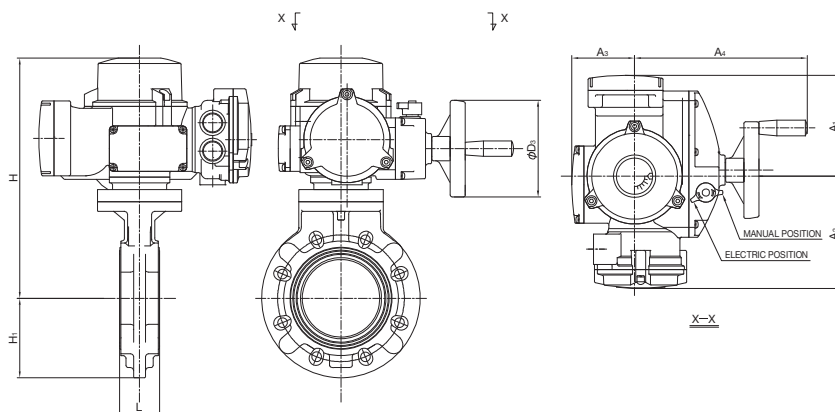
TYPE S

Three-Phase AC200V  
Three-Phase AC400V

# BUTTERFLY VALVE TYPE 57

TYPE—A57S

CONNECTION / WAFER—JIS, DIN, ANSI



### ACTUATOR SELECTION CHART

SIZE	ACTUATOR TYPE
40mm (1 1/2inch)	SRJ-010
50mm ( 2inch)	
65mm (2 1/2inch)	
80mm ( 3inch)	
100mm ( 4inch)	SRJ-020
125mm ( 5inch)	
150mm ( 6inch)	
200mm ( 8inch)	SRJ-060
250mm ( 10inch)	

For detailed specifications, see P.133

■ JIS, DIN (Unit: mm)

mm	L	D <sub>3</sub>	H	H <sub>1</sub>	A <sub>1</sub>	A <sub>2</sub>	A <sub>3</sub>	A <sub>4</sub>
40	39	160	313	75	167	186	104	286
50	42	160	323	83	167	186	104	286
65	46	160	333	93	167	186	104	286
80	46	160	348	106	167	186	104	286
100	56	160	363	119	167	186	104	286
125	66	160	398	128	167	186	104	286
150	71	160	413	143	167	186	104	286
200	87	245	441	175	191	202	130	330
250	112	245	476	211	191	202	130	330

■ ANSI (Unit: inch)

inch	mm	L	D <sub>3</sub>	H	H <sub>1</sub>	A <sub>1</sub>	A <sub>2</sub>	A <sub>3</sub>	A <sub>4</sub>
1 1/2	40	1.54	6.30	12.32	2.95	6.57	7.32	4.09	11.26
2	50	1.65	6.30	12.72	3.27	6.57	7.32	4.09	11.26
2 1/2	65	1.81	6.30	13.11	3.66	6.57	7.32	4.09	11.26
3	80	1.81	6.30	13.70	4.17	6.57	7.32	4.09	11.26
4	100	2.20	6.30	14.29	4.69	6.57	7.32	4.09	11.26
5	125	2.60	6.30	15.67	5.04	6.57	7.32	4.09	11.26
6	150	2.80	6.30	16.26	5.63	6.57	7.32	4.09	11.26
8	200	3.43	9.65	17.36	6.89	7.52	7.95	5.12	12.99
10	250	4.41	9.65	18.74	8.31	7.52	7.95	5.12	12.99

**AUTOMATIC ELECTRIC**

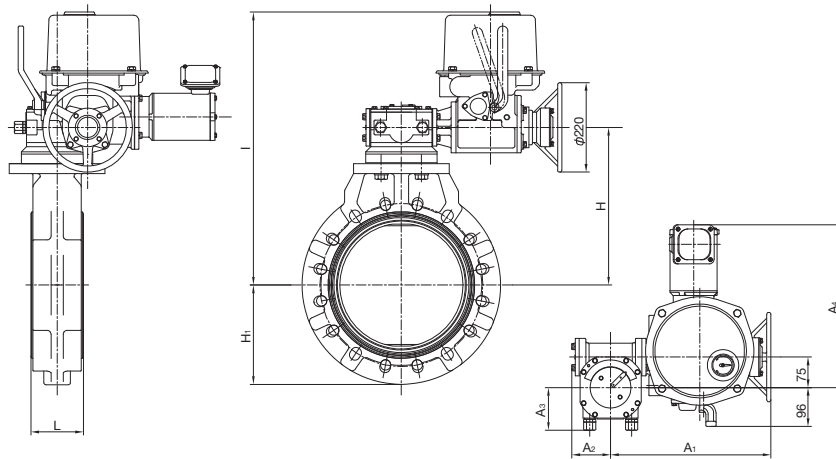
**TYPE S**

Three-Phase  
AC200V  
•  
Three-Phase  
AC400V

# BUTTERFLY VALVE TYPE 57

TYPE—A57S

CONNECTION / WAFFER—JIS, DIN, ANSI



### ACTUATOR SELECTION CHART

SIZE	ACTUATOR TYPE
300mm (12inch)	LTRM - 01 / BRM 1 (AUTOMATIC RETURN MECHANISM)
	or
350mm (14inch)	LTRH - 01 / BRM 1 (MANUAL RETURN MECHANISM)

For detailed specifications, see **P.135**

■ JIS, DIN (Unit: mm)

mm	L	H	H <sub>1</sub>	I	A <sub>1</sub>	A <sub>2</sub>	A <sub>3</sub>	A <sub>4</sub>
300	129	387	244	671	394	95	105	400
350	129	414	270	698	394	95	105	400

■ ANSI (Unit: inch)

inch	mm	L	H	H <sub>1</sub>	I	A <sub>1</sub>	A <sub>2</sub>	A <sub>3</sub>	A <sub>4</sub>
12	300	5.08	15.24	9.61	26.42	15.51	3.74	4.13	15.75
14	350	5.08	16.30	10.63	27.48	15.51	3.74	4.13	15.75