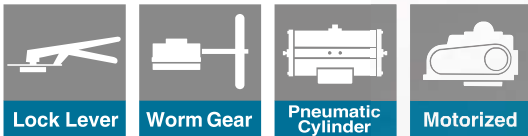
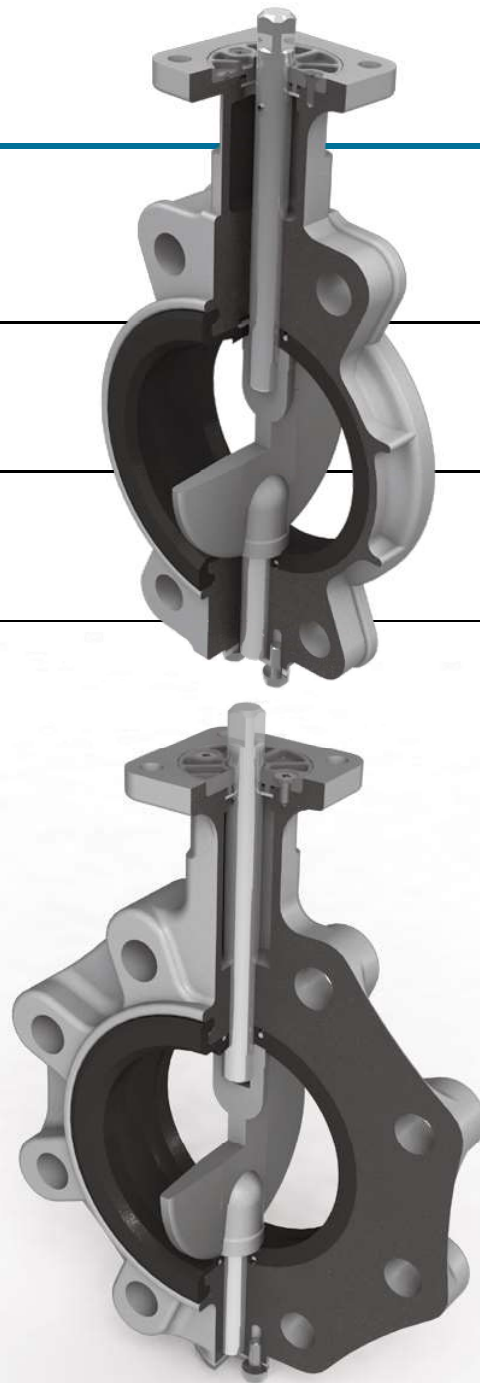


**72WG** Wafer

**72SG** Semi lugged

**72LG** Full lugged



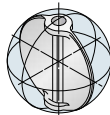
### Features and Benefits

#### New cosine-curve seat

The new cosine-curve seat (patent pending) allows better performance in reducing friction, torque and wear than the previous design.

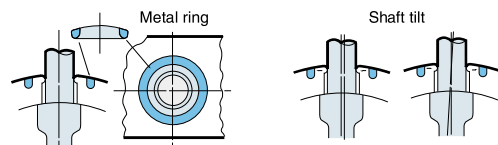
#### Much longer life with spherical design

Similar to a spherical body rotating inside a spherical area, the operation of the disc is smooth and unhindered. Torque is reduced and the valve life is lengthened.



#### Self-aligning stem seal through backup ring

The stem seal is the primary and secondary seal system. The backup ring functions as the self-aligning stem seal.



#### Ease of maintenance

The field replaceable seat ring makes maintenance easy and reduces maintenance costs.

## Standard Specifications

Model	72WG (Wafer)	72SG (Semi lugged)	72LG (Lugged)
Valve nominal size	40 to 200mm	50 to 600mm	50 to 600mm
Flange accommodation	DIN PN16, GB PN16, ASME Class 150, BS4504 PN16	DIN PN16, GB PN16, ASME Class 150, BS4504 PN16	DIN PN16, GB PN16, ASME Class 150, BS4504 PN16
Face-to-face dimensions	JIS B 2002 / ISO 5752 / API 609		
Max. working pressure	1.6Mpa		
Body shell test (hydraulic)	2.4Mpa		
Seat leak test (pneumatic)	1.76Mpa		
Working temperature range ※1	NBR : -10 to 80 degrees C, *EPDM : -20 to 120 degrees C		
Working temperature in continuous use ※2	NBR : 0 to 60 degrees C, *EPDM : 0 to 70 degrees C		
Standard materials	Body	Ductile iron, JIS FCD450	
	Disc	304 stainless steel, JIS SCS13	
	Stem	316 stainless steel, JIS SCS14	
	Seat ring	SUS420J2	
Actuators	Lock lever	NBR, *EPDM	
	Lock lever	Manual, pneumatic, electric	
Coating ※8	Powder coat paint (Munsell N7)		

※1 Please consult us when using NBR and EPDM seating continuously above 60 degrees C and 70 degrees C respectively.

※2 "Working temperature in continuous use" stands for the temperature continuously kept exceeding one hour.

\* 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.

Butterfly Valve

**TRITEC**

**TT2**

**334A**

**344Q**

**302A/303Q**

**304A/304Q**

**304YA**

**302Y/304Y**

**304M**

(HLV)

**507V/508V**

**DTM**

**846T/847T/847Q**

**841T/842T**

**700Z**

**700G/704G/705G**

**72WG/72SG/72LG**

**731P/732P/  
732Q/752W**

**731R**

**700E/700K/700S**

**704G/722F/720F**

**227P**

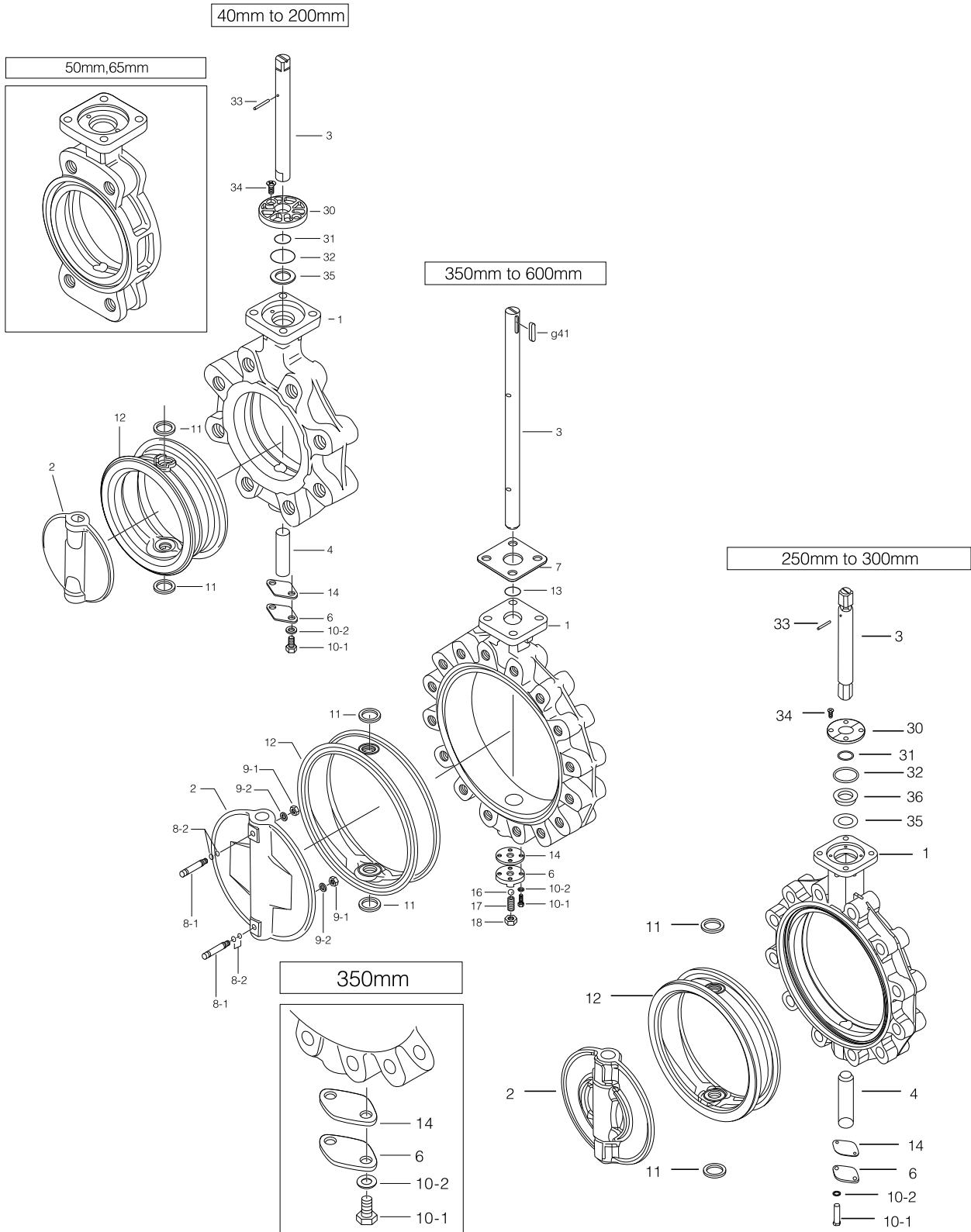
**907T/908H**

(MKT)

**903L/901C/  
905C (Bata-check)**

# 72WG (Wafer) / 72SG (Semi lugged) / 72LG (Lugged)

## 72WG / 72SG / 72LG Expanded view of components



※The drawing above is 72LG series.  
The components of 72WG and 72SG series are the same.

## 72WG/72SG/72LG Parts list

### ■ 72WG/72SG/72LG Parts list (40mm to 300mm)

No.	Description	Q'ty	Remarks
1	Body	1	
2	Disc	1	
3	Upper stem	1	
4	Lower stem	1	
6	Bottom cover	1	
10-1	Hexagon bolt	2	
10-2	Spring washer	2	
★ 11	Secondary ring	2	Only 50mm to 300mm
★ 12	Seat ring	1	
★ 14	Gasket	1	
★ 30	Bushing	1	
★ 31	O-ring	1	
★ 32	O-ring	1	
33	Spring pin	1	
34	Machine screw	2	
35	Plate	1	
36	Seal seat	1	Only 250mm to 300mm

### ■ 72WG/72SG/72LG Parts list (350mm to 600mm)

No.	Description	Q'ty	Remarks
1	Body	1	
2	Disc	1	
3	Stem	1	
6	Bottom cover	1	
7	Retainer plate	1	
★ 8-1	Taper bolt	2	
★ 8-2	O-ring	4	
★ 9-1	Hexagon nut	2	
★ 9-2	Spring washer	2	
10-1	Hexagon bolt	2	350mm
		4	400mm to 600mm
10-2	Spring washer	2	350mm
		4	400mm to 600mm
★ 11	Secondary ring	2	350mm
11	Secondary ring	2	400mm to 600mm
★ 12	Seat ring	1	
★ 13	O-ring	1	
★ 14	Gasket	1	
16	Ball	1	Only 400mm to 600mm
17	Hollow bolt	1	Only 400mm to 600mm
18	Lock nut	1	Only 400mm to 600mm
g41	Key	1	

Remark 1: The ★ indicates recommended spare parts. They are supplied as "Seat ring set".

Butterfly Valve

**TRITEC**

**TT2**

**334A**

**344Q**

**302A/303Q**

**304A/304Q**

**304YA**

**302Y/304Y**

**304M**

(HLV)

**507V/508V**

**DTM**

**846T/847T/847Q**

**841T/842T**

**700Z**

**700G/704G/705G**

**72WG/72SG/72LG**

**731P/732P/  
732Q/752W**

**731R**

**700E/700K/700S**

**704G/722F/720F**

**227P**

**907T/908H**

(MKT)

**903L/901C/  
905C (Bata-check)**

## 72WG Actuator Selection Chart

### 72WG

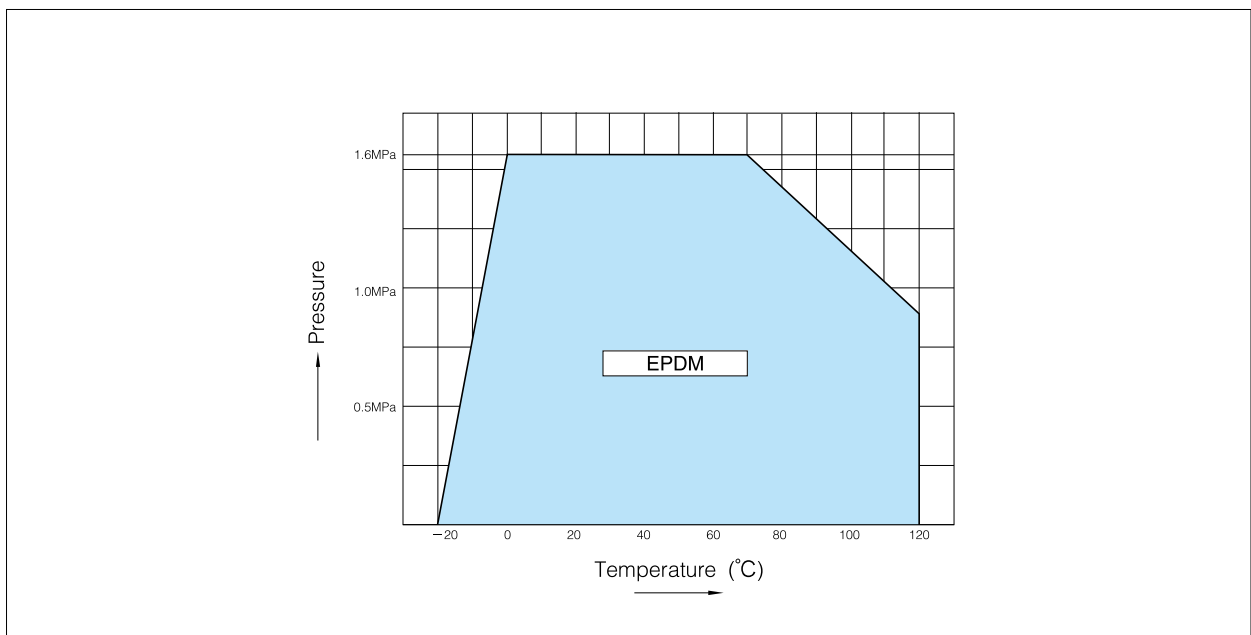
Model	Category	Size (mm / inch)														
		40	50	65	80	100	125	150	200	250	300	350	400	450	500	600
		1 1/2	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24
1T	Standard	1T-1			1T-2			1T-3								
	Heavy duty															
2U	Standard	2U-0		2U-1		2U-2		2U-3		2U-4		2U-5		2U-6		
	Heavy duty															
7E,3A	Standard	T35		T85		T200		T380		T750		TGA-140		TGA-180		
	Heavy duty															
7G,7F 3U,3K	Standard	T85S		T200S		T380S		T750S		TG-12S		TG-14S		TG-20S		
	Heavy duty															
4I*	ON-OFF	4I-00		4I-0		4I-1		4I-2		4I-2.5		4I-3		4I-4		
	Control															

Remark\*: For 350mm with the accessories below, type 4I-4 should be selected.

- Micom unit
- Servo unit
- Speed control unit
- Potentiometer

Selection criteria	Standard	Select when none of the following heavy duty items apply.
	Heavy duty	Select when any of the following items apply. ① Powder or high viscosity fluid (crude oil, etc.) ② Control specification (with positioner) ③ Emergency open valve or pipe dead end valve

## 72WG / 72SG / 72LG Pressure-Temperature Rating



## 72SG / 72LG Actuator Selection Chart

### 72SG / 72LG

Model	Category	Size (mm / inch)													
		50	65	80	100	125	150	200	250	300	350	400	450	500	600
		2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24
1T	Standard	1T-1			1T-2			1T-3							
	Heavy duty	1T-1			1T-2			1T-3							
2U	Standard	2U-0	2U-1	2U-2	2U-3	2U-4	2U-5	2U-6							
	Heavy duty	2U-0	2U-1	2U-2	2U-3	2U-4	2U-5	2U-6							
7E,3A	Standard	T35	T85	T200		T380	T750	TGA-125	TGA-140	TGA-160	TGA-180	TGA-200			
	Heavy duty	T35	T85	T200		T380	T750	TGA-125	TGA-140	TGA-160	TGA-180	TGA-200			
7G,7F 3U,3K	Standard	T85S	T200S		T380S	T750S	TG-10S	TG-12S	TG-14S	TG-20S					
	Heavy duty	T85S	T200S		T380S	T750S	TG-10S	TG-12S	TG-14S	TG-20S					
4I*	ON-OFF	4I-00	4I-0	4I-1	4I-2	4I-2.5	4I-3	4I-4							
	Control	4I-00	4I-0	4I-1	4I-2	4I-2.5	4I-3	4I-4							

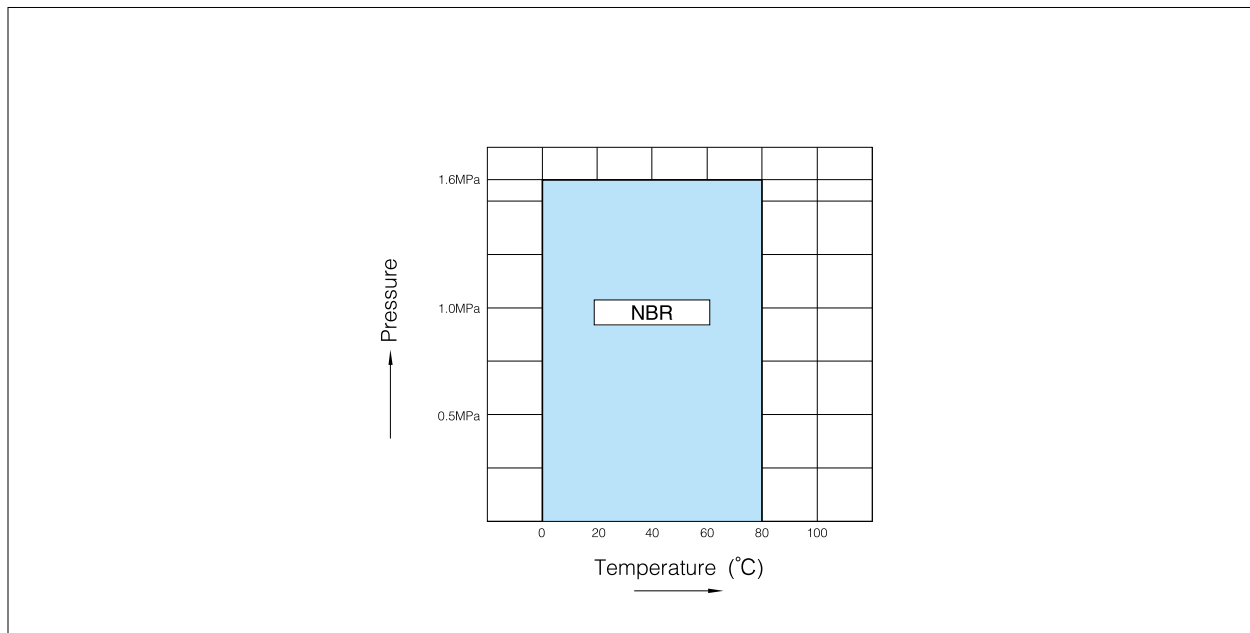
Remark\*: For 350mm with the accessories below, type 4I-4 should be selected.

- Micom unit
- Servo unit
- Speed control unit
- Potentiometer

Selection criteria	Standard	Select when none of the following heavy duty items apply.
	Heavy duty	Select when any of the following items apply. ① Powder or high viscosity fluid (crude oil, etc.) ② Control specification (with positioner) ③ Emergency open valve or pipe dead end valve

Butterfly Valve
<b>TRITEC</b>
<b>TT2</b>
<b>334A</b>
<b>344Q</b>
<b>302A/303Q</b>
<b>304A/304Q</b>
<b>304YA</b>
<b>302Y/304Y</b>
<b>304M (HLV)</b>
<b>507V/508V</b>
<b>DTM</b>
<b>846T/847T/847Q</b>
<b>841T/842T</b>
<b>700Z</b>
<b>700G/704G/705G</b>
<b>72WG/72SG/72LG</b>
<b>731P/732P/732Q/752W</b>
<b>731R</b>
<b>700E/700K/700S</b>
<b>704G/722F/720F</b>
<b>227P</b>
<b>907T/908H (MKT)</b>
<b>903L/901C/905C (Bata-check)</b>

## 72WG / 72SG / 72LG Pressure-Temperature Rating



# 72WG (Wafer) / 72SG (Semi lugged) / 72LG (Lugged)

## 72WG Bare shaft

### 72WG

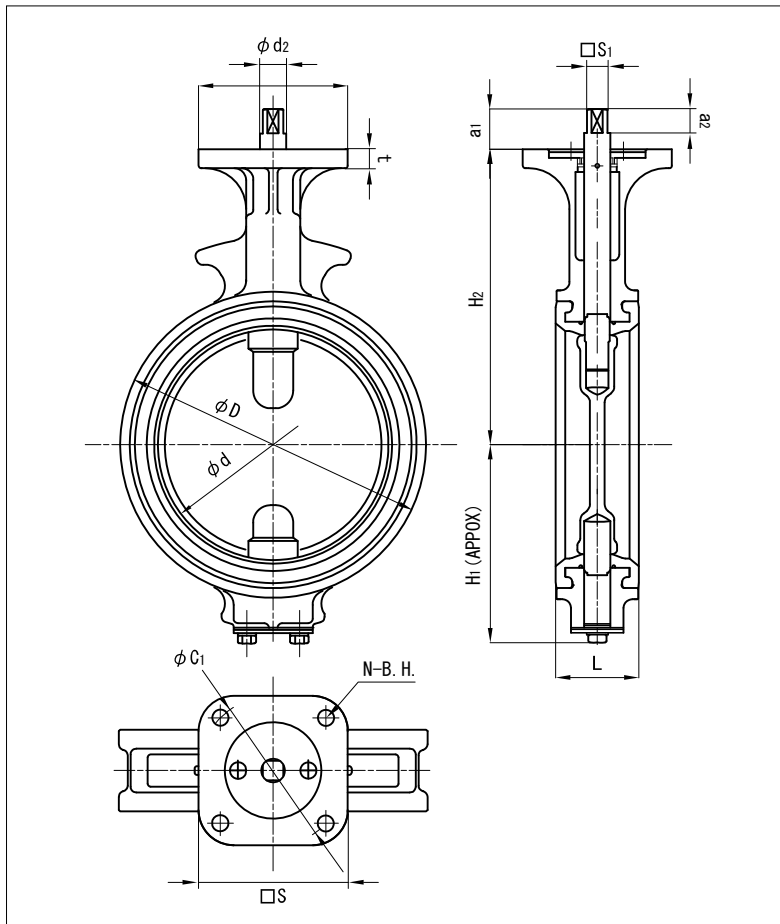
Shaft type	Nominal size		Dimension (mm)													Approx. Mass (kg)
	mm	inch	$\phi d$	$\phi D$	L	H <sub>1</sub>	H <sub>2</sub>	a <sub>1</sub>	a <sub>2</sub>	$\square S_1$	$\phi d_2$	b	t <sub>2</sub>	t	Top flange	
01	40	1 1/2	45	80	35	61	132	21.5	10.5	8	10	—	—	12	F07	1.5
	50	2	56	90	43	68	138	21.5	10.5	8	10	—	—	12	F07	1.8
	65	2 1/2	69	115	46	79	151	21.5	10.5	8	10	—	—	12	F07	2.5
	80	3	84	126	46	86	156	22.5	11.5	10	12	—	—	12	F07	2.6
	100	4	104	146	52	103	167	22.5	11.5	12	14	—	—	12	F07	3.4
	125	5	130	181	56	118	191	27.5	16.5	14	16	—	—	14	F10	5.4
	150	6	153.5	211	56	135	202	27.5	16.5	14	18	—	—	14	F10	7
	200	8	199	256	60	177	227	30	20	18	22	—	—	14	F10	10.4

### Top flange dimension list

Flange type	$\square S$	$\phi C_1$	N	B.H.
F07	70	70	4	9
F10	102	102	4	11
F12	125	125	4	13
F14	140	140	4	19
F16	165	165	4	23

Shaft type	01 : Square
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### 72WG 40mm~200mm



72S G Bare shaft (01: 50mm to 300mm, 02: 350mm to 600mm)

72SG

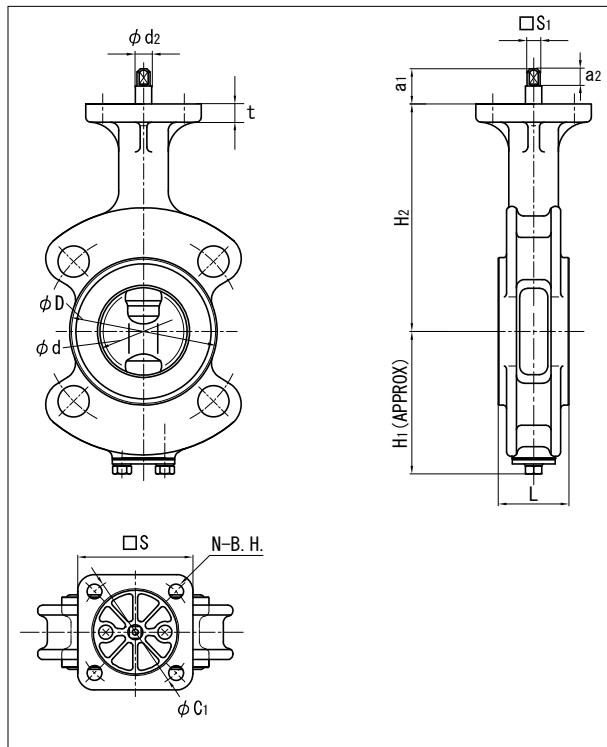
Shaft type	Nominal size		Dimension (mm)													Approx. Mass (kg)
	mm	inch	$\phi d$	$\phi D$	L	H <sub>1</sub>	H <sub>2</sub>	a <sub>1</sub>	a <sub>2</sub>	$\square S_1$	$\phi d_2$	b	t <sub>2</sub>	t	Top flange	
01	50	2	56	90	43	85	138	21.5	10.5	8	10	—	—	12	F07	2.8
	65	2 1/2	69	115	46	94	151	21.5	10.5	8	10	—	—	12	F07	4
	80	3	84	126	46	109	156	22.5	11.5	10	12	—	—	12	F07	4
	100	4	104	146	52	117	167	22.5	11.5	12	14	—	—	12	F07	5
	125	5	130	181	56	143	191	27.5	16.5	14	16	—	—	14	F10	8
	150	6	153.5	211	56	164	202	27.5	16.5	14	18	—	—	14	F10	11
	200	8	199	256	60	186	227	30	20	18	22	—	—	14	F10	15
	250	10	253	322	68	215	280	35	30	24	28	—	—	14	F10	27
	300	12	302	367	78	253	312	35	30	24	32	—	—	16	F12	35
02	350	14	337	410	78	276	348	48	40	—	32	10	3	23	F14	47
	400	16	394	469	102	338	383	54	45	—	40	12	3	23	F14	71.5
	450	18	441	525	114	368	413	65	56	—	46	14	3.5	23	F14	94.5
	500	20	492	580	127	403	453	79	70	—	50	14	3.5	28	F14	126
	600	24	584	682	154	458	528	79	70	—	55	16	4	28	F16	190

Top flange dimension list

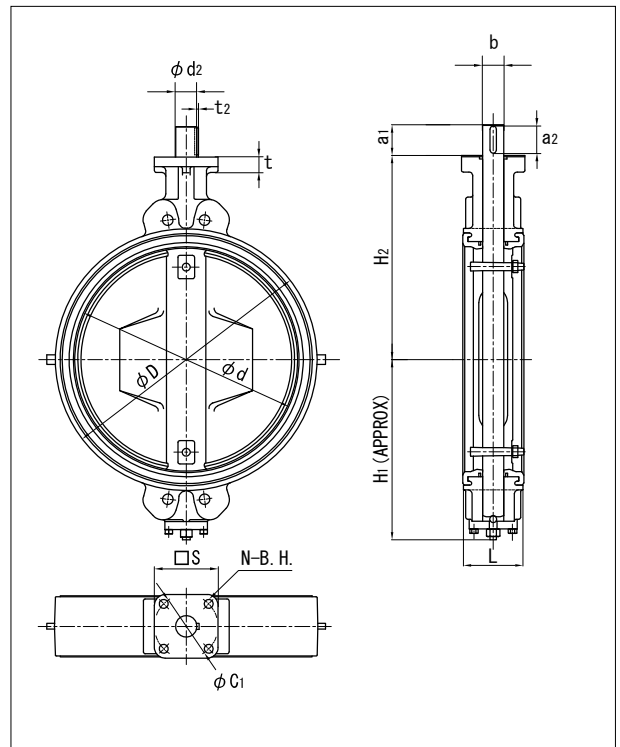
Flange type	$\square S$	$\phi C_1$	N	B.H.
F07	70	70	4	9
F10	102	102	4	11
F12	125	125	4	13
F14	140	140	4	19
F16	165	165	4	23

Shaft type
01 : Square
02 : Round (Key way)

72SG 50mm~300mm



72SG 350mm~600mm



Butterfly Valve

TRITEC

TT2

334A

344Q

302A/303Q

304A/304Q

304YA

302Y/304Y

304M (HLV)

507V/508V

DTM

846T/847T/847Q

841T/842T

700Z

700G/704G/705G

72WG/72SG/72LG

731P/732P/732Q/752W

731R

700E/700K/700S

704G/722F/720F

227P

907T/908H (MKT)

903L/901C/905C (Bata-check)



## 72LG Bare shaft (01: 40mm to 300mm, 02: 350mm to 600mm)

### 72LG

Shaft type	Nominal size		Dimension (mm)													Approx. Mass (kg)
	mm	inch	$\phi d$	$\phi D$	L	H <sub>1</sub>	H <sub>2</sub>	a <sub>1</sub>	a <sub>2</sub>	$\square S_1$	$\phi d_2$	b	t <sub>2</sub>	t	Top flange	
01	50	2	56	90	43	85	138	21.5	10.5	8	10	—	—	12	F07	2.8
	65	2 1/2	69	115	46	94	151	21.5	10.5	8	10	—	—	12	F07	4
	80	3	84	190	46	109	156	22.5	11.5	10	12	—	—	12	F07	5.6
	100	4	104	223	52	117	167	22.5	11.5	12	14	—	—	12	F07	7.9
	125	5	130	250	56	143	191	27.5	16.5	14	16	—	—	14	F10	9.8
	150	6	153.5	276	56	164	202	27.5	16.5	14	18	—	—	14	F10	11.5
	200	8	199	334	60	177	227	30	20	18	22	—	—	14	F10	17.5
	250	10	253	402	68	215	280	35	30	24	28	—	—	14	F10	30
02	350	14	337	$\frac{533}{520}$	78	276	348	48	40	—	32	10	3	23	F14	65
	400	16	394	597	102	338	383	54	45	—	40	12	3	23	F14	106
	450	18	441	640	114	368	413	65	56	—	46	14	3.5	23	F14	127
				634												
	500	20	492	730	127	403	453	79	70	—	50	14	3.5	28	F14	168
				696												
600	24	584	840	154	458	528	79	70	—	55	16	4	28	F16	270	
			820													

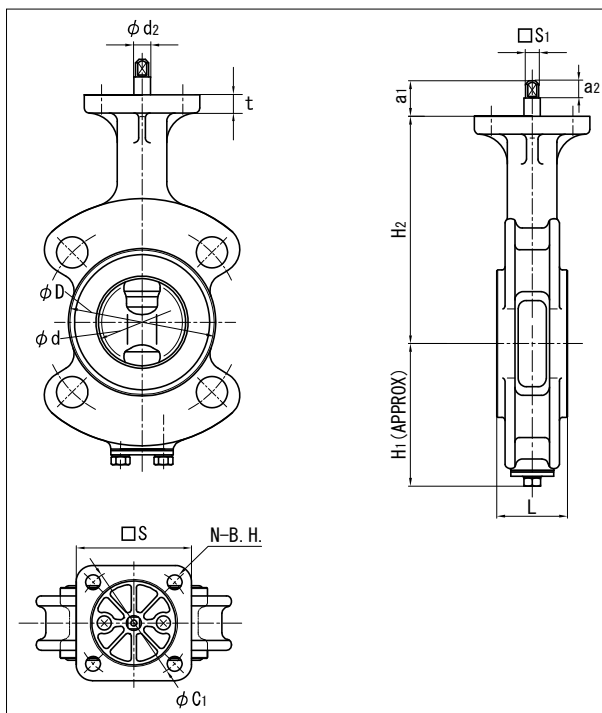
\* Upper : DIN PN16 Lower : ASME class 150

### Top flange dimension list

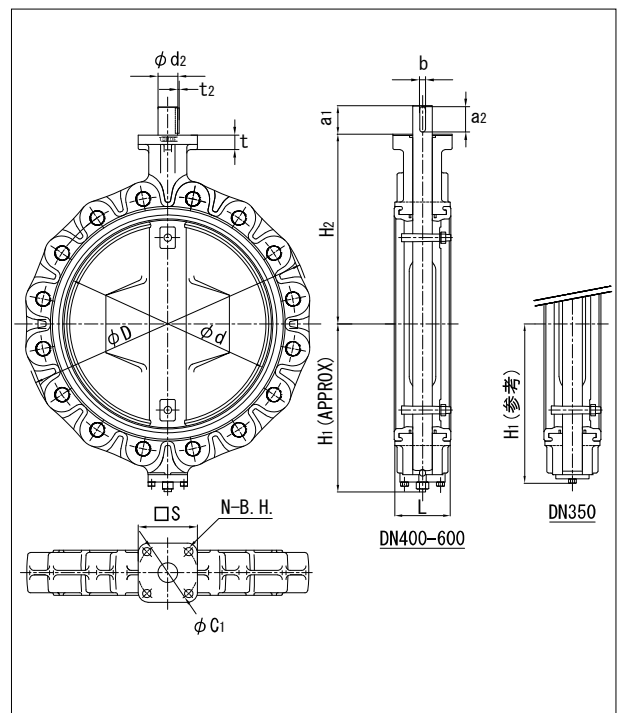
Flange type	$\square S$	$\phi C_1$	N	B.H.
F07	70	70	4	9
F10	102	102	4	11
F12	125	125	4	13
F14	140	140	4	19
F16	165	165	4	23

<b>Shaft type</b>	01 : Square
	02 : Round (Key way)

### 72LG 50mm~300mm



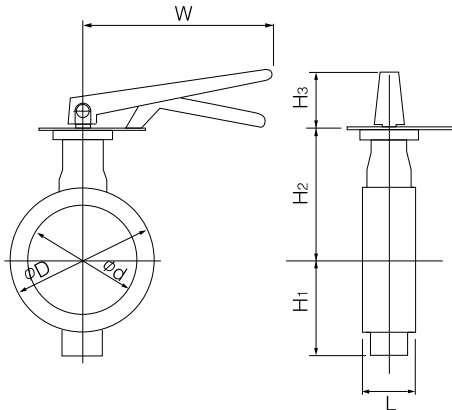
### 72LG 350mm~600mm



Lock lever type 72WG-1T (40mm to 200mm)

Nominal size		Dimension (mm)							Lever type	Approx. Mass (kg)
mm	inch	$\phi d$	$\phi D$	L	H <sub>1</sub>	H <sub>2</sub>	H <sub>3</sub>	W		
40	1 1/2	45	80	35	61	132	66	200	1T-1	2.1
50	2	56	90	43	68	138	66	200	1T-1	2.4
65	2 1/2	69	115	46	79	151	66	200	1T-1	3.1
80	3	84	126	46	86	156	66	200	1T-1	3.2
100	4	104	146	52	103	167	66	200	1T-1	4
125	5	130	181	56	118	191	92	300	1T-2	6.7
150	6	153.5	211	56	135	202	92	300	1T-2	8.3
200	8	199	256	60	177	227	97	350	1T-3	12.1

72WG-1T



1T Installation direction

1T LS (standard)	1T LR	1T RS	1T RR
1T XS	1T XR	1T VS	1T VR

Butterfly Valve

TRITEC

TT2

334A

344Q

302A/303Q

304A/304Q

304YA

302Y/304Y

304M

(HLV)

507V/508V

DTM

846T/847T/847Q

841T/842T

700Z

700G/704G/705G

72WG/72SG/72LG

731P/732P/  
732Q/752W

731R

700E/700K/700S

704G/722F/720F

227P

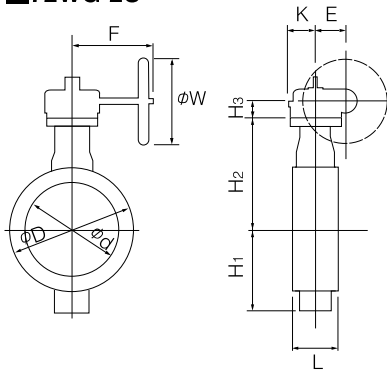
907T/908H  
(MKT)

903L/901C/  
905C (Bata-check)

## Worm gear type 72WG-2U (40mm to 200mm)

Nominal size		Dimension (mm)										Gear type	Approx. Mass (kg)
mm	inch	$\phi d$	$\phi D$	L	H <sub>1</sub>	H <sub>2</sub>	H <sub>3</sub>	E	K	F	W		
40	1 1/2	45	80	35	61	132	29.5	36	46	160	100	2U-0	3.8
50	2	56	90	43	68	138	29.5	36	46	160	100	2U-0	4.1
65	2 1/2	69	115	46	79	151	29.5	36	46	160	100	2U-0	4.8
80	3	84	126	46	86	156	29.5	36	46	160	100	2U-1	4.9
100	4	104	146	52	103	167	29.5	36	46	160	100	2U-1	5.7
125	5	130	181	56	118	191	34.5	44	53	173.5	160	2U-2	9.6
150	6	153.5	211	56	135	202	34.5	44	53	173.5	160	2U-2	11.2
200	8	199	256	60	177	227	41.5	67	75	198	200	2U-3	18

### 72WG-2U



### 2U Installation direction

2UA (standard)	2UAR	2UB	2UBR

Double-acting pneumatic cylinder type 72WG-7E (40mm to 200mm)

■Standard

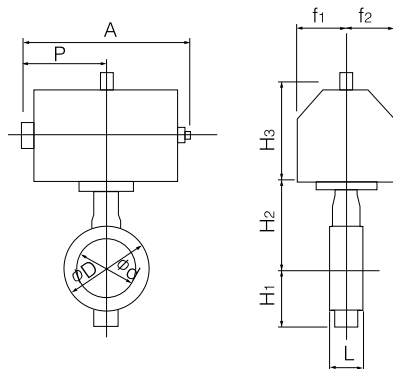
Nominal size		Dimension (mm)										Center handle type	Approx. Mass (kg)
mm	inch	φd	φD	L	H <sub>1</sub>	H <sub>2</sub>	H <sub>3</sub>	A	P	f <sub>1</sub>	f <sub>2</sub>		
40	1 1/2	45	80	35	61	132	125	228	116	57	29	T35	4
50	2	56	90	43	68	138	125	228	116	57	29	T35	4
65	2 1/2	69	115	46	79	151	125	228	116	57	29	T35	5
80	3	84	126	46	86	156	168	276	142	75	47	T85	8
100	4	104	146	52	103	167	168	276	142	75	47	T85	8
125	5	130	181	56	118	191	168	276	142	75	47	T85	10
150	6	153.5	211	56	135	202	203	346	176	79	57	T200	15
200	8	199	256	60	177	227	231	423	214	91	69	T380	25

■Heavy duty

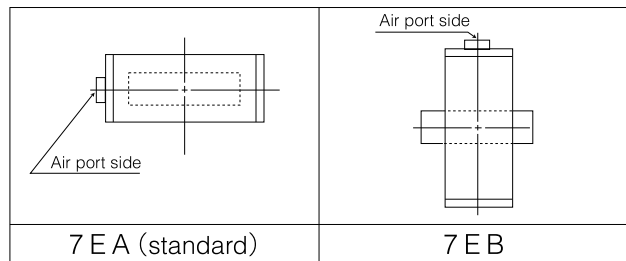
Nominal size		Dimension (mm)										Center handle type	Approx. Mass (kg)
mm	inch	φd	φD	L	H <sub>1</sub>	H <sub>2</sub>	H <sub>3</sub>	A	P	f <sub>1</sub>	f <sub>2</sub>		
40	1 1/2	45	80	35	61	132	125	228	116	57	29	T35	4
50	2	56	90	43	68	138	125	228	116	57	29	T35	4
65	2 1/2	69	115	46	79	151	125	228	116	57	29	T35	5
80	3	84	126	46	86	156	168	276	142	75	47	T85	8
100	4	104	146	52	103	167	203	346	176	79	57	T200	12
125	5	130	181	56	118	191	203	346	176	79	57	T200	14
150	6	153.5	211	56	135	202	203	346	176	79	57	T200	15
200	8	199	256	60	177	227	231	423	214	91	69	T380	25

Selection criteria	Standard	Select when none of the following heavy duty items apply.
	Heavy duty	Select when any of the following items apply. ① Powder or high viscosity fluid (crude oil, etc.) ② Control specification (with positioner) ③ Emergency open valve or pipe dead end valve ④ Air or Gas

■72WG-7E



■7E Installation direction



Butterfly Valve
TRITEC
TT2
334A
344Q
302A/303Q
304A/304Q
304YA
302Y/304Y
304M (HLV)
507V/508V
DTM
846T/847T/847Q
841T/842T
700Z
700G/704G/705G
72WG/72SG/72LG
731P/732P/732Q/752W
731R
700E/700K/700S
704G/722F/720F
227P
907T/908H (MKT)
903L/901C/905C (Bata-check)

# 72WG (Wafer) / 72SG (Semi lugged) / 72LG (Lugged)

Single-acting pneumatic cylinder type 72WG-7G (Air to open: 40mm to 200mm) / 72WG-7F (Air to close: 40mm to 200mm)

## Standard

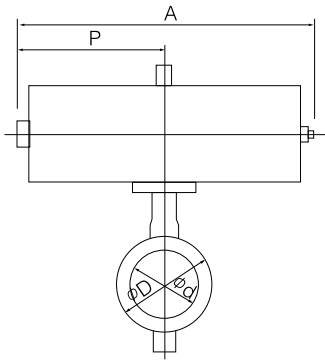
Nominal size		Dimension (mm)										Cylinder type	Approx. Mass (kg)
mm	inch	$\phi d$	$\phi D$	L	H <sub>1</sub>	H <sub>2</sub>	H <sub>3</sub>	A	P	f <sub>1</sub>	f <sub>2</sub>		
40	1 1/2	45	80	35	61	132	168	364	183	75	47	T85S	8
50	2	56	90	43	68	138	168	364	183	75	47	T85S	8
65	2 1/2	69	115	46	79	151	168	364	183	75	47	T85S	9
80	3	84	126	46	86	156	203	449	226	79	57	T200S	14
100	4	104	146	52	103	167	231	550	276	91	69	T380S	23
125	5	130	181	56	118	191	231	550	276	91	69	T380S	25
150	6	153.5	211	56	135	202	269	723	360	118	85	T750S	40
200	8	199	256	60	177	227	269	723	360	118	85	T750S	43

## Heavy duty

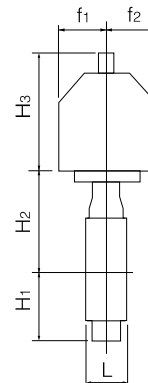
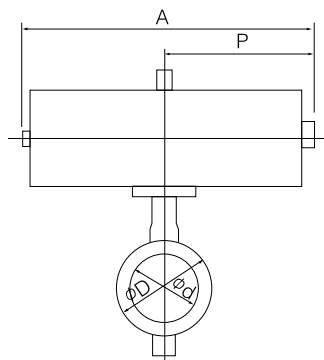
Nominal size		Dimension (mm)										Cylinder type	Approx. Mass (kg)
mm	inch	$\phi d$	$\phi D$	L	H <sub>1</sub>	H <sub>2</sub>	H <sub>3</sub>	A	P	f <sub>1</sub>	f <sub>2</sub>		
40	1 1/2	45	80	35	61	132	168	364	183	75	47	T85S	8
50	2	56	90	43	68	138	168	364	183	75	47	T85S	8
65	2 1/2	69	115	46	79	151	203	449	226	79	57	T200S	14
80	3	84	126	46	86	156	203	449	226	79	57	T200S	14
100	4	104	146	52	103	167	231	550	276	91	69	T380S	23
125	5	130	181	56	118	191	231	550	276	91	69	T380S	25
150	6	153.5	211	56	135	202	269	723	360	118	85	T750S	40

Selection criteria	Standard	Select when none of the following heavy duty items apply.
	Heavy duty	Select when any of the following items apply. ① Powder or high viscosity fluid (crude oil, etc.) ② Control specification (with positioner) ③ Emergency open valve or pipe dead end valve ④ Air or Gas

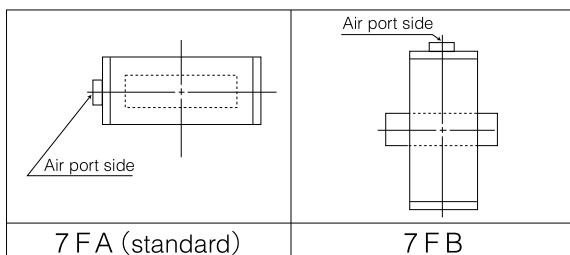
## 72WG-7F



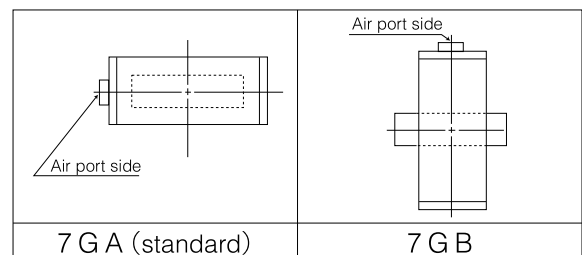
## 72WG-7G



## 7F Installation direction



## 7G Installation direction



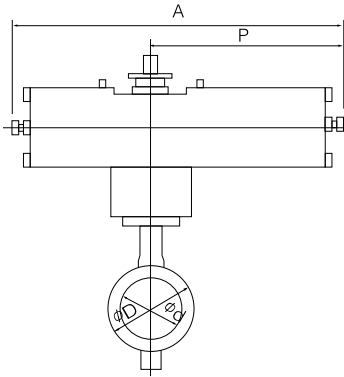
Single-acting pneumatic cylinder type 72WG-3U (Air to open: 200mm) / 72WG-3K (Air to close: 200mm)

■ Heavy duty

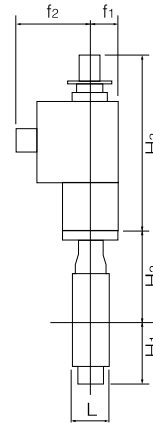
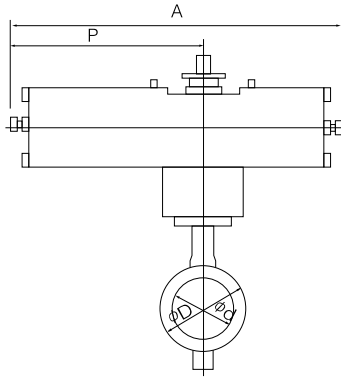
Nominal size		Dimension (mm)										Cylinder type	Approx. Mass (kg)
mm	inch	$\phi d$	$\phi D$	L	H <sub>1</sub>	H <sub>2</sub>	H <sub>3</sub>	A	P	f <sub>1</sub>	f <sub>2</sub>		
200	8	199	256	60	177	227	307	945	585	70	165	TG-10S	66

Selection criteria	Standard	Select when none of the following heavy duty items apply.
	Heavy duty	Select when any of the following items apply. ① Powder or high viscosity fluid (crude oil, etc.) ② Control specification (with positioner) ③ Emergency open valve or pipe dead end valve ④ Air or Gas

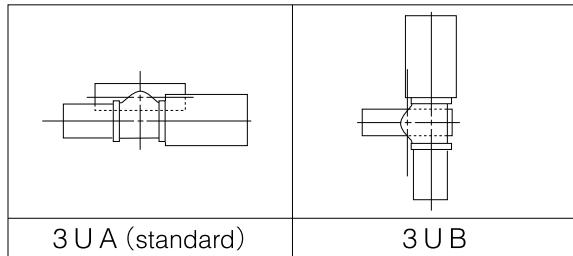
■ 72WG-3U



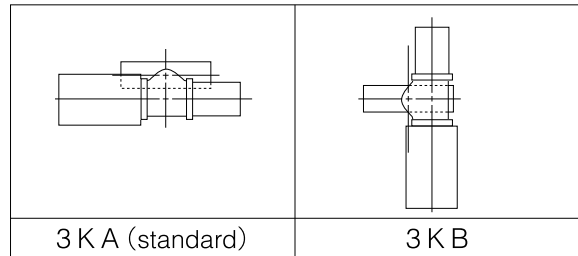
■ 72WG-3K



■ 3U Installation direction



■ 3K Installation direction



Butterfly Valve

**TRITEC**

**TT2**

**334A**

**344Q**

**302A/303Q**

**304A/304Q**

**304YA**

**302Y/304Y**

**304M (HLV)**

**507V/508V**

**DTM**

**846T/847T/847Q**

**841T/842T**

**700Z**

**700G/704G/705G**

**72WG/72SG/72LG**

**731P/732P/732Q/752W**

**731R**

**700E/700K/700S**

**704G/722F/720F**

**227P**

**907T/908H (MKT)**

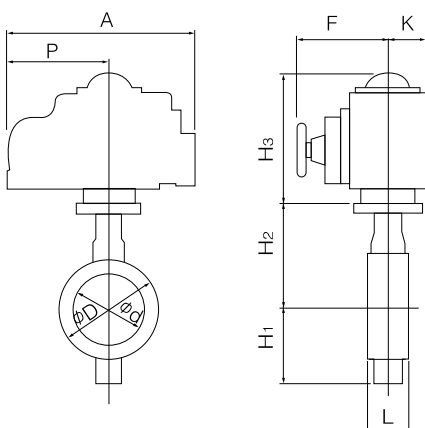
903L/901C/905C (Bata-check)

# 72WG (Wafer) / 72SG (Semi lugged) / 72LG (Lugged)

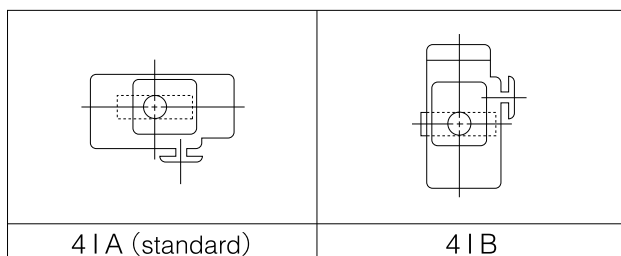
## Single phase electric motor type 72WG-4I (40mm to 200mm)

Nominal size		Dimension (mm)										Motor type	Approx. Mass (kg)
mm	inch	$\phi d$	$\phi D$	L	H <sub>1</sub>	H <sub>2</sub>	H <sub>3</sub>	A	P	F	K		
40	1 1/2	45	80	35	61	132	120	161	84	58	45	4 I-00	4
50	2	56	90	43	68	138	120	161	84	58	45	4 I-00	4.3
65	2 1/2	69	115	46	79	151	150	202	100	85	54	4 I-0	6.7
80	3	84	126	46	86	156	150	202	100	85	54	4 I-0	6.8
100	4	104	146	52	103	167	165	252	138	126	65	4 I-1	9.8
125	5	130	181	56	118	191	198	310	167	154	85	4 I-2	16.6
150	6	153.5	211	56	135	202	198	310	167	154	85	4 I-2	18.2
200	8	199	256	60	177	227	198	310	167	154	85	4 I-2.5	21.6

### 72WG-4 I



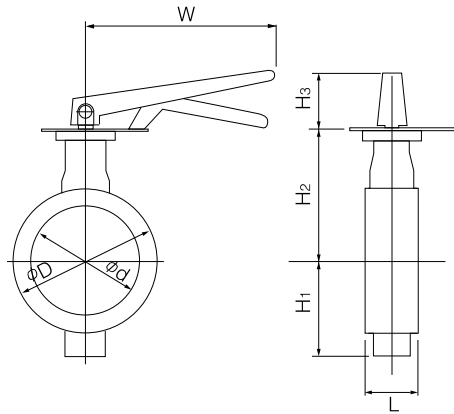
### 4 I Installation direction



Lock lever type 72SG-1T (50mm to 200mm)

Nominal size		Dimension (mm)							Lever type	Approx. Mass (kg)
mm	inch	$\phi d$	$\phi D$	L	H <sub>1</sub>	H <sub>2</sub>	H <sub>3</sub>	W		
50	2	56	90	43	85	138	66	200	1T-1	3.1
65	2 1/2	69	115	46	94	151	66	200	1T-1	4.1
80	3	84	126	46	109	156	66	200	1T-1	4.6
100	4	104	146	52	117	167	66	200	1T-1	5.6
125	5	130	181	56	143	191	92	300	1T-2	9.3
150	6	153	211	56	164	202	92	300	1T-2	12.3
200	8	199.0	256	60	186	227	97	350	1T-3	16.7

72SG-1T



1T Installation direction

1T LS (standard)	1T LR	1T RS	1T RR
1T XS	1T XR	1T VS	1T VR

Butterfly Valve

TRITEC

TT2

334A

344Q

302A/303Q

304A/304Q

304YA

302Y/304Y

304M

(HLV)

507V/508V

DTM

846T/847T/847Q

841T/842T

700Z

700G/704G/705G

72WG/72SG/72LG

731P/732P/  
732Q/752W

731R

700E/700K/700S

704G/722F/720F

227P

907T/908H  
(MKT)

903L/901C/  
905C (Bata-check)

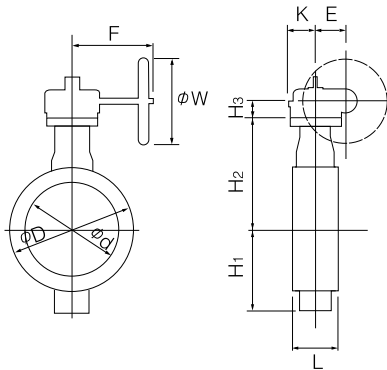


# 72WG (Wafer) / 72SG (Semi lugged) / 72LG (Lugged)

## Worm gear type 72SG-2U (50mm to 600mm)

Nominal size		Dimension (mm)										Gear type	Approx. Mass (kg)
mm	inch	$\phi d$	$\phi D$	L	H <sub>1</sub>	H <sub>2</sub>	H <sub>3</sub>	E	K	F	W		
50	2	56	90	43	85	138	29.5	36	46	160	100	2U-0	4.8
65	2 1/2	69	115	46	94	151	29.5	36	46	160	100	2U-0	5.8
80	3	84	126	46	109	156	29.5	36	46	160	100	2U-1	6.3
100	4	104	146	52	117	167	29.5	36	46	160	100	2U-1	7.3
125	5	130	181	56	143	191	34.5	44	53	173.5	160	2U-2	12.2
150	6	153.5	211	56	164	202	34.5	44	53	173.5	160	2U-2	16
200	8	199	256	60	186	227	41.5	67	75	198	200	2U-3	23
250	10	253	322	68	215	280	41.5	67	75	198	200	2U-3	38
300	12	302	367	78	253	312	48	87	90	222.5	200	2U-4	53
350	14	337	410	78	276	348	48	87.5	90	222.5	280	2U-4	63
400	16	394	469	102	338	383	50	90	105	266	280	2U-5	88
450	18	441	525	114	368	413	50	90	105	266	280	2U-5	112
500	20	492	580	127	403	453	50	90	105	266	280	2U-5	143
600	24	584	682	154	458	528	61	113	140	352	400	2U-6	222

### 72SG-2U



### 2U Installation direction

2 U A (standard)	2 U AR	2 U B	2 U BR

## Double-acting pneumatic cylinder type 72SG-7E (50mm to 300mm)

### Standard

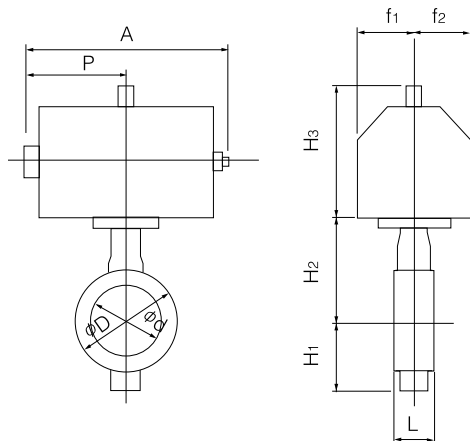
Nominal size		Dimension (mm)										Cylinder type	Approx. Mass (kg)
mm	inch	$\phi d$	$\phi D$	L	H <sub>1</sub>	H <sub>2</sub>	H <sub>3</sub>	A	P	f <sub>1</sub>	f <sub>2</sub>		
50	2	56	90	43	85	138	125	228	116	57	29	T35	5
65	2 1/2	69	115	46	94	151	125	228	116	57	29	T35	6
80	3	84	126	46	109	156	168	276	142	75	47	T85	9
100	4	104	146	52	117	167	168	276	142	75	47	T85	10
125	5	130	181	56	143	191	168	276	142	75	47	T85	13
150	6	153.5	211	56	164	202	203	346	176	79	57	T200	19
200	8	199	256	60	186	227	231	423	214	91	69	T380	29
250	10	253	322	68	215	280	231	423	214	91	69	T380	44
300	12	302	367	78	253	312	269	546	270	118	85	T750	63

### Heavy duty

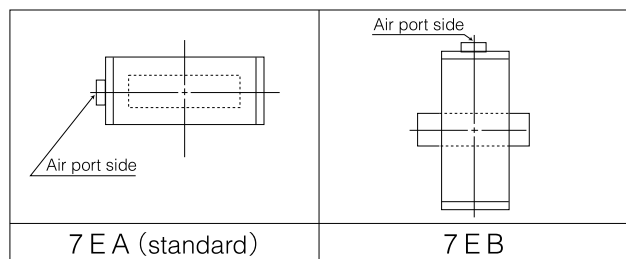
Nominal size		Dimension (mm)										Cylinder type	Approx. Mass (kg)
mm	inch	$\phi d$	$\phi D$	L	H <sub>1</sub>	H <sub>2</sub>	H <sub>3</sub>	A	P	f <sub>1</sub>	f <sub>2</sub>		
50	2	56	90	43	85	138	125	228	116	57	29	T35	5
65	2 1/2	69	115	46	94	151	125	228	116	57	47	T35	6
80	3	84	126	46	109	156	168	276	142	75	57	T85	9
100	4	104	146	52	117	167	203	346	176	79	57	T200	13
125	5	130	181	56	143	191	203	346	176	79	57	T200	16
150	6	153.5	211	56	164	202	203	346	176	79	69	T200	19
200	8	199	256	60	186	227	231	423	214	91	69	T380	29
250	10	253	322	68	215	280	269	546	270	118	85	T750	53

Selection criteria	Standard	Select when none of the following heavy duty items apply.
	Heavy duty	Select when any of the following items apply. ① Powder or high viscosity fluid (crude oil, etc.) ② Control specification (with positioner) ③ Emergency open valve or pipe dead end valve ④ Air or Gas

### 72SG-7E



### 7E Installation direction



Butterfly Valve

**TRITEC**

**TT2**

**334A**

**344Q**

**302A/303Q**

**304A/304Q**

**304YA**

**302Y/304Y**

**304M**

(HLV)

**507V/508V**

**DTM**

**846T/847T/847Q**

**841T/842T**

**700Z**

**700G/704G/705G**

**72WG/72SG/72LG**

**731P/732P/**

**732Q/752W**

**731R**

**700E/700K/700S**

**704G/722F/720F**

**227P**

**907T/908H**

(MKT)

**903L/901C/**

**905C (Bata-check)**

**Double-acting pneumatic cylinder type 72SG-3A (300mm to 600mm)**

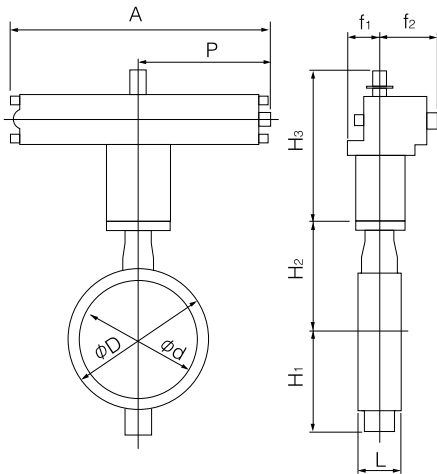
■ **Standard**

Nominal size		Dimension (mm)										Cylinder type	Approx. Mass (kg)
mm	inch	$\phi d$	$\phi D$	L	H <sub>1</sub>	H <sub>2</sub>	H <sub>3</sub>	A	P	f <sub>1</sub>	f <sub>2</sub>		
350	14	337	410	78	276	348	364	743	381	100	164	TGA-125	85
400	16	394	469	102	338	383	412	810	417	100	180	TGA-140	124
450	18	441	525	114	368	413	412	810	417	100	180	TGA-140	150
500	20	492	580	127	403	453	465	939	483	130	202	TGA-160	217
600	24	584	682	154	458	528	478	1053	543	130	218	TGA-180	330

■ **Heavy duty**

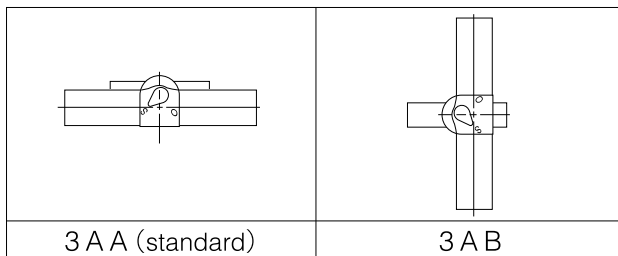
Nominal size		Dimension (mm)										Cylinder type	Approx. Mass (kg)
mm	inch	$\phi d$	$\phi D$	L	H <sub>1</sub>	H <sub>2</sub>	H <sub>3</sub>	A	P	f <sub>1</sub>	f <sub>2</sub>		
300	12	302	367	78	253	312	364	743	381	100	164	TGA-125	71
350	14	337	410	78	276	348	364	743	381	100	164	TGA-125	85
400	16	394	469	102	338	383	412	810	417	100	180	TGA-140	124
450	18	441	525	114	368	413	465	939	483	130	202	TGA-160	197
500	20	492	580	127	403	453	465	939	483	130	202	TGA-160	217
600	24	584	682	154	458	528	525	1163	599	160	253	TGA-200	390

■ **72SG-3A**



Selection criteria	Standard	Select when none of the following heavy duty items apply.
	Heavy duty	Select when any of the following items apply. ① Powder or high viscosity fluid (crude oil, etc.) ② Control specification (with positioner) ③ Emergency open valve or pipe dead end valve ④ Air or Gas

■ **3A Installation direction**



Single-acting pneumatic cylinder type 72SG-7G (Air to open: 50mm to 200mm) / 72SG-7F (Air to close: 50mm to 200mm)

■ Standard

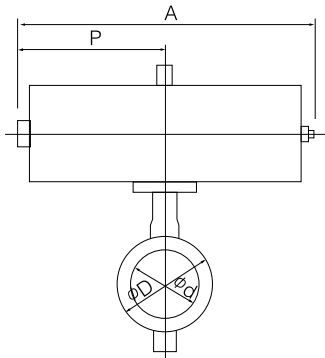
Nominal size		Dimension (mm)										Cylinder type	Approx. Mass (kg)
mm	inch	$\phi d$	$\phi D$	L	H <sub>1</sub>	H <sub>2</sub>	H <sub>3</sub>	A	P	f <sub>1</sub>	f <sub>2</sub>		
50	2	56	90	43	85	138	168	364	183	75	47	T85S	9
65	2 1/2	69	115	46	94	151	168	364	183	75	47	T85S	10
80	3	84	126	46	109	156	203	449	226	79	57	T200S	15
100	4	104	146	52	117	167	231	550	276	91	69	T380S	24
125	5	130	181	56	143	191	231	550	276	91	69	T380S	27
150	6	153.5	211	56	164	202	269	723	360	118	85	T750S	44
200	8	199	256	60	186	227	269	723	360	118	85	T750S	48

■ Heavy duty

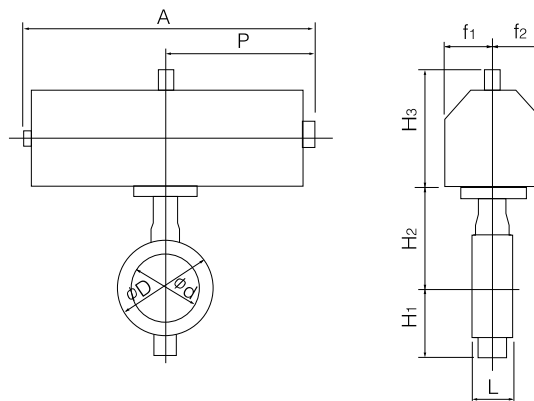
Nominal size		Dimension (mm)										Cylinder type	Approx. Mass (kg)
mm	inch	$\phi d$	$\phi D$	L	H <sub>1</sub>	H <sub>2</sub>	H <sub>3</sub>	A	P	f <sub>1</sub>	f <sub>2</sub>		
50	2	56	90	43	85	138	168	369	183	75	47	T85S	9
65	2 1/2	69	115	46	94	151	203	449	226	79	57	T200S	14
80	3	84	126	46	109	156	203	449	226	79	57	T200S	15
100	4	104	146	52	117	167	231	550	276	91	69	T380S	24
125	5	130	181	56	143	191	231	550	276	91	69	T380S	27
150	6	153.5	211	56	164	202	269	723	360	118	85	T750S	44

Selection criteria	Standard	Select when none of the following heavy duty items apply.
	Heavy duty	Select when any of the following items apply. ① Powder or high viscosity fluid (crude oil, etc.) ② Control specification (with positioner) ③ Emergency open valve or pipe dead end valve ④ Air or Gas

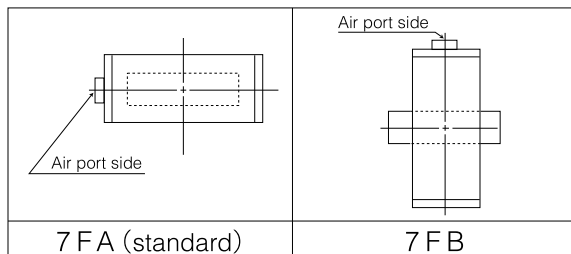
■ 72SG-7F



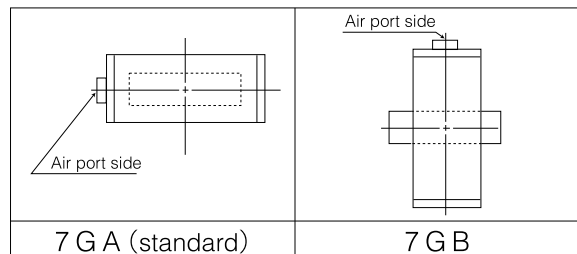
■ 72SG-7G



■ 7F Installation direction



■ 7G Installation direction



Butterfly Valve
TRITEC
TT2
334A
344Q
302A/303Q
304A/304Q
304YA
302Y/304Y
304M (HLV)
507V/508V
DTM
846T/847T/847Q
841T/842T
700Z
700G/704G/705G
72WG/72SG/72LG
731P/732P/732Q/752W
731R
700E/700K/700S
704G/722F/720F
227P
907T/908H (MKT)
903L/901C/905C (Bata-check)

# 72WG (Wafer) / 72SG (Semi lugged) / 72LG (Lugged)

Single-acting pneumatic cylinder type 72SG-3U (Air to open: 200mm to 600mm) / 72SG-3K (Air to close: 200mm to 600mm)

## Standard

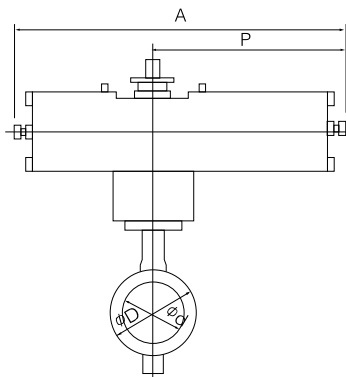
Nominal size		Dimension (mm)										Cylinder type	Approx. Mass (kg)
mm	inch	$\phi d$	$\phi D$	L	H <sub>1</sub>	H <sub>2</sub>	H <sub>3</sub>	A	P	f <sub>1</sub>	f <sub>2</sub>		
250	10	253	322	68	215	280	307	1080	720	94	206	TG-12S	125
300	12	302	367	78	253	312	307	1080	720	94	206	TG-12S	134
350	14	337	410	78	276	348	340	1255	865	131	257	TG-14S	244
400	16	394	469	102	338	383	340	1255	865	131	257	TG-14S	270
450	18	441	525	114	368	413	474	1655	1095	164	348	TG-20S	507
500	20	492	580	127	403	453	474	1655	1095	164	348	TG-20S	538
600	24	584	682	154	458	528	474	1655	1095	164	348	TG-20S	602

## Heavy duty

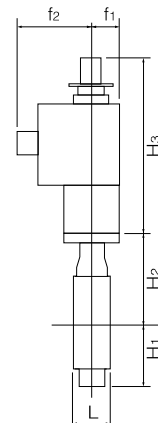
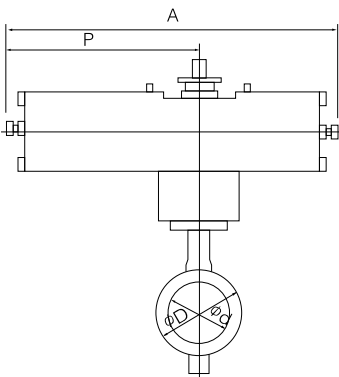
Nominal size		Dimension (mm)										Cylinder type	Approx. Mass (kg)
mm	inch	$\phi d$	$\phi D$	L	H <sub>1</sub>	H <sub>2</sub>	H <sub>3</sub>	A	P	f <sub>1</sub>	f <sub>2</sub>		
200	8	199	256	60	186	227	307	945	585	70	165	TG-10S	71
250	10	253	322	68	215	280	307	1080	720	94	206	TG-12S	125
300	12	302	367	78	253	312	340	1255	865	131	257	TG-14S	232
350	14	337	410	78	276	348	340	1255	865	131	257	TG-14S	244
400	16	394	469	102	338	383	474	1655	1095	164	348	TG-20S	474
450	18	441	525	114	368	413	474	1655	1095	164	348	TG-20S	507
500	20	492	580	127	403	453	474	1655	1095	164	348	TG-20S	538

Selection criteria	Standard	Select when none of the following heavy duty items apply.
	Heavy duty	Select when any of the following items apply. ① Powder or high viscosity fluid (crude oil, etc.) ② Control specification (with positioner) ③ Emergency open valve or pipe dead end valve ④ Air or Gas

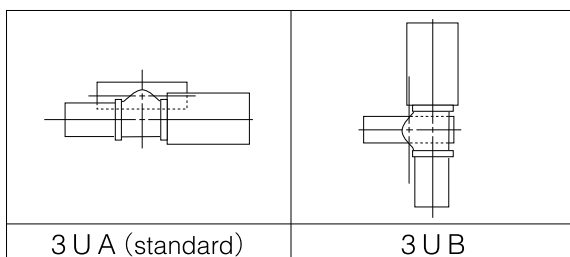
## 72SG-3U



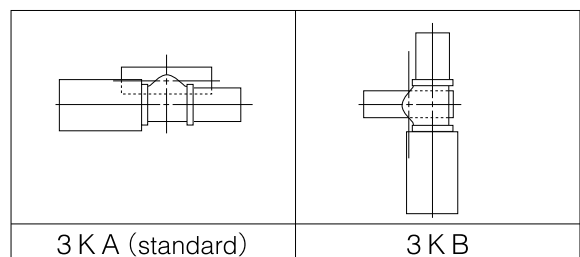
## 72SG-3K



## 3U Installation direction



## 3K Installation direction



## Single phase electric motor type 72SG-4I (50mm to 500mm)

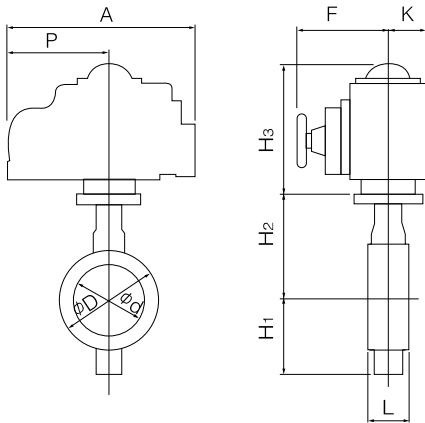
Nominal size		Dimension (mm)										Motor type	Approx. Mass (kg)
mm	inch	$\phi d$	$\phi D$	L	H <sub>1</sub>	H <sub>2</sub>	H <sub>3</sub>	A	P	F	K		
50	2	56	90	43	85	138	120	161	84	58	45	4 I-00	5.3
65	2 1/2	69	115	46	94	151	150	202	100	85	54	4 I-0	7.7
80	3	84	126	46	109	156	150	202	100	85	54	4 I-0	8.2
100	4	104	146	52	117	167	165	252	138	126	65	4 I-1	11.4
125	5	130	181	56	143	191	198	310	167	154	85	4 I-2	19.2
150	6	153.5	211	56	164	202	198	310	167	154	85	4 I-2	22.2
200	8	199	256	60	186	227	198	310	167	154	85	4 I-2.5	26.2
250	10	253	322	68	215	280	230	388	223	246	136	4 I-3	50
300	12	302	367	78	253	312	230	388	223	246	136	4 I-3	63
350	14	337	410	78	276	348	230	388	223	246	136	4 I-3	70
							255	338	223	246	136	4 I-4	76
400	16	394	469	102	338	383	255	388	223	246	136	4 I-4	101
450	18	441	525	114	368	413	230	388	223	246	136	4 I-4	125
500	20	492	580	127	403	453	230	388	223	246	136	4 I-4	156

Note 1: For nominal size 50 mm type (for control), the 4I-0 type should be selected. (The 4I-0 type is only designed for ON-OFF operation.)

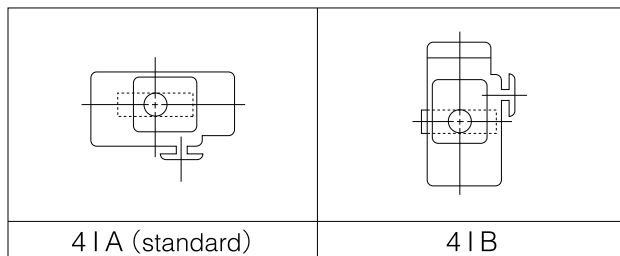
Remark: For 350mm type with the accessories below, type 4I-4 should be selected.

- Micom unit
- Servo unit
- Speed control unit
- Potentiometer

### 72SG-4 I



### 4 I Installation direction



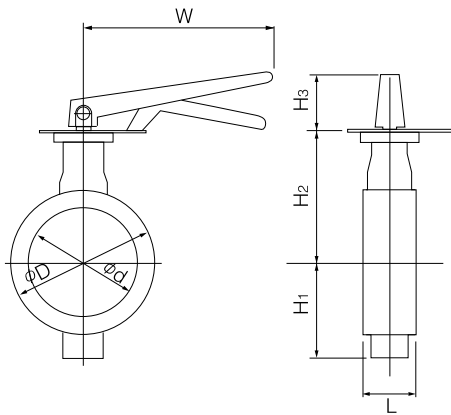
Butterfly Valve
<b>TRITEC</b>
<b>TT2</b>
<b>334A</b>
<b>344Q</b>
<b>302A/303Q</b>
<b>304A/304Q</b>
<b>304YA</b>
<b>302Y/304Y</b>
<b>304M (HLV)</b>
<b>507V/508V</b>
<b>DTM</b>
<b>846T/847T/847Q</b>
<b>841T/842T</b>
<b>700Z</b>
<b>700G/704G/705G</b>
<b>72WG/72SG/72LG</b>
<b>731P/732P/732Q/752W</b>
<b>731R</b>
<b>700E/700K/700S</b>
<b>704G/722F/720F</b>
<b>227P</b>
<b>907T/908H (MKT)</b>
<b>903L/901C/905C (Bata-check)</b>

# 72LG (Lugged)

## Lock lever type 72LG-1T (50mm to 200mm)

Nominal size		Dimension (mm)							Lever type	Approx. Mass (kg)
mm	inch	$\phi d$	$\phi D$	L	H <sub>1</sub>	H <sub>2</sub>	H <sub>3</sub>	W		
50	2	56	90	43	85	138	66	200	1T-1	3.1
65	2 1/2	69	115	46	94	151	66	200	1T-1	4.1
80	3	84	126	46	109	156	66	200	1T-1	5.4
100	4	104	146	52	117	167	66	200	1T-1	8
125	5	130	181	56	143	191	92	300	1T-2	11.9
150	6	153.5	211	56	164	202	92	300	1T-2	15.1
200	8	199	256	60	186	227	97	350	1T-3	22.2

### 72LG-1T



### 1T Installation direction

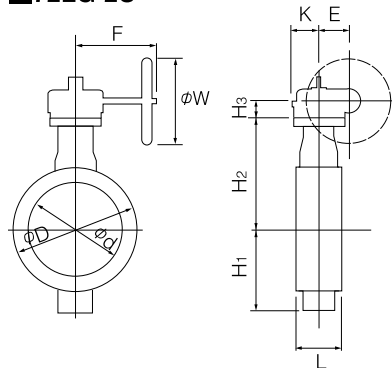
1TLS (standard)	1TLR	1TRS	1TRR
1TXS	1TXR	1TVS	1TVR

**Worm gear type 72LG-2U (50mm to 600mm)**

Nominal size		Dimension (mm)										Gear type	Approx. Mass (kg)
mm	inch	$\phi d$	$\phi D$	L	H <sub>1</sub>	H <sub>2</sub>	H <sub>3</sub>	E	K	F	W		
50	2	56	90	43	68	138	29.5	36	46	160	100	2U-0	4.8
65	2 1/2	69	115	46	79	151	29.5	36	46	160	100	2U-0	5.8
80	3	84	126	46	86	156	29.5	36	46	160	100	2U-1	7.1
100	4	104	146	52	103	167	29.5	36	46	160	100	2U-1	9.7
125	5	130	181	56	118	191	34.5	44	53	173.5	160	2U-2	14.8
150	6	153.5	211	56	135	202	34.5	44	53	173.5	160	2U-2	18.8
200	8	199	256	60	177	227	41.5	67	75	198	200	2U-3	27
250	10	253	322	68	215	280	41.5	67	75	198	200	2U-3	52
300	12	302	367	78	253	312	48	87.5	90	222.5	200	2U-4	76
* 350	14	337	533	78	276	348	48	87.5	90	222.5	280	2U-4	86
			520										
400	16	394	597	102	338	383	50	90	105	266	280	2U-5	123
* 450	18	441	640	114	368	413	50	90	105	266	280	2U-5	148
			634										
* 500	20	492	730	127	403	453	50	90	105	266	280	2U-5	195
			696										
* 600	24	584	840	154	458	528	61	113	140	352	400	2U-6	306
			820										

\* Upper : DIN PN16 Lower : ASME class 150

**72LG-2U**



**2U Installation direction**

2 UA (standard)	2 UAR	2 UB	2 UBR

Butterfly Valve

<b>TRITEC</b>
<b>TT2</b>
<b>334A</b>
<b>344Q</b>
<b>302A/303Q</b>
<b>304A/304Q</b>
<b>304YA</b>
<b>302Y/304Y</b>
<b>304M (HLV)</b>
<b>507V/508V</b>
<b>DTM</b>
<b>846T/847T/847Q</b>
<b>841T/842T</b>
<b>700Z</b>
<b>700G/704G/705G</b>
<b>72WG/72SG/72LG</b>
<b>731P/732P/732Q/752W</b>
<b>731R</b>
<b>700E/700K/700S</b>
<b>704G/722F/720F</b>
<b>227P</b>
<b>907T/908H (MKT)</b>
<b>903L/901C/905C (Bata-check)</b>



## Double-acting pneumatic cylinder type 72LG-7E (50mm to 300mm)

### Standard

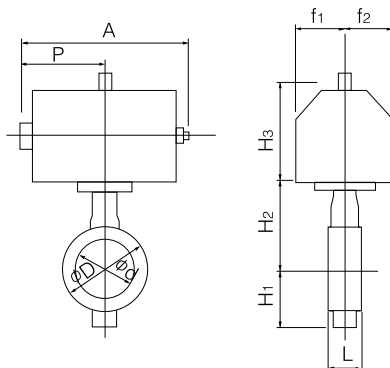
Nominal size		Dimension (mm)										Center handle type	Approx. Mass (kg)
mm	inch	$\phi d$	$\phi D$	L	H <sub>1</sub>	H <sub>2</sub>	H <sub>3</sub>	A	P	f <sub>1</sub>	f <sub>2</sub>		
50	2	56	90	43	85	138	125	228	116	57	29	T35	5
65	2 1/2	69	115	46	94	151	125	228	116	57	29	T35	6
80	3	84	126	46	109	156	168	276	142	75	47	T85	11
100	4	104	146	52	117	167	168	276	142	75	47	T85	12
125	5	130	181	56	143	191	168	276	142	75	47	T85	14
150	6	153.5	211	56	164	202	203	346	176	79	57	T200	19
200	8	199	256	60	177	227	231	423	214	91	69	T380	31
250	10	253	322	68	215	280	231	423	214	91	69	T380	58
300	12	302	367	78	253	312	269	546	270	118	85	T750	88

### Heavy duty

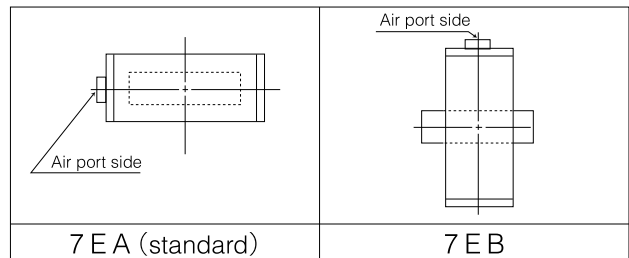
Nominal size		Dimension (mm)										Center handle type	Approx. Mass (kg)
mm	inch	$\phi d$	$\phi D$	L	H <sub>1</sub>	H <sub>2</sub>	H <sub>3</sub>	A	P	f <sub>1</sub>	f <sub>2</sub>		
50	2	56	90	43	85	138	125	228	116	57	29	T35	5
65	2 1/2	69	115	46	94	151	125	228	116	57	29	T35	6
80	3	84	126	46	109	156	168	276	142	75	47	T85	11
100	4	104	146	52	117	167	203	346	176	79	57	T200	15
125	5	130	181	56	143	191	203	346	176	79	57	T200	17
150	6	153.5	211	56	164	202	203	346	176	79	57	T200	19
200	8	199	256	60	177	227	231	423	214	91	69	T380	31
250	10	253	322	68	215	280	269	546	270	118	85	T750	68

Selection criteria	Standard	Select when none of the following heavy duty items apply.
	Heavy duty	Select when any of the following items apply. ① Powder or high viscosity fluid (crude oil, etc.) ② Control specification (with positioner) ③ Emergency open valve or pipe dead end valve ④ Air or Gas

### 72LG-7E



### 7E Installation direction



## Double-acting pneumatic cylinder type 72LG-3A (300mm to 600mm)

### Standard

	Nominal size		Dimension (mm)									Cylinder type	Approx. Mass (kg)	
	mm	inch	$\phi d$	$\phi D$	L	H <sub>1</sub>	H <sub>2</sub>	H <sub>3</sub>	A	P	f <sub>1</sub>			f <sub>2</sub>
*	350	14	337	533 520	78	276	348	364	743	381	100	164	TGA-125	85
	400	16	394	597	102	338	383	364	743	381	100	164	TGA-140	124
*	450	18	441	640 634	114	368	413	412	810	417	100	180	TGA-140	191
*	500	20	492	730 696	127	403	453	465	939	483	130	202	TGA-160	269
*	600	24	584	840 820	154	458	528	478	1053	543	218	69	TGA-180	414

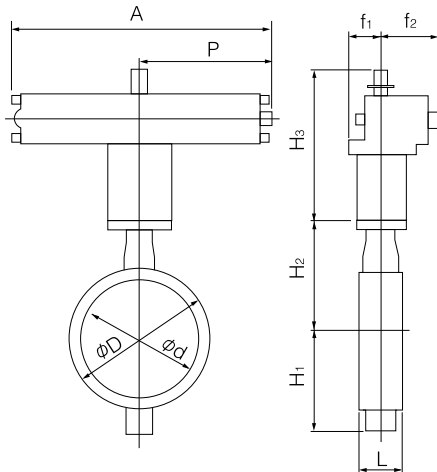
\* Upper : DIN PN16 Lower : ASME class 150

### Heavy duty

	Nominal size		Dimension (mm)									Cylinder type	Approx. Mass (kg)	
	mm	inch	$\phi d$	$\phi D$	L	H <sub>1</sub>	H <sub>2</sub>	H <sub>3</sub>	A	P	f <sub>1</sub>			f <sub>2</sub>
	300	12	302	367	78	253	312	364	743	381	100	164	TGA-125	75
*	350	14	337	533 520	78	276	348	364	743	381	100	164	TGA-125	85
	400	16	394	597	102	338	383	412	810	417	100	180	TGA-140	124
*	450	18	441	640 634	114	368	413	465	939	483	130	202	TGA-160	233
*	500	20	492	730 696	127	403	453	465	939	483	130	202	TGA-160	269
*	600	24	584	840 820	154	458	528	525	1163	599	160	253	TGA-200	474

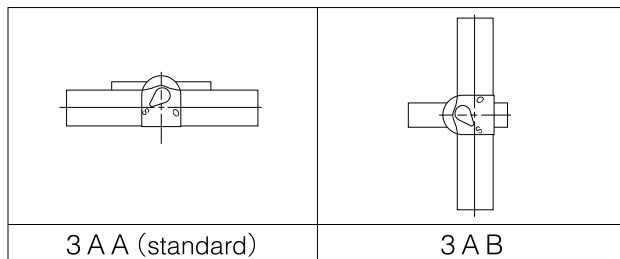
\* Upper : DIN PN16 Lower : ASME class 150

### 72LG-3A



Selection criteria	Standard	Select when none of the following heavy duty items apply.
	Heavy duty	Select when any of the following items apply. ① Powder or high viscosity fluid (crude oil, etc.) ② Control specification (with positioner) ③ Emergency open valve or pipe dead end valve ④ Air or Gas

### 3A Installation direction



Butterfly Valve

**TRITEC**

**TT2**

**334A**

**344Q**

**302A/303Q**

**304A/304Q**

**304YA**

**302Y/304Y**

**304M**

(HLV)

**507V/508V**

**DTM**

**846T/847T/847Q**

**841T/842T**

**700Z**

**700G/704G/705G**

**72WG/72SG/72LG**

**731P/732P/732Q/752W**

**731R**

**700E/700K/700S**

**704G/722F/720F**

**227P**

**907T/908H**

(MKT)

903L/901C/905C (Bata-check)

# 72LG (Lugged)

Single-acting pneumatic cylinder type 72LG-7G (Air to open: 50mm to 200mm) / 700G-7F (Air to close: 50mm to 200mm)

## Standard

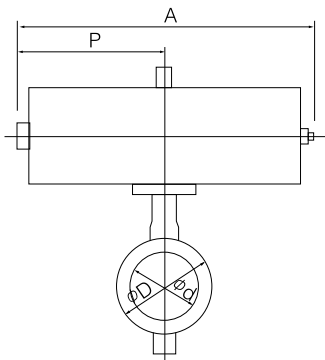
Nominal size		Dimension (mm)										Cylinder type	Approx. Mass (kg)
mm	inch	$\phi d$	$\phi D$	L	H <sub>1</sub>	H <sub>2</sub>	H <sub>3</sub>	A	P	f <sub>1</sub>	f <sub>2</sub>		
50	2	56	90	43	85	138	168	364	183	75	47	T85S	9
65	2 1/2	69	115	46	94	151	168	364	183	75	47	T85S	10
80	3	84	126	46	109	156	203	449	226	79	57	T200S	16
100	4	104	146	52	117	167	231	550	276	91	69	T380S	25.6
125	5	130	181	56	143	191	231	550	276	91	69	T380S	30
150	6	153.5	211	56	164	202	269	723	360	118	85	T750S	47
200	8	199	256	60	177	227	269	723	360	118	85	T750S	53

## Heavy duty

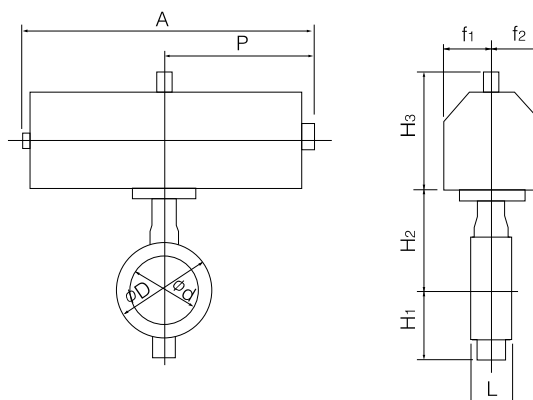
Nominal size		Dimension (mm)										Cylinder type	Approx. Mass (kg)
mm	inch	$\phi d$	$\phi D$	L	H <sub>1</sub>	H <sub>2</sub>	H <sub>3</sub>	A	P	f <sub>1</sub>	f <sub>2</sub>		
50	2	56	90	43	85	138	168	364	183	75	47	T85S	9
65	2 1/2	69	115	46	94	151	203	449	226	79	57	T200S	14
80	3	84	126	46	109	156	203	449	226	79	57	T200S	16
100	4	104	146	52	117	167	231	550	276	91	69	T380S	25.6
125	5	130	181	56	143	191	231	550	276	91	69	T380S	30
150	6	153.5	211	56	164	202	269	723	360	118	85	T750S	47

Selection criteria	Standard	Select when none of the following heavy duty items apply.
	Heavy duty	Select when any of the following items apply. ① Powder or high viscosity fluid (crude oil, etc.) ② Control specification (with positioner) ③ Emergency open valve or pipe dead end valve ④ Air or Gas

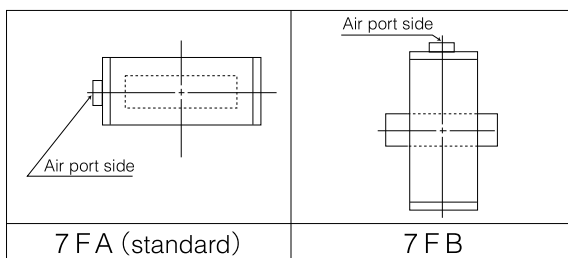
## 72LG-7F



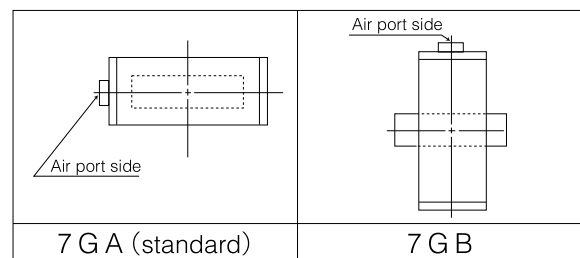
## 72LG-7G



## 7F Installation direction



## 7G Installation direction



Single-acting pneumatic cylinder type 72LG-3U (Air to open: 200mm to 600mm) / 72LG-3K (Air to close: 200mm to 600mm)

Standard

Nominal size		Dimension (mm)										Cylinder type	Approx. Mass (kg)
mm	inch	$\phi d$	$\phi D$	L	H <sub>1</sub>	H <sub>2</sub>	H <sub>3</sub>	A	P	f <sub>1</sub>	f <sub>2</sub>		
250	10	253	322	68	215	280	307	1080	720	94	206	TG-12S	139
300	12	302	367	78	253	312	307	1080	720	94	206	TG-12S	158
* 350	14	337	533 520	78	276	348	340	1255	865	131	257	TG-14S	267
400	16	394	597	102	338	383	340	1255	865	131	257	TG-14S	305
* 450	18	441	640 634	114	368	413	474	1655	1095	164	348	TG-20S	543
* 500	20	492	730 696	127	403	453	474	1655	1095	164	348	TG-20S	590
* 600	24	584	840 820	154	458	528	474	1655	1095	164	348	TG-20S	686

\*Upper : DIN PN16 Lower : ASME class 150

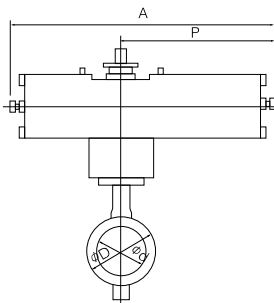
Heavy duty

Nominal size		Dimension (mm)										Cylinder type	Approx. Mass (kg)
mm	inch	$\phi d$	$\phi D$	L	H <sub>1</sub>	H <sub>2</sub>	H <sub>3</sub>	A	P	f <sub>1</sub>	f <sub>2</sub>		
200	8	199	256	60	177	227	307	945	585	70	165	TG-10S	77
250	10	253	322	68	215	280	307	1080	720	94	206	TG-12S	139
300	12	302	367	78	253	312	340	1255	865	131	257	TG-14S	254
* 350	14	337	533 520	78	276	348	340	1255	865	131	257	TG-14S	267
400	16	394	597	102	338	383	474	1655	1095	164	348	TG-20S	508
* 450	18	441	640 634	114	368	413	474	1655	1095	164	348	TG-20S	543
* 500	20	492	730 696	127	403	453	474	1655	1095	164	348	TG-20S	590

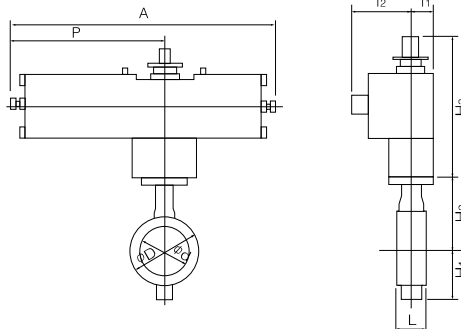
\*Upper : DIN PN16 Lower : ASME class 150

Selection criteria	Standard	Select when none of the following heavy duty items apply.
	Heavy duty	Select when any of the following items apply. ① Powder or high viscosity fluid (crude oil, etc.) ② Control specification (with positioner) ③ Emergency open valve or pipe dead end valve ④ Air or Gas

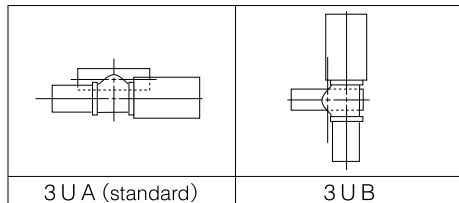
72LG-3U



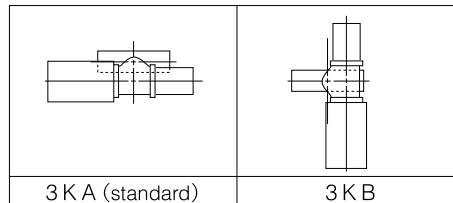
72LG-3K



3U Installation direction



3K Installation direction



Butterfly Valve
<b>TRITEC</b>
<b>TT2</b>
<b>334A</b>
<b>344Q</b>
<b>302A/303Q</b>
<b>304A/304Q</b>
<b>304YA</b>
<b>302Y/304Y</b>
<b>304M (HLV)</b>
<b>507V/508V</b>
<b>DTM</b>
<b>846T/847T/847Q</b>
<b>841T/842T</b>
<b>700Z</b>
<b>700G/704G/705G</b>
<b>72WG/72SG/72LG</b>
<b>731P/732P/732Q/752W</b>
<b>731R</b>
<b>700E/700K/700S</b>
<b>704G/722F/720F</b>
<b>227P</b>
<b>907T/908H (MKT)</b>
<b>903L/901C/905C (Bata-check)</b>

## Single phase electric motor type 72LG-4I (40mm to 500mm)

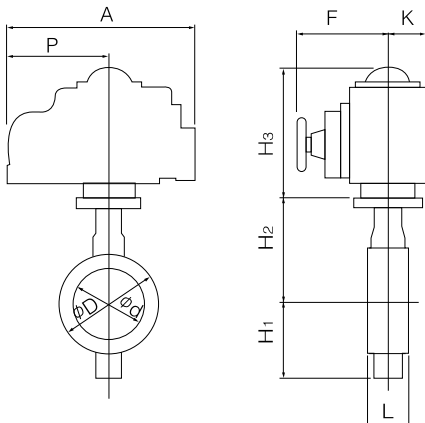
Nominal size		Dimension (mm)										Motor type	Approx. Mass (kg)	
mm	inch	$\phi d$	$\phi D$	L	H <sub>1</sub>	H <sub>2</sub>	H <sub>3</sub>	A	P	F	K			
50	2	56	90	43	68	138	120	161	84	58	45	4 I-00	5.3	
65	2 1/2	69	115	46	79	151	150	202	100	85	54	4 I-0	7.7	
80	3	84	126	46	86	156	150	202	100	85	54	4 I-0	8.2	
100	4	104	146	52	103	167	165	252	138	126	65	4 I-1	13.8	
125	5	130	181	56	118	191	198	310	167	154	85	4 I-2	21.8	
150	6	153.5	211	56	135	202	198	310	167	154	85	4 I-2	25	
200	8	199	256	60	177	227	198	310	167	154	85	4 I-2.5	30.2	
250	10	253	322	68	215	280	230	388	223	246	136	4 I-3	56.8	
300	12	302	367	78	253	312	230	388	223	246	136	4 I-3	86.2	
*	350	14	337	533	78	276	348	230	388	223	246	136	4 I-3	93
				520				255						
400	16	394	597	102	338	383	255	388	223	246	136	4 I-4	136	
*	450	18	441	640	114	368	413	230	388	223	246	136	4 I-4	161
				634										
*	500	20	492	730	127	403	453	230	388	223	246	136	4 I-4	208
				696										

Remark: For 350mm type with the accessories below, type 4I-4 should be selected.

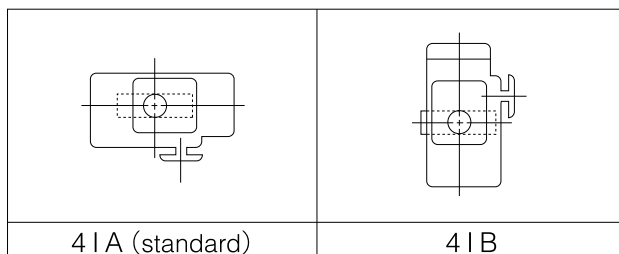
- Micom unit
- Servo unit
- Speed control unit
- Potentiometer

\* Upper : DIN PN16 Lower : ASME class 150

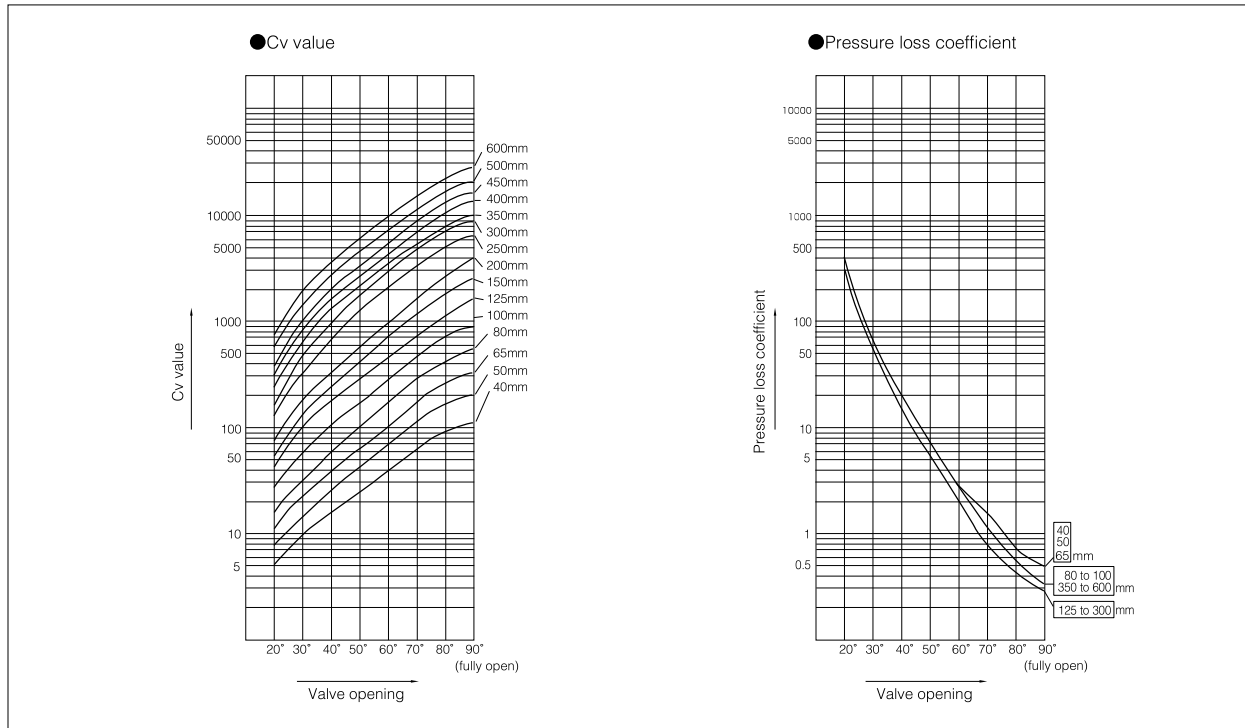
### 72LG-4I



### 4I Installation direction



700G/704G/705G Cv value/pressure loss coefficient



Butterfly Valve

- TRITEC**
- TT2**
- 334A**
- 344Q**
- 302A/303Q**
- 304A/304Q**
- 304YA**
- 302Y/304Y**
- 304M (HLV)**
- 507V/508V**
- DTM**
- 846T/847T/847Q**
- 841T/842T**
- 700Z**
- 700G/704G/705G**
- 72WG/72SG/72LG**
- 731P/732P/732Q/752W**
- 731R**
- 700E/700K/700S**
- 704G/722F/720F**
- 227P**
- 907T/908H (MKT)**
- 903L/901C/905C (Bata-check)**

72WG / 72SG / 72LG Cv value

Nominal size		Valve opening							
mm	inch	20°	30°	40°	50°	60°	70°	80°	90°
40	1 1/2	5	9	16	25	39	61	95	121
50	2	8	15	25	40	64	103	160	200
65	2 1/2	12	25	41	64	102	162	260	320
80	3	15	33	57	95	163	271	450	580
100	4	27	58	100	162	269	444	749	880
125	5	45	109	189	295	453	719	1144	1590
150	6	60	148	262	423	685	1147	1897	2800
200	8	67	188	347	576	969	1698	2902	4300
250	10	130	351	675	1225	2125	3375	5091	6200
300	12	194	487	972	1764	3011	4966	7412	8900
350	14	232	662	1350	2030	3294	5167	7832	9620
400	16	468	964	1648	2724	4529	6815	10553	12700
450	18	583	1202	2068	3448	5692	8384	13116	15500
500	20	758	1555	2656	4379	7214	10845	17100	19800
600	24	1037	2141	3681	6129	10106	14911	22827	27300

## 72WG / 72SG / 72LG Pressure Loss Coefficient

Nominal size		Valve opening							
mm	inch	20°	30°	40°	50°	60°	70°	80°	90°
40	1 1/2	264	72	26	10	4	2	1	0.4
50	2	257	68	25	10	4	2	1	0.4
65	2 1/2	310	75	28	11	4	2	1	0.4
80	3	394	83	27	10	3	1	0.4	0.3
100	4	350	78	26	10	4	1	0.4	0.3
125	5	316	53	18	7	3	1	0.4	0.2
150	6	348	57	18	7	3	1	0.35	0.2
200	8	849	106	31	11	4	1	0.3	0.2
250	10	528	72	20	6	2	1	0.35	0.25
300	12	488	78	20	6	2	1	0.35	0.25
350	14	531	65	16	7	3	1	0.4	0.3
400	16	227	54	18	7	2	1	0.4	0.3
450	18	239	56	19	7	3	1	0.4	0.3
500	20	218	52	18	7	2	1	0.4	0.3
600	24	247	58	20	7	3	1	0.4	0.3

## 72WG / 72SG / 72LG Flange accommodation

Nominal size		ASME	BS4504	DIN
mm	inch	class 150	NP16	NP16
40	1 1/2	○	○	○
50	2	○	○	○
65	2 1/2	○	○	○
80	3	○	○	○
100	4	○	○	○
125	5	○	○	○
150	6	○	○	○
200	8	○	○	○
250	10	○	○	○
300	12	○	○	○
350	14	○	○	○
400	16	○	○	○
450	18	○	○	○
500	20	○	○	○
600	24	○	○	○

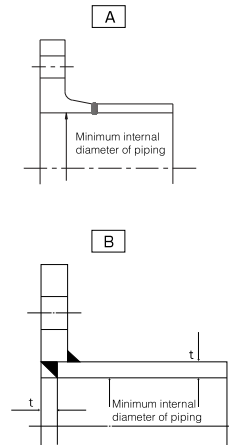
○ : Can be used without flange drilling.

72WG / 72SG / 72LG Applicable Pipe List in Case of **A**

Nominal size		SGP	Sch20	Sch40	Sch10S	Sch20S	Minimum internal diameters of piping (mm)
mm	inch						
40	1 1/2	○	—	○	○	○	26
50	2	○	○	○	○	○	31
65	2 1/2	○	○	○	○	○	48
80	3	○	○	○	○	○	67
100	4	○	○	○	○	○	87
125	5	○	○	○	○	○	115
150	6	○	○	○	○	○	140
200	8	○	○	○	○	○	188
250	10	○	○	○	○	○	243
300	12	○	○	○	○	○	292
350	14	○	○	○	—	—	324
400	16	○	○	○	—	—	375
450	18	○	○	○	—	—	421
500	20	○	○	○	—	—	471
600	24	—	○	○	—	—	557

72WG / 72SG / 72LG Applicable Pipe List in Case of **B**

Nominal size		SGP	STPY	Sch20	Sch40	Sch10S	Sch20S
mm	inch						
40	1 1/2	○	—	—	○	○	○
50	2	○	—	○	○	○	○
65	2 1/2	○	—	○	○	○	○
80	3	○	—	○	○	○	○
100	4	○	—	○	○	○	○
125	5	○	—	○	○	○	○
150	6	○	—	○	○	○	○
200	8	○	—	○	○	○	○
250	10	○	—	○	○	○	○
300	12	○	—	○	○	○	○
350	14	○	○	○	○	—	—
400	16	○	○	○	○	—	—
450	18	○	○	○	○	—	—
500	20	○	○	○	○	—	—
600	24	—	○	○	○	—	—



- Butterfly Valve
- TRITEC**
- TT2**
- 334A**
- 344Q**
- 302A/303Q**
- 304A/304Q**
- 304YA**
- 302Y/304Y**
- 304M (HLV)**
- 507V/508V**
- DTM**
- 846T/847T/847Q**
- 841T/842T**
- 700Z**
- 700G/704G/705G**
- 72WG/72SG/72LG**
- 731P/732P/732Q/752W**
- 731R**
- 700E/700K/700S**
- 704G/722F/720F**
- 227P**
- 907T/908H (MKT)**
- 903L/901C/905C (Bata-check)**

Remark 1: The symbols above mean the following.

○: Piping possible —: Not standardized

Remark 2: Butterfly valves are inserted into a pipe that was fitted with the disc when fully open.

In cases where you are using a pipe or flange that is less than the minimum inner pipe diameter, use is still possible if means are taken such as inserting a spacer between the valve and flange. For details, please consult us.



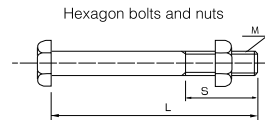
## 72WG Piping Bolts and Nuts Sizes

### ■ For Hexagon Bolts and Nuts

Nominal size		DIN PN16	GB PN16	BS PN16	ASME class 150
mm	inch	Hex. bolt & nuts	Hex. bolt & nuts	Hex. bolt & nuts	Hex. bolt & nuts
40	1 1/2	4-M16× 90×30	4-M16× 90×30	4-M16× 90×30	4-1/2-13UNC× 90×38
50	2	4-M16×105×30	4-M16×105×30	4-M16×105×30	4-5/8-11UNC×105×38
65	2 1/2	4-M16×105×30	4-M16×105×30	4-M16×105×30	4-5/8-11UNC×110×38
80	3	8-M16×105×30	8-M16×105×30	8-M16×105×30	4-5/8-11UNC×120×38
100	4	8-M16×115×30	8-M16×115×30	8-M16×115×30	8-5/8-11UNC×125×38
125	5	8-M16×120×35	8-M16×120×35	8-M16×120×35	8-3/4-10UNC×130×45
150	6	8-M20×130×40	8-M20×130×40	8-M20×130×40	8-3/4-10UNC×135×45
200	8	12-M20×140×40	12-M20×140×40	12-M20×140×40	8-3/4-10UNC×145×50

Example

Hexagon bolts : 12 - M22 × 60 × 50  
                   |      |      |      |  
                   N      M      L      S



## 72SG/72LG Piping Bolts and Nuts Sizes

### ■ For Hexagon Bolts and Nuts (Flange Bolt Hole: Drilled Holes)

Size		DIN PN16	GB PN16	BS PN16	ASME class 150
mm	inch	Hex. bolt & nuts	Hex. bolt & nuts	Hex. bolt & nuts	Hex. bolt & nuts
50	2	4-M16×105×30	4-M16×105×30	4-M16×105×30	4-5/8-11UNC×105×38
65	2 1/2	4-M16×105×30	4-M16×105×30	4-M16×105×30	4-5/8-11UNC×110×38
80	3	8-M16×105×30	8-M16×105×30	8-M16×105×30	4-5/8-11UNC×120×38
100	4	8-M16×115×35	8-M16×115×35	8-M16×115×35	8-5/8-11UNC×125×38
125	5	8-M16×120×35	8-M16×120×35	8-M16×120×35	8-3/4-10UNC×130×45
150	6	8-M20×130×40	8-M20×130×40	8-M20×130×40	8-3/4-10UNC×135×45
200	8	12-M20×140×40	12-M20×140×40	12-M20×140×40	8-3/4-10UNC×145×50
250	10	12-M20×160×45	12-M20×160×45	12-M20×160×45	12-7/8- 9UNC×155×50
300	12	12-M20×180×45	12-M20×180×45	12-M20×180×45	12-7/8- 9UNC×170×50
350	14	16-M20×180×45	16-M20×180×45	16-M20×180×45	12-1- 8UNC×180×55
400	16	16-M24×210×50	16-M24×210×50	16-M24×210×50	16-1- 8UNC×205×55
450	18	20-M24×230×55	20-M24×230×55	20-M24×230×55	16-1 1/8-8UN×225×60
500	20	20-M24×250×55	20-M24×250×55	20-M24×250×55	20-1 1/8-8UN×245×60
600	24	20-M27×290×60	20-M27×290×60	20-M27×290×60	20-1 1/4-8UN×290×65

### ■ For Hexagon Bolts and Nuts (Flange Bolt Hole: Tapped Holes)

Size		DIN PN16	GB PN16	BS PN16	ASME class 150
mm	inch	Hex. bolt	Hex. bolt	Hex. bolt	Hex. bolt
50	2	8-M16×40×25	8-M16×40×25	8-M16×40×25	8-5/8-11UNC×35×20
65	2 1/2	8-M16×40×25	8-M16×40×25	8-M16×40×25	8-5/8-11UNC×40×25
80	3	16-M16×40×25	16-M16×40×25	16-M16×40×25	8-5/8-11UNC×40×25
100	4	16-M16×40×25	16-M16×40×25	16-M16×40×25	16-5/8-11UNC×40×25
125	5	16-M16×40×25	16-M16×40×25	16-M16×40×25	16-3/4-10UNC×45×30
150	6	16-M20×45×25	16-M20×45×25	16-M20×45×25	16-3/4-10UNC×45×30
200	8	24-M20×50×30	24-M20×50×30	24-M20×50×30	16-3/4-10UNC×50×30
250	10	24-M20×55×35	24-M20×55×35	24-M20×55×35	24-7/8- 9UNC×60×35
300	12	24-M20×60×40	24-M20×60×40	24-M20×60×40	24-7/8- 9UNC×65×35
350	14	32-M20×60×40	32-M20×60×40	32-M20×60×40	24-1- 8UNC×65×35
400	16	32-M24×65×45	32-M24×65×45	32-M24×65×45	32-1- 8UNC×70×40
450	18	40-M24×70×45	40-M24×70×45	40-M24×70×45	32-1 1/8-8UN×75×45
500	20	40-M24×75×50	40-M24×75×50	40-M24×75×50	40-1 1/8-8UN×75×45
600	24	40-M27×85×55	40-M27×85×55	40-M27×85×55	40-1 1/4-8UN×85×50

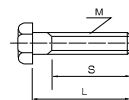
Remarks:  
 Bolt/Nut material: SS400/SS400, SUS304/SUS304  
 The dimensions in parenthesis show ASME class 125. (for 65 mm and 80 mm)  
 Heavy nut shall be used for ASME class 125/150 hexagon nuts.  
 A unified screw should have 8 threads per inch if its nominal diameter exceeds 1 inch.

Example

Setting bolts: 4 - M30 × 95 × 65  
 (Hexagon bolts)

Quantity    Nominal size (M)    Length of bolt (L)    Effective screw length (S)

Setting bolts (Hexagon bolts)



Butterfly Valve
TRITEC
TT2
334A
344Q
302A/303Q
304A/304Q
304YA
302Y/304Y
304M (HLV)
507V/508V
DTM
846T/847T/847Q
841T/842T
700Z
700G/704G/705G
72WG/72SG/72LG
731P/732P/732Q/752W
731R
700E/700K/700S
704G/722F/720F
227P
907T/908H (MKT)
903L/901C/905C (Bata-check)