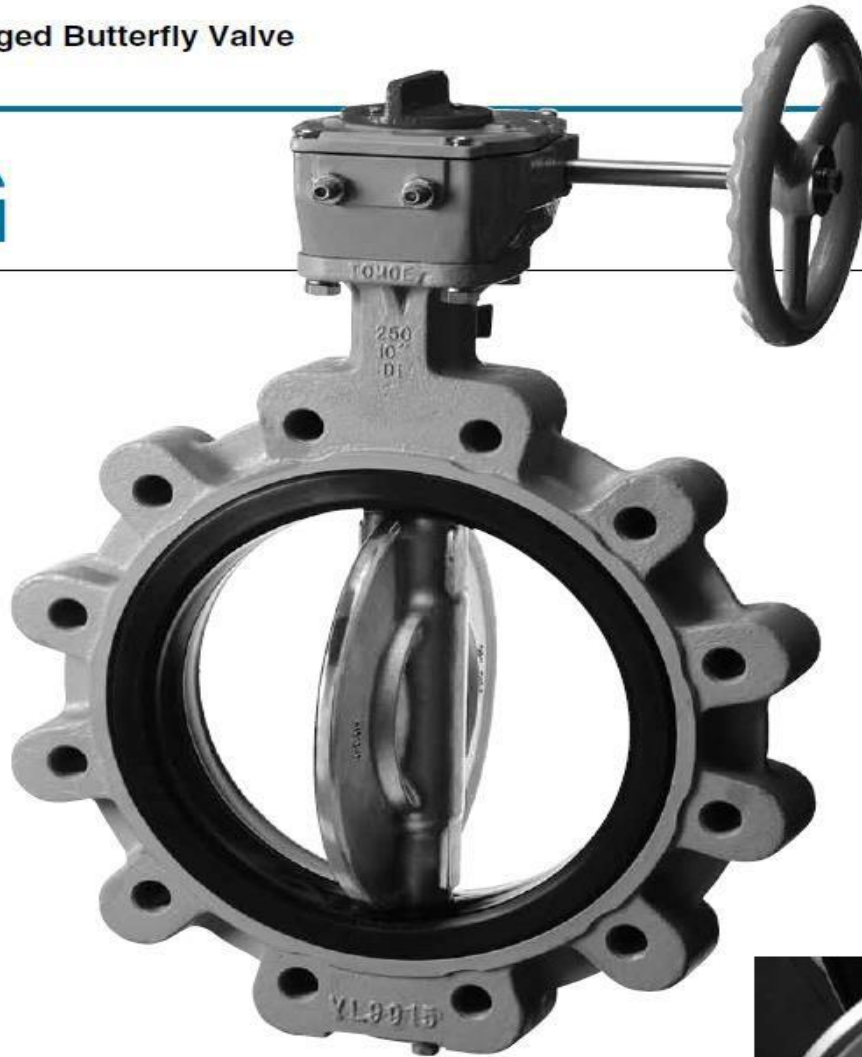


16 BARg Rated Lugged Butterfly Valve
for General Use

71LG



Features and Benefits

Lightweight disc design

The new disc design provides an ultra strong but lightweight disc, providing considerable weight reductions over competitive products.

Higher Cv values achieved

By minimising the thickness of the disc and keeping its surface smooth, higher Cv values are obtained. Pressure loss figures at the fully open position are significantly lower than those of our competitors.

Less torque

The disc edge design ensures reliable sealing and less torque properties.

Multi layered stem bearings

The multi layered stem bearings ensure that optimum torque figures are delivered and maintained.

Consistent sealing properties

The renowned TOMOE cosine seat design ensures reliable and consistent sealing at a fully rated 16 BARg pressure application.

Ease of maintenance

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

General Description

16 BARg rated lugged pattern butterfly valve.

Standard Specifications

Valve Type		Concentric Rubber Seated Butterfly Valve	
Model		71LG	
Body Style		Full Lugged and Wafer ¹	
Valve Nominal Size	inch	2, 2 1/2, 3, 4, 5, 6, 8	10, 12, 14, 16, 18, 20, 24
	mm	50, 65, 80, 100, 125, 150, 200	250, 300, 350, 400, 450, 500, 600
Applicable Standards	Face-to-Face Dimensions	API 609 Category A, ISO 5752 (20 series)	
	Applicable Flange Accommodation	BS4504 PN16/PN10, DIN2633 PN16, DIN2632 PN10, GB/T9113.1 PN1.6/1.0, ASME B16.5 Class 150, ASME B16.1 Class 125, JIS10K, JPI class 150	BS4504 PN16/PN10, DIN2633 PN16, DIN2632 PN10, GB/T9113.1 PN1.6/1.0, ASME B16.5 Class 150, ASME B16.1 Class 125, JIS10/16K
	Top Flange Mounting	ISO5211-1	
Standard Materials	Body	Ductile iron, JIS FCD450	Ductile iron, ASTM A536 65-45-12
	Disc	Stainless steel, JIS SCS 14, FCD450+HALAR [®] Coating	Stainless steel, ASTM A351CF8, ASTM A536 65-45-12+HALAR [®] Coating
	Shaft	SUS420J2	
	Seat ring	NBR, EPDM	
Max. Working Pressure		1.6MPa	
Seat Leakage Rate		ISO5208 RateA (Zero leakage), API598	
Flow Direction		Bi-directional	
Working Temperature Range	Maximum	NBR: 0~60°C, EPDM: -10~80°C	
	Continuous Use	NBR: 0~50°C, EPDM: 0~70°C	
Test Pressures	Shell Test	2.4Mpa (Hydrostatic)	
	Seat Leakage Test	1.76Mpa (Hydrostatic)	
Operators		Lock lever, Worm gear, Electric Motor, Pneumatic cylinder	
Coating		Epoxy Primer Finish (Munsell N7)	

¹ Wafer type is available upon request

* 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.

Option: Anti-condensation column



The anti-condensation column is available as option. It is made of engineering plastic and prevent condensation occurred by transmission of cool temperature form flow media. No insulation is necessary around the gearbox. Compared to the conventional stainless steel column, the anti-condensation column is:

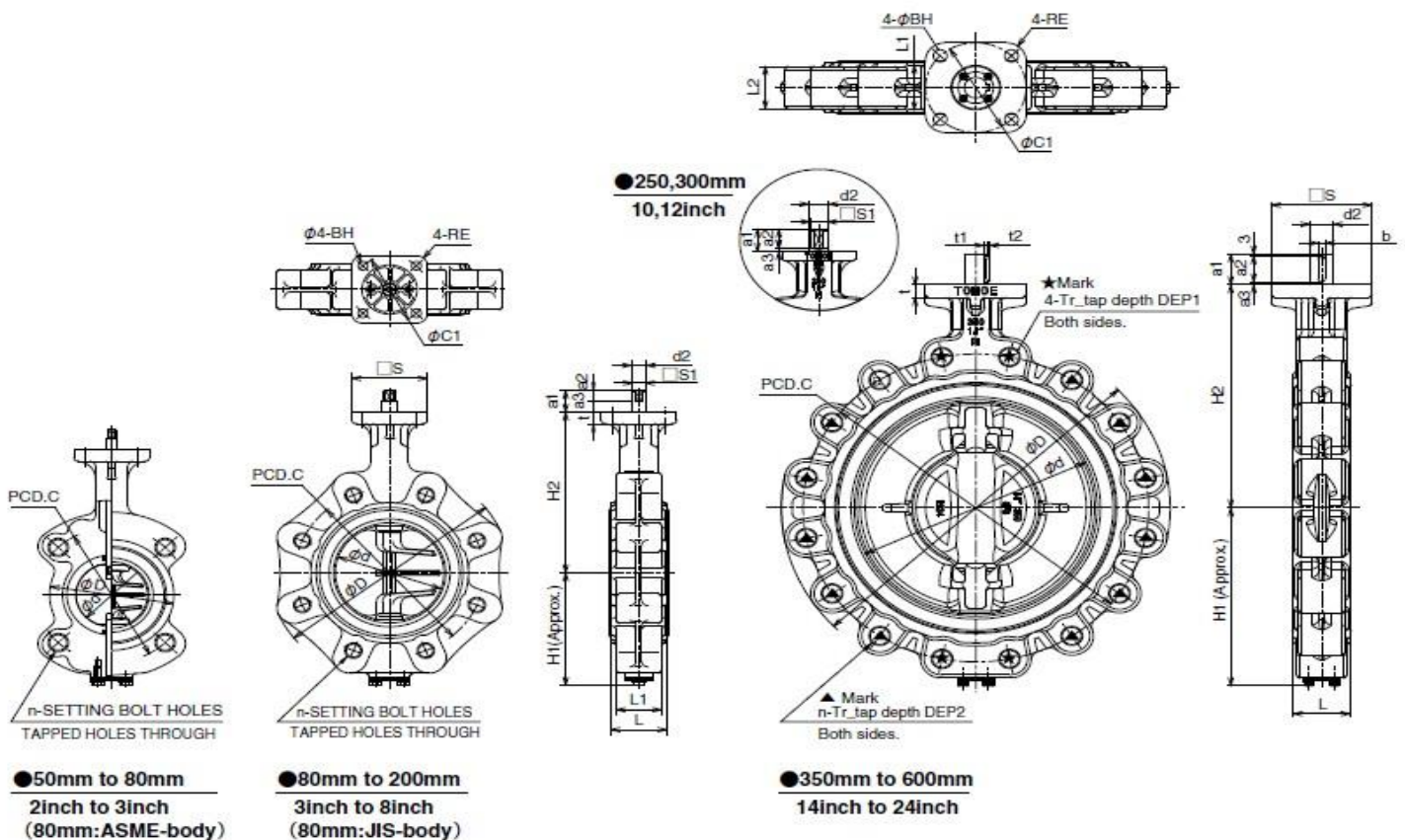
- **Lighter weight**
- **Better anti-heat-transmission results in better anti-condensation and smaller size**
- **Simple shape**
- **Easy installation**

With this column, valve operation would be much easier even if the pipe is covered with thick insulation material.

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Dimensions - Bareshaft Valve

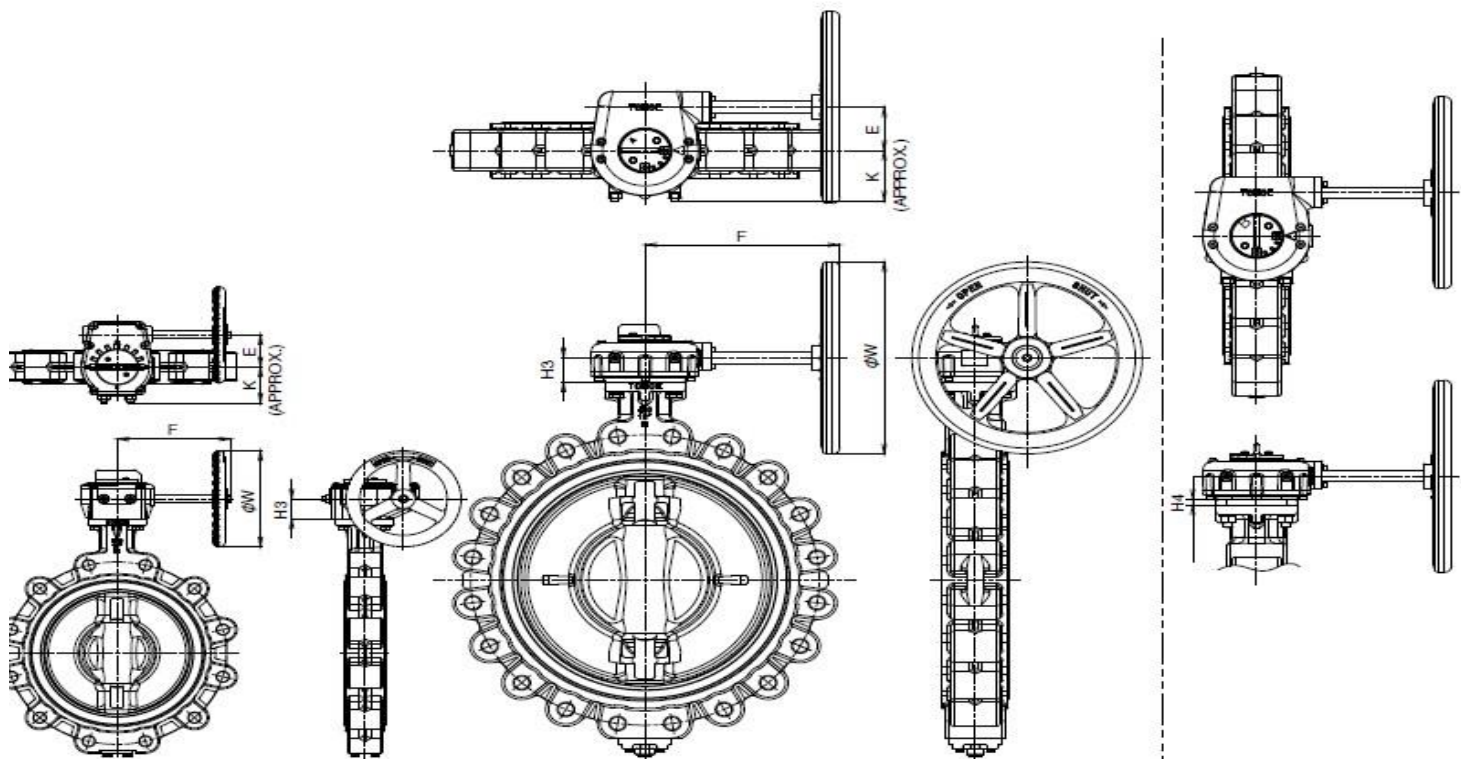
Nominal size		d	L	L1	H1	H2	S1	d2	a1	a2	a3	b	t	t1	t2	S	RE	C1	BH	Approx. Weight (kg)
mm	inch																			
50	2	56	43	33	85	138	8	10	21.5	10.5	11	-	12	-	-	70	10	70	9	2.5
65	2 1/2	69	46	36	94	151	8	10	21.5	10.5	11	-	12	-	-	70	10	70	9	3.5
80	3	84	46	36	109	156	10	12	22.5	11.5	11	-	12	-	-	70	10	70	9	4.0/4.8
100	4	104	52	42	117	167	12	14	22.5	11.5	11	-	12	-	-	70	10	70	9	6.7
125	5	130	56	46	143	191	14	16	27.5	16.5	11	-	14	-	-	102	23.5	102	11	8.8
150	6	153.5	56	46	164	202	14	18	27.5	16.5	11	-	14	-	-	102	23.5	102	11	10.4
200	8	199	60	50	176	227	18	22	30	20	10	-	14	-	-	102	23.5	102	11	14.5/16.3
250	10	253	68	60	216	280	24	28	35	30	5	-	14	-	-	102	24	102	11	36.4
300	12	302	78	68	254	312	24	32	35	30	5	-	16	-	-	125	32	125	13	50.8/51.3
350	14	337	79	70	278	348	-	32	48	40	5	10	20	5	3	140	28	140	19	69.3/65.1
400	16	394	102	90	338	383	-	40	54	45	6	12	20	5	3	140	28	140	19	105
450	18	441	114	102	368	413	-	46	65	56	6	14	20	5.5	3.5	140	28	140	19	149/123
500	20	492	127	115	403	453	-	50	79	70	6	14	25	5.5	3.5	140	28	140	19	186
600	24	584	154	142	458	528	-	55	79	70	6	16	25	6	4	165	28	165	23	291/313



Dimensions - Gear Operated Valve

Nominal size		H3	H4 [*]	E	K	F	W	Gear Model	Approx Weight (kg)		
									Standard	Installation Direction of B	Gear box
50	2	29.5	-	36	46	160	100	2U-0	4.8	-	2.3
65	2 1/2	29.5	-	36	46	160	100	2U-0	5.8	-	2.3
80	3	29.5	-	36	46	160	100	2U-1	6.3/7.1	-	2.3
100	4	29.5	-	36	46	160	100	2U-1	9	-	2.3
125	5	34.5	-	44	53	173.5	160	2U-2	13	-	4.2
150	6	34.5	-	44	53	173.5	160	2U-2	14.6	-	4.2
200	8	41.5	-	67	75	198	200	2U-3	22.5/24	-	8
250	10	41.5	-	67	75	198	200	2U-3	44	-	8
300	12	48	-	87.5	90	222.5	200	2U-4	63/64	-	13
350	14	48	-	87.5	90	222.5	280	2U-4	80/84	-	15
400	16	50	-	90	105	331	280	2U-5S	120	-	15
450	18	50	10	90	105	337	400	2U-5S	139/164	140/165	15
500	20	50	-	90	105	337	400	2U-5S	201	-	15
600	24	61	10	113	140	400	500	2U-6S	317/340	319/342	26

* Must use spacer to 450mm and 600mm in the installation direction of B.



150 to 350mm
2 to 14inch

● 400 to 600mm
16 to 14inch

*
● 450mm, 600mm
18inch, 24inch
Installation
direction of B