

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 (Beta-check)

**Discs and seats come in various materials to meet a wide range of needs. These are the ultimate general purpose valves and they provide excellent cost performance.**

### General Description

Handling, durability and longevity are the basic aspects by which valve performance can be improved. TOMOE have now developed the 700G series, a superior, pressure-proof, general purpose valve, with the addition of a wide range of features to offer improved performance and better cost efficiency.

The 700G series is designed to satisfy many international flange standards for use worldwide.

### Structure

The body is available in various designs such as wafer, semi-lugged and full-lugged, with various materials such as ductile iron, carbon steel, etc. The disc is also available with high-grade stainless steel, type 316, nylon coating, aluminium, bronze or PPS. The patented cosine-curve structure is adopted for the seat ring. The 700G series is superior to conventional models in all respects.

### Standard Specifications

Model	700G (Wafer)			704G (Fully lugged)		705G (Semi lugged)	
Valve nominal size	40 to 300mm	350 to 550mm	600mm	50 to 300mm	350 to 600mm	50 to 300mm	350 to 600mm
Applicable flange standard	JIS 5K/10K, ANSI 125lb/150lb, DIN PN10/PN16, BS 4504 PN10/PN16, BS 10' E'	JIS 5K/10K	JIS 5K/10K, ANSI 125lb/150lb, DIN PN10, BS4504 PN10	JIS 5K/10K, ANSI 125lb/150lb, DIN PN10/PN16, BS4504 PN10/PN16, BS 10' E'	JIS 5K/10K, ANSI 125lb/150lb, DIN PN10, BS4504 PN10	JIS 5K/10K, ANSI 125lb/150lb, DIN PN10/PN16, BS4504 PN10/PN16, BS10' E'	JIS 5K/10K, ANSI 125lb/150lb, DIN PN10, BS4504 PN10 only
Face-to-face dimensions	API 609 / ISO 5752 (20 series)						
Max. working pressure	1.0 MPa						
Body shell test (hydraulic)	1.5 MPa						
Seat leak test (pneumatic) ※1	1.1 MPa						
Working temperature range ※2,※3	NBR : -10 to 80 degrees C, *EPDM : -20 to 120 degrees C						
Working temperature in continuous use ※4	NBR : 0 to 60 degrees C, *EPDM : 0 to 70 degrees C						
Standard materials	Body ※5	Ductile iron, JIS FCD450	Cast iron, JIS FC 250	Ductile iron, JIS FCD450		Ductile iron, JIS FCD 450	Cast iron, JIS FC250, Ductile iron, JIS FCD450
	Disc	316 stainless steel, JIS SCS14 ※6	304 stainless steel, JIS SCS13 316 stainless steel, JIS SCS14	316 stainless steel, JIS SCS14 ※6	304 stainless steel, JIS SCS 13, 316 stainless steel, JIS SCS14	316 stainless steel, JIS SCS 14 ※6	304 stainless steel, JIS SCS 13, 316 stainless steel, JIS SCS 14
		PPS (50 to 200mm) Aluminium bronze JIS CAC702 (50 to 600mm)	Aluminium bronze JIS CAC702	PPS (50 to 200mm) Aluminium bronze JIS CAC702 (50 to 600mm)	Aluminium bronze JIS CAC702	PPS (50 to 200mm) Aluminium bronze JIS CAC702 (50 to 600mm)	Aluminium bronze JIS CAC702
		Ductile iron, JIS FCD 450		Ductile iron, JIS FCD 450	Ductile iron, JIS FCD 450 with hard chrome plating	Ductile iron, JIS FCD 450	
Stem	SUS420J2 / SUS329J1 as an option						
Seat ring ※7	NBR, *EPDM ※7						
Actuators	Lock lever	40 to 200mm	-	50 to 200mm	-	50 to 200mm	-
	Worm gear	40 to 300mm	350 to 600mm	50 to 300mm	350 to 600mm	50 to 300mm	350 to 600mm
	Centre handle	40 to 300mm	-	50 to 300mm	-	50 to 300mm	-
	Pneumatic	40 to 300mm	350 to 600mm	50 to 300mm	350 to 600mm	50 to 300mm	350 to 600mm
	Motorised	40 to 300mm	350 to 600mm	50 to 300mm	350 to 600mm	50 to 300mm	350 to 600mm
Coating ※8	Epoxy primer finish (Munsell N7)						

- ※1 16bar finish is also available subject to working conditions.
  - ※2 Working temperature range varies depending on combination of disc materials and seating. Please consult us.
  - ※3 Please consult us when using NBR and EPDM seating continuously above 60 degrees C and 70 degrees C respectively.
  - ※4 "Working temperature in continuous use" stands for the temperature continuously kept exceeding one hour.
  - ※5 Cast steel body or stainless steel body is also available.
  - ※6 Rib disc: standard. Flat face disc: optional.
  - ※7 Heat resistant EPDM (to 150 degrees C), FKM, SEP, CR and white-NBR seats are also available. See below table.
  - ※8 Polyester powder backed finish (V-Pet #4000) for 700G size 40 to 300mm. Epoxy resin coating for 705G size 50 to 300mm.
  - ※9 Export license by Japanese Ministry is required up to 100mm with FKM seating. Please consult us the detail.
- \* 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.

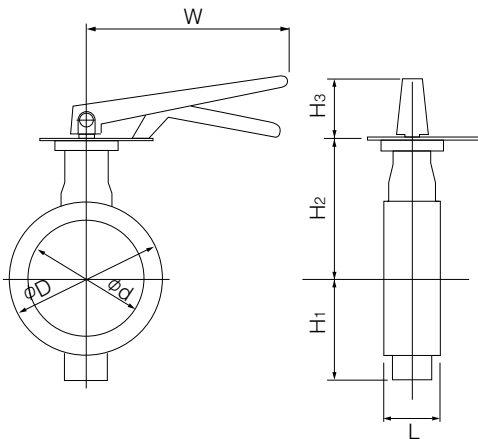
### Seat ring material table

Material	Standard		On request						
	EPDM	NBR	Food Grade EPDM	Heat resistant EPDM	HI-NBR	W-NBR	FKM	CR	SEP
Working temperature range (degrees C)	-20~120	-10~80	-20~120	-10~150	-5~80	-10~70	-10~60	-10~80	-10~60
Working temperature in continuous use (degrees C)	0~70	0~60	0~70	0~130	0~60	0~60	0~50	0~60	0~50
Max. working pressure (MPa)	1.0	1.0	1.0	0.5	1.0	0.5	0.5	1.0	0.5

Lock lever type 700G-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

■700G-1T



■1T Installation direction

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