

# Butterfly Valve Type 365

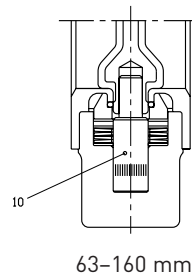
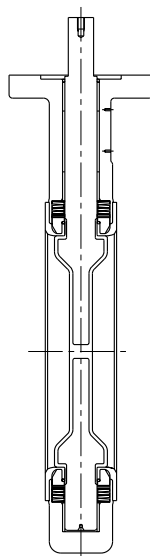
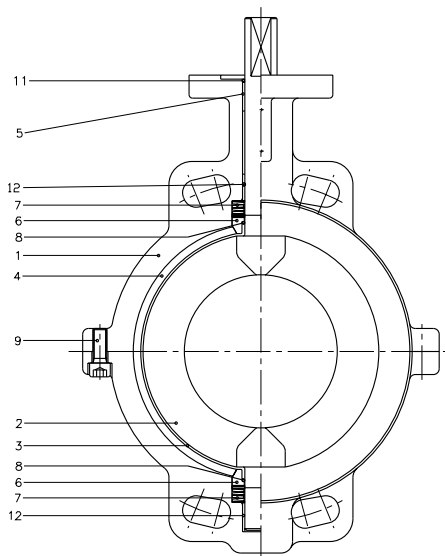
## Technical Data

- ISO 5211 actuator mounting for gear operators and actuators.
- Self-lubricating bearings in the upper and lower stem journals.
- Precision machined virgin PTFE liner is 100 mils minimum thickness.
- Precision PFA encapsulation 100 mils thick, bonded and interlocked to the one-piece disc stem provides maximum permeation protection and prevent delamination.
- Belleville disc springs exert uniform loading through the pusher pressing the PTFE liner and the shoulder of the PFA encapsulated disc/stem together, resulting in leak-free mechanical stem seal.



## General

Manually operated PTFE lined lug style butterfly valve with PFA encapsulated disc. Valves have ANSI 150 bolt patterns and are rated for pressures up to 150 psi and temperatures up to 400°F. All valves have a one-piece disc and stem arrangement with a lock-in PFA encapsulation. All valves are cleaned and manufactured for ultrapure water service. Valves are available with lever and gear operators as well as pneumatic or electric actuators.



## Parts List

Pos.	Part	Material
1	Two piece body	Ductile iron polyester coated
2	One piece disc stem	PFA encapsulated stainless steel
3	Liner	Virgin PTFE
4	Elastomer back-up	Silicon or FPM
5	Bearing	Iglidur X (Thermoplast)
6	Pusher	Stainless steel
7	Belleville washer	Spring steel
8	O-Ring	FPM
9	Int. Hex screw	Stainless steel
10	Pivot pin	Stainless steel
11	O-Ring	FPM
12	Bearing	DU (Steel/PTFE)

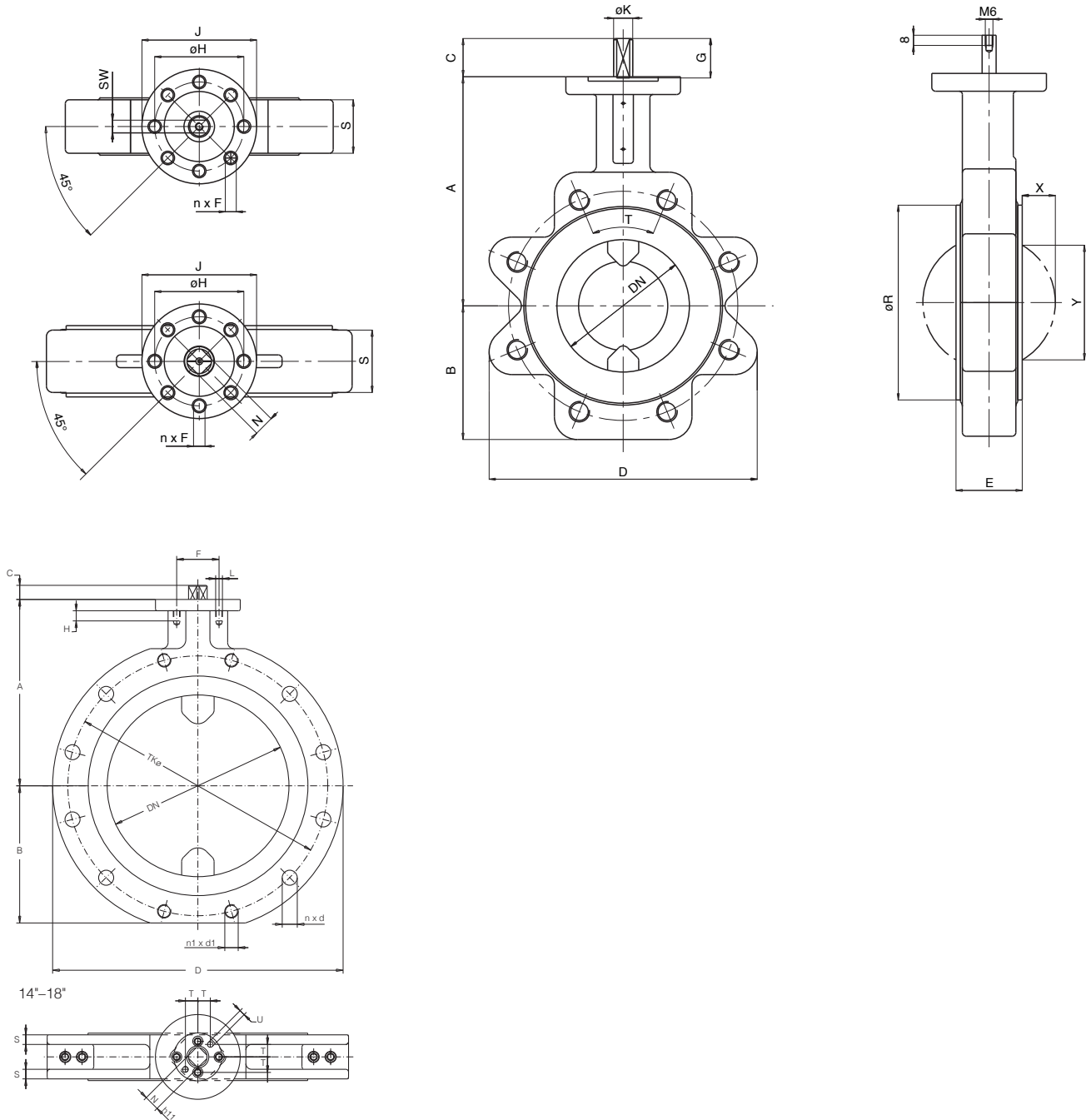
# Dimensions for Butterfly Valve Type 365

## Dimensions for 2"–18" (63–450 mm) valves

Size inch	Size mm	Type	A	B	C	D	E	n × F	G	ØH	ØJ	ØK	ØR	X	Y	N Square	SW	Weight (lb)
2	63	F05	135	65	26	160	43	8 × Ø7	27	50	65	15	95	5	31		10	7.5
3	90	F07	160	93.5	29	188	46	4 × Ø9	30	70	90	15	132	18.5	69		10	13.4
4	110	F07	180	105	29	210	52	4 × Ø9	30	70	90	15	153	26.5	91		10	17.4
6	160	F07	210	140	46	269	56	4 × Ø9	47	70	90	20	209	48.5	143	16/16		29.8
8	200/225	F12	240	170	65	360	60	4 × Ø11	66	125	150	8	259	71.5	196	19/19		51.4
10	250	F12	275	205	65	435	68	8 × Ø13	66	125	150	30	309	91.5	243	22/22		70.7
12	315	F12	310	250	65	500	78	8 × Ø13	66	125	150	30	364	111.5	293	27/27		110.0
14	355	F12	330	255	25	534	78	8 × Ø13	32	125	150	30	412	126.0	321	27/27		132.0
16	400	F14	372	290	33	597	102	12 × 29	35	—	—	—	475	149	392	32/32		194
18	450	F14	392	310	33	635	114	12 × 29	35	—	—	—	525	162	423	32/32		242

Valves 12" and below are ANSI 150 lugged design

14–18" valve is double wafer design

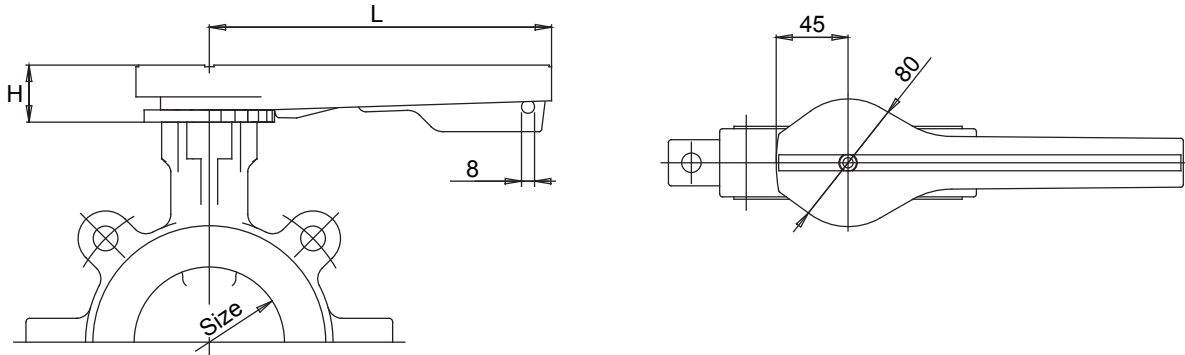


# Dimensions for Type 365 Valves

## Lever Operator Dimensions

Size inch	H (mm)	L (mm)
2	37	210
3	40	300
4	40	300
6	40	300

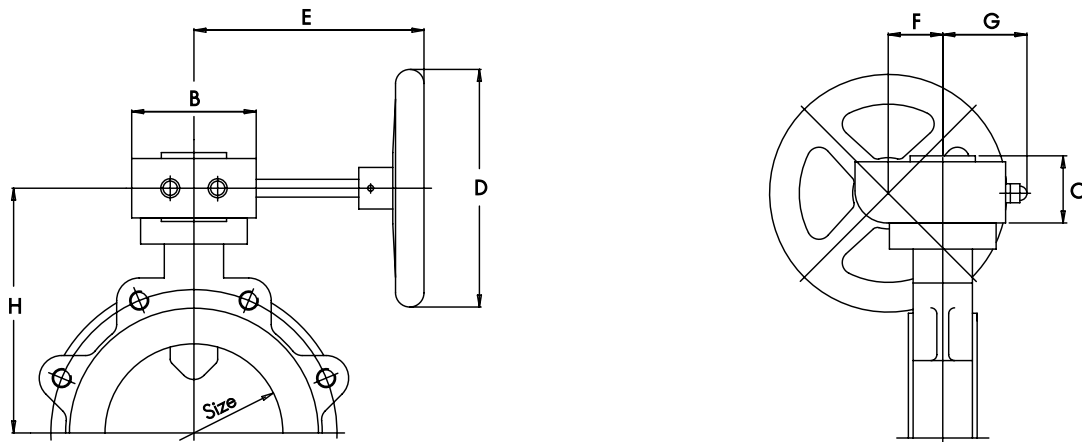
Note: Gear operator required for 8/9" size and larger.



## Gear Operator Dimensions

Size inch	Type	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)
6	AG1	102	68	200	187	52	57	239
8/9	AG2-1	138	89	250	203	71	83	290
10	AG2	138	89	250	203	71	83	315
12	AG3	138	89	315	209	71	83	351
14	AG3	138	89	315	209	71	83	371
16	AG4	200	92	315	232	86	101	414
18	AG4	200	92	315	232	86	101	434

Gears for smaller sizes available upon request.



# Part Numbers for Type 365 Valves

Size inch	Corresponding Pipe Size mm	Part No.	Operator
2	63	<b>160.365.318</b>	Lever
3	90	<b>160.365.320</b>	Lever
4	110	<b>160.365.321</b>	Lever
6	160	<b>160.365.323</b>	Lever
6	160	<b>160.365.503</b>	Gear
8/9	200/225	<b>160.365.504</b>	Gear
10	250	<b>160.365.505</b>	Gear
12	315	<b>160.365.506</b>	Gear
14	355	<b>160.365.507</b>	Gear
16	400	<b>160.365.508</b>	Gear
18	450	<b>160.365.509</b>	Gear

## Bolt Torque

Valve Size (in.)	Foot Pounds
2	23
3	30
4	19
6	36
8/9	48
10	46
12	56
14	call
16	call
18	call

## Cv Values

Valve Size (in.)	Cv Value
2	121
3	475
4	857
6	2,281
8/9	4,037
10	4,821
12	7,054
14	10,050
16	13,465
18	17,217

Above are the recommended bolt torques when using a GF Piping Systems approved gasket. If not using a GF-approved gasket, consult factory.

# GF Piping Systems → worldwide at home

Our local sales companies and representatives ensure local customer support in over 100 countries.

Adding Quality to People's Lives



## GF Piping Systems

2882 Dow Avenue, Tustin, CA 92780-7258

Tel. (714) 731-8800, Toll Free (800) 854-4090, Fax (714) 731-6201

e-mail: [us.ps@georgfischer.com](mailto:us.ps@georgfischer.com)

[www.gfpiping.com](http://www.gfpiping.com)

The technical data is not binding. They neither constitute expressly warranted characteristics nor guaranteed properties nor a guaranteed durability. They are subject to modification. Our General Terms of Sale apply.

### Argentina/Southern South America

Georg Fischer Central Plastics  
Sudamérica S.R.L.  
Buenos Aires, Argentina  
Phone +5411 4512 02 90  
[gfccentral.ps.ar@georgfischer.com](mailto:gfccentral.ps.ar@georgfischer.com)

### Australia

Georg Fischer Pty Ltd  
Riverwood NSW 2210 Australia  
Phone +61(0)2 9502 8000  
[australia.ps@georgfischer.com](mailto:australia.ps@georgfischer.com)  
[www.georgfischer.com.au](http://www.georgfischer.com.au)

### Austria

Georg Fischer  
Rohrleitungssysteme GmbH  
3130 Herzogenburg  
Phone +43(0)2782 856 43-0  
[austria.ps@georgfischer.com](mailto:austria.ps@georgfischer.com)  
[www.georgfischer.at](http://www.georgfischer.at)

### Belgium/Luxembourg

Georg Fischer NV/SA  
1070 Bruxelles/Brüssel  
Phone +32(0)2 556 40 20  
[be.ps@georgfischer.com](mailto:be.ps@georgfischer.com)  
[www.georgfischer.be](http://www.georgfischer.be)

### Brazil

Georg Fischer Ltda.  
04795-100 São Paulo  
Phone +55(0)11 5525 1311  
[br.ps@georgfischer.com](mailto:br.ps@georgfischer.com)  
[www.georgfischer.com.br](http://www.georgfischer.com.br)

### Canada

Georg Fischer Piping Systems Ltd  
Mississauga, ON L5T 2B2  
Phone +1(905)792 8005  
Fax +1(905)792 6667  
[ca.ps@georgfischer.com](mailto:ca.ps@georgfischer.com)  
[www.georgfischer.ca](http://www.georgfischer.ca)

### China

Georg Fischer  
Piping Systems Ltd Shanghai  
Pudong, Shanghai 201319  
Phone +86(0)21 58 13 33 33  
[china.ps@georgfischer.com](mailto:china.ps@georgfischer.com)  
[www.georgfischer.cn](http://www.georgfischer.cn)

### Denmark/Iceland

Georg Fischer A/S  
2630 Taastrup  
Phone +45 (0)70 22 19 75  
[info.dk.ps@georgfischer.com](mailto:info.dk.ps@georgfischer.com)  
[www.georgfischer.dk](http://www.georgfischer.dk)

### Finland

Georg Fischer AB  
01510 VANTAA  
Phone +358 (0)9 586 58 25  
Fax +358 (0)9 586 58 29  
[info.fi.ps@georgfischer.com](mailto:info.fi.ps@georgfischer.com)  
[www.georgfischer.fi](http://www.georgfischer.fi)

### France

Georg Fischer SAS  
95932 Roissy Charles de Gaulle Cedex  
Phone +33(0)1 41 84 68 84  
[fr.ps@georgfischer.com](mailto:fr.ps@georgfischer.com)  
[www.georgfischer.fr](http://www.georgfischer.fr)

### Germany

Georg Fischer GmbH  
73095 Albershausen  
Phone +49(0)7161 302-0  
[info.de.ps@georgfischer.com](mailto:info.de.ps@georgfischer.com)  
[www.georgfischer.de](http://www.georgfischer.de)

### India

Georg Fischer Piping Systems Ltd  
400 076 Mumbai  
Phone +91 224007 2001  
[in.ps@georgfischer.com](mailto:in.ps@georgfischer.com)  
[www.georgfischer.in](http://www.georgfischer.in)

### Italy

Georg Fischer S.p.A.  
20063 Cernusco S/N (MI)  
Phone +3902 921 861  
[it.ps@georgfischer.com](mailto:it.ps@georgfischer.com)  
[www.georgfischer.it](http://www.georgfischer.it)

### Japan

Georg Fischer Ltd  
556-0011 Osaka,  
Phone +81(0)6 6635 2691  
[jp.ps@georgfischer.com](mailto:jp.ps@georgfischer.com)  
[www.georgfischer.jp](http://www.georgfischer.jp)

### Korea

Georg Fischer Piping Systems  
271-3 Seocheon-dong Bundang-gu  
Seongnam-si, Gyeonggi-do  
Seoul 463-824  
Phone +82 31 8017 1450 3  
Fax +82 31 8017 1454  
[kor.ps@georgfischer.com](mailto:kor.ps@georgfischer.com)  
[www.georgfischer.kr](http://www.georgfischer.kr)

### Malaysia

George Fischer (M) Sdn. Bhd.  
40460 Shah Alam, Selangor Darul Ehsan  
Phone +60 (0)3 5122 5585  
[my.ps@georgfischer.com](mailto:my.ps@georgfischer.com)  
[www.georgfischer.my](http://www.georgfischer.my)

### Mexico/Northern Latin America

Georg Fischer S.A. de C.V.  
Apodaca, Nuevo Leon  
CP66636 Mexico  
Phone +52 (81)1340 8586  
Fax +52 (81)1522 8906  
[mx.ps@georgfischer.com](mailto:mx.ps@georgfischer.com)  
[www.georgfischer.mx](http://www.georgfischer.mx)

### Middle East

Georg Fischer Piping Systems  
Dubai, United Arab Emirates  
Phone +971 4 289 49 60  
[info.export@georgfischer.com](mailto:info.export@georgfischer.com)  
[www.export.georgfischer.com](http://www.export.georgfischer.com)

### Netherlands

Georg Fischer N.V.  
8161 PA Epe  
Phone +31(0)578 678 222  
[nl.ps@georgfischer.com](mailto:nl.ps@georgfischer.com)  
[www.georgfischer.nl](http://www.georgfischer.nl)

### Norway

Georg Fischer AS  
1351 Rud  
Phone +47(0)67 18 29 00  
[no.ps@georgfischer.com](mailto:no.ps@georgfischer.com)  
[www.georgfischer.no](http://www.georgfischer.no)

### Poland

Georg Fischer Sp. z o.o.  
05-090 Sekocin Nowy  
Phone +48(0)22 31 31 0 50  
[poland.ps@georgfischer.com](mailto:poland.ps@georgfischer.com)  
[www.georgfischer.pl](http://www.georgfischer.pl)

### Romania

Georg Fischer  
Piping Systems Ltd  
020257 Bucharest - Sector 2  
Phone +40(0)21 230 53 80  
[ro.ps@georgfischer.com](mailto:ro.ps@georgfischer.com)  
[www.export.georgfischer.com](http://www.export.georgfischer.com)

### Russia

Georg Fischer Piping Systems  
Moscow 125047  
Tel. +7 495 258 60 80  
[ru.ps@georgfischer.com](mailto:ru.ps@georgfischer.com)  
[www.georgfischer.ru](http://www.georgfischer.ru)

### Singapore

Georg Fischer Pte Ltd  
528 872 Singapore  
Phone +65(0)67 47 06 11  
[sgp.ps@georgfischer.com](mailto:sgp.ps@georgfischer.com)  
[www.georgfischer.sg](http://www.georgfischer.sg)

### Spain/Portugal

Georg Fischer S.A.  
28046 Madrid  
Phone +34(0)91 781 98 90  
[es.ps@georgfischer.com](mailto:es.ps@georgfischer.com)  
[www.georgfischer.es](http://www.georgfischer.es)

### Sweden

Georg Fischer AB  
117 43 Stockholm  
Phone +46(0)8 506 775 00  
[info.se.ps@georgfischer.com](mailto:info.se.ps@georgfischer.com)  
[www.georgfischer.se](http://www.georgfischer.se)

### Switzerland

Georg Fischer  
Rohrleitungssysteme [Schweiz] AG  
8201 Schaffhausen  
Phone +41(0)52 631 30 26  
[ch.ps@georgfischer.com](mailto:ch.ps@georgfischer.com)  
[www.piping.georgfischer.ch](http://www.piping.georgfischer.ch)

### Taiwan

Georg Fischer Piping Systems  
San Chung City, Taipei Hsien  
Phone +886 2 8512 2822  
Fax +886 2 8512 2823  
[www.georgfischer.tw](http://www.georgfischer.tw)

### United Kingdom/Ireland

George Fischer Sales Limited  
Piping Systems Ltd  
Coventry, CV2 2ST  
Phone +44(0)2476 535 535  
[uk.ps@georgfischer.com](mailto:uk.ps@georgfischer.com)  
[www.georgfischer.co.uk](http://www.georgfischer.co.uk)

### USA/Caribbean

Georg Fischer LLC  
Tustin, CA 92780-7258  
Phone +1(714) 731 88 00  
Toll Free 800 854 40 90  
[us.ps@georgfischer.com](mailto:us.ps@georgfischer.com)  
[www.gfpiping.com](http://www.gfpiping.com)

### Vietnam

Georg Fischer Pte Ltd  
136E Tran Vu, Ba Dinh District, Hanoi  
Phone +84 4 3715 3290  
Fax +84 4 3715 3285

### International

Georg Fischer  
Piping Systems [Switzerland] Ltd.  
8201 Schaffhausen/Switzerland  
Phone +41(0)52 631 30 03  
Fax +41(0)52 631 28 93  
[info.export@georgfischer.com](mailto:info.export@georgfischer.com)  
[www.export.georgfischer.com](http://www.export.georgfischer.com)