GIBSON valves

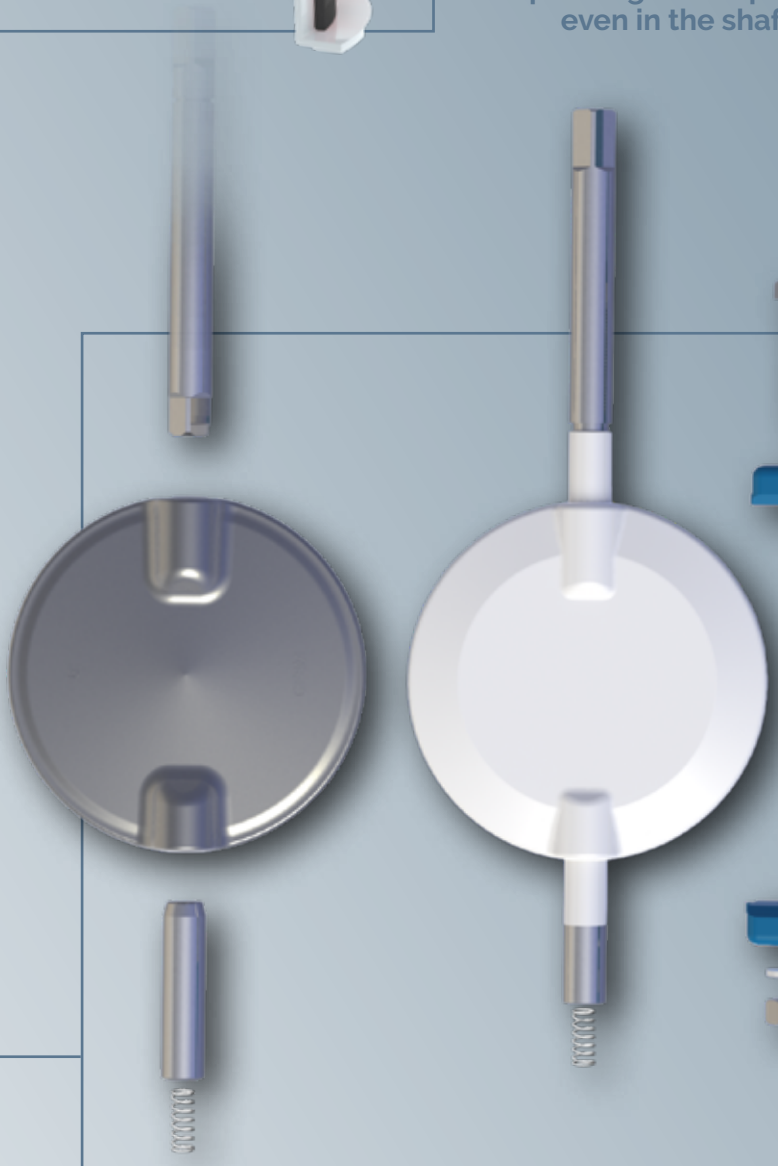
Butterfly valves

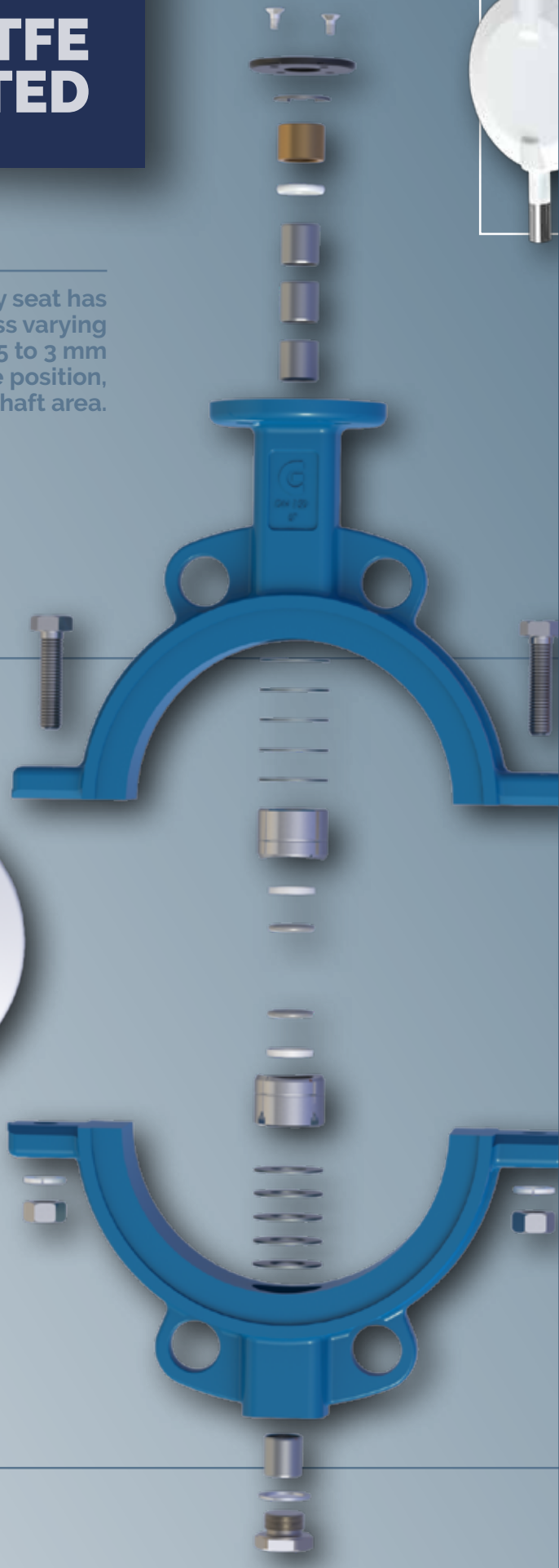
PTFE Seated

Butterfly valves

PTFE SEATED

PTFE body seat has a thickness varying from 2,5 to 3 mm depending on the position, even in the shaft area.





Two silicon half rings increase and ensure elasticity up to highest working temperatures.

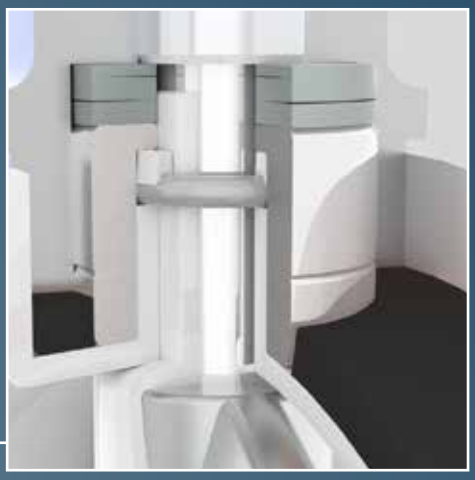
Discs are available in stainless steel (AISI316, HASTELLOY®, DUPLEX®, SUPERDUPLEX®, INCONEL®, etc.), and in stainless steel coated with HALAR® or PTFE.

Standard shafts are in AISI316 stainless teel (Monel® or other materials on request).

Belleville washers ensure the sealing in the upper plane of the disc.

Furthermore a double packing consisting in a FEP coated FKM O Ring and a PTFE C-ring will avoid any leakage along the shaft.

In the TT-valve series the PTFE lining covers the shaft beyond the FEP coated FKM O Ring so that the fluid never contacts the metal core of the disc.



Butterfly valves

PTFE SEATED

Ghibson PTFE seated butterfly valves TT series are available in a wide range of materials combinations, and specifically designed for the chemical industry and heavy duty applications.

TT Series 1
- technical data 1
- components DN 40-300 2
  Stainless steel disc 2
- components DN 50-300 3
  Stainless steel + PTFE disc 3
- components DN 350-600 4
  Stainless steel disc 4
  Stainless steel + PTFE disc 5
- dimensions 6
- torque values 7

Flanges 8

Bolts and rods dimensions 9

Installation instructions 10

Tests 10

Handlever 11

Gearbox 12

Actuators coupling 13
- pneumatic actuators 13
- declutchable gearboxes 13

DVP DIGITAL VALVES PLATFORM
visit **ghibson.it/dvp** to download 2D and 3D technical drawing.

GHIBSON
Zola Predosa
Bologna

Ghibson Italia srl reserves the right to change and/or update data/content without previous notice.

BUTTERFLY VALVES PTFE seat

BVTT - Wafer
DN040-600 . 1" 1/2 -24"

BLTT - Lug
DN050-600 . 2"-24"

Max working pressure

type	DN	Pmax	disc	vacuum	Flanges
Wafer	DN040	16bar	inox	Y	PN 10-16 • A150
Wafer Lug	DN050÷200	16bar	inox	Y	PN 10-16 • A150
Wafer Lug	DN050÷200	16bar	inox+PTFE	N	PN 10-16 • A150
Wafer Lug	DN250÷300	10bar	inox	Y	PN 10-16 • A150
Wafer Lug	DN250÷300	10bar	inox+PTFE	N	PN 10-16 • A150
Wafer Lug	DN350÷400	10bar	inox	Y	PN 10-16 • A150
Wafer Lug	DN350÷400	10bar	inox+PTFE	N	PN 10-16 • A150
Wafer Lug	DN500÷600	6bar	inox	Y	PN 10-16 • A150
Wafer Lug	DN500÷600	6bar	inox+PTFE	N	PN 10-16 • A150

Design:
EN 593 ~ EN 736 ~ EN 12516 ~ EN 1092
ISO 5211 ~ DIN 3337 ~ API 609
PED 2014/68/EU - Mod. H

Face to face:
DIN EN 558 Series 20 ~ ISO 5752 Series 20
BS-5155 Series 4 ~ MSS-SP67
API 609 cat. A ~ NFE 29305-1

Testing:
EN 12266-1 Rate A (supersedes DIN 3230)
ISO 5208 Rate A ~ API 598

Tag:
EN 19 ~ MSS SP-25

All valves are supplied with a metallic label in compliance with PED directive.

The thickness of the PTFE body seat varies from 2,5 to 3 mm depending on the position

TYPE APPROVAL

SIL safety integrity level

0497 [PED]

II 2GD Ex h X
X (see ATEX accompanying instructions)

TÜV TA-Luft

BODY

material	references	standard coating	lug	wafer
Ductile iron (wafer, lug)	EN-GJS 400-15 (GS400)	Epoxy RAL 5009	50-600	40-600
Carbon steel (wafer only)	EN 1.0619 (ASTM A216-WCB)	Epoxy RAL 9005	-	50-600
Stainless steel (wafer only)	EN 1.4408 (ASTM A351 CF8M)	-	-	50-600

DISC

material	references	standard coating	coating on request	DN
Stainless steel	EN 1.4408 (ASTM A351 CF8M)	-	HALAR®	40-600
Stainless steel	A747 CB7Cu-1 + PTFE	PTFE	-	50-600
Hastelloy®	EN 2.4602 (ASTM A494 CX2MW)	-	-	40-600
Super Duplex	EN 1.4469 (A890 Gr. 5A)	-	-	40-600

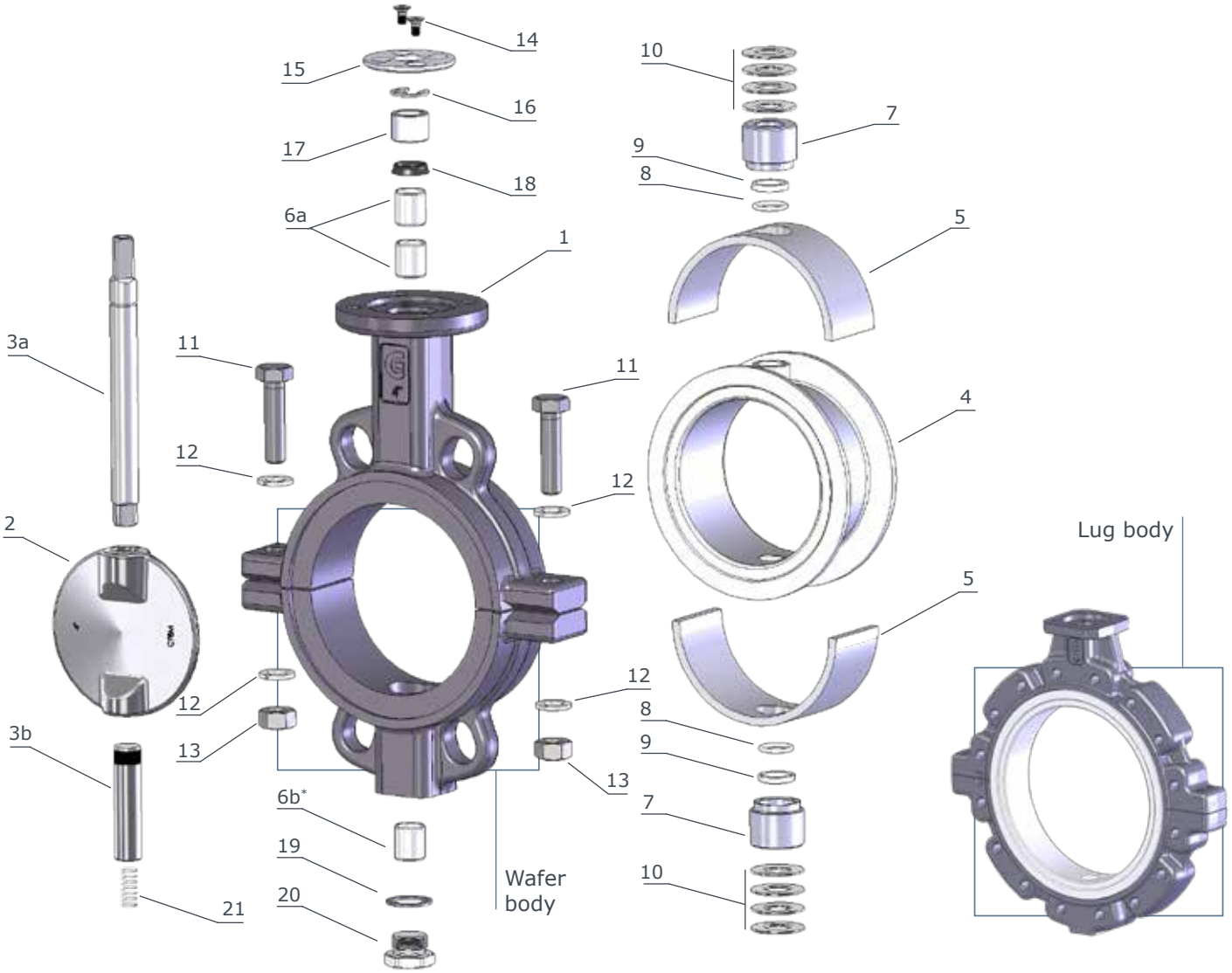
BODY SEAT

ref.	designation	trade name	working temp.	appications
PTFE	polytetrafluorethylene	TEFLON®	-55°C / +200°C	acids, foods, solvents

On request can be supplied other materials as: LCB, Hastelloy, Uranus, Alloy, SuperDuplex, Special steels.
Coating on request: Halar®, Chenisil®, PFA

BVTT DN040-300 . 1" 1/2 - 12"
BLTT DN050-300 . 2" - 12"
PN 10-16 • ANSI 150

Stainless steel EN 1.4408~CF8M (A316) disc



item	q.ty	part	material
1	1	body	• EN-GJS400-15 (GS400) • EN 1.069~ A216-WCB (wafer only) • A351-CF8M (wafer only)
2	1	disc	• A351 - CF8M (AISI 316) • HALAR® (on request)
3a	1	upper shaft	• EN 1.4401~ AISI 316
3b	1	lower shaft	• EN 1.4401~ AISI 316
◇4	1	body seat	• PTFE
◇5	1	elastic support	• silicon
6a	2	bush upper shaft	• steel + PTFE
6b *	1*	bush lower shaft	• steel + PTFE
7	2	housing	• EN 1.4401~ AISI 316
◇8	2	O. Ring	• FEP + FKM (VITON®)
◇9	2	C. Ring	• PTFE
10	2	springs set	• steel

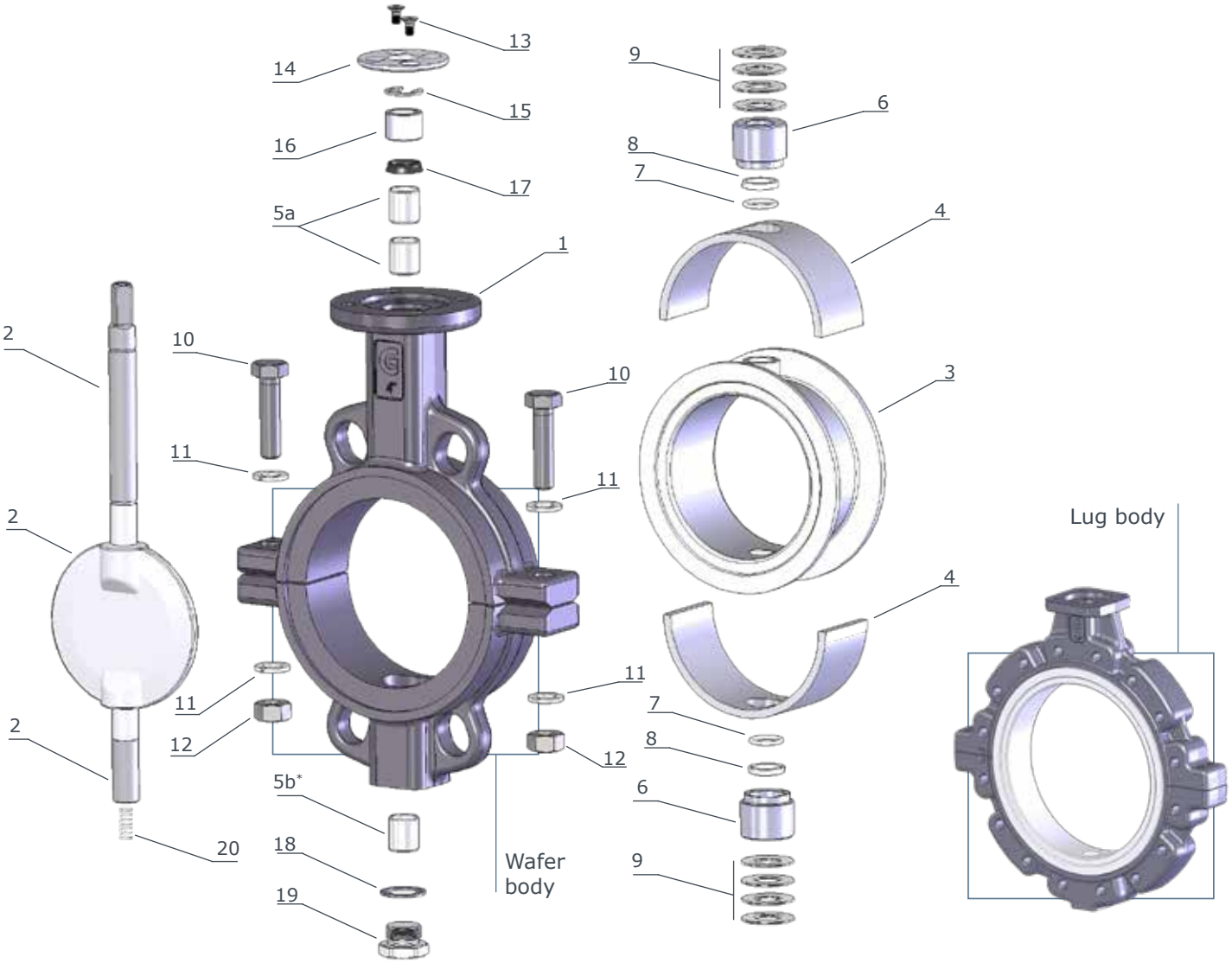
item	q.ty	part	material
11	2	screw	• 8.8 zinc plated steel • A4~A316 (body CF8M)
12	4	washer	• 8.8 zinc plated steel • A4~A316 (body CF8M)
13	2	screw nut	• 8.8 zinc plated steel • A2~304 (body CF8M)
14	2	screw	• 10.9 zinc plated steel • A4~A316 (body CF8M)
15	1	upper flange	• IXEF (DN 50/150) • aluminium (DN 200/300)
16	1	stop ring	• steel
◇17	1	upper bush	• PFTE
◇18	1	O.Ring	• FKM (VITON®)
19	1	plug packing	• aluminium • PTFE (body CF8M)
20	1	threaded plug	• zinc plated steel • 1.4401~A316 (body CF8M)
21	1	spring	• 1.4401~A316 (antistatic device)

* *only DN200/300*

◇ *parts included in spare kit*

BVTT - Wafer **BLTT** - Lug
DN 50 - 300 • 2" - 12"
PN 10-16 • ANSI 150

disc A747 CB7Cu-1 +PTFE



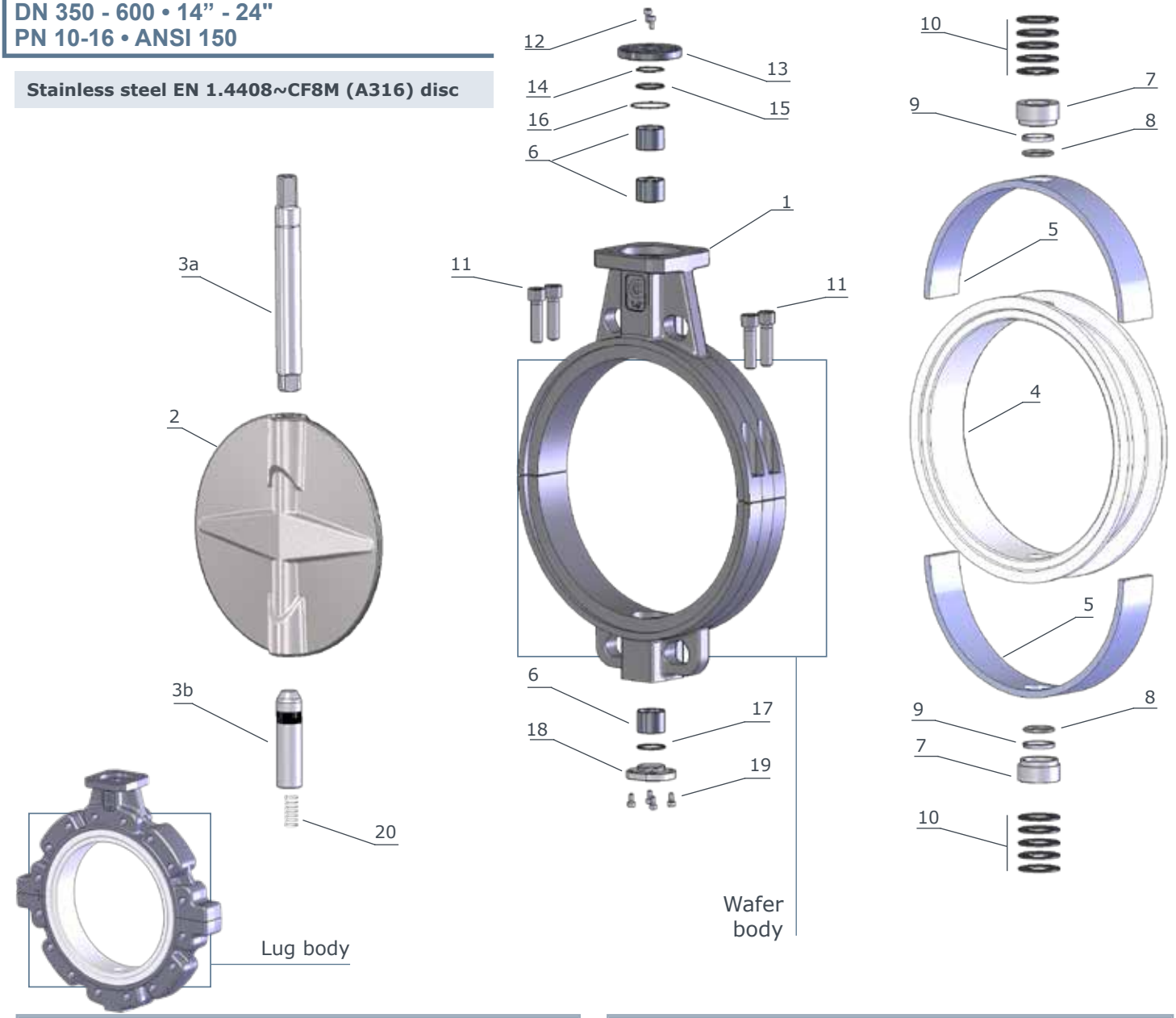
item	q.ty	part	material
1	1	body	• EN-GJS400-15 (GS400) • EN 1.069~ A216-WCB (wafer only) • A351-CF8M (wafer only)
◇2	1	disc - shafts	• A747 CB7Cu-1 + PTFE
◇3	1	body seat	• PTFE
◇4	1	elastic support	• silicon
5a	1	bush upper shaft	• steel + PTFE
5b *	1	bush lower shaft	• steel + PTFE
6	2	housing	• EN 1.4401~A316
◇7	1*	O. Ring	• FEP + FKM (VITON®)
◇8	2	C. Ring	• PTFE
9	2	springs set	• steel
10	2	screw	• 8.8 zinc plated steel • A4~A316 (body CF8M)

item	q.ty	part	material
11	2	washer	• 8.8 zinc plated steel • A4~A316 (body CF8M)
12	2	screw nut	• 8.8 zinc plated steel • A2~304 (body CF8M)
13	4	screw	• 8.8 zinc plated steel • A2~316 (body CF8M)
14	2	upper flange	• IXEF (DN 50/150) • aluminium (DN 200/300)
15	2	stop ring	• steel
◇16	1	upper bush	• PFTE
◇17	1	O.Ring	• FKM (VITON®)
18	1	plug packing	• aluminium • PTFE (body CF8M)
19	1	threaded plug	• zinc plated steel • 1.4401~A316 (body CF8M)
20	1	spring	• 1.4401~A316 (antistatic device)

** only DN200/300* ◇ *parts included in spare kit*

BVTT - Wafer **BLTT** - Lug
DN 350 - 600 • 14" - 24"
PN 10-16 • ANSI 150

Stainless steel EN 1.4408~CF8M (A316) disc



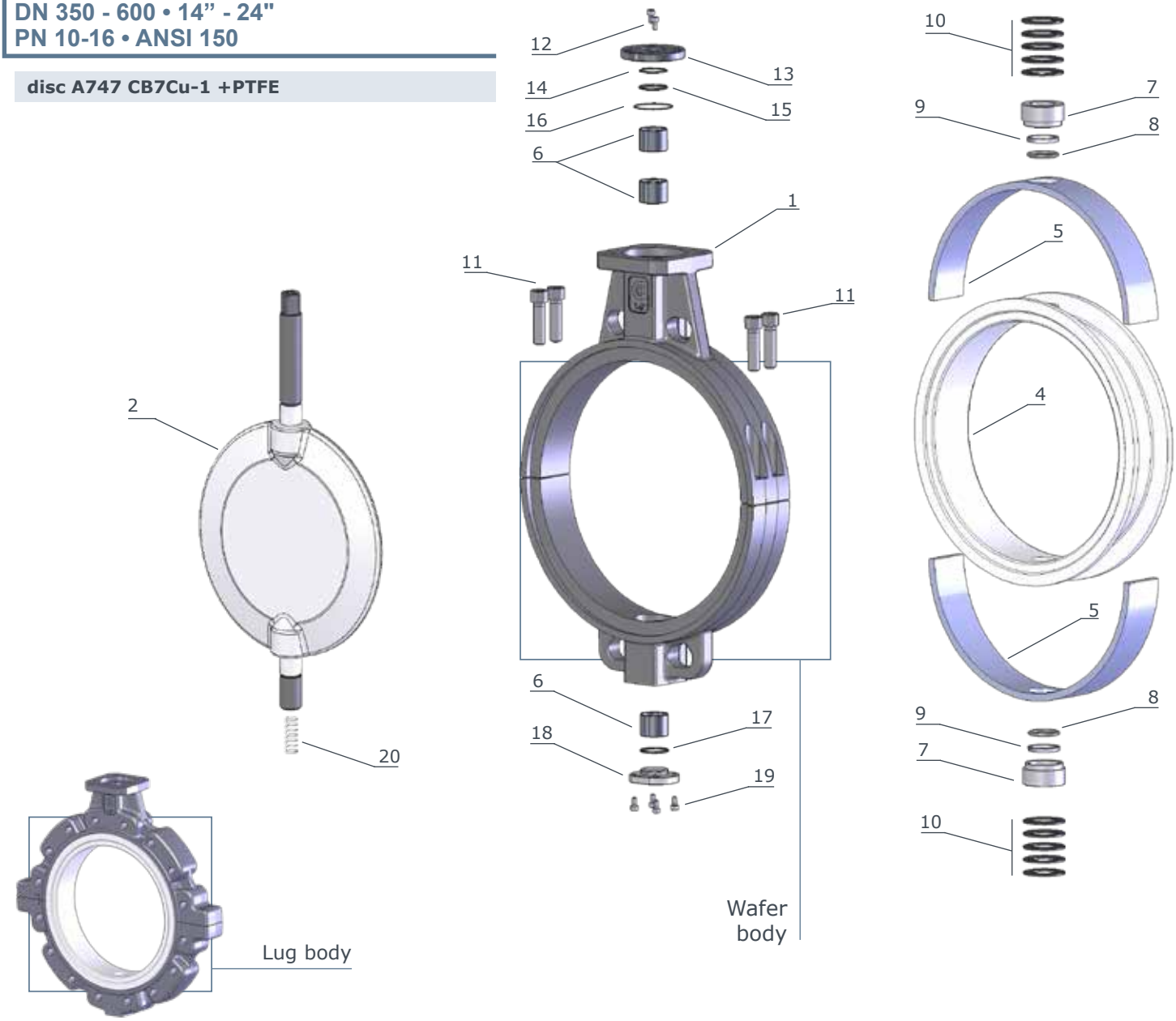
item	q.ty	part	material
1	1	body	• EN-GJS400-15 (GS400) • EN 1.069~ A216-WCB (wafer only) • EN 1.4408~CF8M (A316) wafer only
2	1	disc	• EN 1.4408~CF8M (A316) • HALAR® (on request)
3a	1	upper shafts	• EN 1.4401~AISI 316
3b	1	lower shafts	• EN 1.4401~AISI 316
◇4	1	body seat	• PTFE
◇5	1	elastic support	• silicon
6	3	bush shaft	• A105 + PTFE
7	2	housing	• EN 1.4401~ AISI 316
◇8	2	O. Ring	• FEP + FKM (VITON®)
◇9	2	C. Ring	• PTFE
10	2	springs set	• steel
11	4	screw	• 8.8 zinc plated steel • A4~A316 (body CF8M)

item	q.ty	part	material
12	2	screw	• 8.8 zinc plated steel • A4~A316 (body CF8M)
13	1	upper flange	• zinc plated steell • 1.4401~A316 (body CF8M)
◇14	1	O.Ring	• FKM (VITON®)
15	1	stop ring	• steel
◇16	1	O.Ring	• FKM (VITON®)
◇17	1	O.Ring	• FKM (VITON®)
18	1	lower flange	• zinc plated steel • 1.4401~A316 (body CF8M)
19	4	screw	• 8.8 zinc plated steel • A4~A316 (body CF8M)
20	1	spring	• 1.4401~A316 (antistatic device)

◇ *parts included in spare kit*

BVTT - Wafer **BLTT** - Lug
DN 350 - 600 • 14" - 24"
PN 10-16 • ANSI 150

disc A747 CB7Cu-1 +PTFE

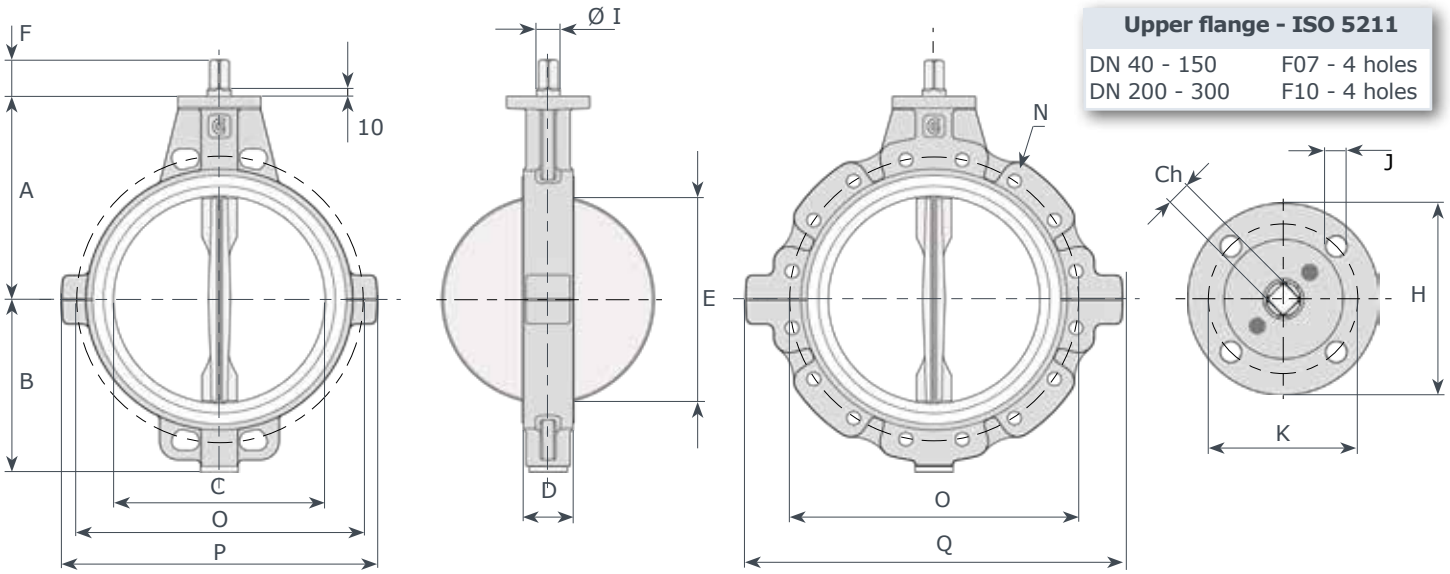


item	q.ty	part	material
1	1	body	• EN-GJS400-15 (GS400) • EN 1.069~ A216-WCB (wafer only) • EN 1.4408~CF8M (A316) wafer only
2	1	disc	• A747 CB7Cu-1 + PTFE
◇4	1	body seat	• PTFE
◇5	1	elastic support	• silicon
6	3	bush shaft	• A105 + PTFE
7	2	housing	• EN 1.4401~ AISI 316
◇8	2	O. Ring	• FEP + FKM (VITON®)
◇9	2	C. Ring	• PTFE
10	2	springs set	• steel
11	4	screw	• 8.8 zinc plated steel • A4~A316 (body CF8M)

item	q.ty	part	material
12	2	screw	• 8.8 zinc plated steel • A4~A316 (body CF8M)
13	1	upper flange	• zinc plated steel • 1.4401~A316 (body CF8M)
◇14	1	O.Ring	• FKM (VITON®)
15	1	stop ring	• steel
◇16	1	O.Ring	• FKM (VITON®)
◇17	1	O.Ring	• FKM (VITON®)
18	1	lower flange=	• zinc plated steel • 1.4401~A316 (body CF8M)
19	4	screw	• 8.8 zinc plated steel • A4~A316 (body CF8M)
20	1	spring	• 1.4401~A316 (antistatic device)

◇ *parts included in spare kit*

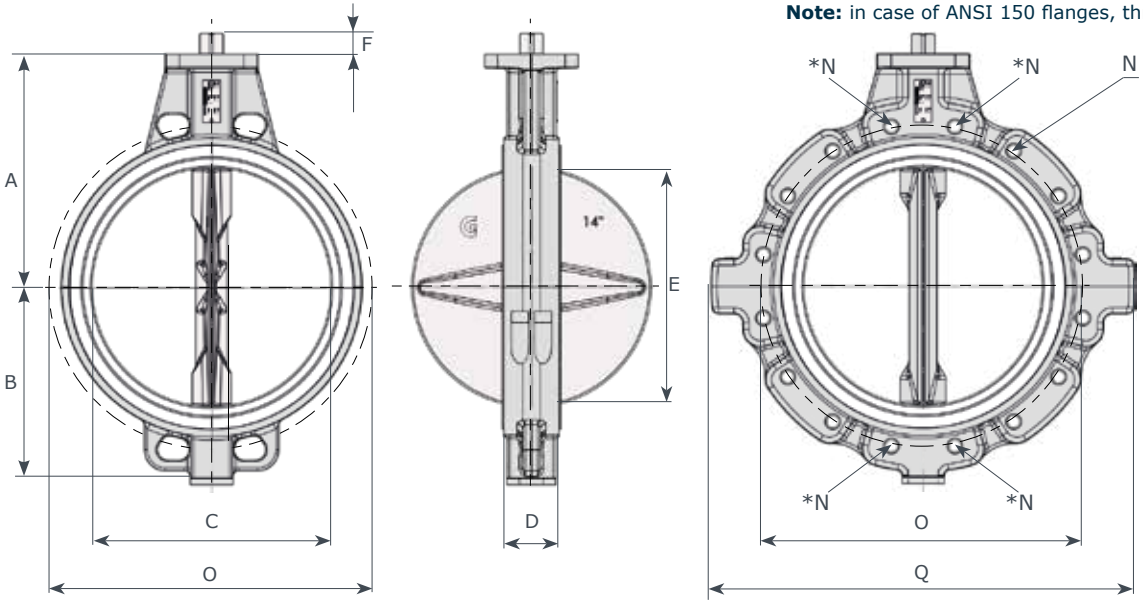
BVTT - Wafer **BLTT** - Lug



Upper flange - ISO 5211	
DN 40 - 150	F07 - 4 holes
DN 200 - 300	F10 - 4 holes

DN	"	A	B	C	D	E	F	Ø I	Ch	H	K	J	P	Q	PN 10			PN 16			ANSI 150			Kg.	
															N	n.	O	N	n.	O	N	n.	O	wafer	lug
40	1 1/2	130	75	49	33	36	34	14	11	90	70	9	-	-	M16	4	110	M16	4	110	M14	4	98.4	3	-
50	2	138	81	55	43	35	34	14	11	90	70	9	165	165	M16	4	125	M16	4	125	M16	4	120.7	3.4	3.9
65	2 1/2	144	98	68	46	50	34	14	11	90	70	9	186	186	M16	8	145	M16	8	145	M16	4	139.7	4.1	4.7
80	3	158	110	81	46	67	34	14	11	90	70	9	196	242	M16	8	160	M16	8	160	M16	4	152.4	4.4	7.6
100	4	173	128	101	52	87	34	16	11	90	70	9	220	270	M16	8	180	M16	8	180	M16	8	190.5	6.8	8.4
125	5	186	140	126	56	113	34	18	14	90	70	9	250	297	M16	8	210	M16	8	210	M20	8	215.9	8.8	11.2
150	6	202	155	150	56	140	34	18	14	90	70	9	278	321	M20	8	240	M20	8	240	M20	8	241.3	10.5	12.9
200	8	240	190	200	60	191	38	22	17	125	102	11	355	420	M20	8	295	M20	12	295	M20	8	298.5	15.2	25.0
250	10	270	220	250	68	241	38	30	22	125	102	11	398	472	M20	12	350	M24	12	355	M22	12	362.0	24.5	30.0
300	12	300	247	298	78	289	38	30	22	125	102	11	455	540	M20	12	400	M24	12	410	M22	12	431.8	32.0	45.0

Note: in case of ANSI 150 flanges, threading can be ANSI B1.1 UNC2B



***Note:** WAFER bodies DN600 have 4 holes N threaded as relevant LUG version

Upper flange ISO 5211	
DN350-400	F12-4 fori
DN500	F14/16 - 4 fori
DN600	F16-4 fori

DN	"	A	B	C	D	E	F	Ø I	Ch	H	K	J	Q	PN10			PN16			ANSI150			kg.	
														N	n.	O	N	n.	O	N	n.	O	wafer	lug
350	14	330	280	341	78	332	28	35	27	150	125	14	600	M20	16	460	M24	16	470	M24	12	476.3	54	73
400	16	355	305	390	102	376	28	40	27	150	125	14	690	M24	16	515	M27	16	525	M27	16	539.8	68	104
500	20	422	366	485	127	479	37	45	36	210	140/165	18/22	820	M24	20	620	M30	20	650	M27	20	635.0	149	179
600	24	495	460	595	154	575	47	60	46	210	165	22	940	M27	20	725	M33	20	770	M33	20	749,3	215	310

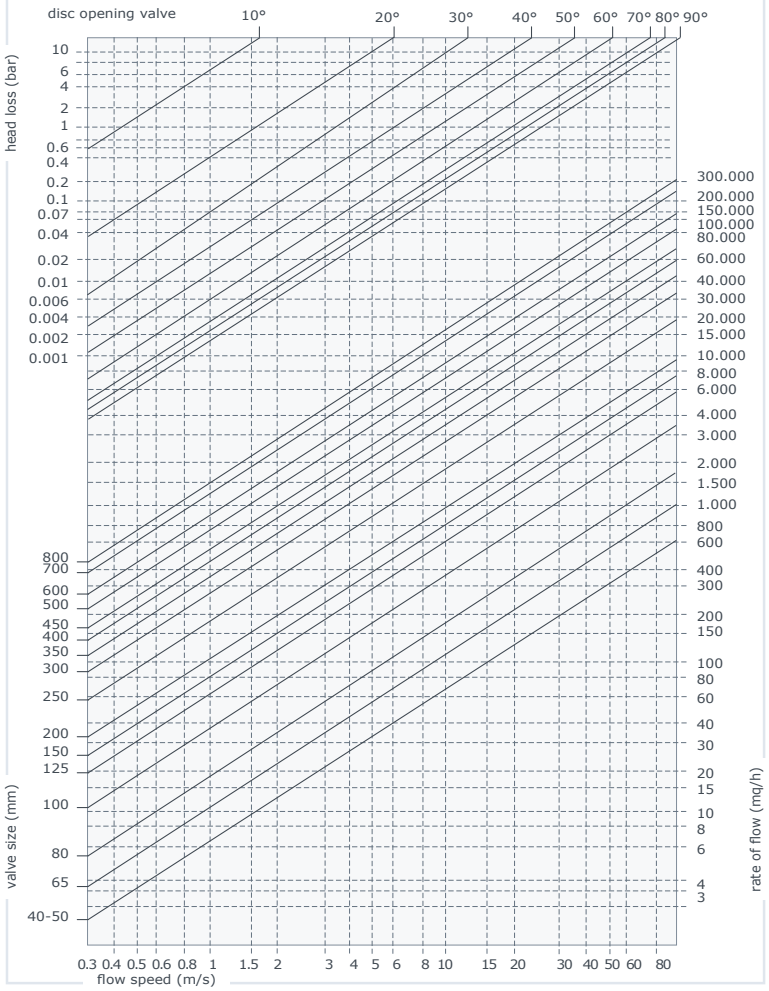
TT Series - Torque values - Nm - safety factor excluded

disc: EN 1.4408~CF8M (A316) fluid H_2O - 20°C working pressure BAR													
DN	0	6	10	16	DN	0	6	10	16	DN	0	6	10
40	5	9	13	20	125	65	70	85	100	350	400	450	550
50	13	16	19	28	150	60	65	94	105	400	700	800	1000
65	20	28	35	38	200	128	153	188	250	500	980	1250	-
80	35	45	52	65	250	190	232	296	-	600	1805	2470	-
100	40	60	70	75	300	214	296	366	-	-	-	-	-

disc: St. Steel + PTFE fluid H2O - 20°C working pressure BAR													
DN	0	6	10	16	DN	0	6	10	16	DN	0	6	10
40	-	-	-	-	125	50	60	75	85	350	500	540	590
50	14	16	18	25	150	60	70	90	100	400	750	850	1030
65	16	20	23	28	200	122	145	180	219	500	950	1240	-
80	26	40	49	55	250	180	220	280	-	600	1950	2550	-
100	35	51	62	66	300	205	280	350	-	-	-	-	-

Notes: values indicated in this page is only for information

Head losses



Formulae for calculation of rate flow

Liquids: $Q = \frac{KV}{\sqrt{\frac{PS}{\Delta P}}}$

Q rate of flow (m^3/h)
PS specific gravity (water=1)
ΔP pressure drop (bar)

Gas: $Q = 28.5 \frac{KV}{\sqrt{\frac{PS}{P_2 \cdot \Delta P}}}$

Q rate of flow (m^3/h)
PS specific gravity (air=1)
ΔP pressure drop (bar)
(less than 1/2 inlet pressure)
P_2 outlet pressure

Steam: $Q = 22.5 \cdot KV \cdot \sqrt{P_2 \cdot \Delta P}$

Q rate of flow (Kg/h)
ΔP pressure drop (bar)
(less than 1/2 inlet pressure)
P_2 outlet pressure

Calculation of the rate of flow equivalent to H_2O:

$Qe = Q \sqrt{\frac{d}{1000}}$

For different liquid, gas or steam head losses are determined by equivalent water rate of flow, as follows:

Qe equivalent water flow *(mc/l o l/s)*
Q fluid flow *(mc/l o l/s)*
d fluid specific gravity *(Kg/mc)*

Values KV (CV = 1,16 KV)													
angle	40/50	65	80	100	125	150	200	250	300	350	400	500	600
5°	-	-	-	-	-	-	-	-	-	53	68	106	207
10°	-	-	-	-	-	-	-	21	49	123	161	246	629
15°	0,2	0,6	1,8	2,4	4,2	5,6	14	80	188	228	299	457	1168
20°	0,9	2,5	5,2	9,5	15	23	110	156	280	315	412	630	2010
25°	3	6,1	12	22	38	61	125	225	354	457	597	914	2735
30°	6,1	11	21	39	69	112	211	310	381	661	863	1320	5080
35°	9,9	18	33	60	105	166	303	433	521	890	1162	1778	6254
40°	15	27	49	88	148	228	405	591	742	1184	1547	2366	9700
45°	21	38	68	121	199	303	528	774	987	1552	2028	3102	11581
50°	29	51	91	159	262	394	679	988	1252	2008	2620	4010	15000
55°	39	68	119	207	338	505	863	1247	1571	2548	3318	5090	17765
60°	53	90	156	269	434	641	1085	1591	2059	3225	4202	6442	22200
65°	72	121	209	357	565	820	1364	2065	2807	3983	5196	7957	26077
70°	92	161	283	487	768	1097	1788	2715	3744	5195	6775	10377	34500
75°	109	209	381	662	1059	1507	2425	3625	4935	6964	9084	13912	39546
80°	115	240	457	815	1303	1861	3043	4768	6831	9301	12142	18578	47560
85°	115	253	502	906	1457	2008	3642	4890	8230	10280	13408	20533	52566
90°	116	257	508	925	1492	2168	3838	5010	9233	10792	14082	22024	56381

Flanges to be used

EN1092-1
Tipo 11

UNI
2280/81
2282/67

DIN
2631
2632
2633

A150
B16.5
welding neck

EN1092-1
Tipo 01

UNI
2276/77
2278/67

DIN
2575
2576
2577

A150
B16.5
slip on

EN1092-1
Tipo 02/32

UNI
6088/89
6090

DIN
2641
2642
2643

EN1092-1
Tipo 04/34

UNI
2289/90
2291

DIN
2672
2673
2674

Compatibility flanges - body Wafer

DN	EN 1092-1 / EN 1092-2					ASME/ANSI			BS 10		JIS B2220		
	PN 6	PN 10	PN 16	PN 25	PN 40	class 125	class 150	class 300	tab D	tab E	5K	10K	16K
40	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓
50	●	✓	✓	✓	✓	✓	✓	✗	●	●	●	✓	✗
65	●	✓	✓	✓	✓	✓	✓	●	●	●	●	✓	●
80	●	✓	✓	✓	✓	✓	✓	✗	●	●	●	●	✓
100	●	✓	✓	✗	✗	✓	✓	✗	●	✗	●	●	✓
125	●	✓	✓	✗	✗	✓	✓	✗	✓	✓	●	●	✓
150	●	✓	✓	●	●	✓	✓	✗	●	●	●	✓	✗
200	●	✓	✓	✗	✗	✓	✓	✗	✓	✓	●	●	✓
250	●	✓	✓	●	●	✓	✓	✗	✗	✓	✓	✓	●
300	●	✓	✓	✗	✗	✓	✓	✗	✓	✓	●	●	✗
350	●	✓	✓	✗	✗	✓	✓	✗	✓	✓	✗	✗	●
400	✗	✓	✓	✗	✗	✓	✓	✗	✗	✗	✗	●	●
500	✗	✓	✓	●	●	✓	✓	✗	✗	✗	✗	✓	●
600	●	✓	✓	●	✗	✓	✓	✗	✗	✗	●	●	✗

✓ standard ● on request
✗ not possible

Compatibility flanges - body Lug

DN	EN 1092-1 / EN 1092-2					ASME/ANSI			BS 10		JIS B2220		
	PN 6	PN 10	PN 16	PN 25	PN 40	class 125	class 150	class 300	tab D	tab E	5K	10K	16K
50	●	✓	✓	✓	✓	✓	✓	✗	●	●	●	●	✗
65	●	✓	✓	✓	✓	✓	✓	✗	●	●	●	✓	●
80	●	✓	✓	✓	✓	✓	✓	✗	●	●	●	●	●
100	✗	✓	✓	●	●	✓	✓	✗	✗	●	●	●	●
125	●	✓	✓	●	●	✓	✓	✗	✓	✓	●	●	●
150	●	✓	✓	●	●	✓	✓	✗	●	●	●	✓	✗
200	●	✓	✓	✗	✗	✓	✓	✗	✓	✓	●	●	●
250	●	✓	✓	●	✗	✓	✓	✗	✗	✓	●	●	✗
300	●	✓	✓	✗	✗	✓	✓	✗	✓	✓	●	✗	✗
350	●	✓	✓	✗	✗	✓	✓	✗	✓	✓	●	●	●
400	●	✓	✓	●	✓	✓	✓	✗	✗	✗	●	●	●
500	●	✓	✓	●	✓	✓	✓	✗	✗	✗	●	●	●
600	●	✓	✓	●	✗	✓	✓	✗	✗	✗	●	✗	✗

✓ standard ● on request
✗ not possible

Bolts and rods dimensions

DN	Wafer valves								
	PN 10			PN 16			ANSI 150		
	Bolts	Rods	N°	Bolts	Rods	N°	Bolts	Rods	N°
40	M16x90	M16x100	4	M16x90	M16x100	4	M14x90	M14x110	4
50	M16x100	M16x120	4	M16x100	M16x120	4	M16x100	M16x130	4
65	M16x110	M16x130	8	M16x110	M16x130	8	M16x110	M16x140	4
80	M16x110	M16x130	8	M16x110	M16x130	8	M16x120	M16x150	4
100	M16x120	M16x140	8	M16x120	M16x140	8	M16x120	M16x150	8
125	M16x120	M16x150	8	M16x120	M16x150	8	M20x130	M20x160	8
150	M20x130	M20x160	8	M20x130	M20x160	8	M20x140	M20x160	8
200	M20x140	M20x170	8	M20x140	M20x170	12	M20x150	M20x170	8
250	M20x150	M20x180	12	M24x150	M24x180	12	M22x160	M22x190	12
300	M20x160	M20x190	12	M24x160	M24x190	12	M22x170	M22x210	12
350	M20x160	M20x190	16	M24x170	M24x200	16	M24x180	M24x220	12
400	M24x190	M24x220	16	M27x210	M27x240	16	M27x210	M27x250	16
500	M24x210	M24x240	20	M30x240	M30x280	20	M27x250	M27x290	20
600	M27x250	M27x290	16	M33x270	M33x320	16	M33x290	M33x340	16
	* M27x75	-	8	* M33x85	-	8	* M33x95	-	8

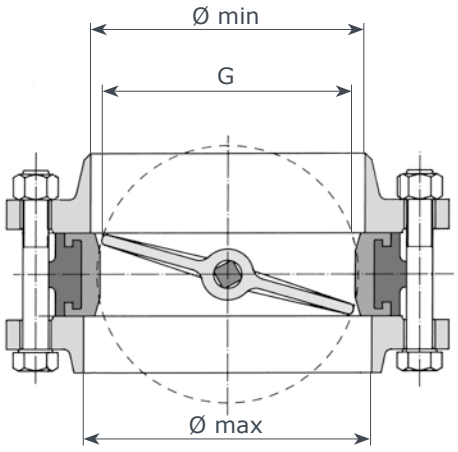
* Valves DN600 (both LUG and WAFER execution) have 4 threaded blind holes each side, therefore screws marked with * are to be used.

DN	Lug valves					
	PN 10		PN 16		ANSI 150	
	Bolts	N°	Bolts	N°	Bolts	N°
50	M16x35	8	M16x35	8	M16x35	8
65	M16x40	16	M16x40	16	M16x40	8
80	M16x40	16	M16x40	16	M16x40	8
100	M16x40	16	M16x40	16	M16x45	16
125	M16x45	16	M16x45	16	M20x50	16
150	M20x45	16	M20x45	16	M20x50	16
200	M20x50	16	M20x50	24	M20x55	16
250	M20x55	24	M24x55	24	M22x60	24
300	M20x60	24	M24x60	24	M22x60	24
350	M20x60	32	M24x65	32	M24x65	24
400	M24x70	32	M27x70	32	M27x80	32
500	M24x80	40	M30x80	40	M27x90	40
600	M27x90	32	M33x100	32	M33x100	32
	* M27x75	8	* M33x85	8	* M33x95	8

* Valves DN600 (both LUG and WAFER execution) have 4 threaded blind holes each side, therefore screws marked with * are to be used.

NOTE 1: Screw and rod dimensions have been calculated with WELDING NECK flanges PN 10/16 (EN1092-1 Tipe 11) ANSI150 (ANSI B16.5)

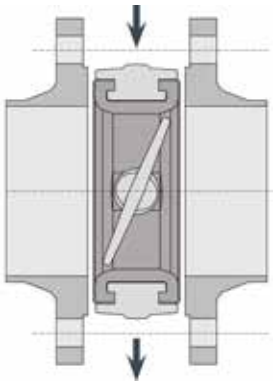
NOTE 2: Number of nMTS should be double when WAFER valves are assembled with threaded rods.



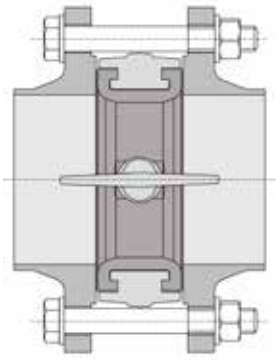
DN	40	50	65	80	100	125	150	200	250	DN	300	350	400	500	600
G	36	35	50	67	87	113	140	191	241	5°	289	332	376	479	575
Ø min	29	44	60	75	98	122	148	196	244	10°	296	332	378	478	566
Ø max	49	62	80	93	118	146	175	225	275	15°	330	372	422	500	600

Installation

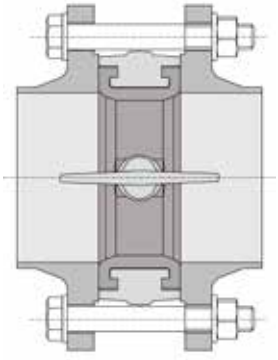
Assembly



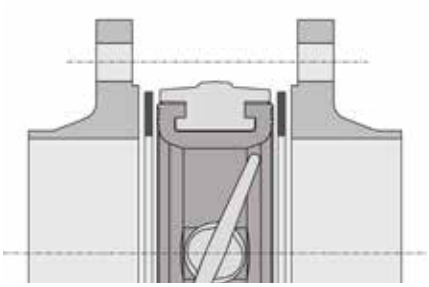
1 - Leave a space between flanges so that valve can be easily inserted and removed.



2 - Open completely the valve before tightening flanges.



3 - Tighten bolts till flanges are in contact with valve body.

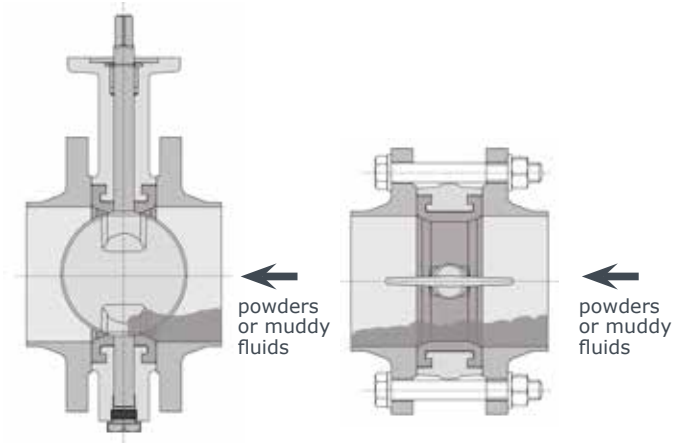


4 - NOTE: do not insert other packing between flange and valve.

NOTE: Weld the pipe only in spots with the valve between flanges.
Remove the valve before finishing welding to avoid that heat damage the seat.
Clean carefully the welding to avoid that slags damage the seat.

Installation for powders and muddy fluids

In case of use with powders or muddy fluids, install the valve with horizontal rotation axis, to allow sediments to flow easily on opening.



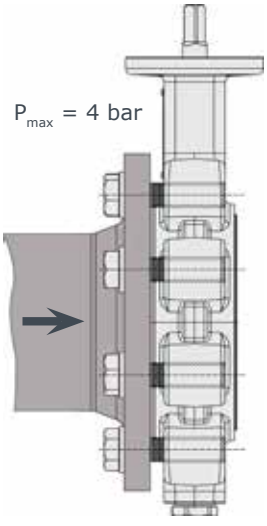
Wrong
Vertical rotation axis

Right
Horizontal rotation axis

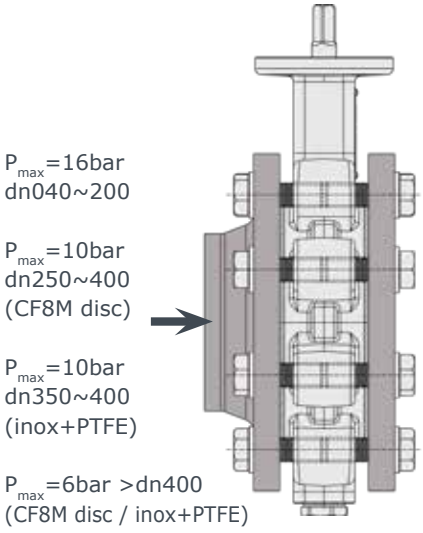
This type of installation is always advisable with valve diameters over DN 400.

End piping installation

When valves are installed end of piping, a counterflange as per dwg type B is needed to secure tightness at max pressure.

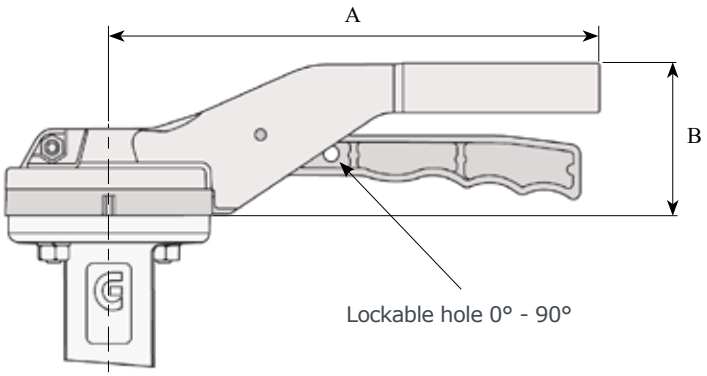


Type A installation with MT end piping



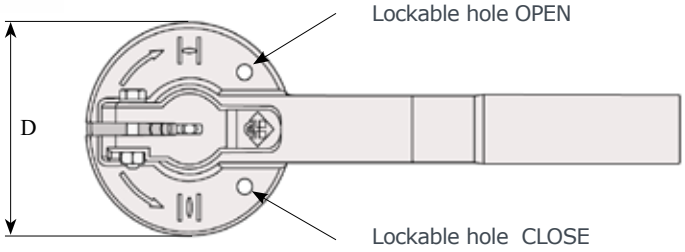
Type B installation with end piping

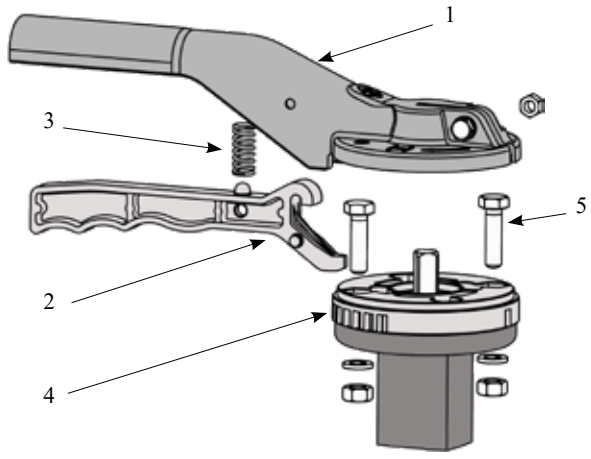
Handlevers



DN	A	B	D	Kg	
				aluminium	st. steel
40 - 100	220	67	93	0.60	1.80
125 - 150	275	67	93	0.65	2.05
200 - 300	340	76	125	1	-

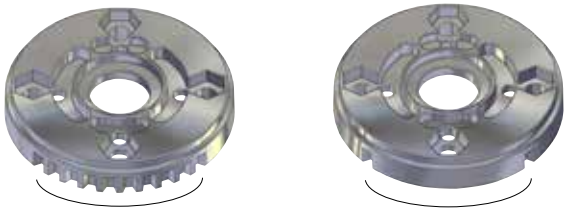
Note: DN 250 - 300 handlever not recommended





		DN40 - 300	DN40 - 150
1	lever	aluminium	EN 1.408~A351
2	trigger	aluminium	EN 1.408~A351
3	spring	stainless steel	stainless steel
4	disc positioning	aluminium	EN 1.408~A351
5	screws	stainless steel	stainless steel

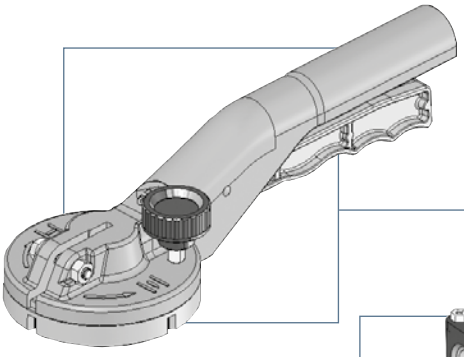
positioning disc DN 40 - 150 designed for flanges ISO 5211 F05/F07



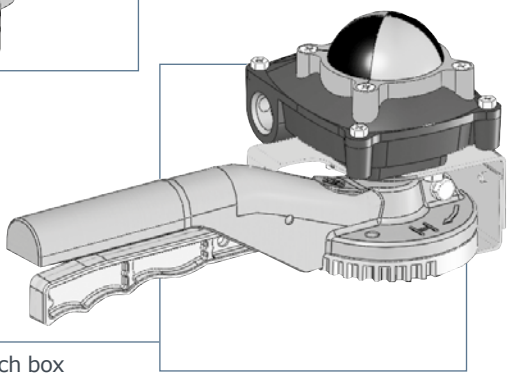
10 positions Open - Closed

positioning disc with two types of regulation: 10 positions or Open/Close

OPTIONALS



Adjustable handlever

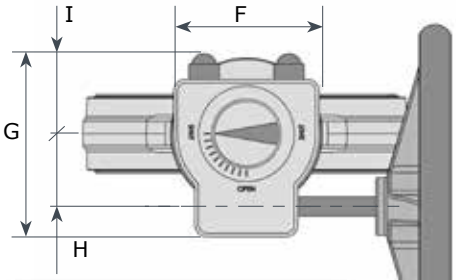


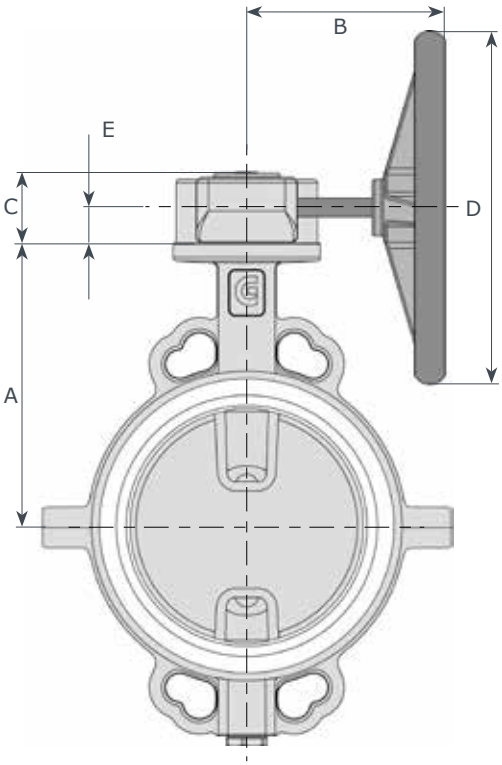
handlever with switch box
(only DN 40/300)

Gearboxes - Aluminium body - HW Series - Cast Iron body - GH Series

HW series

body:	aluminium
worm gears:	steel
sector gear:	ductile iron
shalt:	stainless steel
handwheel:	steel
protection:	IP65
T:	-20 / +120 °C





GH series

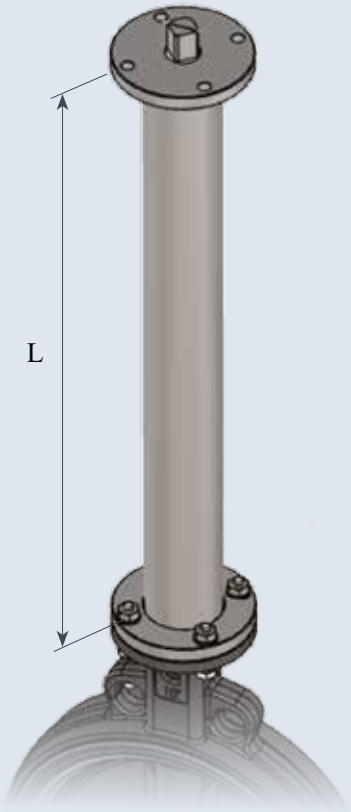
body:	ductile iron
worm gears:	steel
sector gear:	ductile iron
shaft:	steel
handwheel:	steel
protection:	IP67
T:	-20 / +80 °C

low/high temperature execution on request

Waterproof valve shaft extension

When necessary, it's possible to extend the valve shaft as indicated in the figure. Construction is in carbon steel with protective paint (on request stainless steel).

"L" measure shoul be indicated when ordering.



Our tecnical department is available to solve special applications.

Dimensions

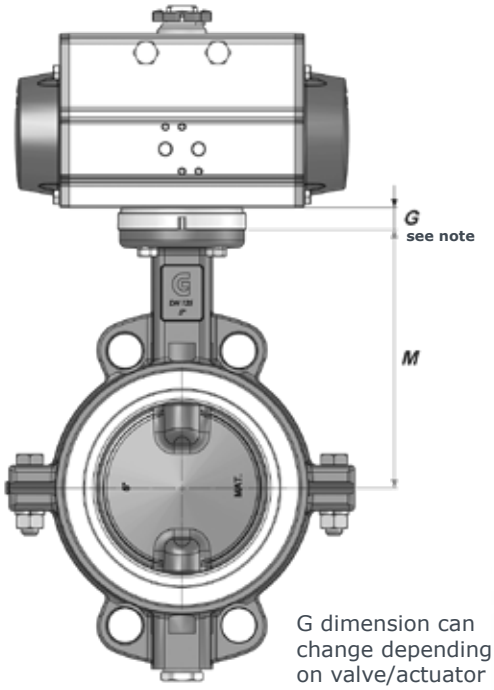
Mod. HW	B	C	D	E	F	G	H		Kg
HW 070	160	48	140	27	80	115	42		1.6
HW 102	215	56	250	33	120	150	60		3
HW 140	250	95	400	51	185	225	80		10
Mod. GH	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**Kg**
GH10	170	64	200	29	90	122.5	44	52.5	2.2
GH20	179	65.5	200	29	125	144	52	65	3.6
GH21	214	73	300	36	125	162	62	74	4.8
GH30	265	89	350	46	150	202	79	89	12
GH55	300	99	400	49.5	210	229	89	105	13
GH88	350	350	500	55	225	267	112	112	20.1

Coupling valve - actuators

DN	"	mod. HW	mod. GH	A
40	$1^{1/2}$	HW070	GH10	138
50	2	HW070	GH10	138
65	$2^{1/2}$	HW070	GH10	144
80	3	HW070	GH10	158
100	4	HW070	GH10	173
125	5	HW070	GH10	186
150	6	HW070	GH10	202
200	8	HW102	GH20	202

DN	"	mod. HW	mod. GH	A
250	10	HW102	GH20	270
300	12	HW102	GH20	300
350	14	HW140	GH30	330
400	16	HW140	GH30	355
DN	**"**	**mod. HW**	**mod. GH**	**A**
500	20	-	GH55	422
DN	**"**	**mod. HW**	**mod. AB**	**A**
600	24	-	GH88	495

Pneumatic actuators: double action / spring return



G dimension can change depending on valve/actuator coupling.

Valve seat: PTFE - Fluid: H20 - T: 20° C air: 5,5 Bar

DN	M	PN 6				PN 10				PN 16			
		DA		SR		DA		SR		DA		SR	
		mod.	G	mod.	G	mod.	G	mod.	G	mod.	G	mod.	G
40	130	VA 52	24	VA 75 SR	16	VA 52	24	VA 75 SR	16	VA 63	20	VA 85 SR	16
50	138	VA 63	20	VA 85 SR	16	VA 63	20	VA 85 SR	16	VA 63	20	VA 100 SR	16
65	144	VA 63	20	VA 85 SR	16	VA 75	20	VA 100 SR	16	VA 75	16	VA 100 SR	16
80	158	VA 75	16	VA 115 SR	16	VA 85	16	VA 115 SR	16	VA 85	16	VA 125 SR	16
100	173	VA 85	16	VA 125 SR	16	VA 85	16	VA 125 SR	16	VA 85	16	VA 125 SR	16
125	186	VA 85	16	VA 125 SR	16	VA 100	16	VA 125 SR	16	VA 100	16	VA 140 SR	14
150	202	VA 85	16	VA 125 SR	16	VA 100	16	VA 140 SR	14	VA 100	16	VA 140 SR	14
200	240	VA 115	14	VA 160 SR	14	VA 125	14	VA 180 SR	14	VA 125	16	VA 200 SR	50
250	270	VA 125	14	VA 200 SR	50	VA 140	14	VA 200 SR	50	-	-	-	-
300	300	VA 140	14	VA 200 SR	50	VA 160	14	VA 230 SR	50	-	-	-	-
350	330	VA 160	0	VA 230 SR	100	VA 180	0	VA 270 SR	100	-	-	-	-
400	355	VA 200	0	VA 270 SR	100	VA 230	100	VA 330 SR	100	-	-	-	-
500	422	VA 230	0	VA 330 SR	0	-	-	-	-	-	-	-	-
600	495	VA 330	100	AT 1001 SR	0	-	-	-	-	-	-	-	-

Rack & Pinion Actuators

Max air pressure: 8 bar
5,5 bar (AT series)

Temperature: -20°C / +85°C
-20°C / +80°C (AT series)

Torque range: 8/5059 Nm
13,2/9173 Nm a 5,5Bar (AT series)

Double travel stop open/close: ±5°
-5°/+15 close (AT series)
+5°/-15 open(AT series)

Declutchable manual gearboxes

GD Series

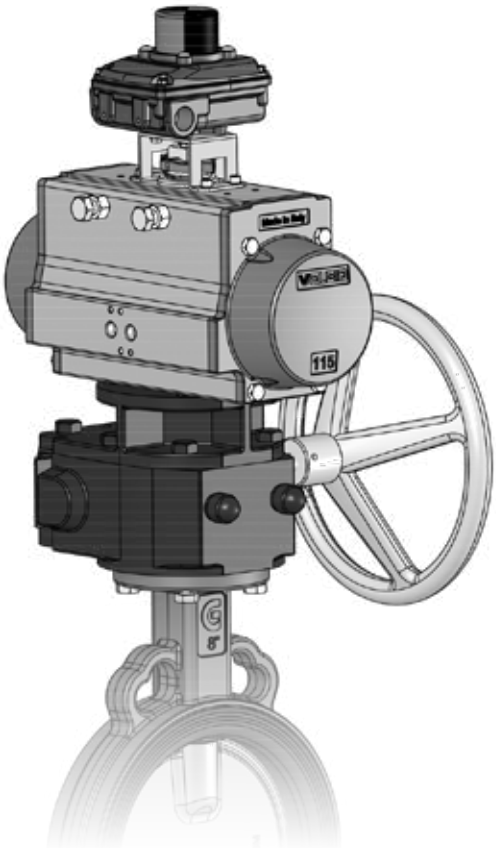
body: aluminium
worm gears: steel
sector gear: ductile iron
shaft: stainless steel
handwheel: steel
protection: IP65
T: -20 / +120 °C

Ø valve	DA actuator double action	SR actuator spring return	emergency gearbox type
DN 40÷150	VA 75-100	VA 75-115	**GD070**
		VA 125	**GD102**
DN200	VA 85-100		**GD070**
DN200-300	VA 115-160	VA 115-160	**GD102**
		VA 180-200	**GD140**
DN350-500	VA 140-200	VA 200	**GD140**

ILGD Series

body: cast iron GGG25
worm gears: steel
sector gear: ductile iron
shaft: steel
handwheel: steel
protection: IP65 (IP67 on req.)
T: -20 / +120 °C

Ø valve	DA actuator double action	SR actuator spring return	emergency gearbox type
DN040-150	VA 63-100	VA 63-100	**ILGD200**
	VA 115-125	VA 115-160	**ILGD600**
		VA 180-200	**ILGD900**
DN200-300	VA 85-160	VA 115-160	**ILGD600**
	VA 180-200	VA 180-200	**ILGD900**
	VA 230	VA 230	**ILGD1500**
DN350-400	VA 140-200	VA 200	**ILGD2400**
	VA 230	VA 230	**ILGD1500**
	VA 270	VA 270	**ILGD2400**
DN450	VA 180-230	VA 230	**ILGD1500**
	VA 270	VA 270-330	**ILGD2400**
DN500	VA 180-230	VA 230	**ILGD5000**
	VA 270	VA 270	**ILGD2400**
	VA 330	VA 330	**ILGD5000**
DN600	VA 270		**ILGD2400**
	VA 330	VA 330	**ILGD5000**



Ghibson Italia can now boast of more than 40 years of experience in manufacturing of industrial valves.
In these 40 years we have designed and manufactured in our facilities in Italy butterfly valves and check valves, for the most different industrial applications.

We export our products all over the world always providing our customers with the best assistance during all the phases: design, installation, maintenance.

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HVAC
Chemical & Petrochemical
Powder Conveying Systems
Food & Beverage

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Cooling Water systems - Metallurgical processes
Powder transportation & storage
Oil field recovery - Liquid natural gas
Steam service - Steam Turbine
Saltwater Service - District heating & cooling
Hot Air & Smokes
Chemicals storage & trasportation
Food & Beverage processes

DEPARTMENTS

- **RESEARCH & DEVELOPMENT**
- **DESIGN**
- **CUSTOMIZATION**
- **PRODUCTION & LOGISTIC**
- **SALES & MARKETING**
- **QUALITY CONTROL**
- **CERTIFICATIONS**
- **PACKING AND SHIPPING**
- **AFTER SALES SUPPORT**

WIDE RANGE OF PRODUCTS

Very large choice of materials including valves of every alloy of carbon or stainless steel, bronze, aluminium, as well as with PTFE or Polypropylene.

We manufacture rubber seated valves with many elastomer types (EPDM, NBR, FKM, Silicone, Carboxidate among others), as well as PTFE, RTFE seated valves with many different coatings such as Halar, Rilsan, PFA, Chenisil, etc.

We can offer a total assistance:
- before selling we can start from dimensioning the valves and actuators, make selection of materials for all parts upon knowing the specification, prepare all types of drawings etc.

- after selling we make final documentation, provide installation supervision, undertake commissioning etc.

BUTTERFLY VALVES
Rubber Seated
PTFE Seated
High Performance
Damper Valves

ACTUATORS & OPTIONS
Pneumatic - Electric - Hydraulic

CONTROL SYSTEMS

CUSTOMIZED VALVES

CHECK VALVES
Disc type - Swing type
Dual plate

CERTIFICATIONS

Certified Management System SQS ISO 9001
Certified Management System SQS ISO 14001
Certified Management System SQS ISO 45001

CE
TYPE APPROVED PRODUCT DNV DNV.COM/AF
BUREAU VERITAS 1828 BUREAU VERITAS type approval
TÜV SÜD ITALIA TA-luft VDI 2440
EAC
DVGW FOR GAS
SIL safety integrity level
Ex
FUGITIVE EMISSIONS TA-Luft ISO 15848-1
Fire-Safe ANSI/API 607 - Iso 10497-5

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