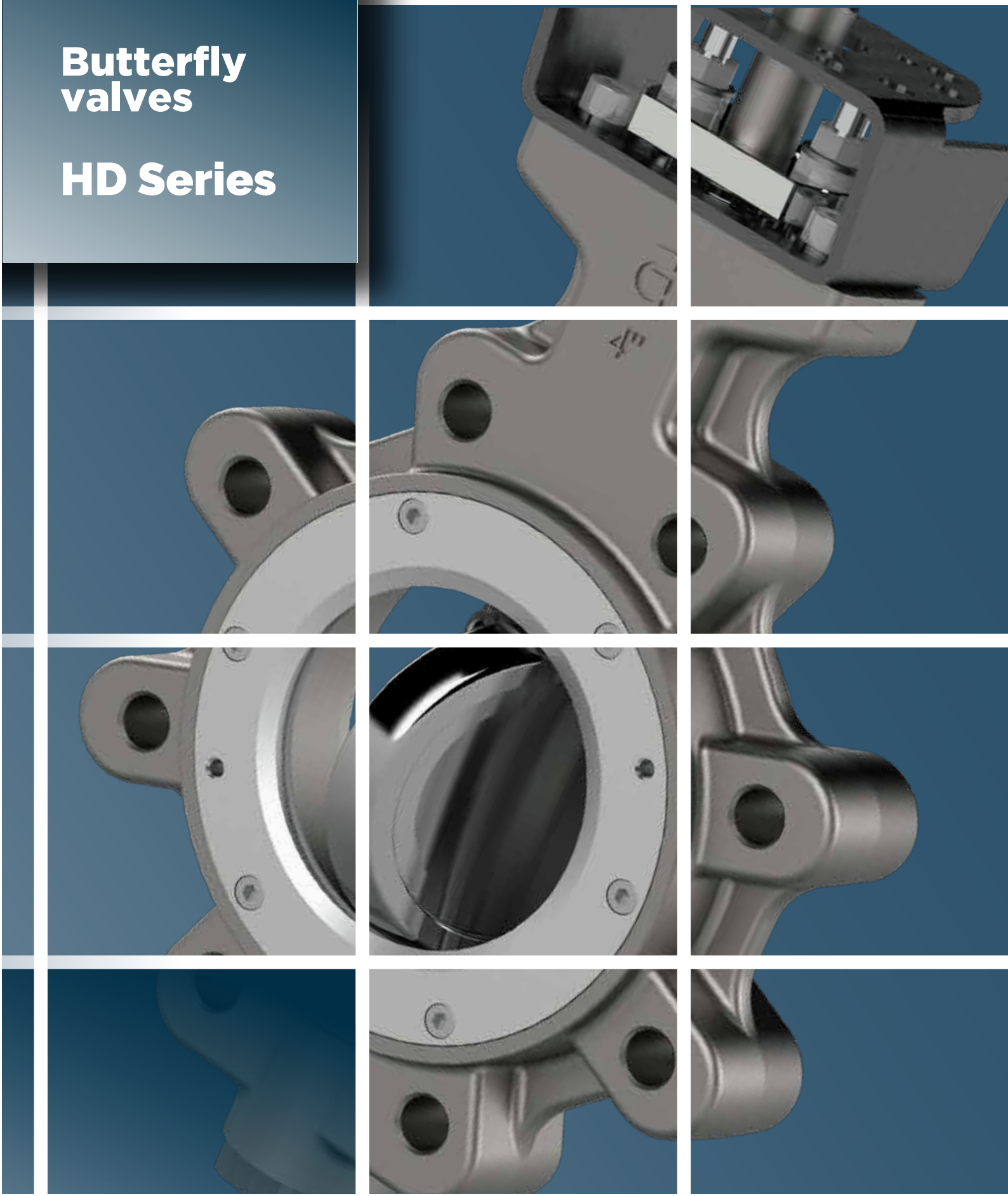
GHIBSON valves

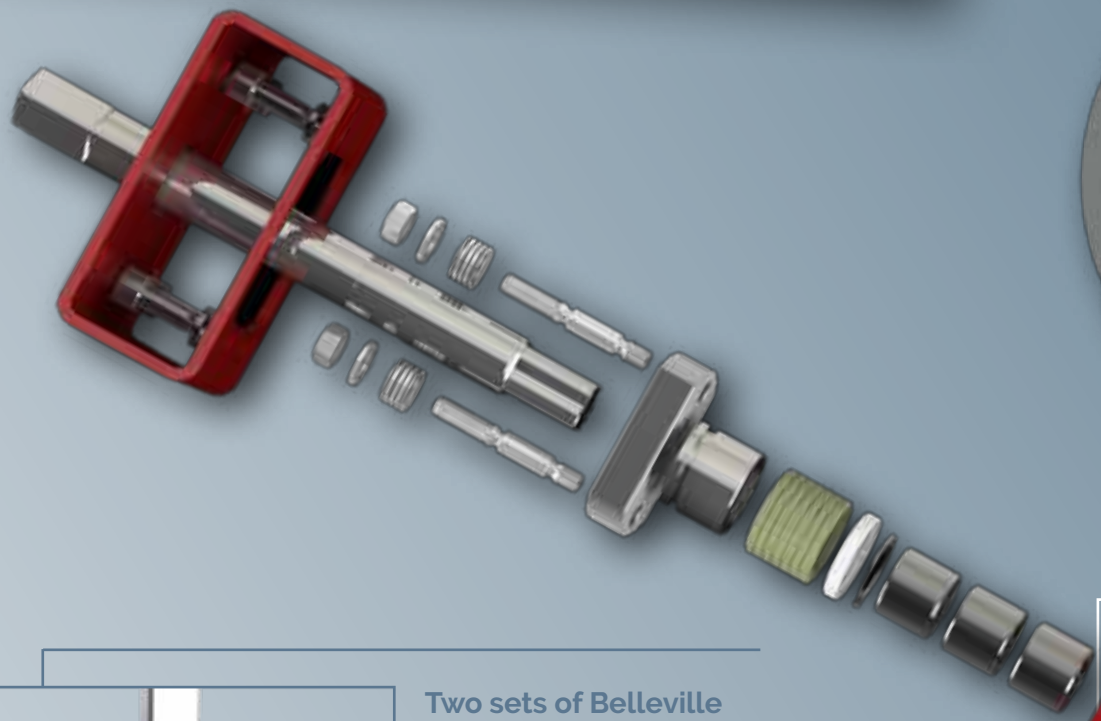
Butterfly valves

HD Series



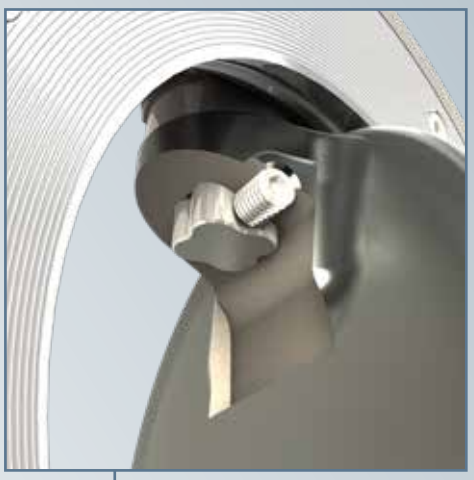
Butterfly valves

Double eccentric HD Series



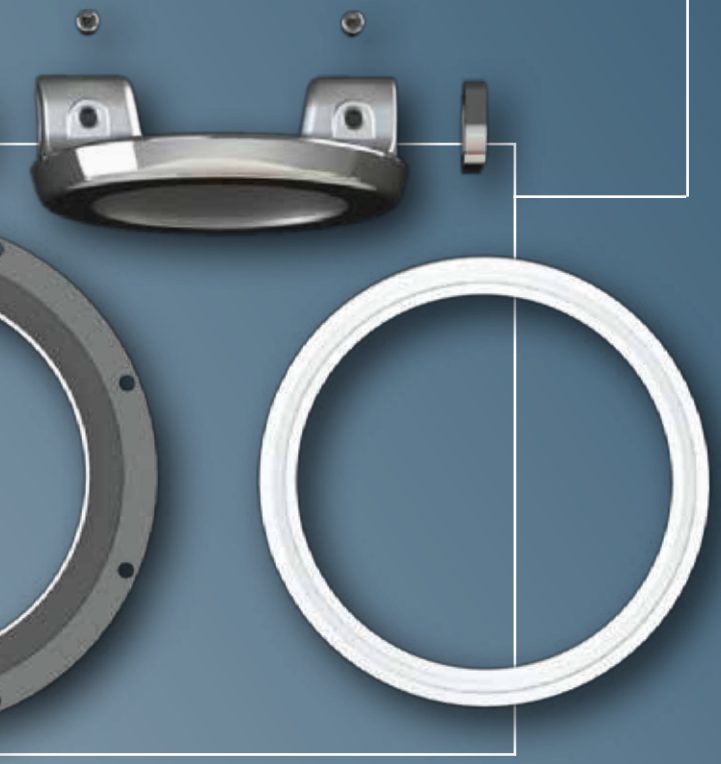


Two sets of Belleville washers ensure the sealing along valve shafts even at high temperatures.
The thrust of the two sets is transmitted to the packing through a floating gland to avoid that a possibile expansion of the components could damage this sealing.

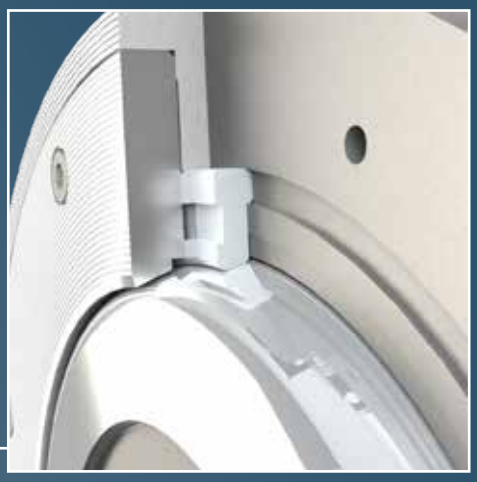


HD valve series was designed with a special shaped shaft-disc connection which ensures an accurate coupling while avoiding clearances.
This design, thanks to a section larger than the classic square one, allows higher shaft tensile capacity.

Metallic seat is composed by an inconel ring and two graphite packings.



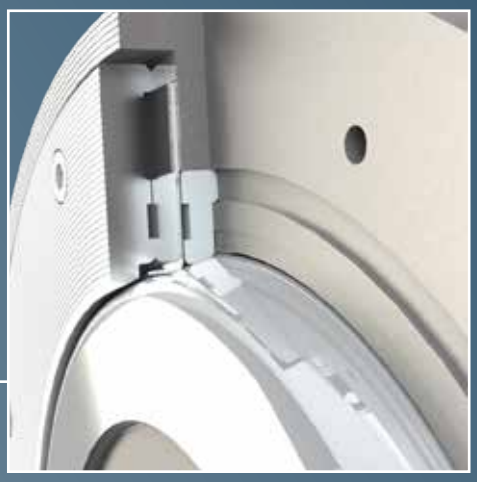
Detail of the RTFE seat



Detail of the metallic seat



Detail of the the Fire Safe design



Both upper and lower shafts are guided by st.steel + PTFE bushings.

Butterfly valves

Double eccentric HD Series

Ghibson high performance butterfly valves HD are specifically designed for high demanding applications where the valve performance is critical.

Available in different material and ratings.

The Fire safe version is Fire tested to API 607-6th edition.











HD series 1
- technical data 1
- components 2
  - RTFE seat 2
  - Inconel seat 3
  - "FIRE SAFE" design 4
- dimensions 5
- compatible flanges JIS 6
- torque values 6
- pressure / temperature 6
- bolts and rods dimensions 7
- installation instruction 8

Operators 9
- Handlever and Gearboxes 9
- Pneumatic Actuators 10
- Declutchable gearboxes 10
- Extension shaft 11
- Hydraulic Actuator 11

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
DOUBLE ECCENTRIC HD SERIES

BVHD - Wafer
DN 40 - 600 • 1"½ - 24"

BLHD - Lug
DN 40 - 600 • 1"½ - 24"

Max working pressure:
BVHD/BLHD DN 40÷600: **25 Bar**
Flange: ***PN 10-16-25 • A150***

Design:
EN 593~EN 736
EN 12516~EN 1092~EN12266
ISO 5211~DIN 3337~API 609~ASME B16.34
PED 2014/68/EU - Mod. H

Face to face:
DIN EN 558 Series 20~ISO 5752 Series 20
BS-5155 Series 4~MSS-SP67
NFE 29305-1
API 609 cat.B
API 609 cat.A (DN 350 excluded)

Testing:
EN 12266-1 Rate A (supersedes DIN 3230)
ISO 5208 Rate A ~ API 598
FIRE TEST API 607 VI Ed. September
Class V - Met/Met

Tag:
EN 19 ~ MSS SP-25



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



TYPE APPROVAL

0497 [PED]

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

Fire-Safe
ANSI/API 607 - ISO 10497-5

SIL safety integrity level

FUGITIVE EMISSIONS
TA-Luft
ISO 15848-1

BODY			
material	references	standard coating	DN
Carbon steel (wafer, lug)	EN 1.0619 (ASTM A216-WCB)	High-temp coating - grey color	40-600
Stainless steel (wafer, lug)	EN 1.4408 (A351 CF8M)	-	40-600
Austenitic Stainless steel	EN 1.4547 (A351 CK3MCuN)	-	40-600
SUPERDUPLEX	EN 1.4469 (A890 Gr. 5A)	-	40-600

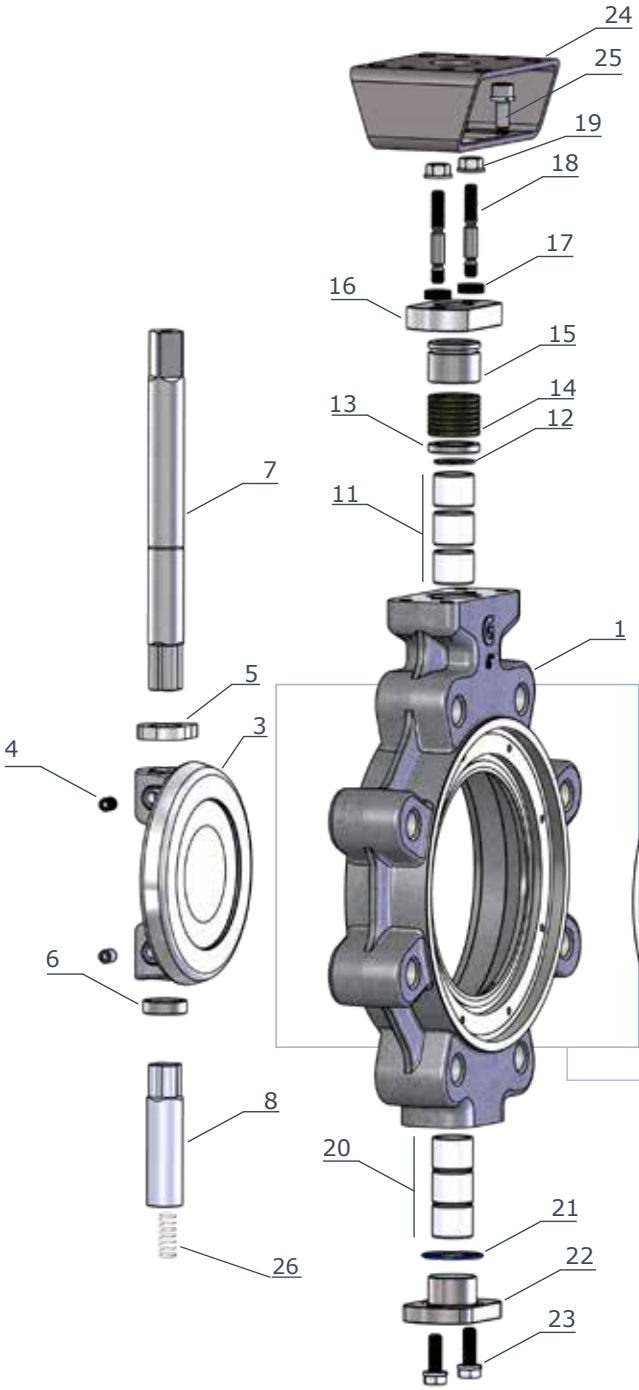
DISC		
material	references	DN
Stainless steel	EN 1.4408 (A351 CF8M)	40-600
Austenitic Stainless steel	EN 1.4547 (A351 CK3MCuN)	40-600
SUPERDUPLEX	EN 1.4469 (A890 Gr. 5A)	40-600

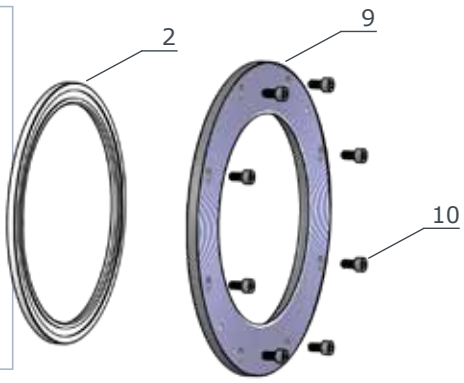
SEDE		
ref.	material	working temp.
RT	RTFE (PTFE reinforced)	Min: -55°C - Max: +230°C
IN	Inconel 625	Min: -55°C - Max: +450°C
FS	RTFE + Inconel 625	Min: -55°C - Max: +230°C / +450°C

On request can be supplied other materials as: LCB, Hastelloy, Uranus, Alloy, Super Duplex, Special steels, Special bronzes.
Special coating on request.

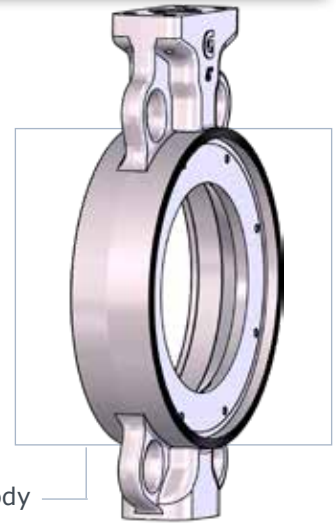
BVHD - Wafer • RTFE seat
DN 40 - 600 • 1"½ - 24"
PN 10 - 16 - 25 • ANSI 150

BLHD - Lug • RTFE seat
DN 40 - 600 • 1"½ - 24"
PN 10 - 16 - 25 • ANSI 150





1A Lug body



1B Wafer body

item	q.ty	part	material
1	1	body a: Lug b: Wafer	• EN 1.0619 (ASTM A216-WCB) • EN 1.4408 (A351 CF8M) • EN 1.4547 (A351 CK3MCuN) * • EN 1.4469 (A890 Gr. 5A) *
◊ 2	1	soft seat	• RTFE (PTFE reinforced)
3	1	disc	• EN 1.4408 (A351 CF8M) • EN 1.4547 (A351 CK3MCuN) • EN 1.4469 (A890 Gr. 5A)
4	2	locking pins	• A4 ~ A316
5	1	upper spacer	• EN 1.4401 (A316)
6	1	lower spacer	• EN 1.4401 (A316)
7	1	upper shaft	• EN 1.4542 (A564 A630)
8	1	lower shaft	• EN 1.4542 (A564 A630)
9	1	seat retaining flange	• EN 1.4404 (A316L)
10	8	screw	• A4 ~ A316
◊ 11	3	upper bush	• stainless steel + PTFE • steel + PTFE

item	q.ty	part	material
12	1	retaining ring	• AISI 301
13	1	thrust block	• EN 1.4401 (A316)
◊ 14	1	shaft packing	• graphite • PTFE (on request)
15	1	gland	• EN 1.4401 (A316)
16	1	gland flange	• EN 1.4401 (A316)
17	2	springs set	• AISI 301
18	2	rods	• A4 ~ A316
19	2	nut	• A2 ~ A304
◊ 20	3	lower bush	• stainless steel + PTFE • steel + PTFE
◊ 21	1	O-ring	• PTFE
22	1	lower plug	• EN 1.4401 (A316)
23	2	screw	• A4 ~ A316
24	1	upper flange	• steel epoxy coated
25	4	screw	• A4 ~ A316
26	1	spring	• 1.4401 ~ A316 (antistatic device)

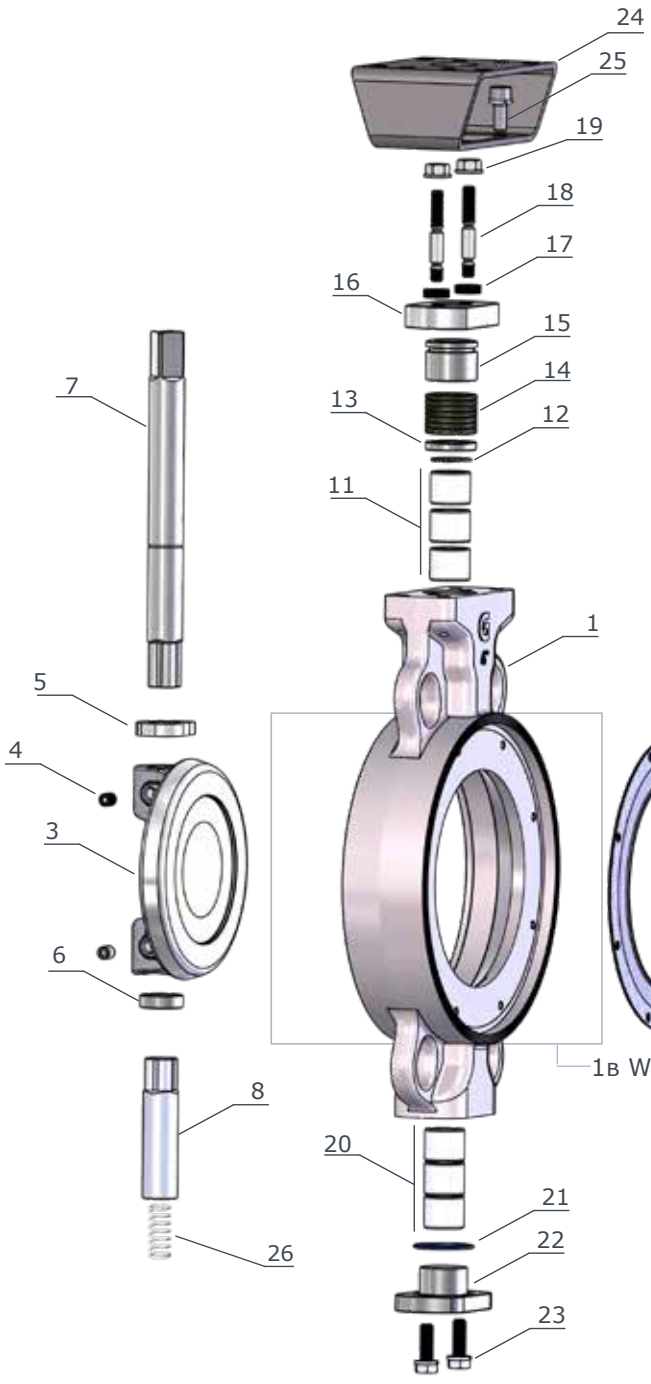
◊ parts included in spare kit

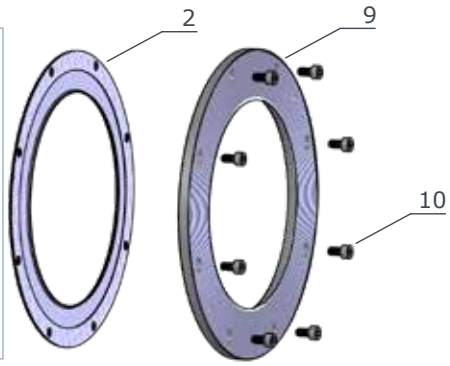
* with special material body the components in contact with the fluid will also be in a suitable material

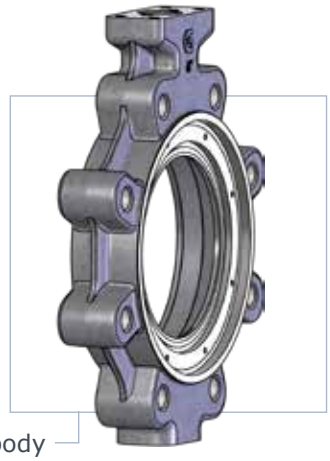
BUTTERFLY VALVES
DOUBLE ECCENTRIC HD SERIES

BVHD - Wafer • Inconel seat
DN 40 - 600 • 1"½ - 24"
PN 10 - 16 - 25 • ANSI 150

BLHD - Lug • Inconel seat
DN 40 - 600 • 1"½ - 24"
PN 10 - 16 - 25 • ANSI 150







item	q.ty	part	material
1	1	body A: Lug B: Wafer	• EN 1.0619 (ASTM A216-WCB) • EN 1.4408 (A351 CF8M) • EN 1.4547 (A351 CK3MCuN) * • EN 1.4469 (A890 Gr. 5A) *
◊ 2	1	metallic seat	• Inconel 625 + graphite
3	1	disc	• EN 1.4408 (A351 CF8M) • EN 1.4547 (A351 CK3MCuN) • EN 1.4469 (A890 Gr. 5A)
4	2	locking pins	• A4 ~ A316
5	1	upper spacer	• EN 1.4401 (A316)
6	1	lower spacer	• EN 1.4401 (A316)
7	1	upper shaft	• EN 1.4542 (A564 A630)
8	1	lower shaft	• EN 1.4542 (A564 A630)
9	1	seat retaining flange	• EN 1.4404 (A316L)
10	8	screw	• A4 ~ A316
◊ 11	3	upper bush	• stainless steel + PTFE • steel + PTFE

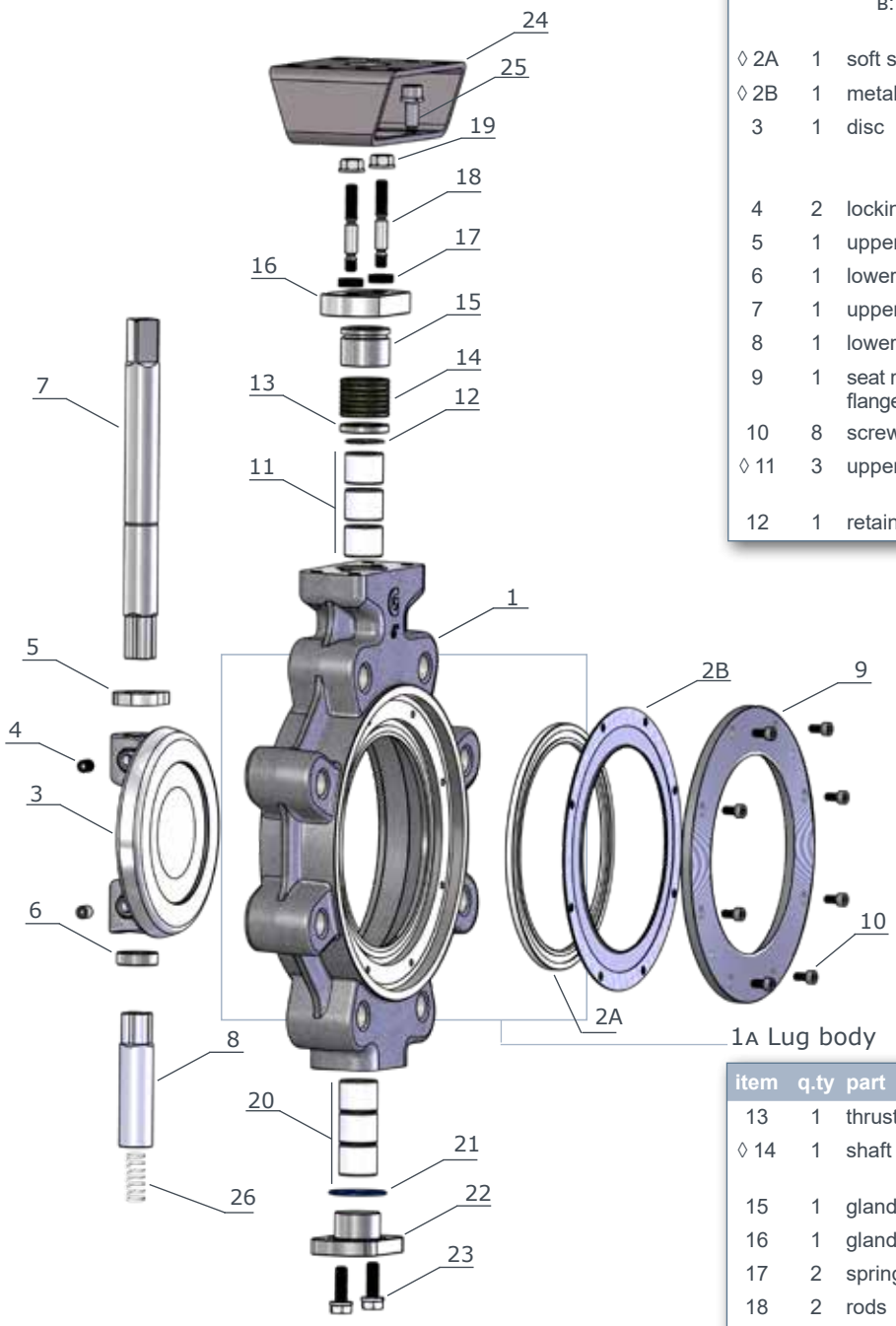
item	q.ty	part	material
12	1	retaining ring	• AISI 301
13	1	thrust block	• EN 1.4401 (A316)
◊ 14	1	shaft packing	• graphite • PTFE (on request)
15	1	gland	• EN 1.4401 (A316)
16	1	gland flange	• EN 1.4401 (A316)
17	2	springs set	• AISI 301
18	2	rods	• A4 ~ A316
19	2	nut	• A2 ~ A304
◊ 20	3	lower bush	• stainless steel + PTFE • steel + PTFE
◊ 21	1	packing	• graphite
22	1	lower plug	• EN 1.4401 (A316)
23	2	screw	• A4 ~ A316
24	1	upper flange	• steel epoxy coated
25	4	screw	• A4 ~ A316
26	1	spring	• 1.4401 ~ A316 (antistatic device)

◊ parts included in spare kit

* with special material body the components in contact with the fluid will also be in a suitable material

BVHD - Wafer • "FIRE SAFE" design
DN 40 - 600 • 1"½ - 24"
PN 10-16-25 • ANSI 150

BLHD - Lug • "FIRE SAFE" design
DN 40 - 600 • 1"½ - 24"
PN 10-16-25 • ANSI 150



1A Lug body



1B Wafer body

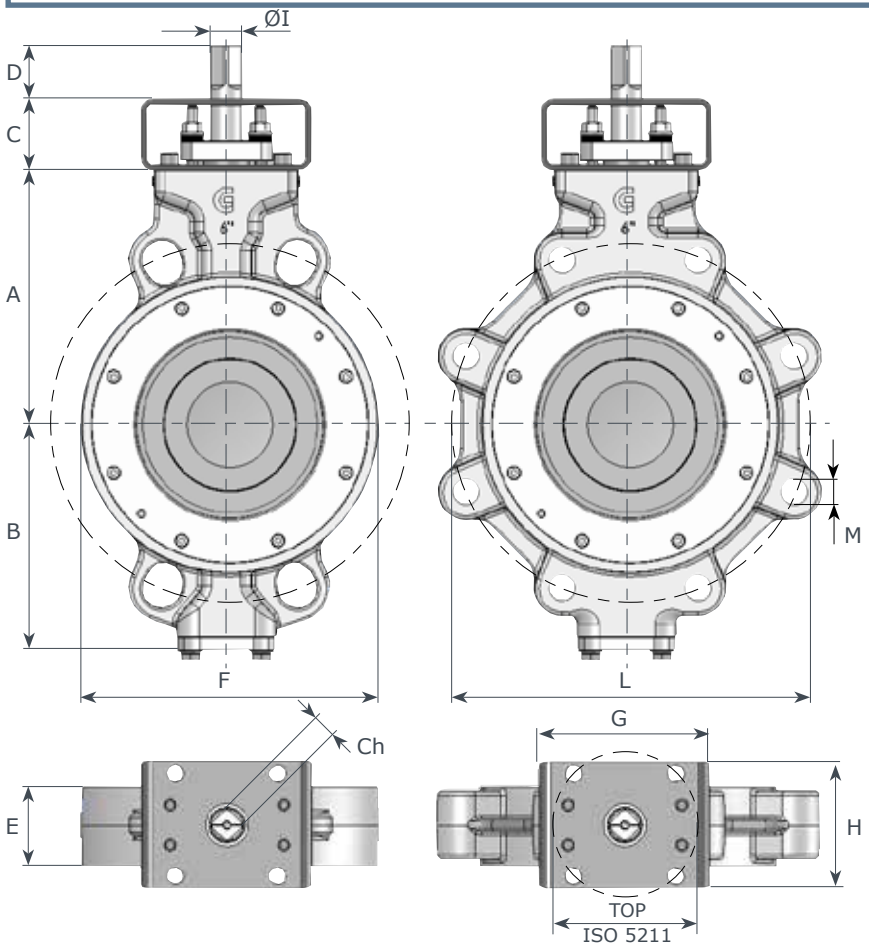
item	q.ty	part	material
1	1	body A: Lug B: Wafer	• EN 1.0619 (ASTM A216-WCB) • EN 1.4408 (A351 CF8M) • EN 1.4547 (A351 CK3MCuN) * • EN 1.4469 (A890 Gr. 5A) *
◊ 2A	1	soft seat	• RTFE (PTFE reinforced)
◊ 2B	1	metallic seat	• Inconel 625 + graphite
3	1	disc	• EN 1.4408 (A351 CF8M) • EN 1.4547 (A351 CK3MCuN) • EN 1.4469 (A890 Gr. 5A)
4	2	locking pins	• A4 ~ A316
5	1	upper spacer	• EN 1.4401 (A316)
6	1	lower spacer	• EN 1.4401 (A316)
7	1	upper shaft	• EN 1.4542 (A564 A630)
8	1	lower shaft	• EN 1.4542 (A564 A630)
9	1	seat retaining flange	• EN 1.4404 (A316L)
10	8	screw	• A4 ~ A316
◊ 11	3	upper bush	• stainless steel + PTFE • steel + PTFE
12	1	retaining ring	• AISI 301

item	q.ty	part	material
13	1	thrust block	• EN 1.4401 (A316)
◊ 14	1	shaft packing	• graphite • PTFE (on request)
15	1	gland	• EN 1.4401 (A316)
16	1	gland flange	• EN 1.4401 (A316)
17	2	springs set	• AISI 301
18	2	rods	• A4 ~ A316
19	2	nut	• A2 ~ A304
◊ 20	3	lower bush	• stainless steel + PTFE • steel + PTFE
◊ 21	1	packing	• graphite
22	1	lower plug	• EN 1.4401 (A316)
23	2	screw	• A4 ~ A316
24	1	upper flange	• steel epoxy coated
25	4	screw	• A4 ~ A316
26	1	spring	•1.4401 ~ A316 (antistatic device)

◊ parts included in spare kit

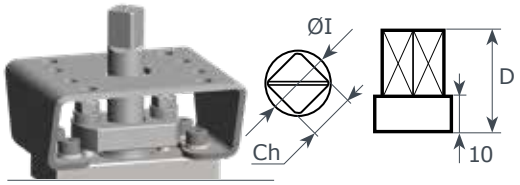
* with special material body the components in contact with the fluid will also be in a suitable material

BVHD/BLHD dimensions

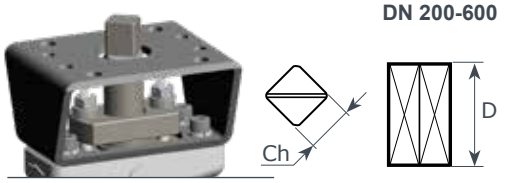


SHAFT

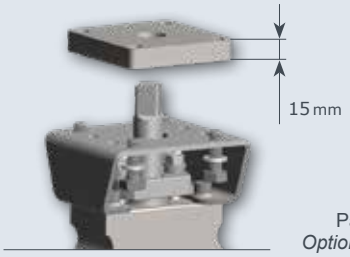
DN 40-150



DN 200-600



OPTIONAL SPACER



DN 40-150

Spacer F07/F10
Material:
Painted carbon steel
Optional: Stainless Steel

DN	"	A	B	C	D	E	F	G	H	Ø I	Ch	TOP
40	1 1/2	113	76	50	34	39	85	100	70	14	11	F05/F07
50	2	117	81	50	34	43	95	100	70	14	11	F05/F07
65	2 1/2	120	93	50	34	46	105	100	70	14	11	F05/F07
80	3	129	101	50	34	46	127	100	70	14	11	F05/F07
100	4	160	128	50	34	52	150	100	70	18	14	F05/F07
125	5	170	159	50	38	56	174	120	90	22	17	F07/F10
150	6	179	168	50	38	56	210	120	90	22	17	F07/F10
200	8	218	207	60	23	61	270	120	90	28	22	F07/F10
250	10	257	232	80	23	69	325	160	130	30	22	F12/F14
300	12	300	270	80	28	78	378	160	130	35	27	F12/F14
350	14	328	304	100	28	92	432	200	140	40	27	F14
400	16	387	340	100	37	102	485	200	140	45	36	F16
500	20	451	427	100	47	127	580	200	165	60	46	F16
600	24	515	460	150	56	154	694	300	300	70	55	F25

DN	PN 10			PN 16			PN 25			ANSI 150			Kg.	
	M	n.	L	M	n.	L	M	n.	L	M (1)	n.	L	wafer	lug
40	M16	4	110	M16	4	110	M16	4	110	M14	4	98,4	4,0	4,0
50	M16	4	125	M16	4	125	M16	4	125	M16	4	120.7	3.5	5.7
65	M16	8	145	M16	8	145	M16	8	145	M16	4	139.7	4.0	7
80	M16	8	160	M16	8	160	M16	8	160	M16	4	152.4	4.8	7.6
100	M16	8	180	M16	8	180	M20	8	190	M16	8	190.5	8	9.7
125	M16	8	210	M16	8	210	M24	8	220	M20	8	215.9	10.1	14.8
150	M20	8	240	M20	8	240	M24	8	250	M20	8	241.3	13.5	17.6
200	M20	8	295	M20	12	295	M24	12	310	M20	8	298.5	22	32
250	M20	12	350	M24	12	355	M27	12	370	M22	12	362.0	35	46
300	M20	12	400	M24	12	410	M27	16	430	M22	12	431.8	50	62
350	M20	16	460	M24	16	470	M30	16	490	M24	12	476.3	83	110
400	M24	16	515	M27	16	525	M33	16	550	M27	16	539.8	107	140
500	M24	20	620	M30	20	650	M33	20	660	M27	20	635.0	200	250
600	M27	20	725	M33	20	770	M36	20	770	M33	20	749,3	280	350

NOTE (1) : in case of ANSI150 flanges, threading can be ANSI B1.1 UNC2B

Compatible flanges JIS B2220 :2004

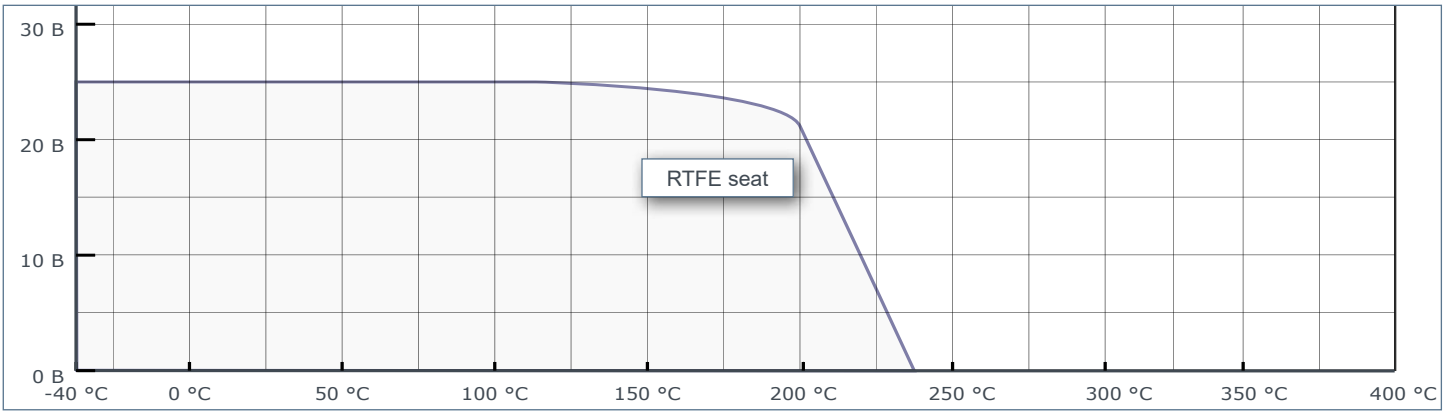
DN	BVHD - wafer (Pmax = 25bar)					BLHD - lug (Pmax = 25bar)				
	JIS 5K	JIS 10K	JIS 16K	JIS 20K	JIS 30K	JIS 5K	JIS 10K	JIS 16K	JIS 20K	JIS 30K
40	●	●	●	●	●	●	●	●	●	●
50	✕	●	●	●	●	✕	●	●	●	✕
65	●	✓	●	●	✕	●	●	●	●	✕
80	●	●	●	●	✕	●	●	●	●	●
100	✕	●	✓	✓	✓	✕	●	●	●	●
125	●	●	✓	✓	✓	●	●	●	●	●
150	●	✓	✕	✕	✕	●	✓	✕	✕	✕
200	✕	●	✓	✓	●	✕	●	●	●	●
250	●	✓	✕	✕	✕	●	●	✕	✕	✕
300	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕
350	✕	✕	●	●	●	✕	✕	●	●	●
400	✕	●	●	●	✕	✕	●	●	●	✕
500	please contact Technical Office									
600	please contact Technical Office									

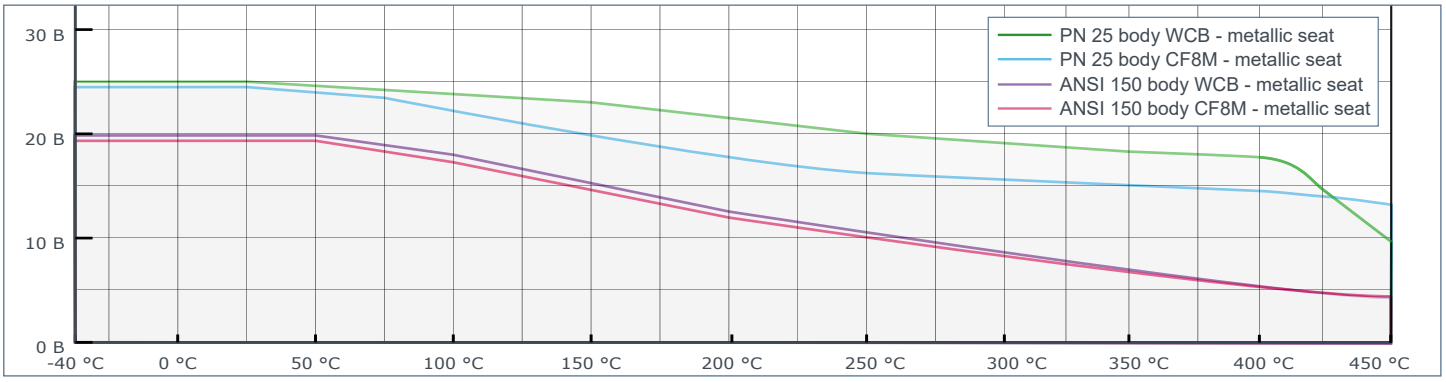
✓ standard ● on request ✕ not possible

Torque values - Nm | safety factor excluded

seat: RTFE - fluid: H_2O - 20°C working pressure: BAR					seat: INCONEL - fluid: H_2O - 20°C working pressure: BAR				
DN	10	16	20	25	DN	10	16	20	25
40	21	27	36	42	40	32	40	52	61
50	24	30	40	47	50	36	44	58	68
65	34	38	48	60	65	51	56	70	86
80	38	45	54	68	80	57	67	78	97
100	45	56	62	81	100	68	83	89	114
125	85	90	105	120	125	124	133	154	168
150	130	145	170	210	150	186	212	248	302
200	155	251	326	423	200	261	350	392	570
250	330	450	520	580	250	480	668	765	848
300	580	640	740	850	300	848	941	1085	1244
350	780	1030	1190	1550	350	950	1250	1500	1850
400	850	1400	1750	2275	400	1750	2180	2470	2830
500	1925	2560	2980	3875	500	2740	3445	3910	4500
600	3550	4700	5600	6600	600	5000	6300	7450	8000

Pressure / Temperature

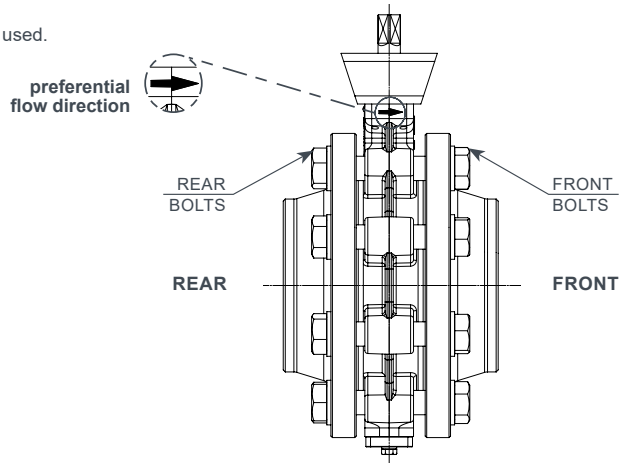




Bolts and rods dimensions

DN	Wafer valves											
	PN10			PN16			PN25			A150		
	Bolts	Rods	N°	Bolts	Rods	N°	Bolts	Rods	N°	Bolts	Rods	N°
40	M16x100	M16x120	4	M16x100	M16x120	4	M16x100	M16x120	4	M14x100	M14x120	4
50	M16x110	M16x130	4	M16x110	M16x130	4	M16x120	M16x130	4	M16x120	M16x130	4
65	M16x120	M16x130	8	M16x120	M16x130	8	M16x120	M16x140	8	M16x130	M16x140	4
80	M16x120	M16x130	8	M16x120	M16x130	8	M16x130	M16x140	8	M16x130	M16x140	4
100	M16x130	M16x140	8	M16x130	M16x140	8	M20x140	M20x150	8	M16x130	M16x150	8
125	M16x130	M16x150	8	M16x140	M16x150	8	M24x150	M24x170	8	M20x140	M20x160	8
150	M20x140	M20x150	8	M20x140	M20x150	8	M24x150	M24x170	8	M20x140	M20x160	8
200	M20x150	M20x160	8	M20x150	M20x160	12	M24x160	M24x180	12	M20x160	M20x170	8
250	M20x160	M20x180	12	M24x160	M24x180	12	M27x180	M27x200	12	M22x170	M22x200	12
300	M20x170	M20x180	12	M24x180	M24x200	12	M27x200	M27x220	16	M22x180	M22x200	12
350	M20x180	M20x200	12	M24x200	M24x220	16	M30x220	M30x240	16	M24x220	M24x220	12
400	M24x200	M24x220	16	M27x220	M27x240	16	M33x240	M33x260	16	M27x220	M27x240	16
500	M24x220	M24x240	16	M30x240	M30x280	16	M33x260	M33x300	16	M27x260	M27x280	16
	* REAR: Bolts M24x60		4	* REAR: Bolts M30x70		4	* REAR: Bolts M33x80		4	* REAR: Bolts M27x80		4
	* FRONT: Bolts M24x70		4	* FRONT: Bolts M30x80		4	* FRONT: Bolts M33x90		4	* FRONT: Bolts M27x90		4
600	M27x300	M27x330	16	M33x310	M33x340	16	M36x320	M36x350	16	M33x320	M33x350	16
	* REAR: Bolts M27x70		4	* REAR: Bolts M33x80		4	* REAR: Bolts M36x90		4	* REAR: Bolts M33x90		4
	* FRONT: Bolts M27x80		4	* FRONT: Bolts M33x90		4	* FRONT: Bolts M36x100		4	* FRONT: Bolts M33x100		4

* Valves DN500 and 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:

- spiralwound gasket ASME B16.20a (ex API 601)
- washer EN ISO 7089 (ex UNI 6592) - on both flanges
- welding neck flanges PN 10/16/25 (EN1092-1 Type 11)
- welding neck flanges ANSI150 (ANSI B16.5)

NOTE 2

Number of nuts should be double when WAFER valves are assembled with threaded rods.

DN	Lug valves															
	PN10				PN16				PN25				A150			
	Rear		Front		Rear		Front		Rear		Front		Rear		Front	
	Bolts	N°	Bolts	N°	Bolts	N°	Bolts	N°	Bolts	N°	Bolts	N°	Bolts	N°	Bolts	N°
40	M16x35	4	M16x40	4	M16x35	4	M16x40	4	M16x40	4	M16x40	4	M14x35	4	M14x40	4
50	M16x45	4	M16x45	4	M16x45	4	M16x45	4	M16x45	4	M16x45	4	M16x45	4	M16x45	4
65	M16x40	8	M16x50	8	M16x40	8	M16x50	8	M16x45	8	M16x55	8	M16x45	4	M16x55	4
80	M16x45	8	M16x55	8	M16x45	8	M16x55	8	M16x50	8	M16x55	8	M16x45	4	M16x55	4
100	M16x50	8	M16x50	8	M16x50	8	M16x50	8	M20x55	8	M20x55	8	M16x55	8	M16x55	8
125	M16x55	8	M16x55	8	M16x55	8	M16x55	8	M24x55	8	M24x60	8	M20x55	8	M20x55	8
150	M20x55	8	M20x55	8	M20x55	8	M20x55	8	M24x60	8	M24x60	8	M20x55	8	M20x60	8
200	M20x55	8	M20x65	8	M20x55	8	M20x65	8	M24x60	12	M24x70	12	M20x60	8	M20x65	8
250	M20x60	12	M20x70	12	M24x60	12	M24x70	12	M27x65	12	M27x75	12	M22x65	12	M22x70	12
300	M20x65	12	M20x70	12	M24x70	12	M24x75	12	M27x75	16	M27x80	16	M22x70	12	M22x80	12
350	M20x70	12	M20x80	12	M24x70	16	M24x90	16	M30x80	16	M30x100	16	M24x80	12	M24x90	12
400	M24x75	16	M24x90	16	M27x80	16	M27x90	16	M33x90	16	M33x100	16	M27x80	16	M27x100	16
500	M24x90	16	M24x90	16	M30x100	16	M30x100	16	M33x110	16	M33x110	16	M27x110	16	M27x110	16
	* bolts M24x60	4	* bolts M24x70	4	* bolts M30x70	4	* bolts M30x80	4	* bolts M33x80	4	* bolts M33x90	4	* bolts M27x80	4	* bolts M27x90	4
600	M27x100	16	M27x110	16	M33x110	16	M33x120	16	M36x120	16	M36x130	16	M33x120	16	M33x130	16
	* bolts M27x70	4	* bolts M27x80	4	* bolts M33x80	4	* bolts M33x90	4	* bolts M36x90	4	* bolts M36x100	4	* bolts M33x90	4	* bolts M33x100	4

* Valves DN500 and DN600 (both LUG and WAFER execution) have 4 threaded blind holes each side, therefore screws marked with * are to be used.

Installation

Valve/pipe assembly

1. Leave a space between flanges to allow easy installation of the valve (see fig. 1). Insert two gaskets between flange and valve (not supplied).
2. HD butterfly valves are bi-directional and can be installed with the flow in both directions. There is however a preferential direction (see fig.2), which minimize turbulences when fluid is under pressure.
3. HD Butterfly valves can be installed with the shaft axis in any direction. It is however preferable to keep it vertical .
4. Center valve body between flanges, then tighthen the bolts.
   ATTENTION: Non correct centering of the valve may damage valve disc.
5. After start-up make sure that there are no leakings and that the valve is properly operating

Remarks:

- Always remove the valve before any flange welding to avoid possible damages due to heat
- On top of upper shaft there is a notch parallel to disc indicating its position. (for valves DN>200 refer to the key).
- When actuator or gear box are assembled on the valve, please consider that there is a mechanical stop allowing only anti-clockwise rotation.
- Valve is closed when disc is against the stop.

fig. 1

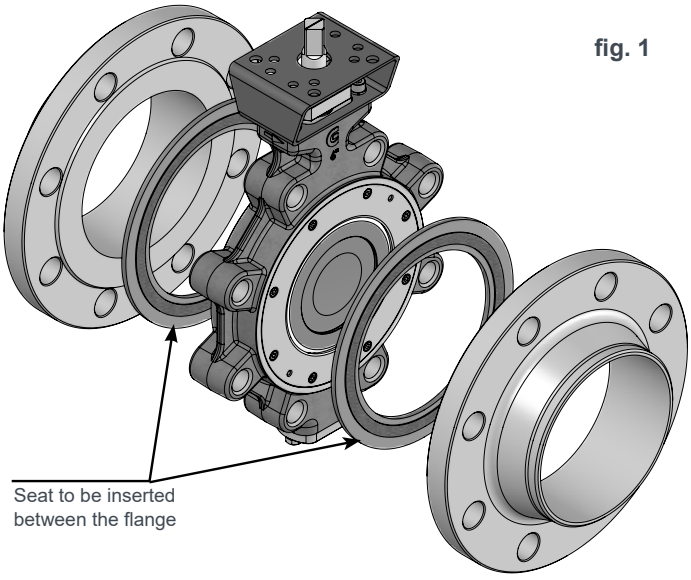
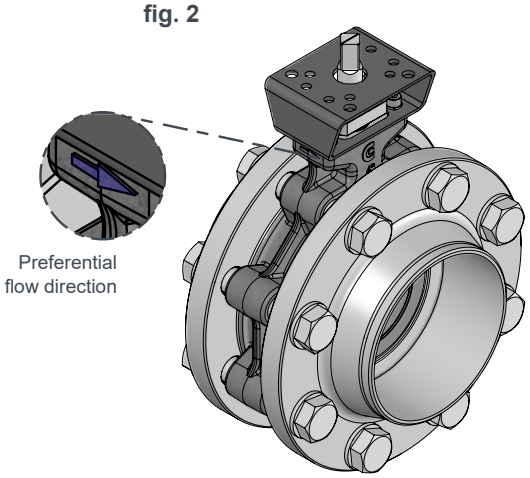


fig. 2

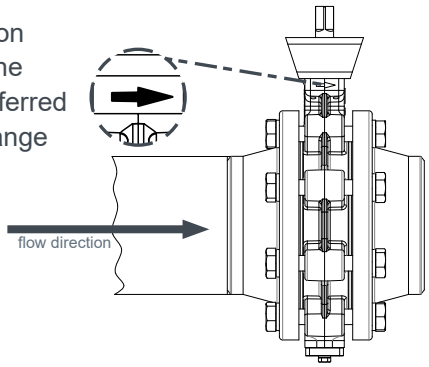


Valve/pipe disassembly

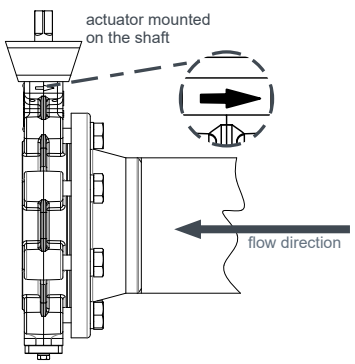
1. Make sure that there is no fluid under pressure upstream or downstream the valve. Disconnect any electronic as well as pneumatic device.
2. Make sure that valve disc is closed.
3. Loose bolts and widen piping flanges. While keeping the valve, remove bolts and disassemble the valve.

End-of-pipe installation

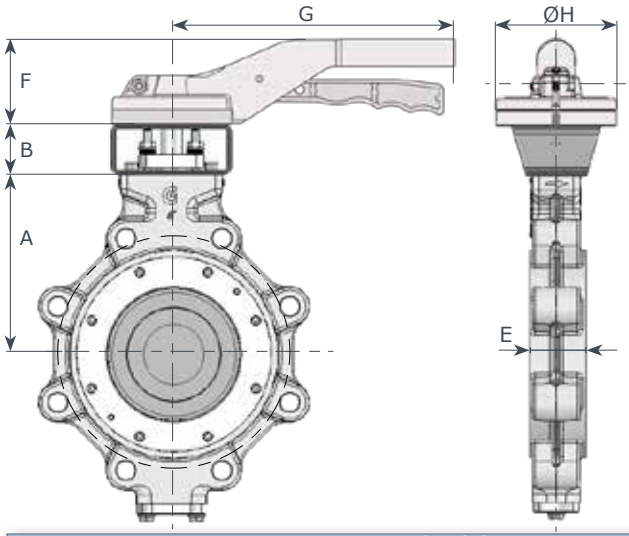
When the installation is with the flow in the direction of the preferred arrow, a counter flange shall be installed



When the installation is with the flow direction opposite to the preferred arrow, the use of a counter flange is not required (except in the case of a wafer valve); however the disc position must be positively controlled by an actuator.

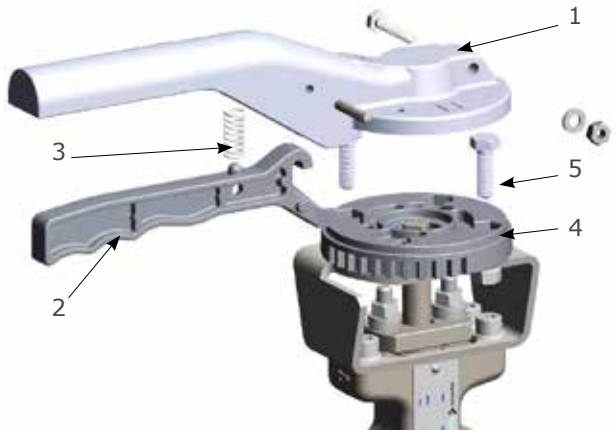


Handlever



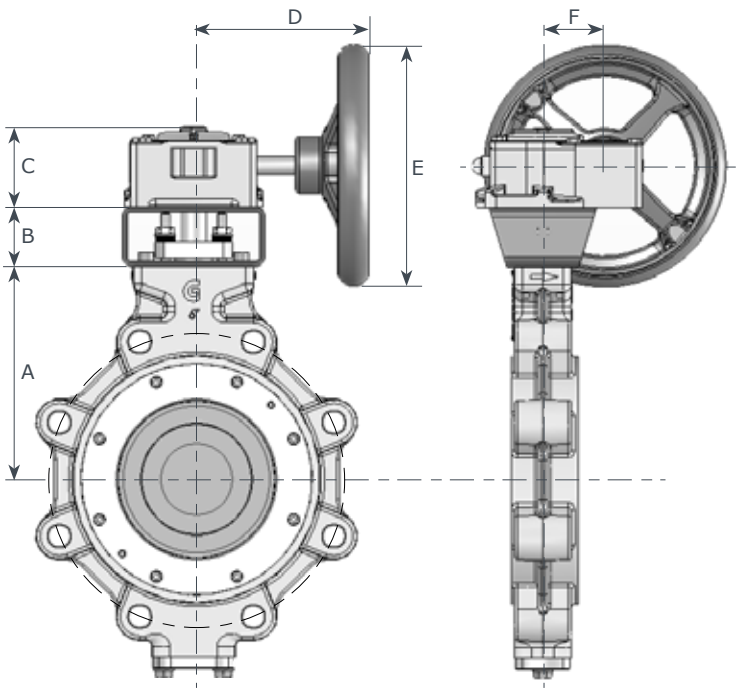
DN	"	A	B	E	F	G	ØH	aluminium Weight (Kg) wafer	aluminium Weight (Kg) lug	St.steel Weight (Kg) wafer	St.steel Weight (Kg) lug
40	1 1/2	113	50	39	67	220	93	4.6	4.6	5.7	5.7
50	2	117	50	43	67	220	93	4.1	6.3	5.2	7.4
65	2 1/2	120	50	46	67	220	93	4.6	7.6	5.7	8.7
80	3	129	50	46	67	220	93	5.4	8.2	6.5	9.3
100	4	160	50	52	67	275	93	8.7	10.4	10.0	11.7
125	5	170	50	56	76	340	125	11.1	15.8	-	-
150	6	179	50	56	76	340	125	14.5	18.6	-	-

COMPONENTS



		DN 40-150	DN 40-100
1	lever	aluminium	A351 CF8M
2	trigger	aluminium	A351 CF8M
3	spring	stainless steel	stainless steel
4	disc positioning	aluminium	A351 CF8M
5	screws	stainless steel	stainless steel

Gearboxes - coupling and dimensions



RTFE seated valve / fluid: H2O / T: 20°C

DN	"	A	B	C	D	E	F	type	Weight (Kg) wafer	Weight (Kg) lug
40	1 1/2	113	50	64	170	200	44	GH 10	6.3	6.3
50	2	117	50	64	170	200	44	GH 10	5.8	8
65	2 1/2	120	50	64	170	200	44	GH 10	6.3	9.3
80	3	129	50	64	170	200	44	GH 10	7.1	9.9
100	4	160	50	64	170	200	44	GH 10	10.3	12
125	5	170	50	66	179	200	52	GH 20	13.7	18.4
150	6	179	50	66	179	200	52	GH 20	17.1	21.2
200	8	218	60	73	214	300	62	GH 21	27	37
250	10	257	80	89	265	350	79	GH 30	47	58
300	12	300	80	99	300	400	89	GH 55	62	74
350	14	328	100	92	275	500	101	GH 66	97	124
400	16	387	100	115	350	500	112	GH 88	127	160
500	20	451	100	126	430	600	129	GH195 BR3.5	235	285
600	24	515	150	154	435	600	157	GH300 BR5	330	400

INCONEL seated valve / fluid: H2O / T: 20°C

DN	"	A	B	C	D	E	F	type	Weight (Kg) wafer	Weight (Kg) Lug
40	1 1/2	113	50	64	170	200	44	GH 10	6.3	6.3
50	2	117	50	64	170	200	44	GH 10	5.8	8
65	2 1/2	120	50	64	170	200	44	GH 10	6.3	9.3
80	3	129	50	64	170	200	44	GH 10	7.1	9.9
100	4	160	50	64	170	200	44	GH 10	10.3	12
125	5	170	50	66	179	200	52	GH 20	13.7	18.4
150	6	179	50	66	179	200	52	GH 20	17.1	21.2
200	8	218	60	73	214	300	62	GH 21	27	37
250	10	257	80	89	265	350	79	GH 30	47	58
300	12	300	80	99	300	400	89	GH 55	62	74
350	14	328	100	92	275	500	101	GH 66	97	124
400	16	387	100	115	350	500	112	GH 88	127	160
500	20	451	100	126	430	600	129	GH195 BR3.5	235	285
600	24	515	150	154	451	600	157	GH300 BR6	340	410

GH series

body:	ductile iron GGG40
worm gears:	steel
sector gear:	ductile iron
shaft:	steel
handwheel:	steel
protection:	IP67
T: -20 / +80 °C	

low/high temperature execution on request

Pneumatic actuator

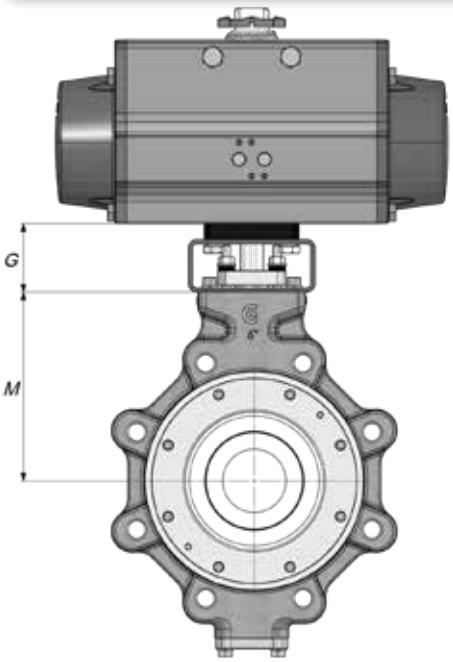
Rack & Pinion Actuators

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 5,5 Bar (AT series)

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



NOTE

G quote can change depending on valve/actuator coupling.

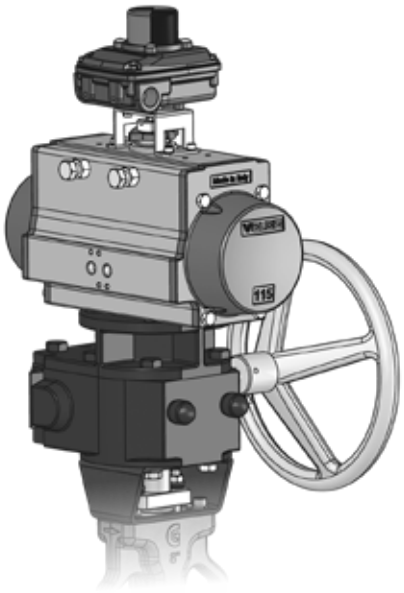
Fluid: H2O - T: 20° C - Air pressure: 5,5 Bar - Seat: RTFE

DN	M	PN 10				PN 16				PN 20 / PN 25			
		DA		SR		DA		SR		DA		SR	
		mod.	G	mod.	G	mod.	G	mod.	G	mod.	G	mod.	G
40	113	VA 63	70	VA 85 SR	65	VA 75	65	VA 100 SR	65	VA 75	65	VA 115 SR	65
50	117	VA 63	70	VA 85 SR	65	VA 75	65	VA 100 SR	65	VA 75	65	VA 115 SR	65
65	120	VA 75	65	VA100 SR	65	VA 75	65	VA 100 SR	65	VA 85	65	VA 115 SR	65
80	129	VA 75	65	VA100 SR	65	VA 75	65	VA 115 SR	65	VA 85	65	VA 115 SR	65
100	160	VA 85	65	VA115 SR	65	VA 85	65	VA 115 SR	65	VA 100	65	VA 125 SR	65
125	170	VA100	65	VA125 SR	65	VA100	65	VA 125 SR	65	VA115	65	VA 140 SR	65
150	179	VA115	65	VA140 SR	65	VA115	65	VA 160 SR	65	VA125	65	VA 160 SR	65
200	218	VA115	60	VA160 SR	60	VA125	60	VA 180 SR	60	VA160	60	VA 200 SR	60
250	257	VA140	80	VA200 SR	80	VA160	80	VA 230 SR	80	VA180	80	VA 230 SR	80
300	300	VA180	80	VA230 SR	80	VA180	80	VA 270 SR	80	VA 200	80	VA 270 SR	80
350	328	VA200	100	VA270 SR	100	VA230	100	VA 330 SR	100	VA 230	100	VA 330 SR	100
400	387	VA200	100	VA270 SR	100	VA230	100	VA 330 SR	100	VA 270	100	on request	
500	451	VA270	100	AT1001 SR	100	VA330	100	AT1001 SR	100	VA 330	100	on request	
600	515	AT 801	150	on request		AT1001	150	on request		AT1001	150	on request	

Fluid: H2O - T: 20° C - Air pressure: 5,5 Bar - Seat: INCONEL

DN	M	PN 10				PN 16				PN 20 / PN 25			
		DA		SR		DA		SR		DA		SR	
		mod.	G	mod.	G	mod.	G	mod.	G	mod.	G	mod.	G
40	113	VA 75	65	VA 100 SR	65	VA 75	65	VA 115SR	65	VA 85	65	VA 115 SR	65
50	117	VA 75	65	VA 100 SR	65	VA 75	65	VA 115SR	65	VA 85	65	VA 115 SR	65
65	120	VA 75	65	VA 115 SR	65	VA 85	65	VA115SR	65	VA 100	65	VA 125 SR	65
80	129	VA 85	65	VA 115 SR	65	VA 85	65	VA 125SR	65	VA 100	65	VA 140 SR	65
100	160	VA 85	65	VA 115 SR	65	VA 100	65	VA 125SR	65	VA 100	65	VA 140 SR	65
125	170	VA115	65	VA 140 SR	65	VA 115	65	VA 160SR	65	VA 115	65	VA 160 SR	65
150	179	VA115	65	VA 160 SR	65	VA 125	65	VA 180SR	65	VA 140	65	VA 200 SR	65
200	218	VA125	60	VA 180 SR	60	VA 140	60	VA 200SR	60	VA 180	60	VA 230 SR	60
250	257	VA160	80	VA 230 SR	80	VA 180	80	VA 270SR	180	VA 200	80	VA 270 SR	80
300	300	VA 200	80	VA 270 SR	180	VA 200	80	VA 330SR	180	VA 230	80	VA 330 SR	80
350	328	VA 200	100	VA 330 SR	100	VA 230	100	VA 330SR	100	VA 270	100	AT1001 SR	200
400	387	VA 270	100	AT 801 SR	100	VA 270	100	AT1001 SR	100	VA 300	100	AT1001 SR	100
500	451	VA 330	100	AT1001 SR	100	VA 330	100	on request		AT1001	100	on request	
600	515	AT1001	150	on request		AT1001	150	on request		on request		on request	

Declutchable manual gearboxes



ILGD Series

body: ductile iron GGG40
worm gears: steel
sector gear: ductile iron

shaft: steel
handwheel: steel
T: -20/+120°C

protection: IP65
IP67 on req.

Ø valve	DA actuator double action	SR actuator spring return	emergency gearbox type
DN 40-150	VA 63-100	VA 85-100	**ILGD200**
	VA 115-140	VA 115-160	**ILGD600**
		VA 180-200	**ILGD900**
DN 200-300	VA 115-140		**ILGD600**
	VA 160-200	VA 160-200	**ILGD900**
	VA 230	VA 230	**ILGD1500**
		VA 270	**ILGD2400**
DN 350	VA 200-230		**ILGD1500**
	VA 270	VA 270-330	**ILGD2400**
DN 400	VA 200-230		**ILGD1500**
	VA 270		**ILGD2400**
	VA 330	VA 330	**ILGD5000**
DN 500	VA 270		**ILGD2400**
	VA 330	TBD	**ILGD5000**
DN 600	VA 330-AT1001	TBD	**ILGD5000**

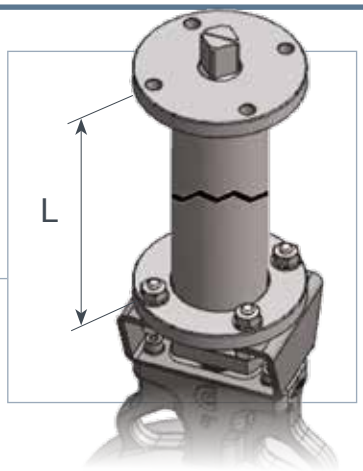
Waterproof valve shaft extension

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).

NOTE

Our tecnical department is available to solve special applications.

"L" measure should be indicated when ordering.



Hydraulic actuator

- Tecnical features:
  - » ductile iron cast body
  - » steel rack and pinion
  - » NBR seats
- fluid type:
  - » hydraulic oil type : HPL DIN51524-2 / ISO 6743-4. Viscosity 15/200 cst
- working pressure: 10 - 120 bar
- working temperature: -20°C / +80°C



Fluid: H2O - T: 20° C - Seat: RTFE

DN	Oil pressure: 60Bar						Oil pressure: 120Bar					
	PN 10		PN 16		PN 20 / PN 25		PN 10		PN 16		PN 20 / PN 25	
	DA	SR	DA	SR	DA	SR	DA	SR	DA	SR	DA	SR
40	H28DA	H40SRA	H28DA	H40SRA	H28DA	H40SRA	H28DA	H40SRB	H28DA	H40SRB	H28DA	H40SRB
50	H28DA	H40SRA	H28DA	H40SRA	H28DA	H40SRA	H28DA	H40SRB	H28DA	H40SRB	H28DA	H40SRB
65	H28DA	H40SRA	H28DA	H40SRA	H28DA	H40SRA	H28DA	H40SRB	H28DA	H40SRB	H28DA	H40SRB
80	H28DA	H40SRA	H28DA	H40SRA	H28DA	H40SRA	H28DA	H40SRB	H28DA	H40SRB	H28DA	H40SRB
100	H28DA	H40SRA	H28DA	H40SRA	H28DA	H50SRA	H28DA	H40SRB	H28DA	H40SRB	H28DA	H40SRB
125	H28DA	H50SRA	H40DA	H50SRA	H40DA	H50SRA	H28DA	H40SRB	H28DA	H40SRB	H28DA	H40SRB
150	H40DA	H50SRA	H40DA	H63SRA	H50DA	H63SRA	H28DA	H40SRB	H28DA	H50SRB	H40DA	H50SRB
200	H50DA	H63SRA	H50DA	H63SRA	H63DA	H80SRA	H40DA	H50SRB	H40DA	H50SRB	H50DA	H63SRB
250	H50DA	H80SRA	H63DA	H80SRA	H63DA	-	H50DA	H63SRB	H50DA	H63SRB	H50DA	H80SRB
300	H63DA	-	H63DA	-	H80DA	-	H50DA	H80SRB	H50DA	H80SRB	H63DA	H80SRB
350	H80DA	-	H80DA	-	-	-	H63DA	H80SRB	H63DA	-	H80DA	-
400	H80DA	-	-	-	-	-	H80DA	H80SRB	H80DA	-	H80DA	-
500	-	-	-	-	-	-	H80DA	-	H80DA	-	-	-
600	-	-	-	-	-	-	-	-	-	-	-	-

Fluid: H2O - T: 20° C - Seat: INCONEL

DN	Oil pressure: 60Bar						Oil pressure: 120Bar					
	PN 10		PN 16		PN 20 / PN 25		PN 10		PN 16		PN 20 / PN 25	
	DA	SR	DA	SR	DA	SR	DA	SR	DA	SR	DA	SR
40	H28DA	H40SRA	H28DA	H40SRA	H28DA	H40SRA	H28DA	H40SRB	H28DA	H40SRB	H28DA	H40SRB
50	H28DA	H40SRA	H28DA	H40SRA	H28DA	H40SRA	H28DA	H40SRB	H28DA	H40SRB	H28DA	H40SRB
65	H28DA	H40SRA	H28DA	H40SRA	H28DA	H50SRA	H28DA	H40SRB	H28DA	H40SRB	H28DA	H40SRB
80	H28DA	H40SRA	H28DA	H40SRA	H40DA	H50SRA	H28DA	H40SRB	H28DA	H40SRB	H28DA	H40SRB
100	H28DA	H40SRA	H28DA	H50SRA	H40DA	H50SRA	H28DA	H40SRB	H28DA	H40SRB	H28DA	H40SRB
125	H40DA	H50SRA	H40DA	H63SRA	H40DA	H63SRA	H28DA	H40SRB	H28DA	H50SRB	H28DA	H50SRB
150	H50DA	H63SRA	H50DA	H63SRA	H50DA	H80SRA	H40DA	H50SRB	H40DA	H50SRB	H40DA	H63SRB
200	H50DA	H80SRA	H50DA	H80SRA	H63DA	-	H40DA	H50SRB	H50DA	H63SRB	H50DA	H80SRB
250	H63DA	-	H63DA	-	H80DA	-	H50DA	H63SRB	H50DA	H80SRB	H63DA	H80SRB
300	H80DA	-	H80DA	-	-	-	H63DA	H80SRB	H63DA	-	H63DA	-
350	H80DA	-	-	-	-	-	H63DA	-	H63DA	-	H80DA	-
400	-	-	-	-	-	-	H80DA	-	H80DA	-	-	-
500	-	-	-	-	-	-	-	-	-	-	-	-
600	-	-	-	-	-	-	-	-	-	-	-	-

MORE THAN 40 YEARS OF HIGH QUALITY EXPERIENCE

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.

MARKET SEGMENTS and APPLICATIONS

Marine
Water Treatment
Pulp & Paper
Power Plant
Nuclear Plant
HVAC
Chemical & Petrochemical
Powder Conveying Systems
Food & Beverage

Steam isolation - Vacuum service - Refining
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



GHIBSON valves

not just valves, but solutions





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