



VALVE MANUFACTURER FOR INDUSTRIAL AND WATER APPLICATIONS



## BUTTERFLY VALVES RESILIENT-SEATED

Pressure : PN6 ~ PN40 | Size : DN 40 ~ DN3200 | Temperature : -40°C ~ +200°C

По вопросам продаж и поддержки обращайтесь:

**ROBVALVE**

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Астрахань (8512)99-46-04  
Барнаул (3852)73-04-60  
Белгород (4722)40-23-64  
Брянск (4832)59-03-52  
Владивосток (423)249-28-31  
Волгоград (844)278-03-48  
Вологда (8172)26-41-59  
Воронеж (473)204-51-73  
Екатеринбург (343)384-55-89  
Иваново (4932)77-34-06  
Ижевск (3412)26-03-58  
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Калининград (4012)72-03-81  
Калуга (4842)92-23-67  
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Киров (8332)68-02-04  
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Красноярск (391)204-63-61  
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Липецк (4742)52-20-81  
Магнитогорск (3519)55-03-13  
Москва (495)268-04-70  
Мурманск (8152)59-64-93  
Набережные Челны (8552)20-53-41  
Нижний Новгород (831)429-08-12  
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Новосибирск (383)227-86-73  
Омск (3812)21-46-40  
Орел (4862)44-53-42  
Оренбург (3532)37-68-04  
Пенза (8412)22-31-16  
Пермь (342)205-81-47  
Ростов-на-Дону (863)308-18-15  
Рязань (4912)46-61-64  
Самара (846)206-03-16  
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Саратов (845)249-38-78  
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Симферополь (3652)67-13-56  
Сургут (3462)77-98-35

Смоленск (4812)29-41-54  
Сочи (862)225-72-31  
Ставрополь (8652)20-65-13  
Тверь (4822)63-31-35  
Томск (3822)98-41-53  
Тула (4872)74-02-29  
Тюмень (3452)66-21-18  
Ульяновск (8422)24-23-59  
Уфа (347)229-48-12  
Хабаровск (4212)92-98-04  
Челябинск (351)202-03-61  
Череповец (8202)49-02-64  
Ярославль (4852)69-52-93

эл. почта: [rvb@nt-rt.ru](mailto:rvb@nt-rt.ru) || сайт: <http://robvalve.nt-rt.ru>

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# CODIFICATION



Valve Definition		Inside Parts Material	Connection Type	Working Pressure	Actuation	Size	
Valve Type							
<b>BUV</b> Butterfly Valve	<b>1</b> - Concentric	<b>20</b> - Standard <b>30</b> - Rubber Lined		<b>UF</b> - U-Type Flange <b>WA</b> - Wafer <b>LU</b> - Lug <b>BW</b> - Butt Welded <b>SW</b> - Socket Welded <b>FL</b> - Flanged <b>BT</b> - NPT Threaded	<b>006</b> - PN6 <b>016</b> - PN16 <b>025</b> - PN25 <b>C01</b> - CL150 <b>C06</b> - CL600 <b>C15</b> - CL1500	<b>X</b> - Not Applicable <b>0</b> - Bareshaft <b>1</b> - Lever <b>2</b> - Handwheel <b>3</b> - Gearbox <b>4</b> - Elec Actuator <b>5</b> - Pneumatical Actuator	<b>0008</b> - DN8 <b>0015</b> - DN15 <b>0200</b> - 8" <b>1200</b> - 48"
	<b>2</b> - Double Offset	<b>30</b> - Double Flanged					

## MATERIAL TABLES

### Carbon Steel, Low Temperature Carbon Steel and Low Temperature Alloy Steel

Material Group	Forging		Codification	Casting		Codification	Application
	ASTM	EN		ASTM	EN		
Carbon Steel <b>-29°C</b>	<b>A105</b>	<b>1.0432</b>	<b>A5</b> <b>L1</b>	<b>A216 WCB</b>	<b>1.0619</b>	<b>WB</b> <b>WC</b>	Non-corrosive applications including water, oil and gases from -29°C to +425°C
	<b>A350 LF1</b>	-		<b>A216 WCC</b>	-		
Low Temperature Carbon Steel <b>-46°C</b>	<b>A350 LF2</b> Class 1	<b>1.0570</b>	<b>L2</b>	<b>A352 LCB</b>	<b>1.1156</b>	<b>LB</b> <b>LC</b>	Low temperature applications from LCB, LCC -46°C to +340°C LF2 -46°C to +427°C
				<b>A352 LCC</b>	-		

Material Sealing		old DIN 1693 (1977)	new DIN 1563 (1997)	ASTM	EN	Codification	Application
<b>EPDM</b>	<b>EP</b>	<b>GG25</b>	EN-GJL-250	A 48 Class 358	0.6025	<b>CI</b>	-10°C to 200°C
<b>NBR</b>	<b>NB</b>						
<b>Silicone</b>	<b>SI</b>	<b>GGG50</b>	EN-GJS-500-7	A 536 Gr 60-40-18	0.7050	<b>D5</b>	-15°C to 350°C
<b>FPM</b>	<b>FP</b>						
<b>Hypalon</b>	<b>HY</b>						
<b>PTFE</b>	<b>PT</b>	<b>GGG40</b>	EN-GJS-400-15	A 536 Gr 65-45-12	0.7040	<b>DI</b>	-15°C to 350°C
		<b>GGG40</b>	EN-GJS-400-18	A 536 Gr 60-40-18	0.7043	<b>D4</b>	-20°C to 350°C

Table given as an indication and without obligation on our part.

## MATERIAL TABLES

### Stainless Steel

Type	Casting		Codification	Forging		Codification	Application
	ASTM	EN		ASTM	EN		
Generic	Generic <b>SS</b>	-	<b>SS</b>	Generic <b>SS</b>		<b>SS</b>	Standard Generic Designation
304	A351 <b>CF8</b>	<b>1.4308</b>	<b>C8</b>	A182 <b>F304</b>	<b>1.4301</b>	<b>34</b>	Corrosive or high temperature non-corrosive services from -268°C to +649°C. Above +425°C specify carbon content of 0,04% or greater
304L	A351 <b>CF3</b>	<b>1.4309</b>	<b>C3</b>	A182 <b>F304L</b>	<b>1.4306</b>	<b>4L</b>	Corrosive or non-corrosive services up to +425°C.
316 Manufacturing Standard	A351 <b>CF8M</b>	<b>1.4408</b>	<b>8M</b>	A182 <b>F316</b>	<b>1.4401</b>	<b>36</b>	Corrosive or either extremely low or high temperature non-corrosive services from -268°C to +649°C. Above +425°C specify carbon content of 0,04% or greater
316L	A351 <b>CF3M</b>	<b>1.4404</b>	<b>3M</b>	A182 <b>F316L</b>	<b>1.4404</b>	<b>6L</b>	Acetic acid, calcium carbonate, calcium lactate, potable water, sea water, steam, sulfites Corrosive or high temperature non-corrosive services from -268°C to +649°C. Above +425°C specify carbon content of 0,04% or greater

# CODIFICATION

## DN - PN

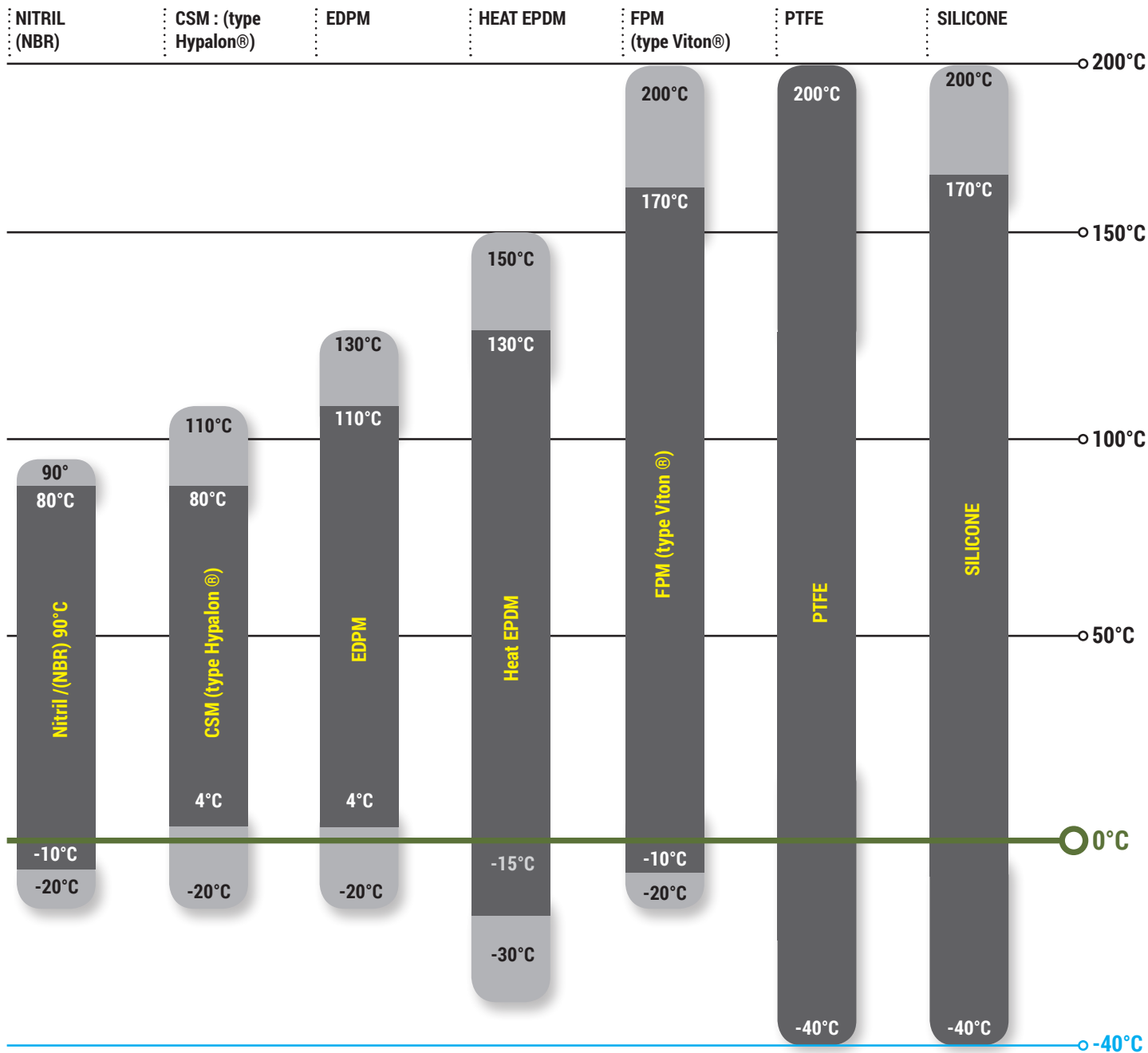
DN	Taille	Codes
40	1"-1/2	0040
50	2"	0050
65	2"-1/2	0065
80	3"	0080
100	4"	0100
125	5"	0125
150	6"	0150
200	8"	0200
250	10"	0250
300	12"	0300
350	14"	0350
400	16"	0400
500	20"	0500
600	24"	0600
700	28"	0700
800	32"	0800
900	36"	0900
1000	40"	1000
1050	42"	1050
1100	44"	1100
1200	48"	1200

DN	Taille	Codes
1300	52"	1300
1400	56"	1400
1500	60"	1500
1600	64"	1600
1700	68"	1700
1800	72"	1800
1900	76"	1900
2000	80"	2000
2200	88"	2200
2500	100"	2500
3000	120"	3000
3200	128"	3200

PN	CODE	Classe	Codes
PN6	006		
PN10	010		
PN16	016		
PN25	025	CL150	C01
PN40	040	CL300	C03

Table given as an indication and without obligation on our part.

## SEAT MATERIAL



**NBR (type Nitril)**  
(Acrylonitrile butadiene rubber)  
Mineral oils, hydrocarbons,  
lubricated air.

**CSM (type Hypalon®)**  
Minéral acids,  
oxidizing, fluids, bases,  
alcohls, animal or vegetable  
oils, phosphorical acids.

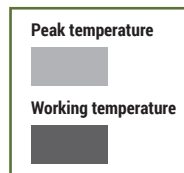
**EPDM**  
(Ethylene propylene caoutschouc)  
Hot or cold water, sea water, dry  
air oilless, alkalines, alcohols,  
hydroxyde soda, acids (minerals and  
organics), acid salt.

**HEAT EPDM**  
(Heat Ethylene propylene  
caoutschouc)  
Same use like for EPDM  
but for higher  
temperature.

**FPM (type Viton®)**  
Fluorocarbon caoutchouc  
Acids, greases, hydrocarbons.

**VSI (type silicone)**  
Silicon rubber  
Food industry,  
high temperature.

**PTFE (type Teflon®)**  
Polytetrafluorethylene  
All corrosive products.



## Standards & Specification

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**Design standard :** API 609/EN593

**Connection flange :** ISO 7005-2 PN10/16;  
EN 1092-2 PN10/16;  
GOST PN10/16;  
ASME B16.5 CLASS 150;  
JIS 10K(DN40~DN300);  
AS/NZS 4087 PN16;

**Top flange :** ISO 5211

**Face to face :** API 609A /EN558 20 serial

**Test standard :** API 598 /EN12266-1

**Working pressure :** PN10/16 (DN40-DN3000 1.5"~120")  
PN25 (DN40-DN600 1.5"~24")

**Size :** BUV12WA (DN40 ~ DN1200 1.5" ~ 48")  
BUV12UF (DN40 ~ DN3000 1.5" ~ 120")  
BUV12LU (DN40 ~ DN900 1.5" ~ 36")

**Testing pressure :** (water) Ps (MPa)

**Shell test :** 1.5 times rated pressure

**Seal test :** 1.1 times rated pressure

**Working temperature :** -15°C ~ +130°C

**Actuator :** manual, electric, pneumatic

## Industrial Applications

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- Products are suitable for fresh water, sea water, sewage, treatment systems, and can also be used in acid, alkali and salty corrosion medias.
- The valve has passed the ACS, NSF and low lead certification. It can be used in the field of drinking water and food.
- The valve has passed API 609 certification; it can be applied to petroleum, natural gas and other industrial pipeline transportation systems.

## Features

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The disc and shaft are connected without pin to reduce the leak point and achieve on-site replacement. It also can achieve optimal fit and open torque transmission by using O-ring sealing on the shaft.

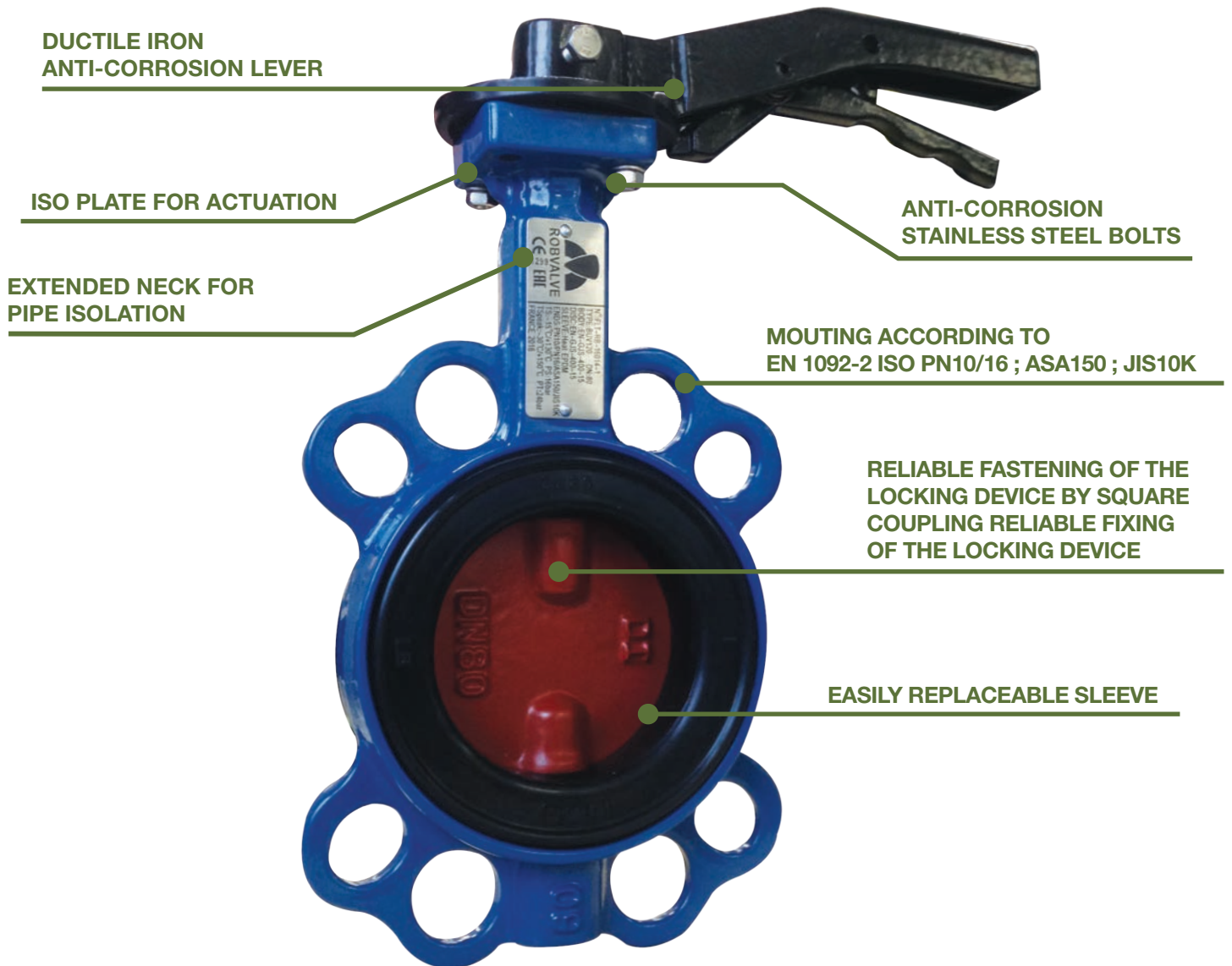
Ball-type sealing is adopted by the connection of Disc and Seat ensuring better connection of Disc and Seat, better sealing capacity and low torque. The semi-shaft design of the Disc efficiently lowers the pressure loss of the valve.

The seat has no skeleton. It adopts a bar design and uses thick rubber, which improve the rebound resilience, allowing lower torque, and the interference sealing ensures better sealing results. The seat can be designed by multiple rubber materials to adopt different working condition.

The bushing between the shaft and body minimizes the friction and lower the torque value, increasing the valve lifetime.

The structure of this valve is simple and therefore easy to use.

# ADVANTAGES



DUCTILE IRON  
ANTI-CORROSION LEVER

ISO PLATE FOR ACTUATION

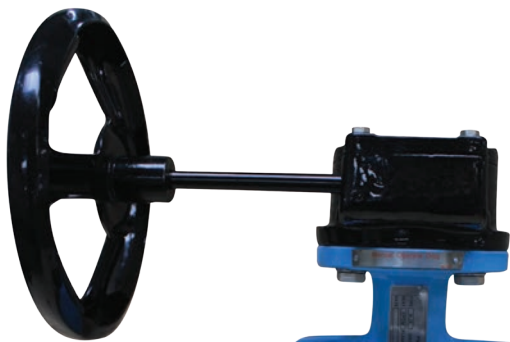
EXTENDED NECK FOR  
PIPE ISOLATION

ANTI-CORROSION  
STAINLESS STEEL BOLTS

MOUNTING ACCORDING TO  
EN 1092-2 ISO PN10/16 ; ASA150 ; JIS10K

RELIABLE FASTENING OF THE  
LOCKING DEVICE BY SQUARE  
COUPLING RELIABLE FIXING  
OF THE LOCKING DEVICE

EASILY REPLACEABLE SLEEVE

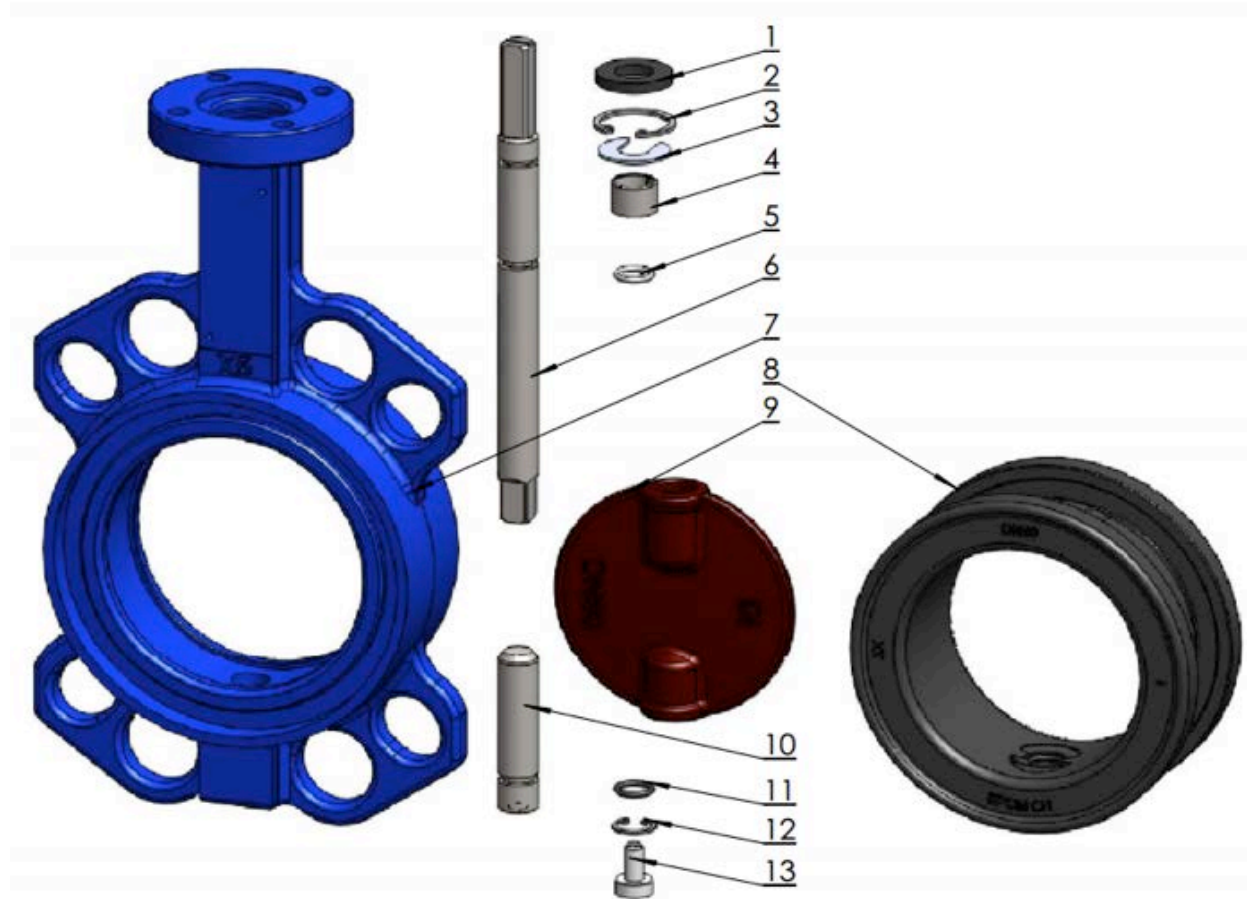


GEARBOX OPERATION FOR  
HIGHER TORQUE VALUES

The circumferential lug profiles on the sleeve engage with matching recesses in the body thus assuring the exact position of the sleeve and long service life.

## Dimensions

### BUV12 Structure (DN40 ~ DN300)



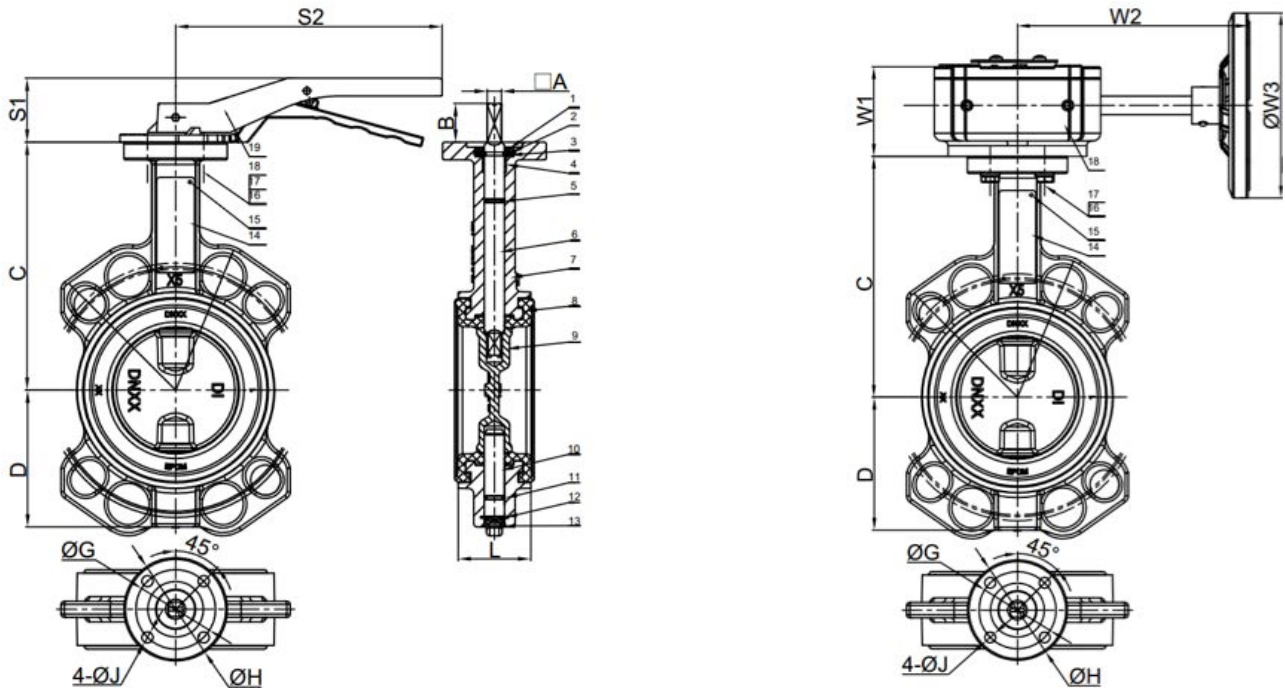
### BUV12 Materials List (DN40 ~ DN300)

NO.	Name	Materials	Optional Materials
1	Anti-dust Ring	NBR	EPDM
2-12	Elastic Collar	65Mn	
3	U-Ring	SS201	Stainless Steel, Carbon Steel
4	Bushing	SS201+F4	--
5-11	O-Ring	NBR	EPDM
6	Upper Shaft	SS420	Stainless Steel
7	Body	EN-GJS-400-15	CI, WCB, Stainless Steel, Copper, Duplex Steel
8	Seat	Heat EPDM	NBR/Silicone/FPM/Hypalon/PTFE
9	Disc	EN-GJS-400-15	WCB, Stainless Steel, Copper, Duplex Steel, Ductile Iron Coated Nylon, Ductile Iron Coated Halar, Ductile Iron Epoxy Coating
10	Lower Shaft	SS420	Stainless Steel
13	Bottom Cover	Plastic	--

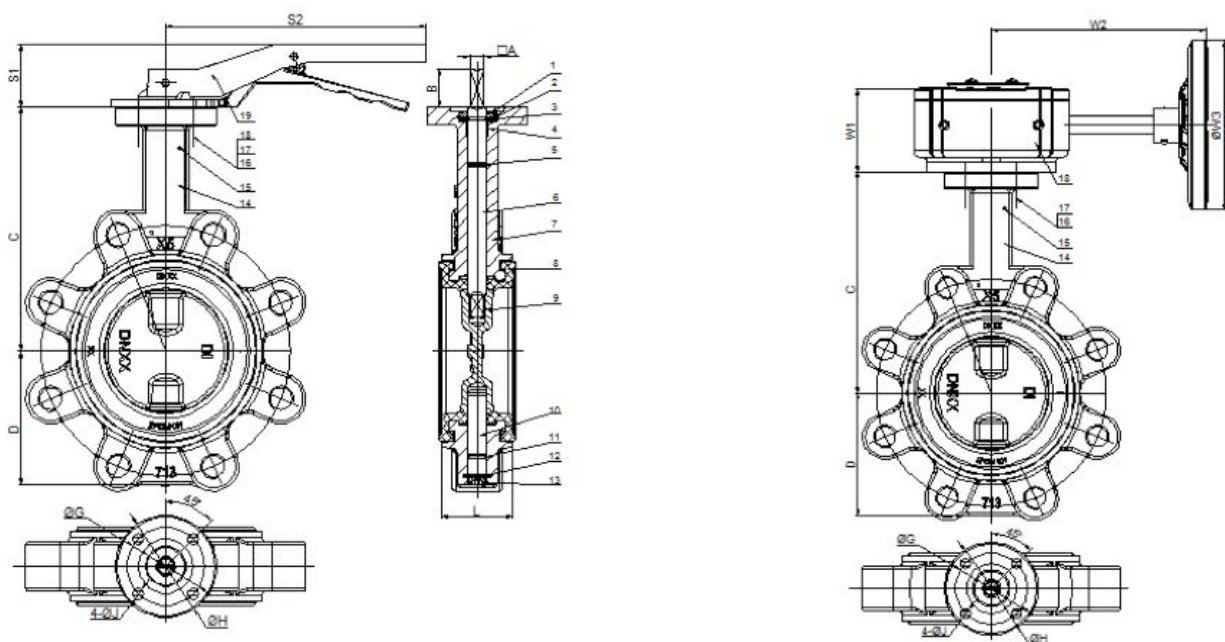
# BUV12 BUTTERFLY VALVE



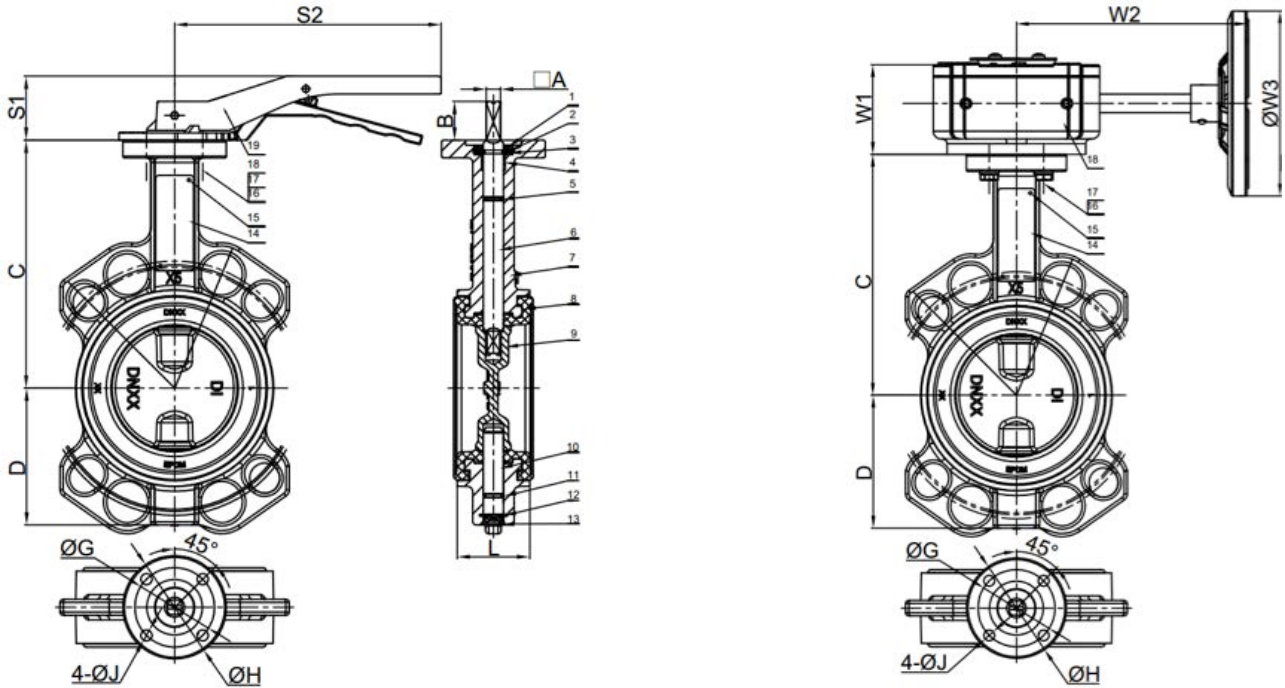
## BUV12 Structure (DN40 ~ DN300) - BUV12 Wafer



## BUV12 Structure (DN40 ~ DN300) - BUV12 Lug



## BUV12 Structure (DN40 ~ DN300) - BUV12 U-Type Flange



## BUV12WA/BUV12LU/BUV12UF Structure Size (DN40 ~ DN300) Unit : mm

DN	Inch	W1	W2	W3	S1	S2	A	B	C	D	ØG	ØH	ØJ	L
40	1.5	58	130	120	52.5	180	9	32	135	52	50	65	Ø8	32.5
50	2	58	130	120	52.5	180	9	32	140	60	50	65	Ø8	42.5
65	2.5	58	130	120	52.5	180	9	32	150	70	50	65	Ø8	45.5
80	3	58	130	120	52.5	180	9	32	156	86	50	65	Ø8	45.5
100	4	58	130	120	52.5	180	11	32	169	90	50	65	Ø8	51.5
125	5	58	130	120	53	220	11	32	190	105	70	90	Ø10	55.5
150	6	58	130	120	53	220	14	32	200	120	70	90	Ø10	55.5
200	8	58	206	200	65	322	17	45	224	158	102	125	Ø12	59.5
250	10	58	206	200	65	322	22	45	265	197	102	125	Ø12	67.5
300	12	58	206	200	65	322	22	45	303	230	102	125	Ø12	77.5

# BUY12 BUTTERFLY VALVE



BUY12WA/BUY12LU/BUY12UF Weight Kg : With Lever (DN 40 ~ DN300) Unit : Kg

Specification	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200	DN250	DN300
	1.5"	2"	2.5"	3"	4"	5"	6"	8"	10"	12"
BUY12WA16L	2.2	2.7	3.2	3.7	4.5	6.4	7.8	15.2	21.5	29.5
BUY12LU16L	2.6	3.2	3.8	4.9	6	9.5	10.7	21	28.4	37.7
BUY12UF16L	3.5	4.2	5.1	5.7	7.4	11.3	12.5	21.3	28.5	41.6

BUY12WA/BUY12LU/BUY12UF Weight Kg : With Gear Box : (DN 40 ~ DN300) Unit : Kg

Specification	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200	DN250	DN300
	1.5"	2"	2.5"	3"	4"	5"	6"	8"	10"	12"
BUY12WA16G	5.8	6.3	6.8	7.3	8.2	9.9	11.4	17.1	23.3	31.4
BUY12LU16G	6.2	6.7	7.4	8.5	9.7	13	14.3	22.9	30.2	39.6
BUY12UF16G	7.1	7.8	8.7	9.3	11.2	14.8	16.1	23.2	30.3	43.5

BUY12WA/BUY12LU/BUY12UF Torque (DN 40 ~ DN300) Unit : N.m

Specification	DN	40	50	65	80	100	125	150	200	250	300
	Inch	1.5"	2"	2.5"	3"	4"	5"	6"	8"	10"	12"
Torque N.m	0bar	<6.8	<6.8	12	24	35	45	70	180	260	380
	6bar	8	8	15	26	40	50	80	190	280	400
	10bar	9	9	18	28	45	55	90	200	300	420
	16bar	10	10	20	30	50	60	100	220	320	450

Note : The torque values in the table are measured, without security coefficient.

BUY12WA/BUY12LU/BUY12UF Kv value (DN 40 ~ DN300) Unit : m<sup>3</sup>/h

Specification	DN	40	50	65	80	100	125	150	200	250	300
	Inch	1.5"	2"	2.5"	3"	4"	5"	6"	8"	10"	12"
KV		55	111	234	425	638	1403	2210	3485	5568	7268

# BUY12 BUTTERFLY VALVE

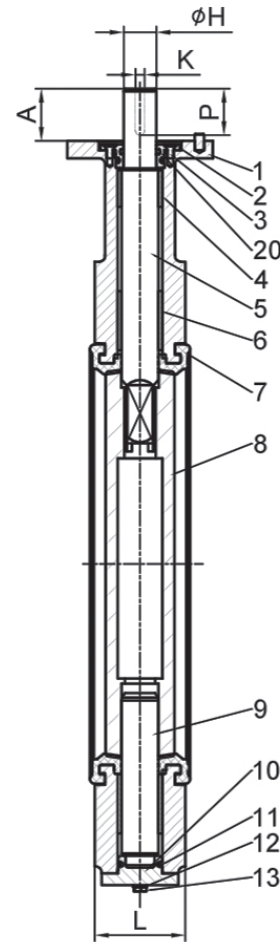
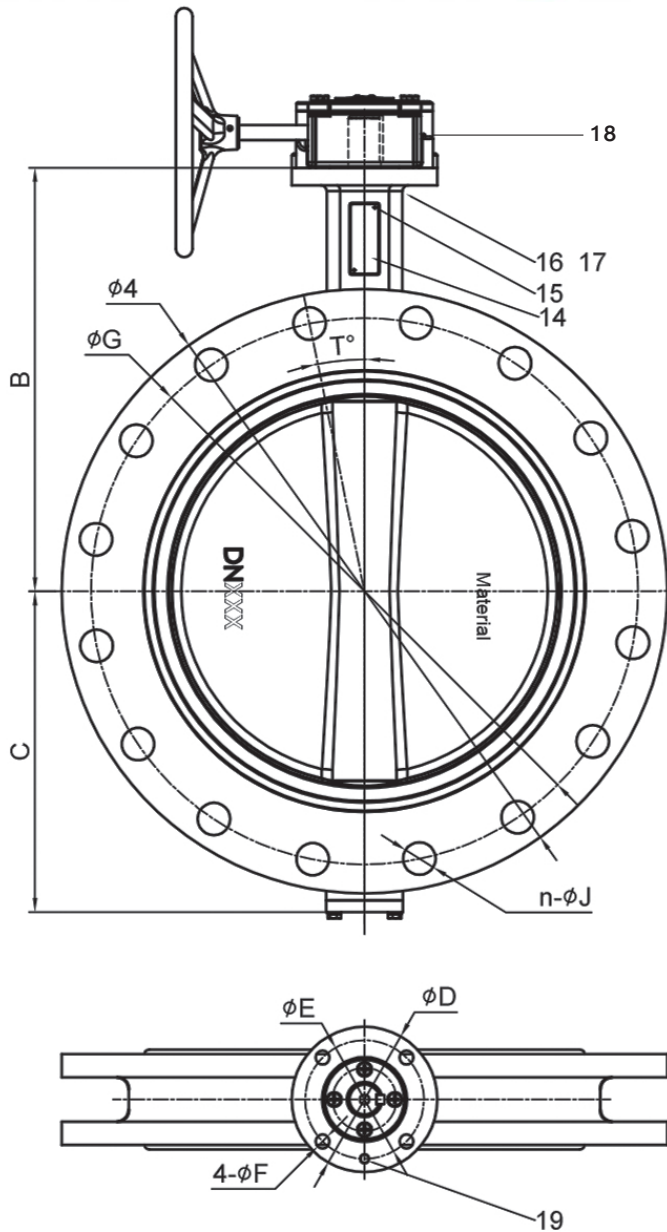
BUY12WA



BUY12LU



BUY12UF



BUY12UF

# BUV12 BUTTERFLY VALVE



## BUV12WA/BUV12LU/BUV12UF Material List (DN350 ~ DN600)

No.	Name	Materials	Optional Materials
1	Body	EN-GJS-400-15	Cl, Stainless Steel, WCB, Copper, Duplex Steel
2	Gland Cover	EN-GJS-400-15	Cl, Stainless Steel, WCB, Copper, Duplex Steel
3	Cylinder Pin	35	---
4,6	Bushing	Copper-base powder metallurgy	Glass Fiber+F4, Stainless Steel+F4
5	Upper Shaft	SS420	Stainless Steel
7	Seat	EPDM	NBR, Silicone, FPM, Hypalon, PTFE
8	Disc	EN-GJS-400-15	WCB, Stainless Steel, Copper, Duplex Steel, Ductile Iron Coated Nylon, Ductile Iron Coated Halar, Ductile Iron Epoxy Coating Coating
9	Lower Shaft	SS420	Stainless Steel
10	Bottom Cover	EN-GJS-400-15	Cl, Stainless Steel, WCB, Copper, Duplex Steel
11,19	O-ring	EPDM	NBR
12,17	Washer	SS201	---
13,16	Bolt	SS201	Stainless Steel, Carbon Steel
14	Nameplate	SS304	---
15	Rivet	Al	---
18	Gear Box	---	---

## BUV12WA/BUV12LU/BUV12UF Structure Size (DN350 ~ DN600) Unit : mm

Size		W1	W2	ØW3	A	B	ØC	ØD	ØE	ØF	G	H	H1	L
DN	Inch													
350	14"	108.5	234.5	300	364	276	125	102	12	28	8	45	40	78
400	16"	124.5	296	400	413	312	175	140	18	31	10	50	45	102
450	18"	124.5	296	400	422	336	175	140	18	35	10	50	45	114
500	20"	124.5	296	400	480	366	175	140	18	38	12	65	56	127
600	24"	124.5	296	400	562	448.4	210	165	23	48	14	65	60	152

# BUY12 BUTTERFLY VALVE

BUY12WA/BUY12LU/BUY12UF Weight - With Gearbox - (DN350 ~ DN600) Unit : Kg

Specification	DN350	DN400	DN450	DN500	DN600
	14"	16"	18"	20"	24"
BUY12WA16G	48	86	105	135	214
BUY12LU16G	67	99	135	172	261
BUY12UF16G	68.3	109.9	139.3	176.1	274.7

BUY12WA/BUY12LU/BUY12UF Torque (DN350 ~ DN600) Unit : N/m

Specification	DN	350	400	450	500	600
	Inch	14"	16"	18"	20"	24"
Torque N.m	0bar	550	680	1300	1500	1600
	6bar	600	800	1500	1600	1800
	10bar	650	920	1600	1800	2000
	16bar	720	1600	1800	2000	2200

Note : The torque values in the table are measured, without security coefficient

BUY12WA/BUY12LU/BUY12UF Kv Value (DN350 ~ DN600) Unit : m<sup>3</sup>/h

Specification	DN	350	400	450	500	600
	Inch	14"	16"	18"	20"	24"
KV		9435	12410	15470	18785	25670



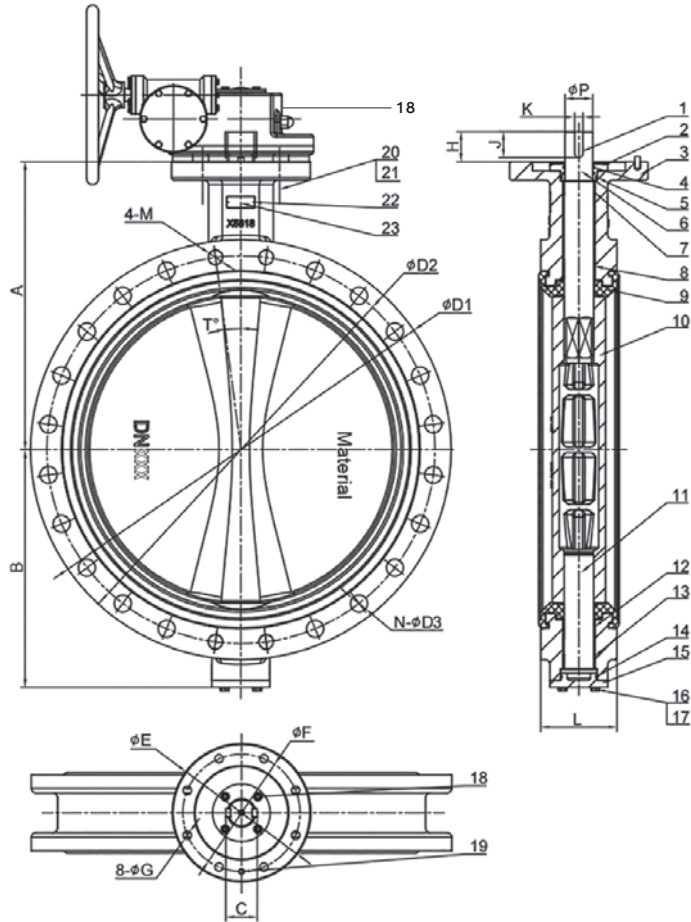
# BUV12 BUTTERFLY VALVE



BUV12WA



BUV12LU



BUV12UF



## BUV12WA/BUV12LU/BUV12UF Material List (DN700 ~ DN1200)

NO.	Name	Materials	Optional Materials
1	General Flat Key	45	--
2	Cylinder Pin	35	--
3	Body	EN-GJS-400-15	Cl, Stainless Steel, WCB, Copper, Duplex Steel
4	Gland Cover	EN-GJS-400-15	Cl, Stainless Steel, WCB, Copper, Duplex Steel
5,14	O-ring	EPDM	NBR
6,13	Bushing	Copper-base powder metallurgy	Glass Fiber+F4,Stainless Steel+F4
7	Upper shaft	SS420	Stainless Steel
8,12	Bushing	Copper-base powder metallurgy	Glass Fiber+F4,Stainless Steel+F4
9	Seat	EPDM	NBR/Silicone/FPM/Hypalon/PTFE
10	Disc	EN-GJS-400-15	WCB, Stainless Steel, Copper, Duplex Steel, Ductile Iron Coated Nylon, Ductile Iron Coated Halar, Ductile Iron Epoxy Coating
11	Lower Shaft	SS420	Stainless Steel
15	Bottom Cover	EN-GJS-400-15	Cl, Stainless Steel, WCB, Copper, Duplex Steel
16	Gasket	SS201	Stainless Steel, Carbon Steel
17	Bolt	SS201	Stainless Steel, Carbon Steel
18	Gear Box	--	--
19	Gasket	SS201	Stainless Steel, Carbon Steel
20	Hexagon bolt	SS201	Stainless Steel, Carbon Steel

## BUV12WA/BUV12LU/BUV12UF Material List (DN700 ~ DN1200) Unit : mm

DN	Inch	W1	W2	ØW3	A	B	ØC	ØD	ØE	ØF	G	H	H1
700	28	166	350	385	620	515	300	254	18	60	18	65	63
800	32	210	395	450	670	590	300	254	18	60	18	65	63
900	36	210	395	450	720	670	300	254	18	70	20	118	110
1000	40	210	395	450	800	715	300	254	18	80	22	142	125
1200	48	208	416	500	940	860	350	298	22	100	28	160	140

## BUV12WA/BUV12LU/BUV12UF Weight - With Gearbox - (DN700 ~ 1200) Unit : Kg

Specification	DN700	DN800	DN900	DN1000	DN1200
	28"	32"	36"	40"	48"
BUV12WA16G	391	537	656	779	1259.5
BUV12LU16G	429	586.5	720.5	877	1433
BUV12UF16G	453	633.5	786	1018	1468

## BUV12WA/BUV12LU/BUV12UF Torque (DN700 ~ 1200) Unit : N/m

Specification	DN	DN700	DN800	DN900	DN1000	DN1200
	Inch	28"	32"	36"	40"	48"
Torque : PN16	N.m	5000	6000	7000	8000	13000

Note : The torque values in the table are measured, without security coefficient

## BUV12WA/BUV12LU/BUV12UF Kv Value (DN700 ~ DN1200) Unit : m<sup>3</sup>/h

Specification	DN	DN700	DN800	DN900	DN1000	DN1200
	Inch	28"	32"	36"	40"	48"
KV		47500	63500	84700	108500	147800

## Standards & Specification

**Design standard :** EN593

**Connection flange :** EN1092-2;  
ISO7005-2;

**Top flange :** ISO 5211

**Face to face :** EN558 (13 serial)

**Test standard :** EN12266-1

**Working pressure :** PN10/16 (DN40 ~ DN3000 1.5" ~ 120")  
PN25 (DN40 ~ DN600 1.5" ~ 24")

**Size :** BUY13FR (DN40 ~ DN1200 1.5" ~ 48")

**Testing pressure :** (water) Ps (MPa)

**Shell test :** 1.5 times rated pressure

**Seal test :** 1.1 times rated pressure

**Working temperature :** -15°C ~ +130°C

**Actuator :** manual, electric, pneumatic

## Industrial Applications

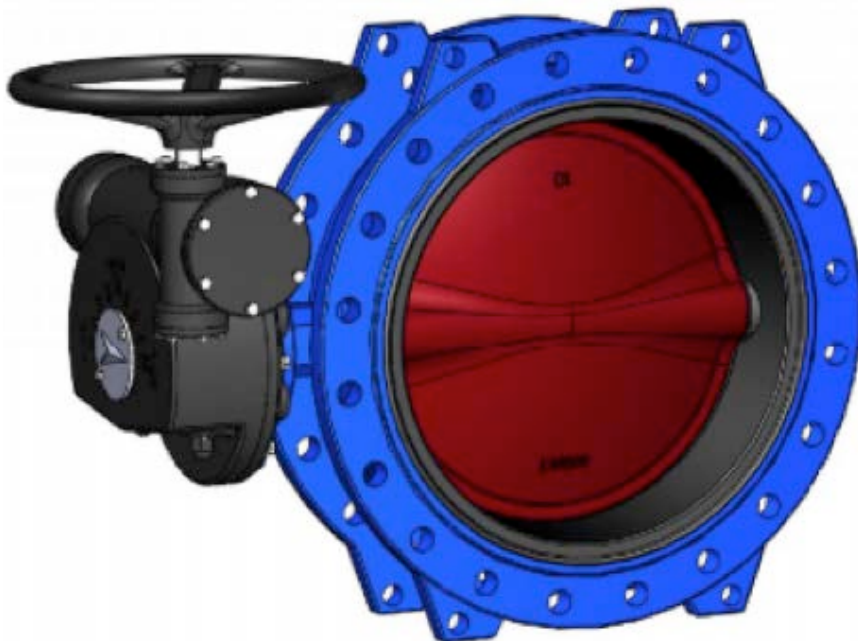
- Products are suitable for fresh water, sea water, sewage, treatment systems, and can also be used in acid, alkali and salty corrosion medias.
- The valve has passed the ACS, NSF and low lead certification. It can be used in the field of drinking water and food.

## Features

The valve is rubber lined by vulcanization injected directly on the body to ensure permanent adhesion. The use of the adhesive layer will enhance the reliability of the butterfly valve.

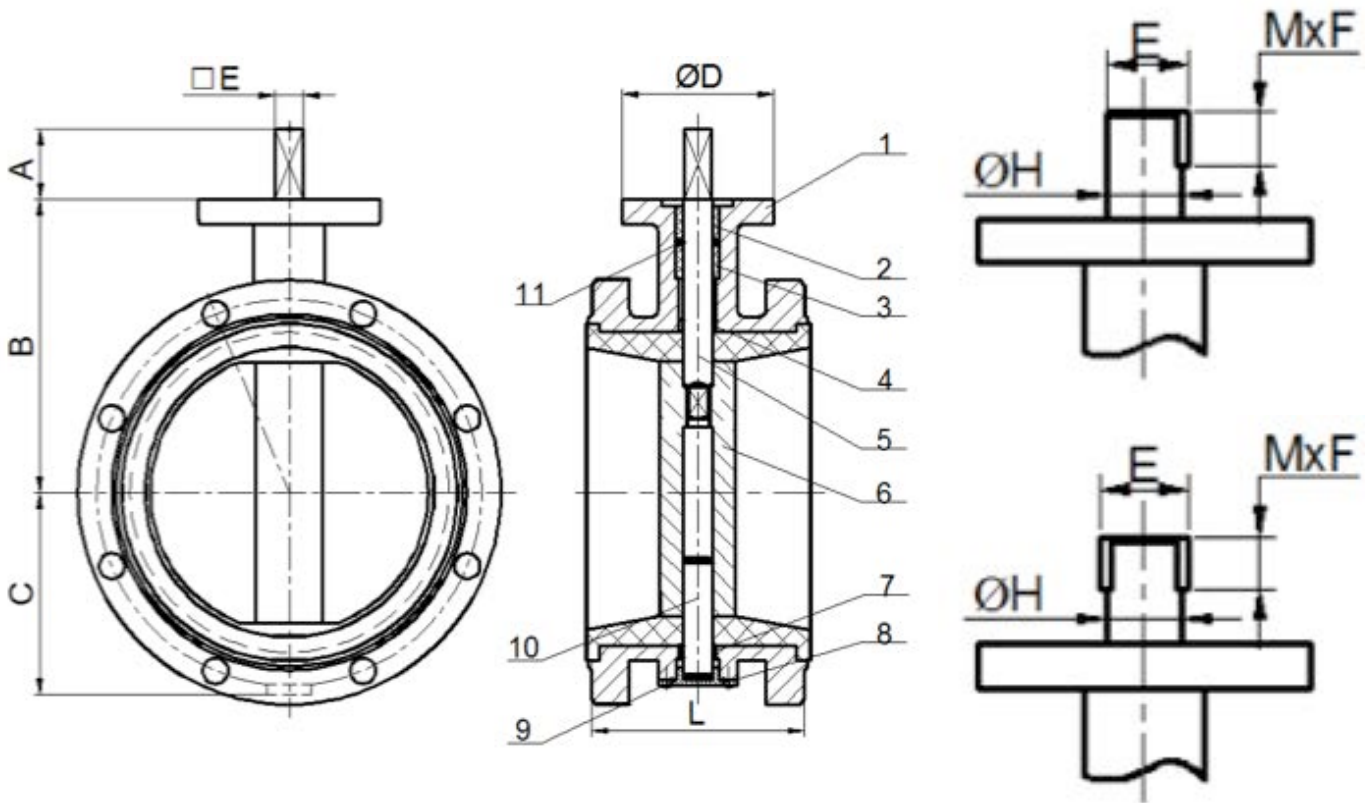
Precision encapsulation and molding process can ensure the lining sealing of the disc and integral flange gasket sealing.

With polishing and precision machining on the sealing surface of the disc, the valve is completely sealed, it lowers the operating torque, extends the service life and reach bubble-tight grade sealing. Streamlined design also minimizes pressure loss.



## Dimensions

BUV13FR Structure (DN40 ~ DN1200)



## BUV13FR Materials List (DN40 ~ DN1200)

NO.	Name	Materials	Optional Materials
1	Body	EN-GJS-400-15	EN-GJS-400-15
2,13	Circlip	65Mn	65Mn
3	U-Ring	SS201	SS201
4,6, 8	Bushing	Glass Fiber+F4	Glass Fiber+F4
5,12	O-Ring	NBR	NBR
7	Upper Shaft	SS420	SS420
9	Disc	EN-GJS-400-15	EN-GJS-400-15
10	Vulcanization Seat	EPDM	EPDM
11	Lower Shaft	SS420	SS420
14	Bottom Cover	EN-GJS-400-15	EN-GJS-400-15

# BUV13 BUTTERFLY VALVE



## BUV13FR Structure (DN40 ~ DN1200) Unit : mm

Size		A	B	C	ØD	TYPE	L	E	ØH	MXF	Weight/Kg
DN	Inch										
40	1.5"	32	113	58	90	F07	106	9	-	-	6.5
50	2"	32	113	63	90	F07	108	9	-	-	8.5
65	2.5"	32	126	71	90	F07	112	9	-	-	9
80	3"	32	133	78	90	F07	114	9	-	-	10
100	4"	32	147	98	90	F07	127	11	-	-	14
125	5"	32	160	109	90	F07	140	11	-	-	17
150	6"	32	180	133	90	F07	140	14	-	-	21.5
200	8"	45	204	158	90	F07	152	17	-	-	32.5
250	10"	45	245	194	125	F10	165	22	-	-	49
300	12"	45	270	219	125	F10	178	22	-	-	66.5
350	14"	45	315	256	125	F10	190	34	31	C8X22	96
400	16"	51.2	363	308	175	F14	216	36	33	C10X50	128
450	18"	51.2	388	334	175	F14	222	41	38	C10X50	152
500	20"	64.2	413	360	175	F14	229	44	41	C10X50	202
600	24"	70.2	510	426	175	F14	267	54	50	C16X63	298
700	28"	66	560	480	210	F16	292	63	55	C16X63	379.5
750	30"	66	585	520	210	F16	318	63	55	C16X63	410
800	32"	66	610	525	210	F16	318	63	55	C16X64	551
900	36"	118	690	635	300	F25	330	84	75	C20X100	735
1000	40"	142	740	685	300	F25	410	95	85	C22X125	1053
1200	48"	206	855	870	350	F30	470	112	100	C28X150	1300

## BUV13FR Torque Value (DN50 ~ DN1200)

BUV13FR Torque Value is same as BUV12WA/BUV12LU/BUV12UF

## BUV13FR Kv Value (DN50 ~ DN1200)

BUV13FR Kv Value is same as BUV12WA/BUV12LU/BUV12UF

## Standards & Specifications

**Design standard conform to :** EN593  
**Connection flange conform to :** EN1092-2, ISO7005-2  
**Top flange conform to :** ISO5211  
**Face to face conform to :** EN588 Series14  
**Test standard conform to :** EN12266-1  
**Nominal working pressure :** PN10/PN16/PN25/PN40

## Performance & Specifications

**Nominal working pressure :** PN10 DN100 ~ DN3000  
 PN16 DN100 ~ DN2600  
 PN25 DN100 ~ DN2000  
 PN40 DN100 ~ DN1200

### Test Pressure (water) Ps (MPa)

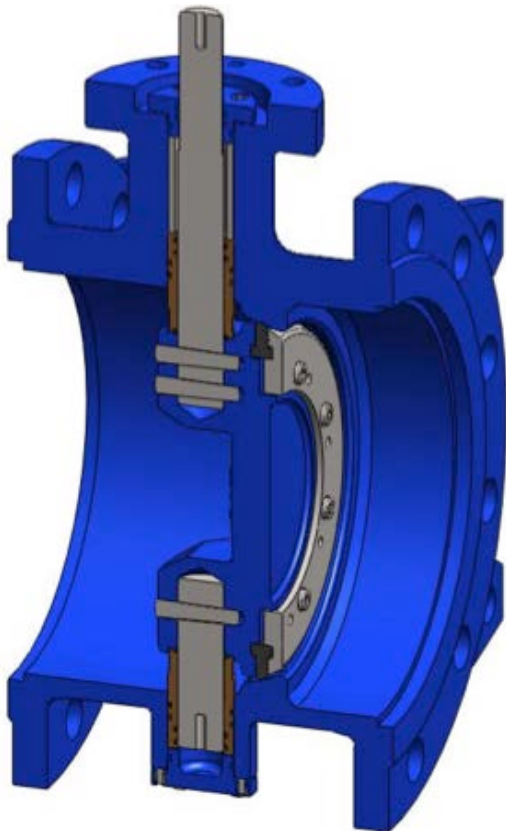
**Body Test Pressure :** 1,5 times rated pressure

**Seat Test Pressure :** 1,1 times rated pressure

**Working temperature :** -10°C ~ +130°C

**Driving Device :** Power-driven, pneumatic

## Product Features



Following EN593 standards and referring to the AWWA C504 design standards our BUV23 valve service life is extended and its safety character is optimum.

The streamlined design of the inside body increases the flow, while the supporting leg and lifting hole facilitate the installation.

The twin-shaft design effectively reduces the medium damage to the valve shaft, enhances the coaxiality, decreases the operating torque, and extends the service life of the valve. The shaft doesn't go through the sealing ring, so the ring can be replaced while the valve is open. The bushing supports the disc ensuring good sealing orientation and gives to the valve the opportunity to be installed both horizontally and vertically.

The double eccentric design ensures good sealing quality and lowers torque. Best optimized sealing magnitude of interference extends the valve lifetime.

The Nickel-based stainless steel seat overlaying on the body has strong corrosion resistant ability and plenty of hardness, which is the fundamental guarantee of long service life. The surface of the seat uses polishing treatment, while the other parts are coated with epoxy resin. The seat adopts T-ring sealing which is inlaid between the disc and the compression ring. In closed position, the sealing ring is pressed by the seat, and forms bi-directional sealing. The sealing ring can be replaced while the disc is still in place. The seat can self-enhance the sealing when the valve is closed, and the media, even from different flow directions, will further enhance the sealing.

German AKZO special epoxy coating is used, ensuring the good adhesion and appearance and preventing the media erosion to the valve.

There are self-adjusting screws on both bottom and top of the valve. The screws can be adjusted to change the relative position of the disc, ensuring the sealing quality of the valve.

## Applications

**Media :** water, seawater, sewage, hot water, gas.

**Usage occasions :** sewage treatment factory, water circulation system, chemical plant, hydraulic pump station.

# BUY23 BUTTERFLY VALVES



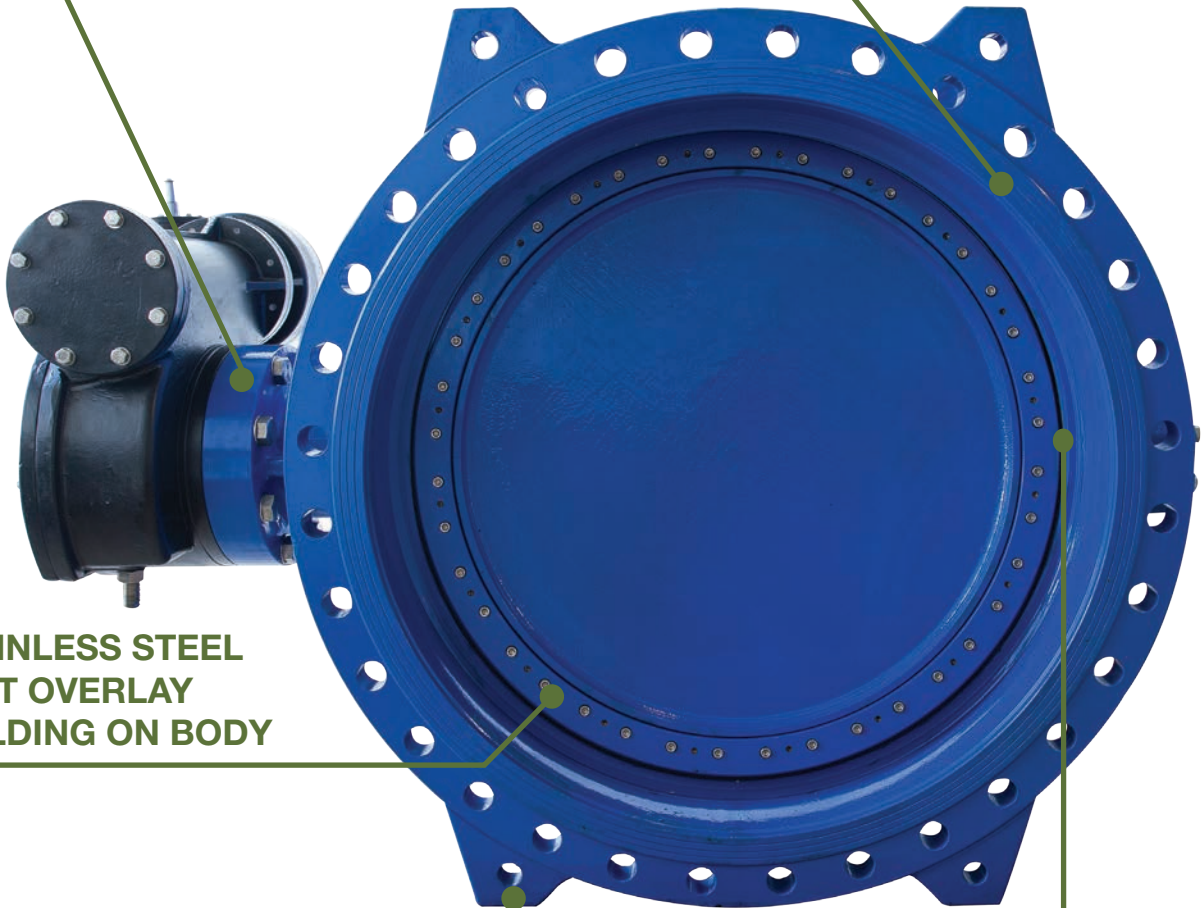
ISO PLATE  
FOR ACTUATION

BIG CHOICE OF  
BODY AND DISC  
MATERIALS  
(DUCTILE IRON OR  
STEEL BY DEFAULT)

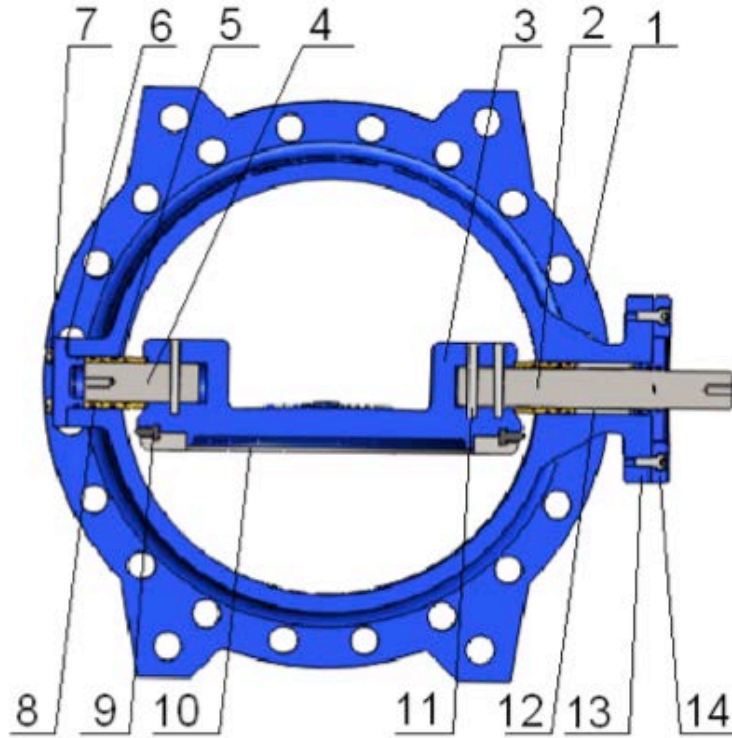
STAINLESS STEEL  
SEAT OVERLAY  
WELDING ON BODY

SUPPORTS

EPDM SEAL, NBR SEAL  
OR OTHER MATERIAL  
ALSO AVAILABLE



## Materials List



No.	Name	Material	Optional Material
1	Body	EN GJS-400-15	EN GJL-250, WCB, LCB
2	Upper Stem	SS420	SS316, SS304
3	Disc	EN GJS-400-15	WCB, Bronze, LCB
4	Lower Stem	SS420	SS316, SS304
5	Bushing	Brass	Stainless Steel
6	Bottom Cover	EN GJS-400-15	EN GJL-250, WCB, LCB
7	Hex Bolt	Stainless Steel	Carbon Steel
8	O-ring	EPDM	NBR
9	Disc Sealing Ring	EPDM	NBR, Hypalon, FPM
10	Disc Gland Ring	Stainless Steel	Carbon Steel
11	Cylinder Pin	SS420	SS316, SS304
12	Spacer Bushing	Stainless Steel	Carbon Steel
13	Hex Bolt	Stainless Steel	Carbon Steel
14	Translation Plate	EN GJS-400-15	Carbon Steel

Note : We just list some common materials in the table. We can provide other materials for special use according to customers' special requirements.

# BUY23 BUTTERFLY VALVES



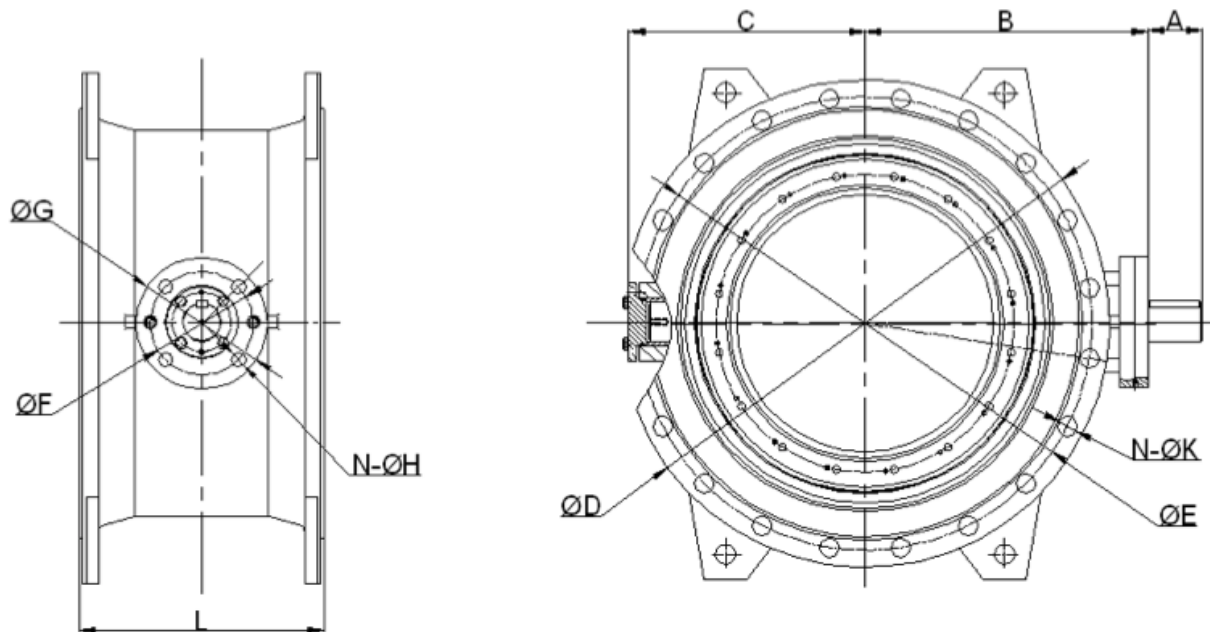
## Torque Values Unit : N.m

DN	100	150	200	250	300	350	400	450	500	600	700	800	900
PN10	60	140	260	460	730	850	1250	1700	2200	3500	5000	6700	10000
PN16	85	200	380	650	1050	1250	1800	2500	3200	5000	7300	10000	14500
PN25	120	280	550	1300	1950	2340	4030	4940	7150	10400	15860	20800	30550
PN40	200	450	900	1800	3300	4500	7200	10000	13500	20000	28800	38000	53000

DN	1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000
PN10	12500	20000	30800	45000	62400	84800	103200	122400	156000	208000	260000
PN16	18000	28500	44100	63000	87500	98000	119000	171500	247000	---	---
PN25	35100	54600	93600	129600	162000	---	---	---	---	---	---
PN40	68000	106000	---	---	---	---	---	---	---	---	---

Note : The torque values above are without safety factor. If automatic actuator is needed, please contact the actuators suppliers to make the selection.

## Main Dimensions



## Main Dimensions List (PN10) Unit : mm

DN	PN	A	B	C	ØD	ØE	ØF	ØG	N-ØH	L	Weight/Kg
100	10	31	162	121	220	180	70	90	4-Ø8	190	16
150	10	31	203	124	285	240	102	125	4-Ø12	210	30
200	10	40	217	164	340	295	102	125	4-Ø12	230	43
250	10	55	260	172	400	350	125	150	4-Ø12	250	56
300	10	55	295	251	445	400	125	150	4-Ø12	270	80
350	10	55	360	297	505	460	125	150	4-Ø14	290	120
400	10	60	365	300	565	515	165	210	4-Ø18	310	132
450	10	90	400	340	615	565	165	210	4-Ø18	330	189
500	10	90	420	395	670	620	165	210	4-Ø18	350	238
600	10	90	490	418	780	725	165	210	4-Ø23	390	330
700	10	100	586	537	895	840	254	300	8-Ø18	430	480
800	10	120	650	595	1015	950	254	300	8-Ø18	470	625
900	10	120	718	647	1115	1050	298	350	8-Ø23	510	800
1000	10	125	795	677	1230	1160	298	350	8-Ø23	550	1062
1200	10	160	921	843	1455	1380	358	415	8-Ø33	630	1738
1400	10	180	990	940	1675	1590	406	475	8-Ø39	710	2550
1600	10	200	1188	1058	1915	1820	406	475	8-Ø39	790	3992
1800	10	250	1260	1150	2115	2020	483	560	12-Ø39	870	4860
2000	16	250	1435	1350	2325	2230	483	560	12-Ø39	950	7820
2200	10	300	1665	1500	2550	2440	483	560	12-Ø39	1030	11540
2400	10	300	1840	1590	2780	2650	603	686	20-Ø39	1110	13221
2600	10	320	1980	1750	2960	2850	603	686	20-Ø39	1190	14680
2800	10	345	1950	1800	3180	3070	603	686	20-Ø39	1270	19760
3000	10	360	2010	1850	3405	3290	603	686	20-Ø39	1350	20020

## Main Dimensions List (PN16) Unit : mm

DN	PN	A	B	C	ØD	ØE	ØF	ØG	N-ØH	L	Weight/Kg
100	16	31	162	121	220	180	70	90	4-Ø10	190	16
150	16	31	203	124	285	240	102	125	4-Ø12	210	30
200	16	40	217	164	340	295	102	125	4-Ø12	230	44
250	16	55	260	172	405	355	125	150	4-Ø14	250	60
300	16	55	295	251	460	410	125	150	4-Ø14	270	85
350	16	55	360	297	520	470	125	150	4-Ø14	290	116
400	16	60	365	300	580	525	165	210	4-Ø23	310	155
450	16	90	400	340	640	585	165	210	4-Ø23	330	237
500	16	90	420	395	715	650	165	210	4-Ø23	350	300
600	16	90	490	418	840	770	165	210	4-Ø23	390	460
700	16	100	586	537	910	840	254	300	8-Ø18	430	670
800	16	120	650	595	1025	950	254	300	8-Ø18	470	775
900	16	120	718	647	1125	1050	298	350	8-Ø23	510	970
1000	16	125	795	677	1255	1170	298	350	8-Ø23	550	1320
1200	16	160	921	843	1485	1390	358	415	8-Ø33	630	2090
1400	16	180	990	940	1685	1590	406	475	8-Ø39	710	2945
1600	16	200	1188	1058	1930	1820	406	475	8-Ø39	790	4450
1800	16	250	1260	1150	2130	2020	483	560	12-Ø39	870	5320
2000	16	250	1435	1350	2345	2230	483	560	12-Ø39	950	8300
2200	16	300	1665	1500	2550	2440	483	560	12-Ø39	1000	12030
2400	16	300	1840	1590	2780	2650	603	686	20-Ø39	1110	13760
2600	16	320	1980	1750	2960	2850	603	686	20-Ø39	1200	22600

## Main Dimensions List (PN25) Unit : mm

DN	PN	A	B	C	ØD	ØE	ØF	ØG	N-ØH	L	Weight/Kg
100	25	31	162	121	220	180	70	90	4-Ø10	190	18
150	25	31	203	124	285	240	102	125	4-Ø12	210	34
200	25	40	217	164	360	310	102	125	4-Ø12	230	55
250	25	55	260	172	425	370	125	150	4-Ø14	250	70
300	25	55	295	251	485	430	125	150	4-Ø14	270	105
350	25	55	360	297	555	490	125	150	4-Ø14	290	130
400	25	60	365	300	620	550	165	210	4-Ø23	310	175
450	25	90	400	340	670	600	165	210	4-Ø23	330	286
500	25	90	420	395	730	660	165	210	4-Ø23	350	375
600	25	90	490	418	845	770	165	210	4-Ø23	390	492
700	25	100	586	537	960	875	254	300	8-Ø18	430	790
800	25	120	650	595	1085	990	254	300	8-Ø18	470	810
900	25	120	718	647	1185	1090	298	350	8-Ø23	510	1260
1000	25	125	795	677	1320	1210	298	350	8-Ø23	550	1690
1200	25	160	921	843	1530	1420	356	415	8-Ø33	630	2500
1400	25	180	990	940	1755	1640	406	475	8-Ø39	710	3550
1600	25	200	1188	1058	1975	1860	406	475	8-Ø39	790	5213
1800	25	250	1260	1150	2195	2070	483	560	12-Ø39	870	6165
2000	25	250	1435	1350	2425	2300	483	560	12-Ø39	950	9650

## Main Dimensions List (PN40) Unit : mm

DN	PN	A	B	C	ØD	ØE	ØF	ØG	N-ØH	L	Weight/Kg
100	40	31	162	121	220	180	70	90	4-Ø10	190	20
150	40	31	203	124	285	240	102	125	4-Ø12	210	39
200	40	40	217	164	375	320	125	150	4-Ø14	230	65
250	40	55	260	172	450	385	125	150	4-Ø14	250	89
300	40	55	295	251	515	450	125	150	4-Ø14	270	140
350	40	55	360	297	580	510	165	210	4-Ø23	290	190
400	40	60	365	300	660	585	165	210	4-Ø23	310	280
450	40	90	400	340	685	610	254	300	4-Ø18	330	396
500	40	90	420	395	755	670	254	300	4-Ø18	350	452
600	40	90	490	418	890	795	298	350	8-Ø23	390	660
700	40	100	586	537	995	900	298	350	8-Ø23	430	925
800	40	120	650	595	1140	1030	356	415	8-Ø33	470	1160
900	40	120	718	647	1250	1140	356	415	8-Ø33	510	1835
1000	40	125	795	677	1360	1250	406	475	8-Ø39	550	2260
1200	40	160	921	843	1575	1460	406	475	8-Ø39	630	2850



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