

PRODUCT CATALOGUE

A vertical strip on the left side of the page showing a close-up of industrial piping and valves, with a blue band on one of the pipes.

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PRODUCT CATALOGUE

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KNIFE GATE VALVE

SERIES: 100 MODEL: 101

NOMINAL DIAMETER	DN50 ... DN1400
NOMINAL PRESSURE	PN10 ... PN16
PURPOSE	Shut-off valve
CONNECTION TYPE	Wafer, lug
MEDIUM TEMPERATURE	-60 °C ... +300 °C
MEDIUM	Water, steam, alkalis, acids, abrasive medium, high-temperature gases, condensate, petroleum products



DESIGN FEATURES OF THE MODEL

- One-piece cast body;
- Replaceable seat seal (O-ring);
- Optional scraper installation for cleaning the knife gate in sticky medium applications;
- Wide selection of sealing materials;
- Full bore;
- Possibility of installing a flushing line at the bottom of the body.

TYPES OF CONTROL

- Manual (handwheel, gearbox);
- Pneumatic actuator: single-acting / double-acting;
- Electric actuator.



Structurally, the knife gate valve can be made with either a rising or a non-rising stem.

FLOW DIRECTION



Unidirectional, in accordance with the arrow marked on the body.

GENERAL APPLICATIONS

The knife gate valve is designed for operation with liquids containing up to 5% suspended solid particles. In applications involving dry materials in gravity systems, the valve should be installed in such a way that the arrow on the body is oriented opposite to the direction of the medium flow, which ensures optimal performance and tightness.

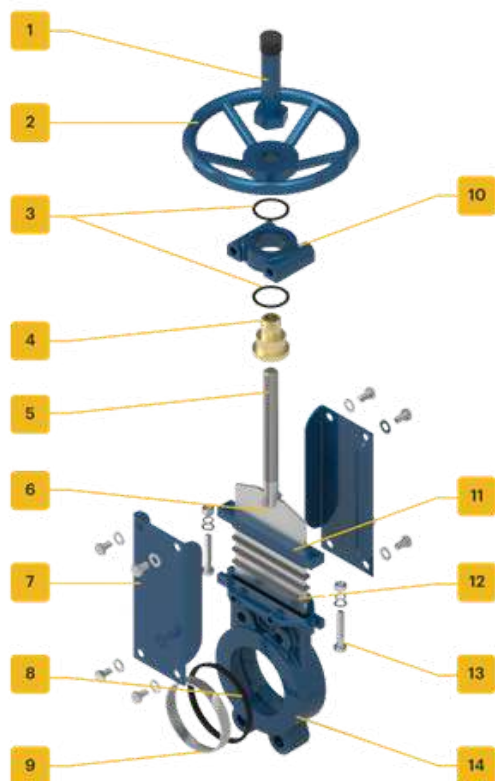
COMPLIANCE STANDARDS

Category		Standard
Product compliance		Directive PED 2014/68/EU
Manufacturing and designing		EN 1984
Marking		EN 19
Leakage class		"A" ISO 5208
Testing		EN 12266-1
Connection	Flange dimensions	EN 1092-1

CE

KNIFE GATE VALVE

SERIES: 100 MODEL: 101



No	Name
1	Hood
2	Handwheel
3	Bearing
4	Stem nut
5	Stem
6	Knife
7	Yoke
8	Seat
9	Ring
10	Yoke head
11	Packing
12	Packing gland
13	Bolt
14	Body

MATERIALS OF THE MAIN COMPONENTS

Name	Material	Medium temperature	Medium
Seat	EPDM	-30°C ... +130°C	Water, steam, alkalis, acids, abrasive medium
	NBR	-30°C ... +100°C	Petroleum products, diesel fuel, mineral oils, propane, butane, abrasive medium
	FKM (Viton)	-40°C ... +200°C	Chemically aggressive medium, mineral oils and greases, gasoline, hot water, abrasive medium
	Metal	-	Chemically aggressive medium, abrasive medium, viscous medium
Body	A216 WCB/1.0619	-29°C ... +300°C	Water, steam, petroleum products
	Duplex 2205	-46°C ... +300°C	Chemically aggressive medium, petroleum products, water
	AISI304/1.4308	-60°C ... +300°C	
	AISI316/1.4408		
	AISI316L/1.4409		
Knife	Duplex 2205	-46°C ... +300°C	Chemically aggressive medium, petroleum products, water
	AISI316/1.4408	-60°C ... +300°C	
	AISI310/1.4835		Chemically aggressive medium, mineral oils and greases, gasoline, water
	AISI316L/1.4409		High-temperature gases, condensate, petroleum products, water
	AISI304/1.4308		Chemically aggressive medium, sulfuric acid, petroleum products
	AISI316Ti/1.4571		

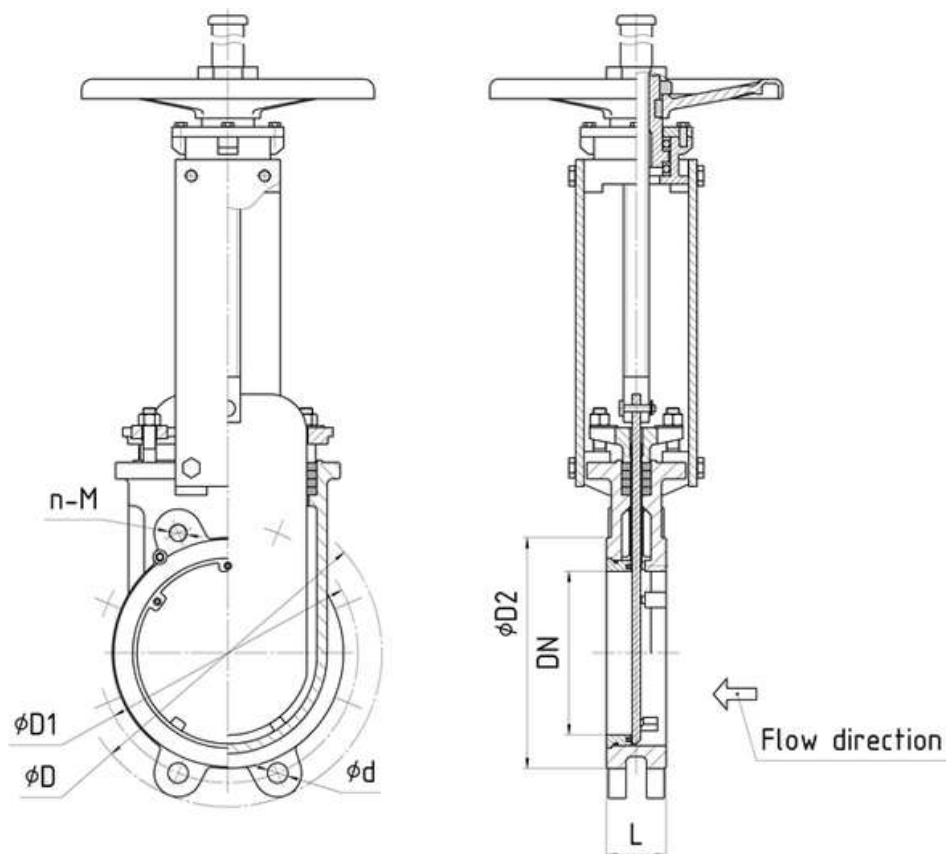
It can be manufactured from other materials according to the customer's technical requirements.

KNIFE GATE VALVE

SERIES: 100 MODEL: 101

Nominal diameter: **DN50 ... DN1400**

Nominal pressure: **PN10 ... PN16**



FLANGE FACING DIMENSIONS FOR PN10, PN16

DN	ΔP, MPa (Bar)	L	PN10					PN16				
			D	D1	D2	n-M	d	D	D1	D2	n-M	d
50	1.0 (10)	48	165	125	102	4-M16	18	165	125	102	4-M16	18
65	1.0 (10)	48	185	145	122	4-M16 / 8-M16	18	185	145	122	4-M16 / 8-M16	18
80	1.0 (10)	51	200	160	138	8-M16	18	200	160	138	8-M16	18
100	1.0 (10)	51	220	180	158	8-M16	18	220	180	158	8-M16	18
125	1.0 (10)	57	250	210	188	8-M16	18	250	210	188	8-M16	18
150	1.0 (10)	57	285	240	212	8-M20	22	285	240	212	8-M20	22
200	1.0 (10)	70	340	295	268	8-M20	22	340	295	268	12-M20	22
250	1.0 (10)	70	395	350	320	12-M20	22	405	355	320	12-M24	26
300	0.6 (6)	76	445	400	370	12-M20	22	460	410	378	12-M24	26
350	0.6 (6)	76	505	460	430	16-M20	22	520	470	438	16-M24	26
400	0.6 (6)	89	565	515	482	16-M24	26	580	525	490	16-M27	30
450	0.5 (5)	89	615	565	532	20-M24	26	640	585	550	20-M27	30
500	0.4 (4)	114	670	620	585	20-M24	26	715	650	610	20-M30	33
600	0.4 (4)	114	780	725	685	20-M27	30	840	770	725	20-M33	36

* Upon request, tabular values are provided for DN700 to DN1400.

KNIFE GATE VALVE

SERIES: 100 MODEL: 101

PARAMETERS OF THROUGH AND TAPPED HOLES FOR **PN10** FASTENER SELECTION

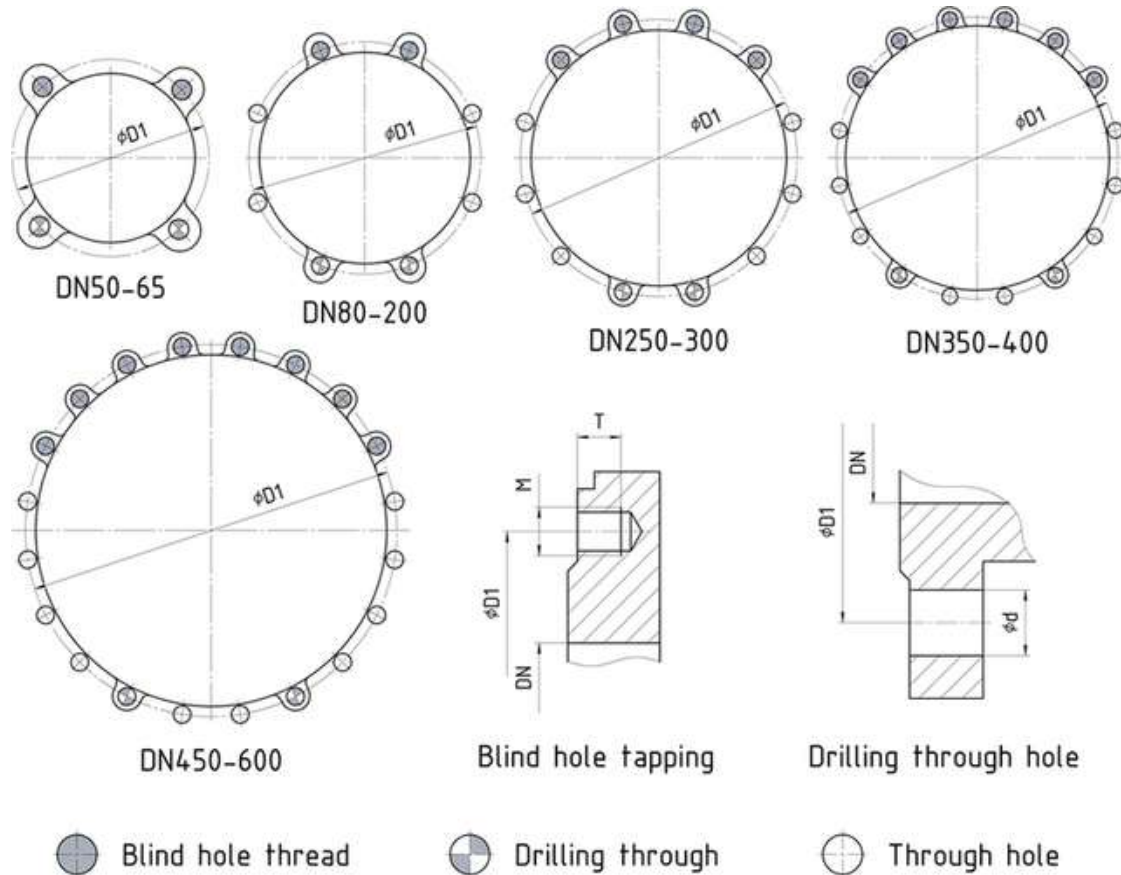


TABLE FOR NOMINAL PRESSURE PN10

DN	D1	n	M	d	T			
50	125	4	M16	18	10	2	0	2
65	145	4 / 8	M16	18	10	2	0	2
80	160	8	M16	18	12	2	4	2
100	180	8	M16	18	12	2	4	2
125	210	8	M16	18	14	2	4	2
150	240	8	M20	22	14	2	4	2
200	295	8	M20	22	14	2	4	2
250	350	12	M20	22	18	4	6	2
300	400	12	M20	22	21	4	6	2
350	460	16	M20	22	21	6	8	2
400	515	16	M24	26	25	6	8	2
450	565	20	M24	26	25	8	10	2
500	620	20	M24	26	26	8	10	2
600	725	20	M27	30	26	8	10	2

* Upon request, tabular values are provided for DN700 ... DN1400.

KNIFE GATE VALVE

SERIES: 100 MODEL: 101

PARAMETERS OF THROUGH AND TAPPED HOLES FOR **PN16** FASTENER SELECTION

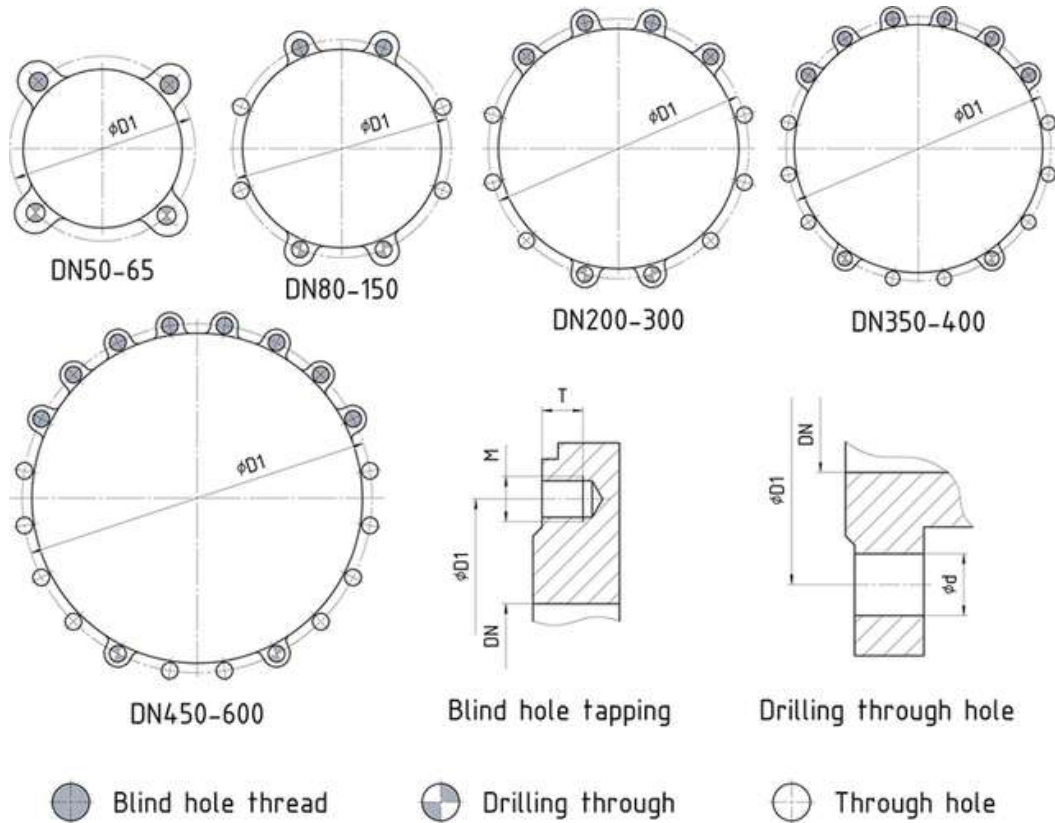


TABLE FOR NOMINAL PRESSURE PN16

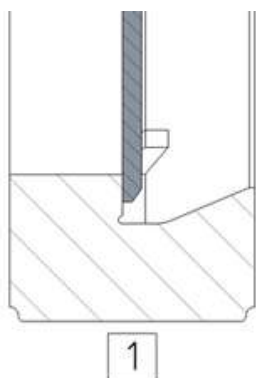
DN	D1	n	M	d	T	●	⊕	⊕
50	125	4	M16	18	10	2	0	2
65	145	4 / 8	M16	18	10	2	0	2
80	160	8	M16	18	12	2	4	2
100	180	8	M16	18	12	2	4	2
125	210	8	M16	18	14	2	4	2
150	240	8	M20	22	14	2	4	2
200	295	12	M20	22	14	4	6	2
250	355	12	M24	26	18	4	6	2
300	410	12	M24	26	21	4	6	2
350	470	16	M24	26	21	6	8	2
400	525	16	M27	30	25	6	8	2
450	585	20	M27	30	25	8	10	2
500	650	20	M30	33	26	8	10	2
600	770	20	M33	36	26	8	10	2

* Upon request, tabular values are provided for DN700 ... DN1400.

KNIFE GATE VALVE

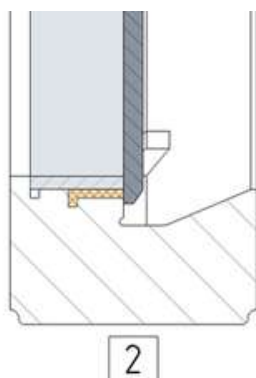
SERIES: 100 MODEL: 101

SEAT VARIATIONS



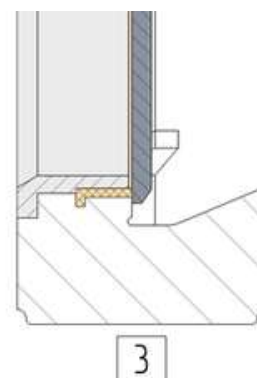
SEAT 1
Metal-metal seat

This type of seat does not include any resilient components. The estimated leakage rate (with water as the test medium) is approximately 1.5% of the pipe flow.



SEAT 2
Standard soft-seated valve

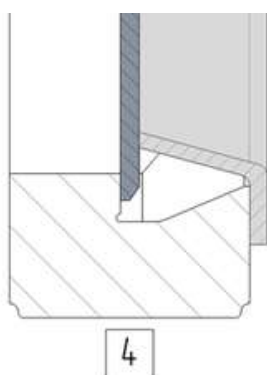
This type of seat includes a resilient seal, which is fixed inside the valve body by means of an AISI316/1.4408 stainless steel retaining ring.



SEAT 3
Soft-seated valve with reinforced socket

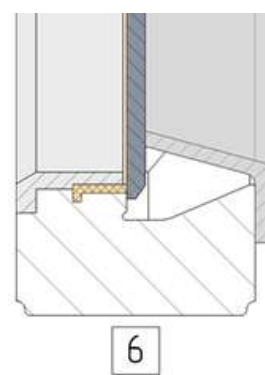
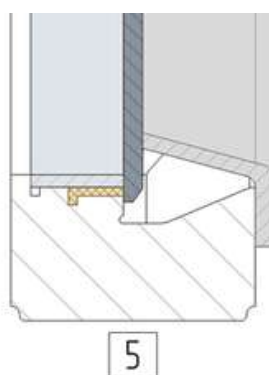
This type of seat includes a resilient seal, which is fixed inside the valve body by means of a stainless steel retaining ring.

The retaining ring serves two functions: it protects the valve from abrasion and helps clean the gate when operating in media containing solids that may adhere to it.



SEAT 4/5/6
The same as seats 1, 2 and 3 but including a deflector

The deflector is a cone-shaped ring located at the valve's entrance with two functions (to protect the valve from abrasion and guide the flow to the center of the valve).



 All seats provide Class "A" tightness except for metal-metal seats 1 and 4, which provide Class "D" tightness.

KNIFE GATE VALVE

SERIES: 100 MODEL: 101

OVERALL DIMENSIONS WITH RISING AND NON-RISING STEM FOR PN10, PN16

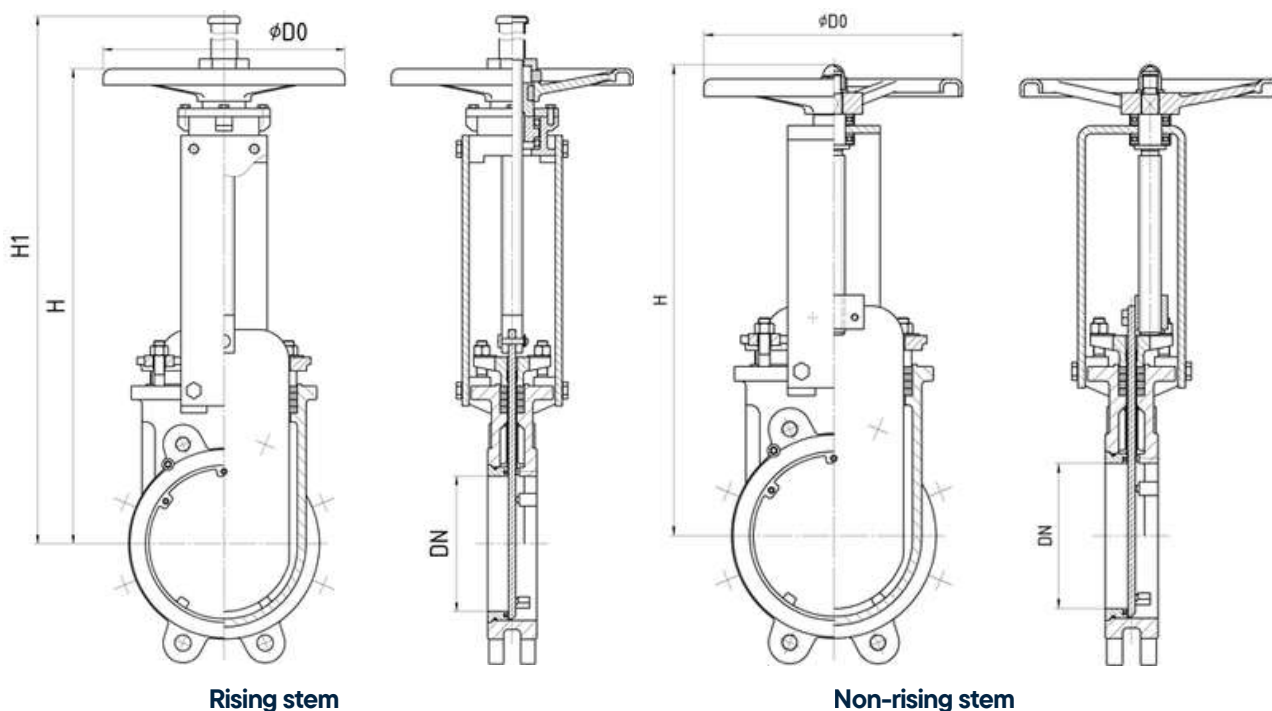


TABLE FOR NOMINAL PRESSURE PN10, PN16

DN	Rising stem				Non-rising stem		
	H	H1	D0	kg	H	D0	kg
50	295	360	180	8	290	180	7
65	335	415	180	10	320	180	8
80	360	455	220	13	350	220	10
100	400	515	240	16	385	240	13
125	455	595	240	21	430	240	18
150	510	675	280	26	485	280	23
200	585	805	300	33	565	300	30
250	695	965	320	54	680	320	47
300	765	1085	320	66	755	320	58
350	880	1250	350	91	922	350	87
400	995	1415	350	121	970	350	117
450	1100	1580	310	165	1100	310	165
500	1200	1770	310	237	1200	310	237
600	1410	2080	310	326	1410	310	326

* The weight values are for reference only; they depend on the material and design of the valve.

* Tabulated specifications for DN450 to DN600 knife gate valves equipped with gearboxes.

KNIFE GATE VALVE

SERIES: 100 MODEL: 102

NOMINAL DIAMETER	DN50 ... DN1400
NOMINAL PRESSURE	PN10 ... PN16
PURPOSE	Shut-off valve
CONNECTION TYPE	Wafer, lug
MEDIUM TEMPERATURE	-60°C ... +300°C
MEDIUM	Water, steam, alkalis, acids, abrasive medium, high-temperature gases, condensate, petroleum products.



DESIGN FEATURES OF THE MODEL

- One-piece cast body;
- Replaceable seat seal (O-ring);
- Optional scraper installation for cleaning the knife gate in sticky medium applications;
- Full bore;
- Wide selection of sealing materials;
- Possibility of installing a flushing line at the bottom of the body.

TYPE OF CONTROL

- Manual (handwheel, gearbox);
- Pneumatic actuator: single-acting / double-acting;
- Electric actuator.



Structurally, the knife gate valve can be made with either a rising or a non-rising stem

FLOW DIRECTION



Bidirectional

GENERAL APPLICATIONS

The bidirectional sealing system is equipped with replaceable sealing rings, which can be configured either as soft seals or in a metal-to-metal arrangement, depending on the application. The knife gate valve is suitable for a wide range of medium, including abrasive slurries, wastewater, and chemical mixtures, making it an ideal solution for demanding industrial environments. It has been specifically designed to operate with liquids containing up to 5% solid particles in suspension.

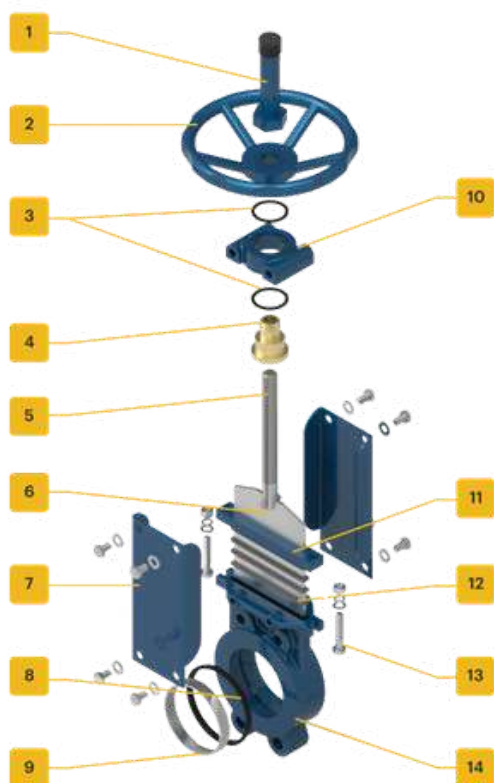
COMPLIANCE STANDARDS

Category		Standard
Product compliance		Directive PED 2014/68/EU
Manufacturing and designing		EN 1984
Marking		EN 19
Leakage class		"A" ISO 5208
Testing		EN 12266-1
Connection	Flange dimensions	EN 1092-1

CE

KNIFE GATE VALVE

SERIES: 100 MODEL: 102



No	Name
1	Hood
2	Handwheel
3	Bearing
4	Stem nut
5	Stem
6	Knife
7	Yoke
8	Seat
9	Ring
10	Yoke head
11	Packing
12	Packing gland
13	Bolt
14	Body

MATERIALS OF THE MAIN COMPONENTS

Name	Material	Medium temperature	Medium
Seat	EPDM	-30°C ... +130°C	Water, steam, alkalis, acids, abrasive medium
	NBR	-30°C ... +100°C	Petroleum products, diesel fuel, mineral oils, propane, butane, abrasive medium
	FKM (Viton)	-40°C ... +200°C	Chemically aggressive medium, mineral oils and greases, gasoline, hot water, abrasive medium
	Metal	-	Chemically aggressive medium, abrasive medium, viscous medium
Body	A216 WCB/1.0619	-29°C ... +300°C	Water, steam, petroleum products
	Duplex 2205	-46°C ... +300°C	Chemically aggressive Medium, petroleum products, water
	AISI304/1.4308	-60°C ... +300°C	
	AISI316/1.4408		
	AISI316L/1.4409		
Knife	Duplex 2205	-46°C ... +300°C	Chemically aggressive medium, mineral oils and greases, gasoline, water
	AISI316/1.4408	-60°C ... +300°C	
	AISI310/1.4835		High-temperature gases, condensate, petroleum products, water
	AISI316L/1.4409		Chemically aggressive medium, sulfuric acid, petroleum products
	AISI304/1.4308		
	AISI316Ti/1.4571		

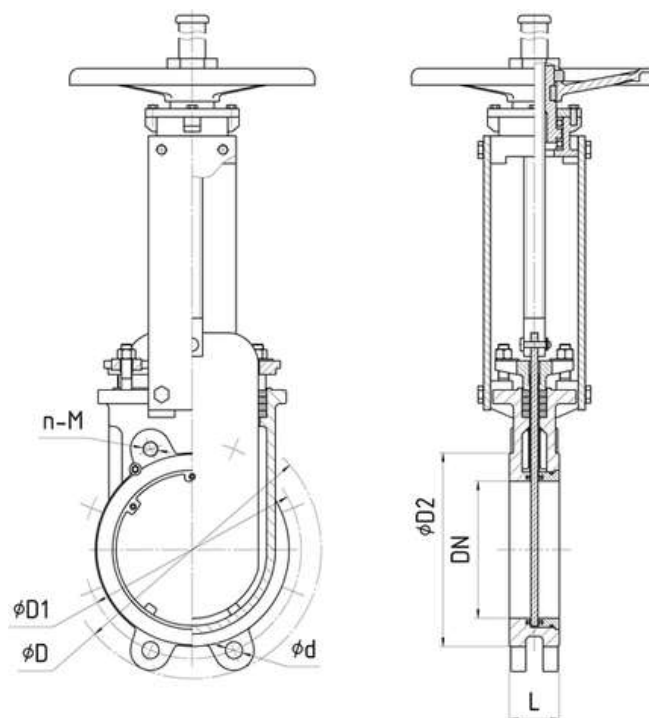
It can be manufactured from other materials according to the customer's technical requirements.

KNIFE GATE VALVE

SERIES: 100 MODEL: 102

Nominal diameter: **DN50 ... DN1400**

Nominal pressure: **PN10 ... PN16**



FLANGE FACING DIMENSIONS FOR PN10, PN16

DN	ΔP, MPa (Bar)	L	PN10					PN16				
			D	D1	D2	n-M	d	D	D1	D2	n-M	d
50	1.0 (10)	48	165	125	102	4-M16	18	165	125	102	4-M16	18
65	1.0 (10)	48	185	145	122	4-M16 / 8-M16	18	185	145	122	4-M16 / 8-M16	18
80	1.0 (10)	51	200	160	138	8-M16	18	200	160	138	8-M16	18
100	1.0 (10)	51	220	180	158	8-M16	18	220	180	158	8-M16	18
125	1.0 (10)	57	250	210	188	8-M16	18	250	210	188	8-M16	18
150	1.0 (10)	57	285	240	212	8-M20	22	285	240	212	8-M20	22
200	1.0 (10)	70	340	295	268	8-M20	22	340	295	268	12-M20	22
250	1.0 (10)	70	395	350	320	12-M20	22	405	355	320	12-M24	26
300	0.6 (6)	76	445	400	370	12-M20	22	460	410	378	12-M24	26
350	0.6 (6)	76	505	460	430	16-M20	22	520	470	438	16-M24	26
400	0.6 (6)	89	565	515	482	16-M24	26	580	525	490	16-M27	30
450	0.5 (5)	89	615	565	532	20-M24	26	640	585	550	20-M27	30
500	0.4 (4)	114	670	620	585	20-M24	26	715	650	610	20-M30	33
600	0.4 (4)	114	780	725	685	20-M27	30	840	770	725	20-M33	36

* Upon request, tabular values are provided for DN700 to DN1400.

KNIFE GATE VALVE

SERIES: 100 MODEL: 102

PARAMETERS OF THROUGH AND TAPPED HOLES FOR **PN10** FASTENER SELECTION

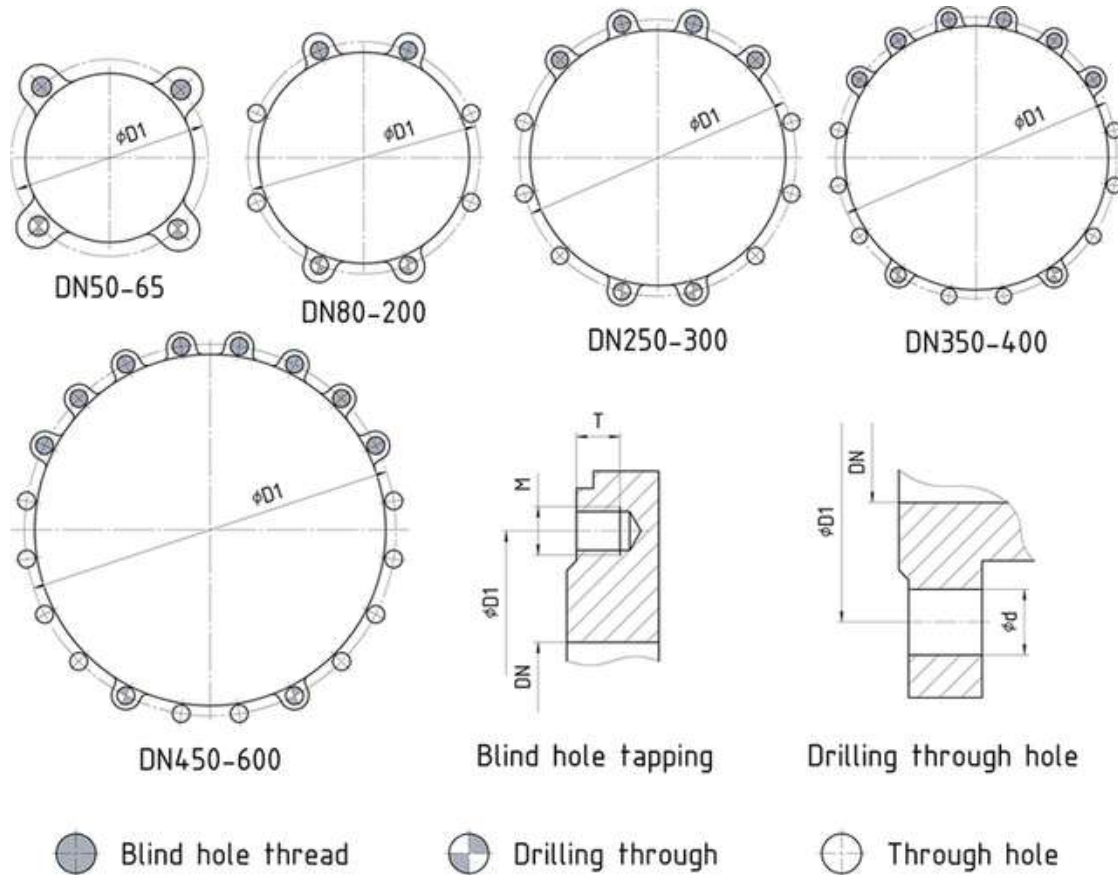


TABLE FOR NOMINAL PRESSURE PN10

DN	D1	n	M	d	T			
50	125	4	M16	18	10	2	0	2
65	145	4 / 8	M16	18	10	2	0	2
80	160	8	M16	18	12	2	4	2
100	180	8	M16	18	12	2	4	2
125	210	8	M16	18	14	2	4	2
150	240	8	M20	22	14	2	4	2
200	295	8	M20	22	14	2	4	2
250	350	12	M20	22	18	4	6	2
300	400	12	M20	22	21	4	6	2
350	460	16	M20	22	21	6	8	2
400	515	16	M24	26	25	6	8	2
450	565	20	M24	26	25	8	10	2
500	620	20	M24	26	26	8	10	2
600	725	20	M27	30	26	8	10	2

* Upon request, tabular values are provided for DN700 to DN1400.

KNIFE GATE VALVE

SERIES: 100 MODEL: 102

PARAMETERS OF THROUGH AND TAPPED HOLES FOR **PN16** FASTENER SELECTION

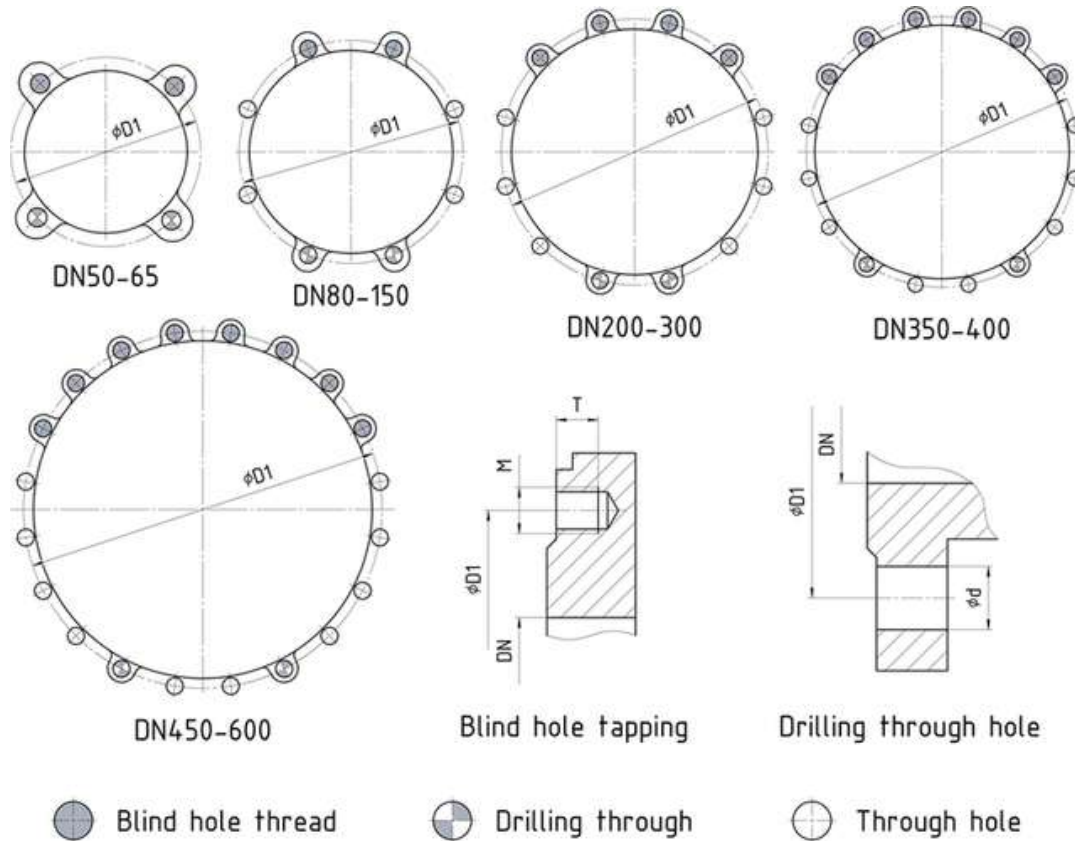


TABLE FOR NOMINAL PRESSURE PN16

DN	D1	n	M	d	T			
50	125	4	M16	18	10	2	0	2
65	145	4 / 8	M16	18	10	2	0	2
80	160	8	M16	18	12	2	4	2
100	180	8	M16	18	12	2	4	2
125	210	8	M16	18	14	2	4	2
150	240	8	M20	22	14	2	4	2
200	295	12	M20	22	14	4	6	2
250	355	12	M24	26	18	4	6	2
300	410	12	M24	26	21	4	6	2
350	470	16	M24	26	21	6	8	2
400	525	16	M27	30	25	6	8	2
450	585	20	M27	30	25	8	10	2
500	650	20	M30	33	26	8	10	2
600	770	20	M33	36	26	8	10	2

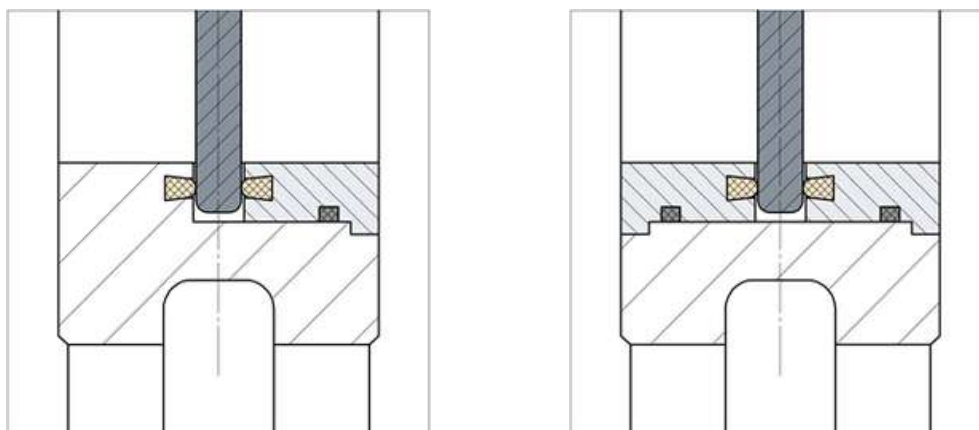
* Upon request, tabular values are provided for DN700 to DN1400.

KNIFE GATE VALVE

SERIES: 100 MODEL: 102

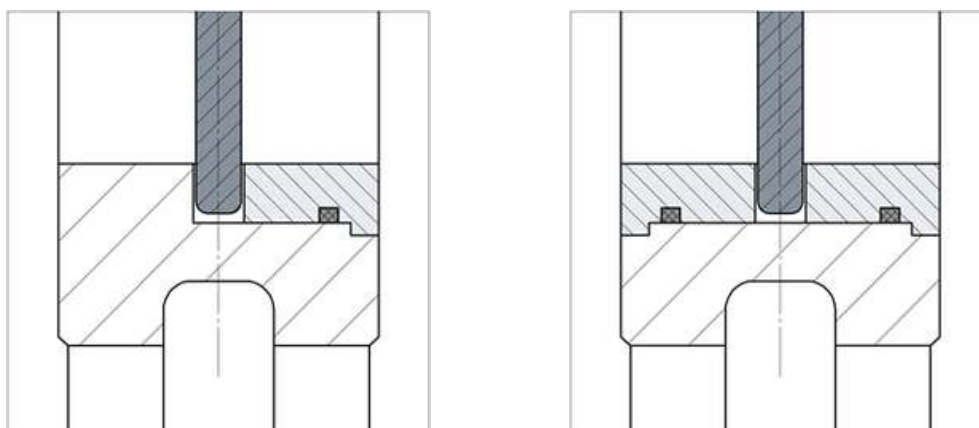
SEAT VARIATIONS

SOFT SEALING



It provides tight shut-off in both flow directions in accordance with ISO 5208, leakage class "A". It is made of high-quality elastomeric materials – EPDM, NBR, FKM (Viton®) – with an operating temperature from -40°C to $+200^{\circ}\text{C}$, depending on the selected elastomer. The sealing system can be configured with one or two replaceable sealing rings, ensuring easy maintenance and cost-effective replacement. The design guarantees reliable sealing performance in applications involving liquids, bulk materials, and gases.

METAL SEALING



It provides reliable shut-off in both flow directions in accordance with ISO 5208, leakage class "D". The sealing system is based on a metal-to-metal contact, ensuring high durability and dependable performance under demanding industrial conditions. The replaceable sealing rings can be configured as single or double rings and are available in various metallic materials (e.g., stainless steel, hardened alloys), offering an operating temperature from -60°C to $+300^{\circ}\text{C}$, depending on the selected material. The design is suitable for chemically aggressive, abrasive, and adhesive medium.

KNIFE GATE VALVE

SERIES: 100 MODEL: 102

OVERALL DIMENSIONS WITH RISING AND NON-RISING STEM FOR **PN10, PN16**

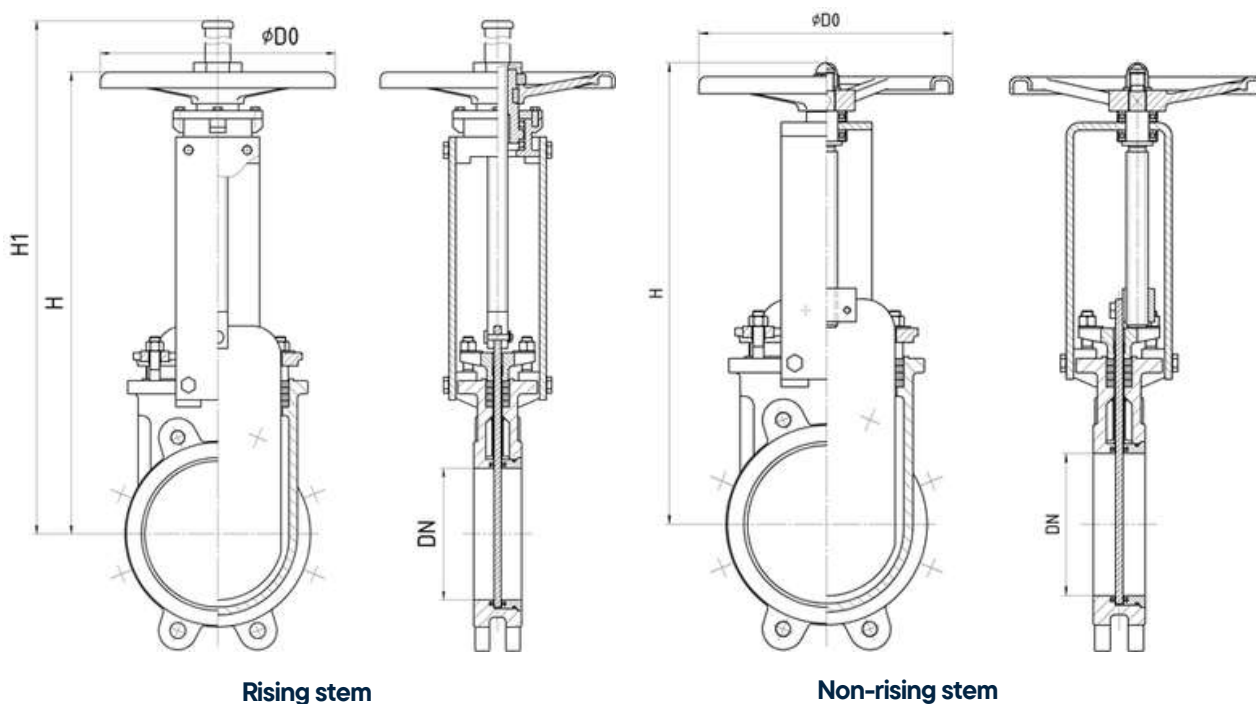


TABLE FOR NOMINAL PRESSURE PN10, PN16

DN	Rising stem				Non-rising stem		
	H	H1	D0	kg	H	D0	kg
50	295	360	180	8	290	180	7
65	335	415	180	10	320	180	8
80	360	455	220	13	350	220	10
100	400	515	240	16	385	240	13
125	455	595	240	21	430	240	18
150	510	675	280	26	485	280	23
200	585	805	300	33	565	300	30
250	695	965	320	54	680	320	47
300	765	1085	320	66	755	320	58
350	880	1250	350	91	922	350	87
400	995	1415	350	121	970	350	117
450	1100	1580	310	165	1100	310	165
500	1200	1770	310	237	1200	310	237
600	1410	2080	310	326	1410	310	326

* The weight values are for reference only; they depend on the material and design of the valve.

* Tabulated specifications for DN450 to DN600 knife gate valves equipped with gearboxes.

KNIFE GATE VALVE

SERIES: 100 MODEL: 103

NOMINAL DIAMETER	DN50 ... DN1000
NOMINAL PRESSURE	PN10 ... PN16
PURPOSE	Shut-off valve
CONNECTION TYPE	Wafer, lug
MEDIUM TEMPERATURE	-60°C ... +300°C
MEDIUM	Water, steam, abrasive medium, condensate, petroleum products.



DESIGN FEATURES OF THE MODEL

- One-piece cast body;
- Full bore;
- Replaceable seat seal (U-ring);
- Optional scraper installation for cleaning the knife gate in sticky medium applications.

TYPE OF CONTROL

- Manual (handwheel, gearbox);
- Pneumatic actuator: single-acting / double-acting;
- Electric actuator.



Structurally, the knife gate valve can be made with either a rising or a non-rising stem.



FLOW DIRECTION

Bidirectional

GENERAL APPLICATIONS

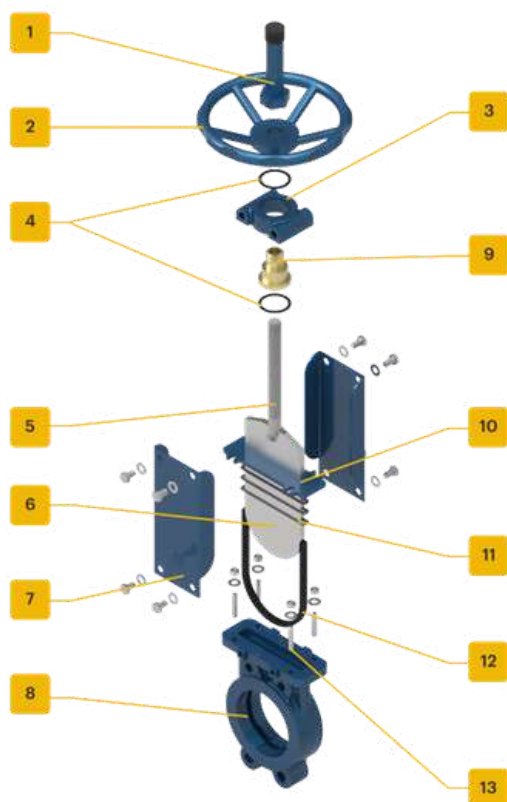
This knife gate valve has been designed for operation with liquids containing up to 5% suspended solids. It is equipped with a bidirectional sealing system based on a U-shaped elastomer seat, which ensures tight shut-off through direct contact with the knife edge. During opening, the seat adapts to the internal contour of the body, allowing full bore flow without dead zones. This design minimizes the accumulation of fine particles within the valve passage, supporting high cycle durability and extended service life.

COMPLIANCE STANDARDS

Category		Standard
Product compliance		Directive PED 2014/68/EU
Manufacturing and designing		EN 1984
Marking		EN 19
Leakage class		"A" ISO 5208
Testing		EN 12266-1
Connection	Flange dimensions	EN 1092-1

KNIFE GATE VAVE

SERIES: 100 MODEL: 103



No	Name
1	Hood
2	Handwheel
3	Yoke head
4	Bearing
5	Stem
6	Knife
7	Yoke
8	Body
9	Stem nut
10	Packing gland
11	Packing
12	Seat
13	Bolt

MATERIALS OF THE MAIN COMPONENTS

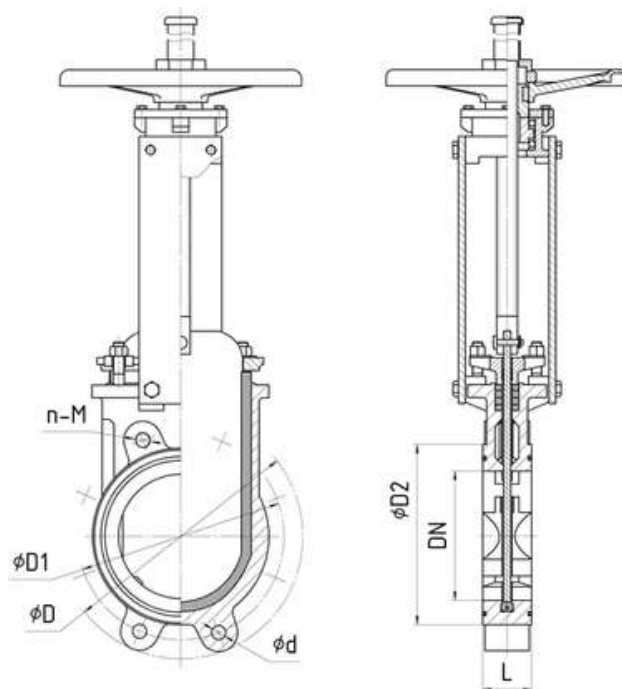
Name	Material	Medium temperature	Medium
Seat	EPDM	-20°C ... +130°C	Water, steam, condensate, abrasive medium
Body	GGG40/EN-GJS-400-15	-20°C ... +130°C	Water, non-aggressive medium
Knife	AISI304/1.4308	-20°C ... +130°C	Water, steam, condensate, abrasive medium, petroleum products
	AISI316/1.4408		
	AISI316L/1.4409		
	AISI316Ti/1.4571		

It can be manufactured from other materials according to the customer's technical requirements.

KNIFE GATE VALVE

SERIES: 100 MODEL: 103

NOMINAL DIAMETER: **DN50 ... DN1000** NOMINAL PRESSURE: **PN10 ... PN16**



FLANGE FACING DIMENSIONS FOR PN10, PN16

DN	ΔP , MPa (Bar)	L	PN10					PN16				
			D	D1	D2	n-M	d	D	D1	D2	n-M	d
50	1.0 (10)	48	165	125	102	4-M16	18	165	125	102	4-M16	18
65	1.0 (10)	48	185	145	122	4-M16 / 8-M16	18	185	145	122	4-M16 / 8-M16	18
80	1.0 (10)	51	200	160	138	8-M16	18	200	160	138	8-M16	18
100	1.0 (10)	51	220	180	158	8-M16	18	220	180	158	8-M16	18
125	1.0 (10)	57	250	210	188	8-M16	18	250	210	188	8-M16	18
150	1.0 (10)	57	285	240	212	8-M20	22	285	240	212	8-M20	22
200	1.0 (10)	70	340	295	268	8-M20	22	340	295	268	12-M20	22
250	1.0 (10)	70	395	350	320	12-M20	22	405	355	320	12-M24	26
300	0.6 (6)	76	445	400	370	12-M20	22	460	410	378	12-M24	26
350	0.6 (6)	76	505	460	430	16-M20	22	520	470	438	16-M24	26
400	0.6 (6)	89	565	515	482	16-M24	26	580	525	490	16-M27	30
450	0.5 (5)	89	615	565	532	20-M24	26	640	585	550	20-M27	30
500	0.4 (4)	114	670	620	585	20-M24	26	715	650	610	20-M30	33
600	0.4 (4)	114	780	725	685	20-M27	30	840	770	725	20-M33	36

* Upon request, tabular values are provided for DN700 to DN1000.

KNIFE GATE VALVE

SERIES: 100 MODEL: 103

PARAMETERS OF THROUGH AND TAPPED HOLES FOR **PN10** FASTENER SELECTION

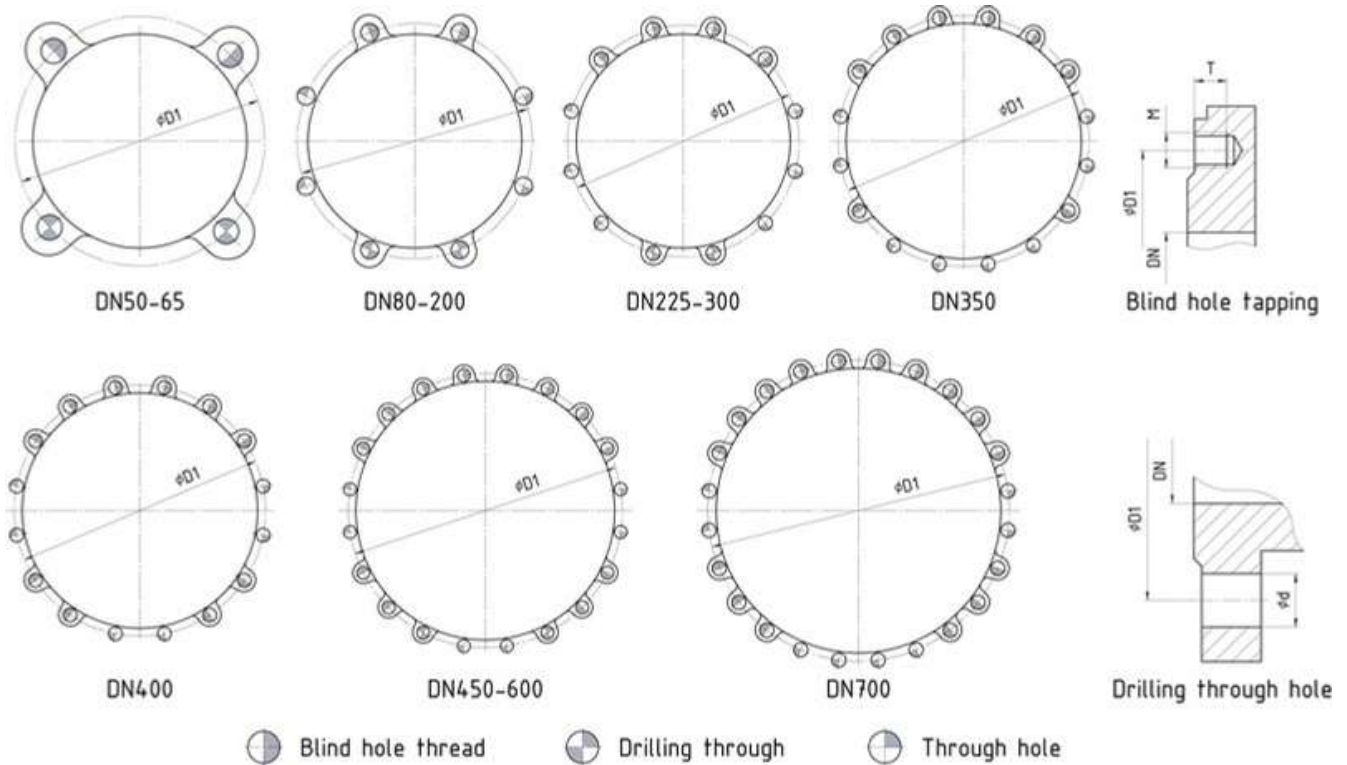


TABLE FOR NOMINAL PRESSURE PN10

DN	D1	Flange bolting EN 1092-2	M	T	d			
50	125	4-M16	M16	12	19	2	-	2
65	145	4-M16	M16	12	19	2	-	2
80	160	8-M16	M16	12	19	2	4	2
100	180	8-M16	M16	12	19	2	4	2
125	210	8-M16	M16	12	19	2	4	2
150	240	8-M20	M20	14	23	2	4	2
200	295	8-M20	M20	16	23	2	4	2
250	350	12-M20	M20	16	23	4	6	2
300	400	12-M20	M20	16	23	4	6	2
350	460	16-M20	M20	18	23	6	8	2
400	515	16-M24	M24	24	28	6	6	4
450	565	20-M24	M24	24	28	8	6	6
500	620	20-M24	M24	24	28	8	6	6
600	725	20-M27	M27	27	31	8	6	6
700	840	20-M27	M27	27	31	10	8	6

KNIFE GATE VALVE

SERIES: 100 MODEL: 103

PARAMETERS OF THROUGH AND TAPPED HOLES FOR **PN16** FASTENER SELECTION

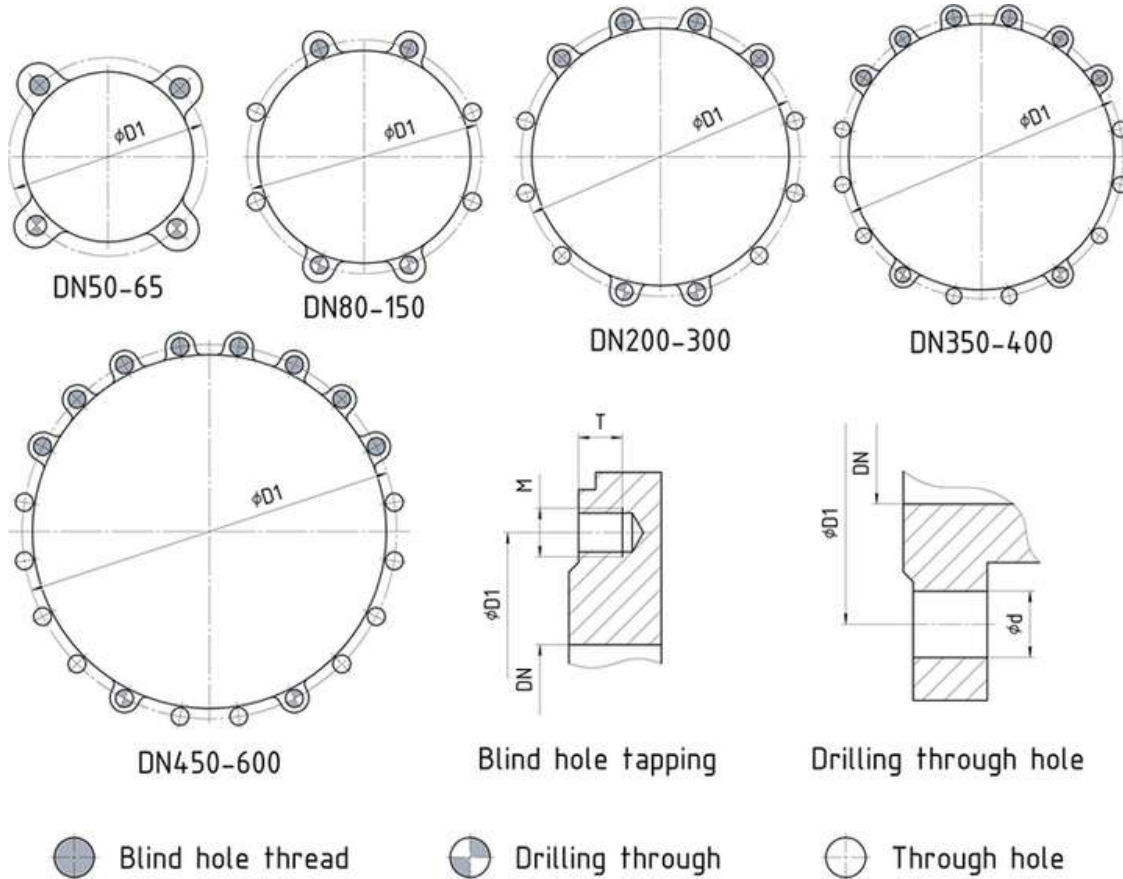


TABLE FOR NOMINAL PRESSURE PN16

DN	D1	n	M	d	T			
50	125	4	M16	18	10	2	0	2
65	145	4 / 8	M16	18	10	2	0	2
80	160	8	M16	18	12	2	4	2
100	180	8	M16	18	12	2	4	2
125	210	8	M16	18	14	2	4	2
150	240	8	M20	22	14	2	4	2
200	295	12	M20	22	14	4	6	2
250	355	12	M24	26	18	4	6	2
300	410	12	M24	26	21	4	6	2
350	470	16	M24	26	21	6	8	2
400	525	16	M27	30	25	6	8	2
450	585	20	M27	30	25	8	10	2
500	650	20	M30	33	26	8	10	2
600	770	20	M33	36	26	8	10	2

* Upon request, tabular values are provided for DN700 ... DN1000.

KNIFE GATE VALVE

SERIES: 100 MODEL: 103

NOMINAL DIAMETER: **DN50 ... DN1000** NOMINAL PRESSURE: **PN10 ... PN16**

OVERALL DIMENSIONS WITH RISING AND NON-RISING STEMS FOR **PN10, PN16**

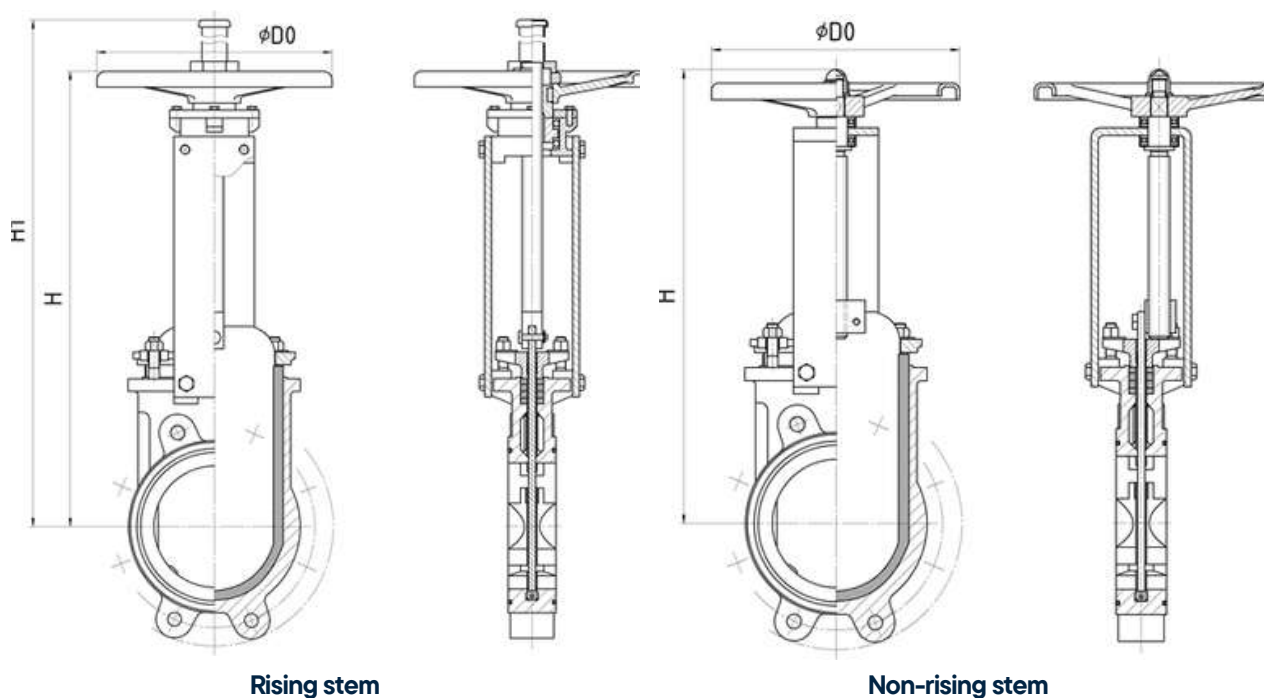


TABLE FOR NOMINAL PRESSURE PN10, PN16

DN	Rising stem				Non-rising stem		
	H	H1	D0	kg	H	D0	kg
50	295	360	180	8	290	180	7
65	335	415	180	10	320	180	8
80	360	455	220	13	350	220	10
100	400	515	240	16	385	240	13
125	455	595	240	21	430	240	18
150	510	675	280	26	485	280	23
200	585	805	300	33	565	300	30
250	695	965	320	54	680	320	47
300	765	1085	320	66	755	320	58
350	880	1250	350	91	922	350	87
400	995	1415	350	121	970	350	117
450	1100	1580	310	165	1100	310	165
500	1200	1770	310	237	1200	310	237
600	1410	2080	310	326	1410	310	326

* The weight values are for reference only; they depend on the material and design of the valve.

* Tabulated specifications for DN450 to DN600 knife gate valves equipped with gearboxes.

KNIFE GATE VALVE

SERIES: 100 MODEL: 104

NOMINAL DIAMETER	DN50 ... DN1000
NOMINAL PRESSURE	PN10 ... PN16
PURPOSE	Shut-off valve
CONNECTION TYPE	Wafer, lug
MEDIUM TEMPERATURE	-20°C ... +130°C
MEDIUM	Water, steam, abrasive medium, condensate, petroleum products



DESIGN FEATURES OF THE MODEL

- Two-piece dismountable body;
- Replaceable seat seal (U-ring);
- Full bore;
- Optional scraper installation for cleaning the knife gate in sticky medium applications.

TYPE OF CONTROL

- Manual (handwheel, gearbox);
- Pneumatic actuator: single-acting / double-acting;
- Electric actuator.



Structurally, the knife gate valve can be made with either a rising or a non-rising stem.

FLOW DIRECTION



Bidirectional

GENERAL APPLICATIONS

This knife gate valve has been designed for operation with liquids containing up to 5% suspended solids. It is equipped with a bidirectional sealing system based on a U-shaped elastomer seat, which ensures tight shut-off through direct contact with the knife edge. During opening, the seat adapts to the internal contour of the body, allowing full bore flow without dead zones. This design minimizes the accumulation of fine particles in the valve passage, supporting high cycle durability and extended service life.

COMPLIANCE STANDARDS

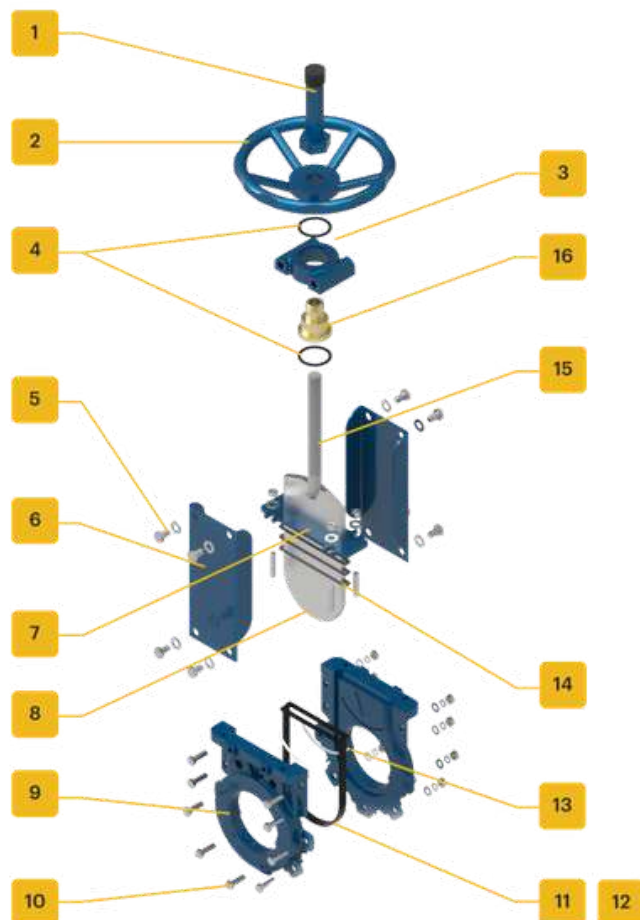
Category		Standard
Product compliance		Directive PED 2014/68/EU
Manufacturing and designing		EN 1984
Marking		EN 19
Leakage class		"A" ISO 5208
Testing		EN 12266-1
Connection	Flange dimensions	EN 1092-1

KNIFE GATE VALVE

SERIES: 100 MODEL: 104

NOMINAL DIAMETER: **DN50 ... DN1000**

NOMINAL PRESSURE: **PN10 ... PN16**



No	Name
1	Hood
2	Handwheel
3	Yoke head
4	Bearing
5	Bolt
6	Yoke
7	Packing gland
8	Knife
9	Body
10	Bolt
11	Seat
12	Gasket
13	Scraper
14	Packing
15	Stem
16	Stem nut

MATERIALS OF THE MAIN COMPONENTS

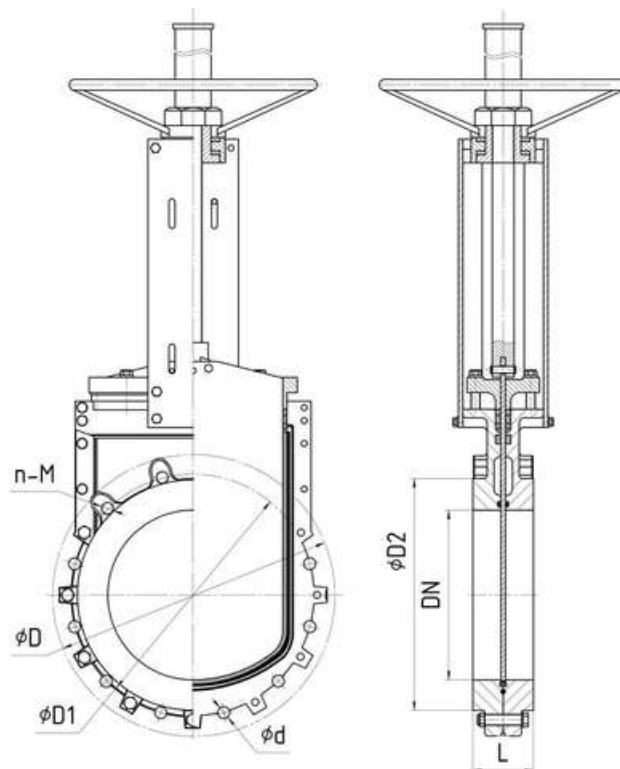
Name	Material	Medium temperature	Medium
Seat	EPDM	-20°C ... +130°C	Water, steam, condensate, abrasive medium
Body	GGG40/EN-GJS-400-15	-20°C ... +130°C	Water, non-aggressive medium
Knife	AISI304/1.4308	-20°C ... +130°C	Water, steam, condensate, abrasive medium, petroleum products
	AISI316/1.4408		
	AISI316L/1.4409		
	AISI316Ti/1.4571		

It can be manufactured from other materials according to the customer's technical requirements.

KNIFE GATE VALVE

SERIES: 100 MODEL: 104

NOMINAL DIAMETER: **DN50 ... DN1000** NOMINAL PRESSURE: **PN10 ... PN16**



FLANGE FACING DIMENSIONS FOR PN10, PN16

DN	ΔP, MPa (Bar)	L	PN10					PN16				
			D	D1	D2	n-M	d	D	D1	D2	n-M	d
50	1.0 (10)	48	165	125	102	4-M16	18	165	125	102	4-M16	18
65	1.0 (10)	48	185	145	122	4-M16 / 8-M16	18	185	145	122	4-M16 / 8-M16	18
80	1.0 (10)	51	200	160	138	8-M16	18	200	160	138	8-M16	18
100	1.0 (10)	51	220	180	158	8-M16	18	220	180	158	8-M16	18
125	1.0 (10)	57	250	210	188	8-M16	18	250	210	188	8-M16	18
150	1.0 (10)	57	285	240	212	8-M20	22	285	240	212	8-M20	22
200	1.0 (10)	70	340	295	268	8-M20	22	340	295	268	12-M20	22
250	1.0 (10)	70	395	350	320	12-M20	22	405	355	320	12-M24	26
300	0.6 (6)	76	445	400	370	12-M20	22	460	410	378	12-M24	26
350	0.6 (6)	76	505	460	430	16-M20	22	520	470	438	16-M24	26
400	0.6 (6)	89	565	515	482	16-M24	26	580	525	490	16-M27	30
450	0.5 (5)	89	615	565	532	20-M24	26	640	585	550	20-M27	30
500	0.4 (4)	114	670	620	585	20-M24	26	715	650	610	20-M30	33
600	0.4 (4)	114	780	725	685	20-M27	30	840	770	725	20-M33	36

* Upon request, tabular values are provided for DN700 to DN1000.

KNIFE GATE VALVE

SERIES: 100 MODEL: 106

NOMINAL DIAMETER	DN50 ... DN800
NOMINAL PRESSURE	PN10 ... PN16
PURPOSE	Shut-off valve
CONNECTION TYPE	Wafer, lug
MEDIUM TEMPERATURE	-20°C ... +200°C
MEDIUM	Water, steam, condensate, alkalis, acids, oils, petroleum products, medium with a high concentration of abrasive particles, aggressive medium.



DESIGN FEATURES OF THE MODEL

- One-piece or two-piece dismantable body;
- Design allows installation without the need for additional gaskets;
- Full bore;
- Body flushing system;
- Designed for high-abrasive and aggressive environments

TYPE OF CONTROL

- Manual (handwheel, gearbox);
- Pneumatic actuator: single-acting / double-acting;
- Electric actuator.



Structurally, the knife gate valve can be made with either a rising or a non-rising stem.

FLOW DIRECTION



Bidirectional

GENERAL APPLICATIONS

The valve is equipped with two replaceable soft-seat sealing rings. In the fully open position, the blade is completely retracted from the flow path, providing a self-cleaning effect and ensuring full bore. At this stage, the sealing rings are tightly pressed against each other, preventing the process medium from coming into contact with the valve body. In the closed position, the sealing rings are firmly pressed against the blade, ensuring reliable shut-off. During the closing operation, the blade may force part of the medium into the lower chamber; therefore, flushing ports are integrated into the bottom cover to allow cleaning. This design is particularly suitable for abrasive media with a high concentration of solid particles as well as aggressive or corrosive media.

COMPLIANCE STANDARDS

Category		Standard
Product compliance		Directive PED 2014/68/EU
Manufacturing and designing		EN 1984
Marking		EN 19
Leakage class		"A" ISO 5208
Testing		EN 12266-1
Connection	Flange dimensions	EN 1092-1

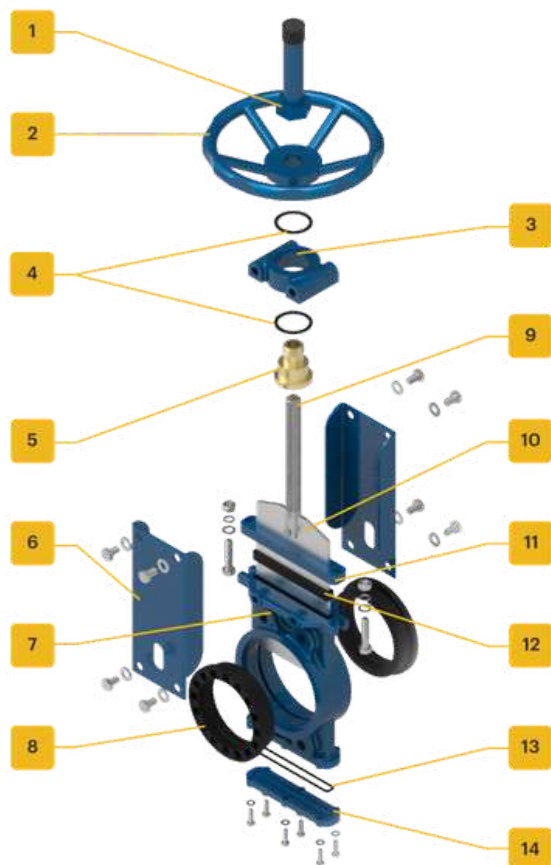
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KNIFE GATE VALVE

SERIES: 100 MODEL: 106

NOMINAL DIAMETER: **DN50 ... DN800**

NOMINAL PRESSURE: **PN10 ... PN16**



No	Name
1	Hood
2	Handwheel
3	Yoke head
4	Bearing
5	Stem nut
6	Yoke
7	Body
8	Seat
9	Stem
10	Knife
11	Packing gland
12	Packing
13	Gasket
14	Lower cover

MATERIALS OF THE MAIN COMPONENTS

Name	Material	Medium temperature	Medium
Seat	NR	-20°C ... +90°C	Water, abrasive medium
	NBR	-20°C ... +100°C	Petroleum products, diesel fuel, mineral oils, propane, butane, abrasive medium
	PU		Petroleum products, abrasive medium
	EPDM	-20°C ... +130°C	Water, steam, condensate, abrasive medium
	FKM (Viton)	-20°C ... +200°C	Aggressive chemical media, mineral oils and lubricants, gasoline, hot water, abrasive medium
Body	GGG40/EN-GJS-400-15	-20°C ... +200°C	Water, non-aggressive medium
Knife	AISI304/1.4308	-20°C ... +200°C	Water, steam, condensate, abrasive medium, petroleum products
	AISI316/1.4408		
	AISI316L/1.4409		
	AISI316Ti/1.4571		

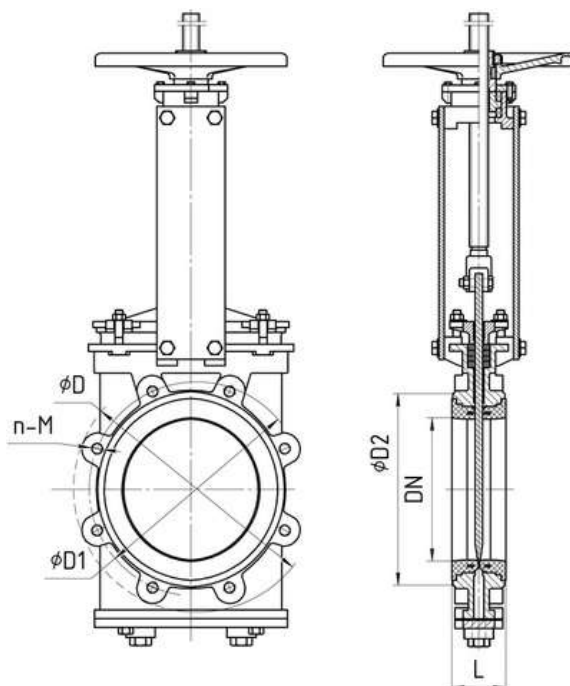
It can be manufactured from other materials according to the customer's technical requirements.

KNIFE GATE VALVE

SERIES: 100 MODEL: 106

NOMINAL DIAMETER: **DN50 ... DN800**

NOMINAL PRESSURE: **PN10 ... PN16**



FLANGE FACING DIMENSIONS FOR PN10, PN16

DN	ΔP , MPa (Bar)	L	PN10				PN16			
			D	D1	D2	n-M	D	D1	D2	n-M
50	1.0 (10)	48	165	125	102	4-M16	165	125	102	4-M16
65	1.0 (10)	48	185	145	122	4-M16 / 8-M16	185	145	122	4-M16 / 8-M16
80	1.0 (10)	51	200	160	138	8-M16	200	160	138	8-M16
100	1.0 (10)	51	220	180	158	8-M16	220	180	158	8-M16
125	1.0 (10)	57	250	210	188	8-M16	250	210	188	8-M16
150	1.0 (10)	57	285	240	212	8-M20	285	240	212	8-M20
200	1.0 (10)	70	340	295	268	8-M20	340	295	268	12-M20
250	1.0 (10)	70	395	350	320	12-M20	405	355	320	12-M24
300	0.6 (6)	76	445	400	370	12-M20	460	410	378	12-M24
350	0.6 (6)	76	505	460	430	16-M20	520	470	438	16-M24
400	0.6 (6)	89	565	515	482	16-M24	580	525	490	16-M27
450	0.5 (5)	89	615	565	532	20-M24	640	585	550	20-M27
500	0.4 (4)	114	670	620	585	20-M24	715	650	610	20-M30
600	0.4 (4)	114	780	725	685	20-M27	840	770	725	20-M33

* Upon request, tabular values are provided for DN700 to DN800.

KNIFE GATE VALVE

SERIES: 100 MODEL: 107

NOMINAL DIAMETER	DN50 ... DN2000
NOMINAL PRESSURE	PN10 ... PN25
PURPOSE	Shut-off valve
CONNECTION TYPE	Flanged
MEDIUM TEMPERATURE	-20°C ... +200°C
MEDIUM	Water, steam, condensate, alkalis, acids, oils, petroleum products, medium with a high concentration of abrasive particles, aggressive medium.



DESIGN FEATURES OF THE MODEL

- One-piece dismantable body;
- Suitable for high-pressure applications
- Full bore;
- Body flushing system;
- Designed for high-abrasive and aggressive environments

TYPE OF CONTROL

- Manual (handwheel, gearbox);
- Pneumatic actuator: single-acting / double-acting;
- Electric actuator.

 Structurally, the knife gate valve can be made with either a rising or a non-rising stem.

FLOW DIRECTION



GENERAL APPLICATIONS

Featuring a flanged connection and designed for operating pressures up to 20 bar, the valve is equipped with two replaceable soft-seat sealing rings. In the fully open position, the blade is completely retracted from the flow path, providing a self-cleaning effect and ensuring full bore. At this stage, the sealing rings are tightly pressed against each other, preventing the process medium from coming into contact with the valve body. In the closed position, the sealing rings are firmly pressed against the blade, ensuring reliable shut-off. During closing, the blade may force part of the medium into the lower chamber; therefore, flushing ports are integrated into the bottom cover to allow cleaning. This design is particularly suitable for abrasive media with a high concentration of solid particles as well as aggressive or corrosive media.

COMPLIANCE STANDARDS

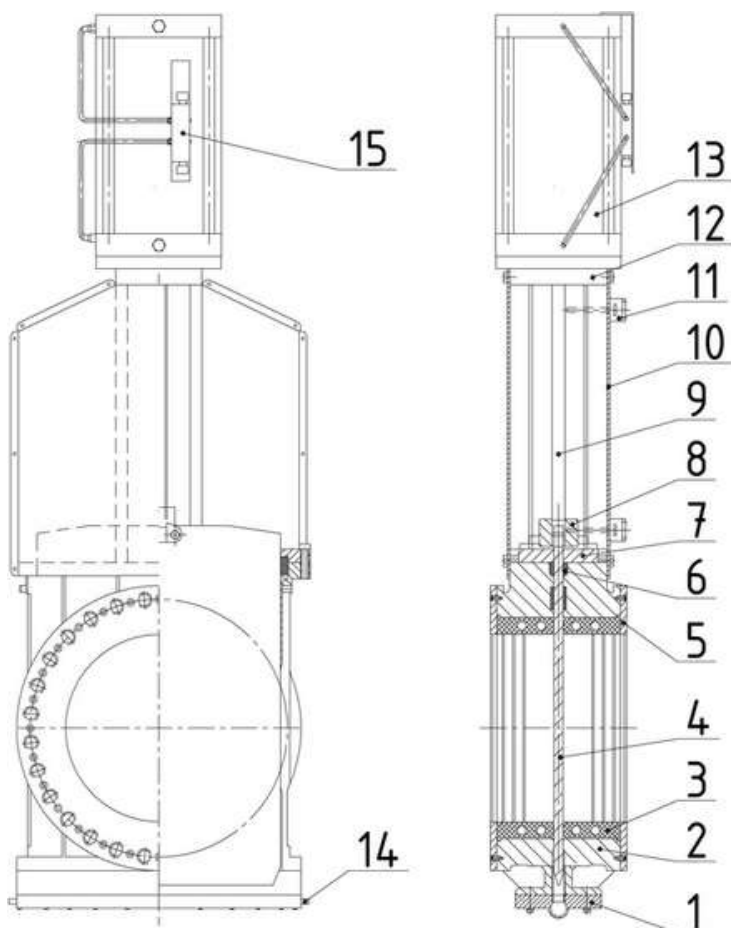
Category		Standard
Product compliance		Directive PED 2014/68/EU
Manufacturing and designing		EN 1984
Marking		EN 19
Leakage class		"A" ISO 5208
Testing		EN 12266-1
Connection	Flange dimensions	EN 1092-1

CE

KNIFE GATE VALVE

SERIES: 100 MODEL: 107

NOMINAL DIAMETER: **DN50 ... DN2000** NOMINAL PRESSURE: **PN10 ... PN25**



No	Name
1	Lower cover
2	Body
3	Seat
4	Knife
5	Seat retainer
6	Packing
7	Packing gland
8	Knife-stem connector
9	Stem
10	Yoke
11	Limit switch
12	Yoke head
13	Pneumatic actuator
14	Flushing port
15	Solenoid

MATERIALS OF THE MAIN COMPONENTS

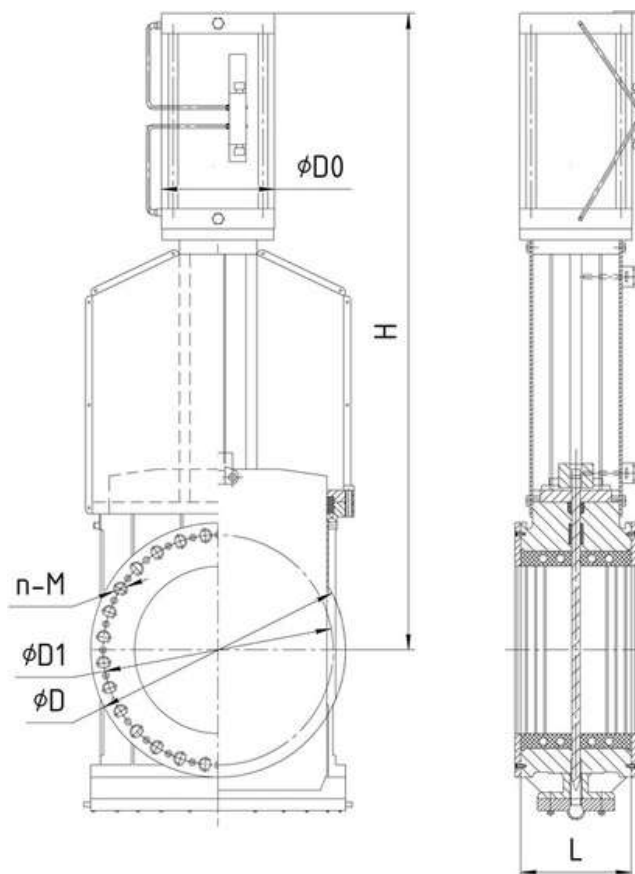
Name	Material	Medium temperature	Medium
Seat	NR	-20°C ... +90°C	Water, abrasive medium
	NBR	-20°C ... +100°C	Petroleum products, diesel fuel, mineral oils, propane, butane, abrasive medium
	EPDM	-20°C ... +130°C	Water, steam, condensate, abrasive medium
	FKM (Viton)	-20°C ... +200°C	Aggressive chemical media, mineral oils and lubricants, gasoline, hot water, abrasive medium
Body	GGG40/EN-GJS-400-15	-20°C ... +200°C	Water, non-aggressive medium
	AISI304/1.4308		Water, steam, condensate, abrasive medium, petroleum products
	AISI316/1.4408		
Knife	AISI304/1.4308	-20°C ... +200°C	Water, steam, condensate, abrasive medium, petroleum products
	AISI316/1.4408		
	AISI316L/1.4409		
	AISI316Ti/1.4571		

It can be manufactured from other materials according to the customer's technical requirements.

KNIFE GATE VALVE

SERIES: 100 MODEL: 107

NOMINAL DIAMETER: **DN50 ... DN2000** NOMINAL PRESSURE: **PN10 ... PN25**



FLANGE FACING DIMENSIONS FOR PN16

DN	ΔP , MPa (Bar)	L	H	D0	PN16		
					D	D1	n-M
50	2.0 (20)	175	483	100	165	125	4-M16
65	2.0 (20)	175	505	100	185	145	4-M16
80	2.0 (20)	175	550	125	200	160	8-M16
100	2.0 (20)	175	600	125	220	180	8-M16
125	1.6 (16)	178	710	125	250	210	8-M16
150	1.6 (16)	178	805	160	285	240	8-M20
200	1.6 (16)	184	985	160	340	295	12-M20
250	1.0 (10)	225	1160	200	405	355	12-M24
300	1.0 (10)	257	1315	200	460	410	12-M24
350	1.0 (10)	257	1320	250	520	470	16-M24
400	1.0 (10)	279	1610	250	580	525	16-M27
450	1.0 (10)	311	1795	250	640	585	20-M27
500	1.0 (10)	359	1995	250	715	650	20-M30
600	1.0 (10)	372	2250	320	840	770	20-M33

* Upon request, tabular values are provided for DN700 to DN2000.

KNIFE GATE VALVE

SERIES: 100 MODEL: 108

NOMINAL DIAMETER	DN50 ... DN800
NOMINAL PRESSURE	PN10 ... PN16
PURPOSE	Shut-off valve
CONNECTION TYPE	Wafer, lug
MEDIUM TEMPERATURE	-20°C ... +100°C
MEDIUM	Water, alkalis, acids, petroleum products



DESIGN FEATURES OF THE MODEL

- Two-piece dismantable body;
- Mounted exclusively on the discharge pipeline;
- No contact between the working medium and the valve body;
- Full bore.

TYPE OF CONTROL

- Manual (handwheel, gearbox);
- Pneumatic actuator: single-acting / double-acting;
- Electric actuator.

 Structurally, the knife gate valve can be made with either a rising or a non-rising stem.

FLOW DIRECTION
 Unidirectional, in accordance with the arrow marked on the body.

GENERAL APPLICATIONS

The valve is equipped with a one-piece polyurethane seal with a guide groove for the blade. This design completely eliminates contact between the process medium and the valve body, providing protection against wear and corrosion. As a result, the valve is suitable for operation in aggressive environments, including acids, alkalis, and other chemically active substances. The valve is unidirectional and intended for installation in a pressure pipeline. In the open position, the blade is completely retracted from the flow passage, ensuring full bore. Tight shut-off is achieved by the close contact between the blade edge and the seal.

COMPLIANCE STANDARDS

Category		Standard
Product compliance		Directive PED 2014/68/EU
Manufacturing and designing		EN 1984
Marking		EN 19
Leakage class		"A" ISO 5208
Testing		EN 12266-1
Connection	Flange dimensions	EN 1092-1

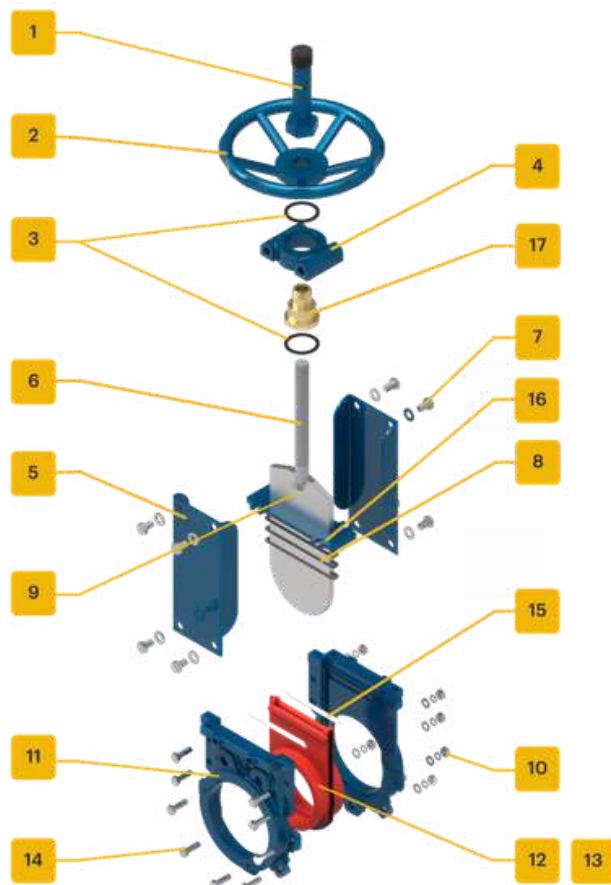
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KNIFE GATE VALVE

SERIES: 100 MODEL: 108

NOMINAL DIAMETER: **DN50 ... DN800**

NOMINAL PRESSURE: **PN10 ... PN16**



No	Name
1	Hood
2	Handwheel
3	Bearing
4	Yoke head
5	Yoke
6	Stem
7	Bolt
8	Packing
9	Knife
10	Nut
11	Body
12	Seat
13	Gasket
14	Bolt
15	Scraper
16	Packing gland
17	Stem nut

MATERIALS OF THE MAIN COMPONENTS

Name	Material	Medium temperature	Medium
Seat	PU	-20°C ... +100°C	Petroleum products, medical reagents, alkalis, acids, abrasive media
Body	GGG40/EN-GJS-400-15	-20°C ... +100°C	-
	A216 WCB/1.0619		
	AISI304/1.4308		
	AISI316/1.4408		
	AISI316L/1.4409		
	AISI316Ti/1.4571		
Knife	AISI304/1.4308	-20°C ... +100°C	Chemically aggressive medium, petroleum products, water
	AISI316/1.4408		
	AISI316L/1.4409		
	AISI316Ti/1.4571		

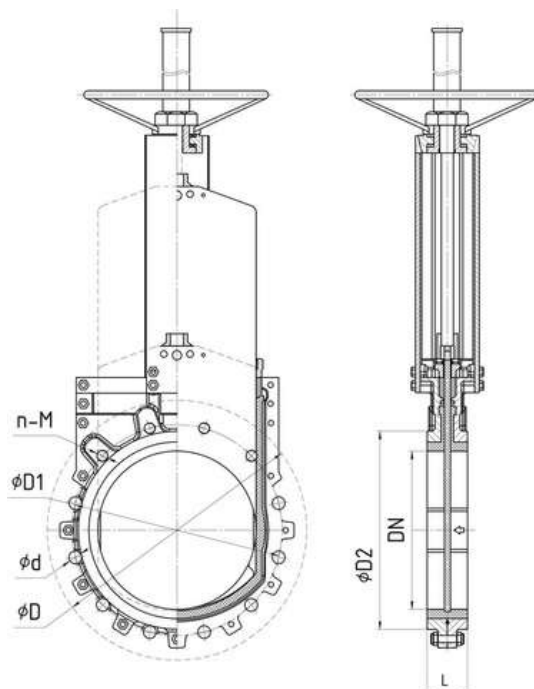
It can be manufactured from other materials according to the customer's technical requirements.

KNIFE GATE VALVE

SERIES: 100 MODEL: 108

NOMINAL DIAMETER: **DN50 ... DN800**

NOMINAL PRESSURE: **PN10 ... PN16**



FLANGE FACING DIMENSIONS FOR PN10, PN16

DN	ΔP, MPa (Bar)	L	PN10				PN16			
			D	D1	D2	n-M	D	D1	D2	n-M
50	1.0 (10)	48	165	125	102	4-M16	165	125	102	4-M16
65	1.0 (10)	48	185	145	122	4-M16 / 8-M16	185	145	122	4-M16 / 8-M16
80	1.0 (10)	51	200	160	138	8-M16	200	160	138	8-M16
100	1.0 (10)	51	220	180	158	8-M16	220	180	158	8-M16
125	1.0 (10)	57	250	210	188	8-M16	250	210	188	8-M16
150	1.0 (10)	57	285	240	212	8-M20	285	240	212	8-M20
200	1.0 (10)	70	340	295	268	8-M20	340	295	268	12-M20
250	1.0 (10)	70	395	350	320	12-M20	405	355	320	12-M24
300	0.6 (6)	76	445	400	370	12-M20	460	410	378	12-M24
350	0.6 (6)	76	505	460	430	16-M20	520	470	438	16-M24
400	0.6 (6)	89	565	515	482	16-M24	580	525	490	16-M27
450	0.5 (5)	89	615	565	532	20-M24	640	585	550	20-M27
500	0.4 (4)	114	670	620	585	20-M24	715	650	610	20-M30
600	0.4 (4)	114	780	725	685	20-M27	840	770	725	20-M33

* Upon request, tabular values are provided for DN700 to DN800.

PINCH VALVE

SERIES: 200 MODEL: 204M

NOMINAL DIAMETER	DN50 ... DN600
NOMINAL PRESSURE	PN10, PN16
PURPOSE	Shut-off and control valve (optional)
MEDIUM TEMPERATURE	-50 °C ... +150 °C
TYPE OF CONNECTIONS	Flanged
OPERATING MEDIUM	High-abrasive medium, chemically aggressive medium, acids, water with abrasive particles, salt solutions, carbon, sand, polar solvents, silicone oils, medium containing mazut, oil, gasoline.
BODY TYPE	Enclosed



FEATURES OF THE MODEL

- Hermetic and detachable body;
- Corrosion resistance;
- Quick and easy sleeve replacement;
- Dual-sided clamping of the sleeve;
- Wide selection of body and sleeve materials.

TYPE OF CONTROL

- Manual (gearbox, handwheel);
- Pneumatic actuator, single-acting or double-acting, without manual override;
- Pneumatic actuator, single-acting or double-acting, with manual override;
- Electric actuator;
- Hydraulic actuator.

FLOW DIRECTION



GENERAL APPLICATIONS

Pinch valves are designed for regulating and shutting off the flow of highly abrasive medium, such as slurries, powders, or coarse-grained substances, including corrosive medium. The main advantages of the pinch valve include a two-piece, fully serviceable body and a double-sided pinch mechanism for the sleeve. The split-body design enables cost-effective, standalone sleeve replacement, minimizing maintenance costs and system downtime.

COMPLIANCE STANDARDS

Category		Standard
Product compliance		Directive PED 2014/68/EU
Manufacturing and design		EN 1984
Marking		EN 19
Leakage class		"A" ISO 5208
Testing		EN 12266-1
Connection	Flange dimensions	EN 1092-1

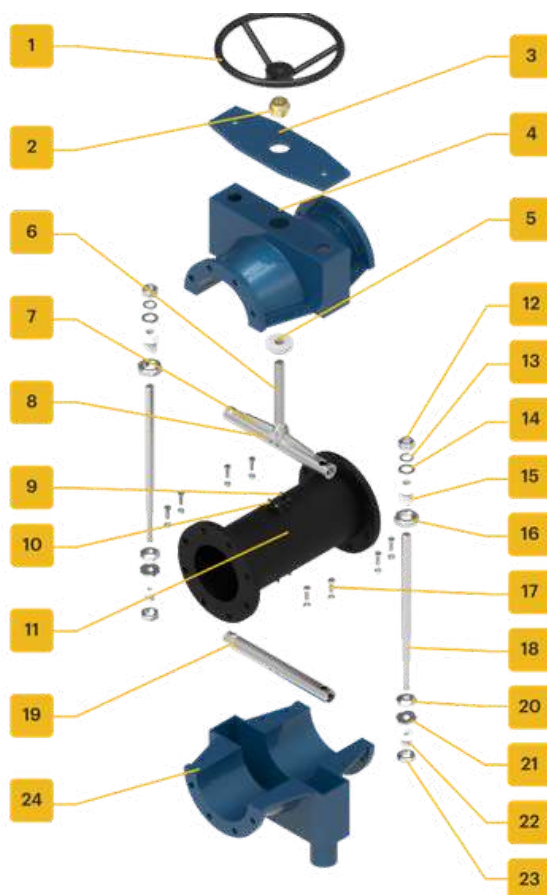


PINCH VALVE

SERIES: 200 MODEL: 204M

Nominal Diameter: **DN50 ... DN600**

Nominal Pressure: **PN10, PN16**



No	Name
1	Handwheel
2	Thrust Bearing
3	Bracket
4	Upper Body
5	Center Bushing
6	Stem
7	Upper Pinch Bar
8	Pin
9	Expansion Rail
10	Clamp bolt
11	Sleeve
12	Nut
13	Spring washer
14	Flat washer
15	Support washer with seal
16	Support sleeve nut
17	Bolts and nuts
18	Side Guide
19	Lower Pinch Bar
20	Locking screw
21	Washer
22	Centering sleeve
23	Nut
24	Lower Body

MATERIALS OF THE MAIN COMPONENTS

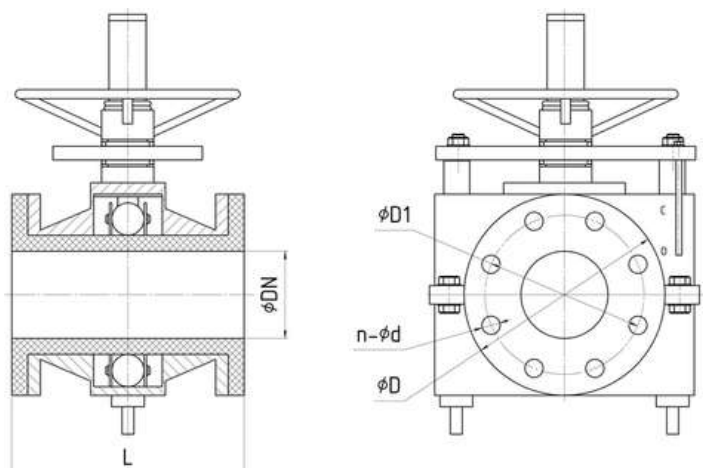
Name	Material	Medium temperature	Medium
Sleeve	EPDM	-50°C ... +130°C	Abrasive medium, dilute acidic and alkaline solutions, saline solutions, water with contaminants, particulate matter, sand
	NR	-40°C ... +80°C	High-abrasion medium, water with admixtures, sand, coal
	NBR	-40°C ... +120°C	Abrasive medium, water with impurities, substances containing mazut, oil, gasoline
	CSM	-40°C ... +130°C	Abrasive medium, chemically aggressive medium, water with impurities
	IIR	-50°C ... +130°C	Abrasive medium, water with impurities, polar solvents, silicone oils
	NR + Linatex	-40°C ... +85°C	Highly abrassive medium, weak acid and alkali solutions, salt solutions, water with impurities, sand, coal
	SBR	-40°C ... +100°C	Abrasive medium, water with impurities, glycols, acetone
	FKM	-20°C ... +150°C	Abrasive medium, chemically aggressive medium, water with impurities
Body	A216 WCB/1.0619	-30°C ... +150°C	-
	GGG40/ EN-GJS-400-15	-20°C ... +130°C	
	AISI304/1.4308	-60°C ... +150°C	
	AISI316/1.4408		
	Aluminium	-20°C ... +150°C	

It is possible to manufacture from other materials according to the technical requirements of the client.

PINCH VALVE

SERIES: 200 MODEL: 204M

NOMINAL DIAMETER: **DN50 ... DN600** NOMINAL PRESSURE: **PN10, PN16**



FLANGE FACING DIMENSIONS FOR PN10

DN	PN, MPa (Bar)	Dimensions			
		L	D	D1	n - Ød
50	1,0 (10)	165	165	125	4-18
65	1,0 (10)	165	185	145	8-18
80	1,0 (10)	200	200	160	8-18
100	1,0 (10)	260	220	180	8-18
125	1,0 (10)	310	250	210	8-18
150	1,0 (10)	375	285	240	8-22
200	1,0 (10)	500	340	295	8-22
250	1,0 (10)	625	395	350	12-22
300	1,0 (10)	750	445	400	12-22
350	1,0 (10)	375	505	460	16-22
400	1,0 (10)	1000	565	515	16-26
450	1,0 (10)	1125	615	565	20-26
500	1,0 (10)	1250	670	620	20-26

FLANGE FACING DIMENSIONS FOR PN16

DN	PN, MPa (Bar)	Dimensions			
		L	D	D1	n - Ød
50	1,6 (16)	165	165	125	4-18
65	1,6 (16)	165	185	145	8-18
80	1,6 (16)	200	200	160	8-18
100	1,6 (16)	250	220	180	8-18
125	1,6 (16)	310	250	210	8-18
150	1,6 (16)	375	285	240	8-22
200	1,6 (16)	500	340	295	12-22
250	1,6 (16)	625	405	355	12-26
300	1,6 (16)	750	460	410	12-26
350	1,6 (16)	875	520	470	16-22
400	1,6 (16)	1000	580	525	16-30
450	1,6 (16)	1125	640	585	20-30
500	1,6 (16)	1250	715	650	20-33

Tabular values for DN500+ are available upon request

There is an option to supply pinch valves with an electric actuator or with a mounting plate for an electric actuator. In such cases, the actuator mounting plate will be manufactured in accordance with the ISO 5211 standard.

PINCH VALVE

SERIES: 200 MODEL: 205M

NOMINAL DIAMETER	DN50 ... DN600
NOMINAL PRESSURE	PN10, PN16
PURPOSE	Shut-off and control valve (optional)
MEDIUM TEMPERATURE	-50 °C ... +150 °C
CONNECTION TYPE	Flanged
OPERATING MEDIUM	High-abrasive medium, chemically aggressive medium, acids, water with abrasive particles, saltsolutions, carbon, sand, polar solvents, siliconeoils, medium containing mazut, oil, gasoline.
BODY TYPE	Enclosed hermetical



FEATURES OF THE MODEL

- Hermetic and detachable body;
- Corrosion resistance;
- Quick and easy sleeve replacement;
- Dual-sided clamping of the sleeve;
- Wide selection of body and sleeve materials.

TYPE OF CONTROL

- Manual (gearbox, handwheel);
- Pneumatic actuator, single-acting or double-acting, without manual override;
- Pneumatic actuator, single-acting or double-acting, with manual override;
- Electric actuator;
- Hydraulic actuator.

FLOW DIRECTION



GENERAL APPLICATIONS

Pinch valves are designed for regulating and shutting off the flow of highly abrasive media, such as slurries, powders, or coarse-grained substances, including corrosive media. The main advantages of the pinch valve include a two-piece, fully serviceable body and a double-sided pinch mechanism for the sleeve. The split-body design enables cost-effective, standalone sleeve replacement, minimizing maintenance costs and system downtime.

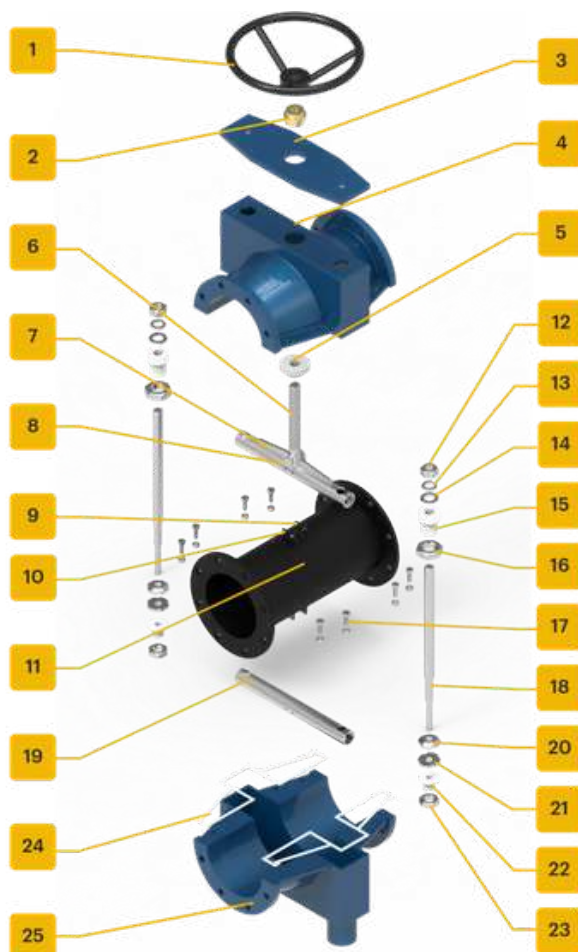
COMPLIANCE STANDARDS

Category		Standard
Product compliance		Directive PED 2014/68/EU
Manufacturing and design		EN 1984
Marking		EN 19
Leakage class		"A" ISO 5208
Testing		EN 12266-1
Connection	Flange dimensions	EN 1092-1



PINCH VALVE

SERIES: 200 MODEL : 205M



No	Name
1	Handwheel
2	Thrust Bearing
3	Bracket
4	Upper Body
5	Center Bushing
6	Stem
7	Upper Pinch Bar
8	Pin
9	Expansion Rail
10	Clamp bolt
11	Sleeve
12	Nut
13	Spring washer
14	Flat washer
15	Support washer with seal
16	Support sleeve nut
17	Bolts and nuts
18	Side Guide
19	Lower Pinch Bar
20	Locking screw
21	Washer
22	Centering sleeve
23	Nut
24	Sealing
25	Lower Body

MATERIALS OF THE MAIN COMPONENTS

Name	Material	Medium temperature	Medium
Sleeve	EPDM	-50°C ... +130°C	Abrasive medium, dilute acidic and alkaline solutions, saline solutions, water with contaminants, particulate matter, sand
	NR	-40°C ... +80°C	High-abrasion medium, water with admixtures, sand, coal
	NBR	-40°C ... +120°C	Abrasive medium, water with impurities, substances containing mazut, oil, gasoline
	CSM	-40°C ... +130°C	Abrasive medium, chemically aggressive medium, water with impurities
	IIR	-50°C ... +130°C	Abrasive medium, water with impurities, polar solvents, silicone oils
	NR + Linatex	-40°C ... +85°C	Highly abrassive medium, weak acid and alkali solutions, salt solutions, water with impurities, sand, coal
	SBR	-40°C ... +100°C	Abrasive medium, water with impurities, glycols, acetone
	FKM	-20°C ... +150°C	Abrasive medium, chemically aggressive medium, water with impurities
Body	A216 WCB/1.0619	-30°C ... +150°C	-
	GGG40/ EN-GJS-400-15	-20°C ... +130°C	
	AISI304/1.4308	-60°C ... +150°C	
	AISI316/1.4408		
	Aluminium	-20°C ... +150°C	

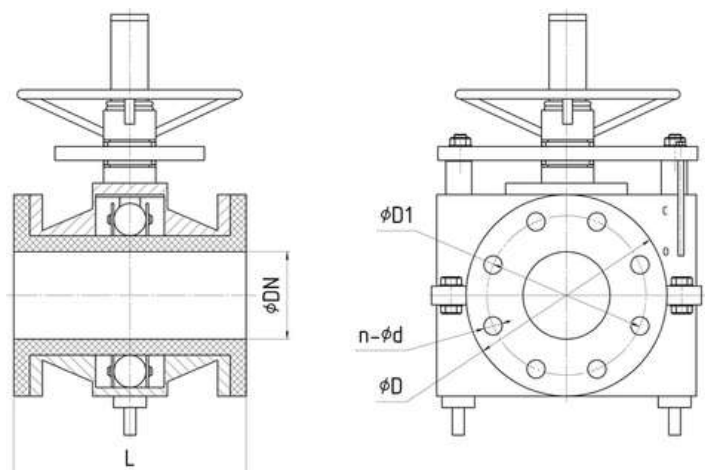
It is possible to manufacture from other materials according to the technical requirements of the client.

PINCH VALVE

SERIES: 200 MODEL: 205M

NOMINAL DIAMETER: **DN50 ... DN600**

NOMINAL PRESSURE: **PN10, PN16**



FLANGE FACING DIMENSIONS FOR PN10

DN	PN, MPa (Bar)	Dimensions			
		L	D	D1	n - Ød
50	1,0 (10)	165	165	125	4-18
65	1,0 (10)	165	185	145	8-18
80	1,0 (10)	200	200	160	8-18
100	1,0 (10)	260	220	180	8-18
125	1,0 (10)	310	250	210	8-18
150	1,0 (10)	375	285	240	8-22
200	1,0 (10)	500	340	295	8-22
250	1,0 (10)	625	395	350	12-22
300	1,0 (10)	750	445	400	12-22
350	1,0 (10)	375	505	460	16-22
400	1,0 (10)	1000	565	515	16-26
450	1,0 (10)	1125	615	565	20-26
500	1,0 (10)	1250	670	620	20-26

FLANGE FACING DIMENSIONS FOR PN16

DN	PN, MPa (Bar)	Dimensions			
		L	D	D1	n - Ød
50	1,6 (16)	165	165	125	4-18
65	1,6 (16)	165	185	145	8-18
80	1,6 (16)	200	200	160	8-18
100	1,6 (16)	250	220	180	8-18
125	1,6 (16)	310	250	210	8-18
150	1,6 (16)	375	285	240	8-22
200	1,6 (16)	500	340	295	12-22
250	1,6 (16)	625	405	355	12-26
300	1,6 (16)	750	460	410	12-26
350	1,6 (16)	875	520	470	16-22
400	1,6 (16)	1000	580	525	16-30
450	1,6 (16)	1125	640	585	20-30
500	1,6 (16)	1250	715	650	20-33

Tabular values for DN500+ are available upon request

There is an option to supply pinch valves with an electric actuator or with a mounting plate for an electric actuator. In such cases, the actuator mounting plate will be manufactured in accordance with the ISO 5211 standard.

PINCH VALVE

SERIES: 200 MODEL: 206M

NOMINAL DIAMETER	DN50 ... DN600
NOMINAL PRESSURE	PN10, PN16
PURPOSE	Shut-off and control valve (optional)
MEDIUM TEMPERATURE	-50 °C ... +150 °C
CONNECTION TYPE	Flanged
MEDIUM	High-abrasive medium, chemically aggressive medium, acids, water with abrasive particles, salt solutions, carbon, sand, polar solvents, silicone oils, medium containing mazut, oil, gasoline.
BODY TYPE	Open



DESIGN FEATURES OF THE MODEL

- Open body;
- Wide selection of body and sleeve materials;
- Quick and easy sleeve replacement;
- Dual-sided clamping of the sleeve.

TYPE OF CONTROL

- Manual (gearbox, handwheel);
- Pneumatic actuator, single-acting or double-acting, without manual override;
- Pneumatic actuator, single-acting or double-acting, with manual override;
- Electric actuator;
- Hydraulic actuator.

FLOW DIRECTION



Bidirectional

GENERAL APPLICATIONS

Pinch valves are designed for regulation and shutting off the flow of highly abrasive media, such as slurries, powders, or coarse-grained substances, including corrosive media. The main advantages of the valve include a two-piece, fully serviceable body and a double-sided pinch mechanism for the sleeve. A characteristic feature of these valves is their lightweight, open-body construction, which significantly reduces their mass. In certain conditions, this allows for installation on plastic piping systems where heavy loads are not permissible.

COMPLIANCE STANDARDS

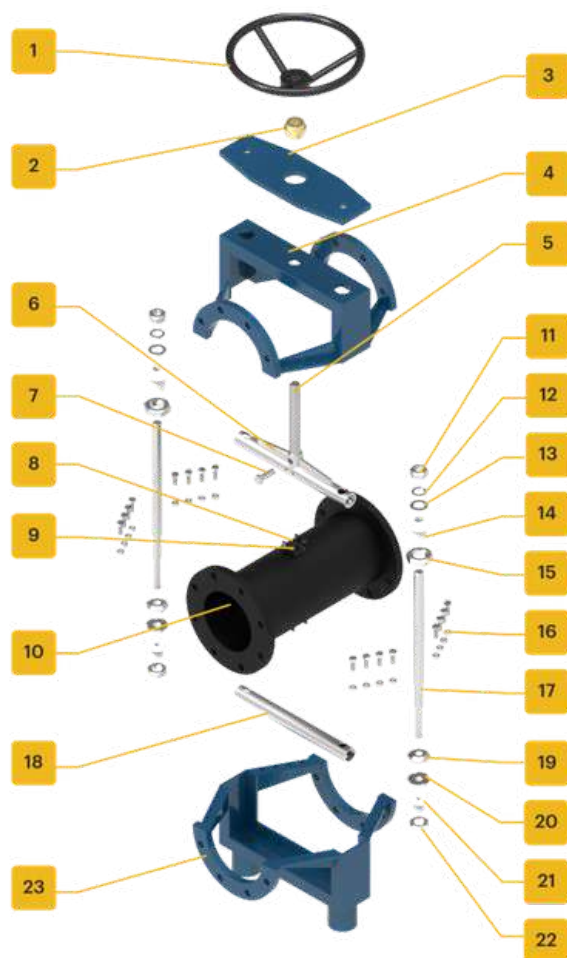
Category		Standard
Product compliance		Directive PED 2014/68/EU
Manufacturing and designing		EN 1984
Marking		EN 19
Leakage class		"A" ISO 5208
Testing		EN 12266-1
Connection	Flange dimensions	EN 1092-1



PINCH VALVE

SERIES: 200 MODEL: 206M

NOMINAL DIAMETER: **DN50 ... DN600** NOMINAL PRESSURE: **PN10, PN16**



No	Name
1	Handwheel
2	Thrust Bearing
3	Bracket
4	Upper Body
5	Stem
6	Upper Pinch Bar
7	Pin
8	Expansion Rail
9	Clamp bolt
10	Sleeve
11	Nut
12	Spring washer
13	Flat washer
14	Support washer with seal
15	Support sleeve nut
16	Bolts and nuts
17	Side Guide
18	Lower Pinch Bar
19	Locking screw
20	Washer
21	Centering sleeve
22	Nut
23	Lower Body

MATERIALS OF THE MAIN COMPONENTS

Name	Material	Medium temperature	Medium
Sleeve	EPDM	-50°C ... +130°C	Weak acids and alkalis, saline solutions, water with impurities, sand, and slightly abrasive media.
	NR	-40°C ... +80°C	Highly abrasive media, water with sand, coal, and slurries.
	NBR	-40°C ... +120°C	Abrasive media, contaminated water, crude oil, fuel oil (mazut), gasoline, and oils.
	CSM	-40°C ... +130°C	Abrasive media, chemically aggressive media, and water with additives.
	IIR	-50°C ... +130°C	Abrasive media, polar solvents, silicone oils, and water with additives.
	NR + Linatex	-40°C ... +85°C	Very high resistance to abrasion; suitable for weak acids and alkalis, salt solutions, sand, and coal.
	SBR	-40°C ... +100°C	Abrasive media, water with additives, glycols, and acetone.
	FKM	-20°C ... +150°C	Chemically aggressive media, solvents, high temperatures, and abrasive media.
Body	CS	-30°C ... +150°C	-
	GGG40/ EN-GJS-400-15	-20°C ... +130°C	
	AISI304/1.4308	-60°C ... +150°C	
	AISI316/1.4408		
	Aluminium	-20°C ... +150°C	

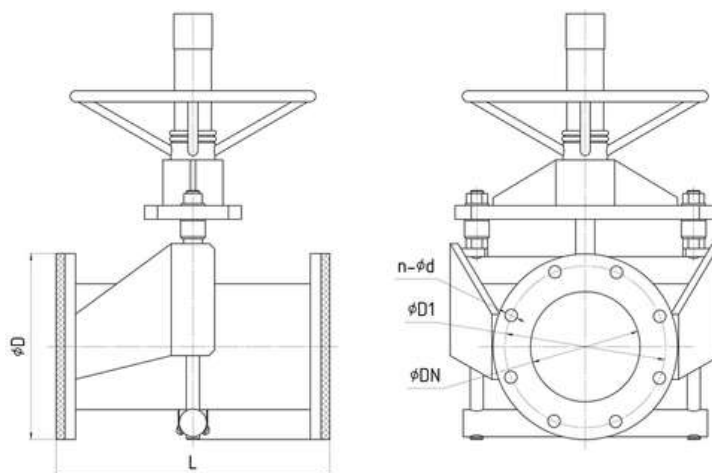
It can be manufactured from other materials according to the customer's technical requirements.

PINCH VALVE

SERIES: 200 MODEL: 206M

NOMINAL DIAMETER: **DN50 ... DN600**

NOMINAL PRESSURE: **PN10, PN16**



FLANGE FACING DIMENSIONS FOR PN10

DN	PN, MPa (Bar)	Dimensions			
		L	D	D1	n - Ød
50	1,0 (10)	165	165	125	4-18
65	1,0 (10)	165	185	145	8-18
80	1,0 (10)	200	200	160	8-18
100	1,0 (10)	260	220	180	8-18
125	1,0 (10)	310	250	210	8-18
150	1,0 (10)	375	285	240	8-22
200	1,0 (10)	500	340	295	8-22
250	1,0 (10)	625	395	350	12-22
300	1,0 (10)	750	445	400	12-22
350	1,0 (10)	375	505	460	16-22
400	1,0 (10)	1000	565	515	16-26
450	1,0 (10)	1125	615	565	20-26
500	1,0 (10)	1250	670	620	20-26

FLANGE FACING DIMENSIONS FOR PN16

DN	PN, MPa (Bar)	Dimensions			
		L	D	D1	n - Ød
50	1,6 (16)	165	165	125	4-18
65	1,6 (16)	165	185	145	8-18
80	1,6 (16)	200	200	160	8-18
100	1,6 (16)	250	220	180	8-18
125	1,6 (16)	310	250	210	8-18
150	1,6 (16)	375	285	240	8-22
200	1,6 (16)	500	340	295	12-22
250	1,6 (16)	625	405	355	12-26
300	1,6 (16)	750	460	410	12-26
350	1,6 (16)	875	520	470	16-22
400	1,6 (16)	1000	580	525	16-30
450	1,6 (16)	1125	640	585	20-30
500	1,6 (16)	1250	715	650	20-33

Tabular values for DN500+ are available upon request

There is an option to supply pinch valves with an electric actuator or with a mounting plate for an electric actuator. In such cases, the actuator mounting plate will be manufactured in accordance with the ISO 5211 standard.

BUTTERFLY VALVES

SERIES: 300 MODEL : 301

NOMINAL DIAMETER	DN25 ... DN1200
NOMINAL PRESSURE	PN10 ... PN16
PURPOSE	Shut-off and control valve
CONNECTION TYPE	Wafer, lug
MEDIUM TEMPERATURE	-20°C ... +160°C
MEDIUM	Water, air, steam, oil products, ethyl alcohol (ethanol), petroleum-derived products, acids, alkalis (bases), chemically aggressive media.



DESIGN FEATURES OF THE MODEL

- Replaceable seat seal;
- One- or two-piece stem;
- Wide selection of sealing materials;
- Pinless connection between stem and disc (optional);
- Ease of installation and user-friendly operation.

TYPES OF CONTROL

- Manual (handwheel, gearbox);
- Pneumatic actuator;
- Electric actuator.

FLOW DIRECTION



GENERAL APPLICATIONS

The valve is designed for general applications with liquids, gases, and slurries, including chemically aggressive media, where tightness and corrosion resistance are of key importance. The body design ensures easy flanged installation. The soft seat enables bidirectional operation with zero leakage. For applications involving aggressive or corrosive media, the use of a two-piece stem with a splined connection or a pinless through-stem design is recommended. These solutions minimize the risk of stem corrosion or damage during operation, which is particularly important for long-term service under demanding conditions.

COMPLIANCE STANDARDS

Category		Standard
Product compliance		Directive PED 2014/68/EU
Manufacturing and designing		EN 593
Marking		EN 19
Leakage class		"A" ISO 5208
Mounting flange		ISO 5211
Connection	Face-to-face length	EN 558
	Flange dimensions	EN 1092-1
Testing	Hydrostatic and functional	EN 12266-1



BUTTERFLY VALVES

SERIES: 300 MODEL : 301



No	Name
1	Body
2	Seat
3	Disc
4	Lower stem
5	Upper stem
6	Lower bushing
7	O-ring
8	Bottom cap
9	Gland plate
10	Screw
11	Upper bushing
12	Packing gland

MATERIALS OF THE MAIN COMPONENTS

Name	Material	Medium temperature	Medium
Seat	EPDM	-15°C ... +110°C	Water, steam, weak solutions of alkalis and acids
	NBR	-15°C ... +90°C	Petroleum products, diesel, mineral oils, propane, butane
	NR	-5°C ... +70°C	Water, moderately abrasive media
	FKM (Viton)	-5°C ... +150°C	Chemically aggressive media, mineral oils and greases, gasoline, hot water
	Neoprene	-5°C ... +100°C	Water, steam, weak solutions of alkalis and acids, oils
	Silicon	-20°C ... +160°C	Acetic acid, ethyl alcohol, ethylene glycol, water, milk, food additives
	CSM	-5°C ... +100°C	Abrasive media, chemically aggressive media, polluted water
Body	A216 WCB/1.0619	-	-
	AISI304/1.4308		
	GGG40/EN-GJS-400-15		
	GG25		
	AISI316/1.4408		
Disc	AISI304/1.4308	-20°C ... +160°C	Water, seawater, contaminated water, air, steam, oil products, petroleum products, oils, acids, alkalis, salts, aggressive chemical substances
	AISI316/1.4408		
	GGG40/EN-GJS-400-15		Water, superheated water, weak solutions of acids and alkalis
	GGG40/EN-GJS-400-15 + rubber-coated disc	Operating temperature range for rubber	-
	Duplex 2205/2507	-46°C ... +300°C	Water, seawater, contaminated water, air, steam, oils, petroleum products, oils, weak acids and alkalis, chemically aggressive media, seawater, salts

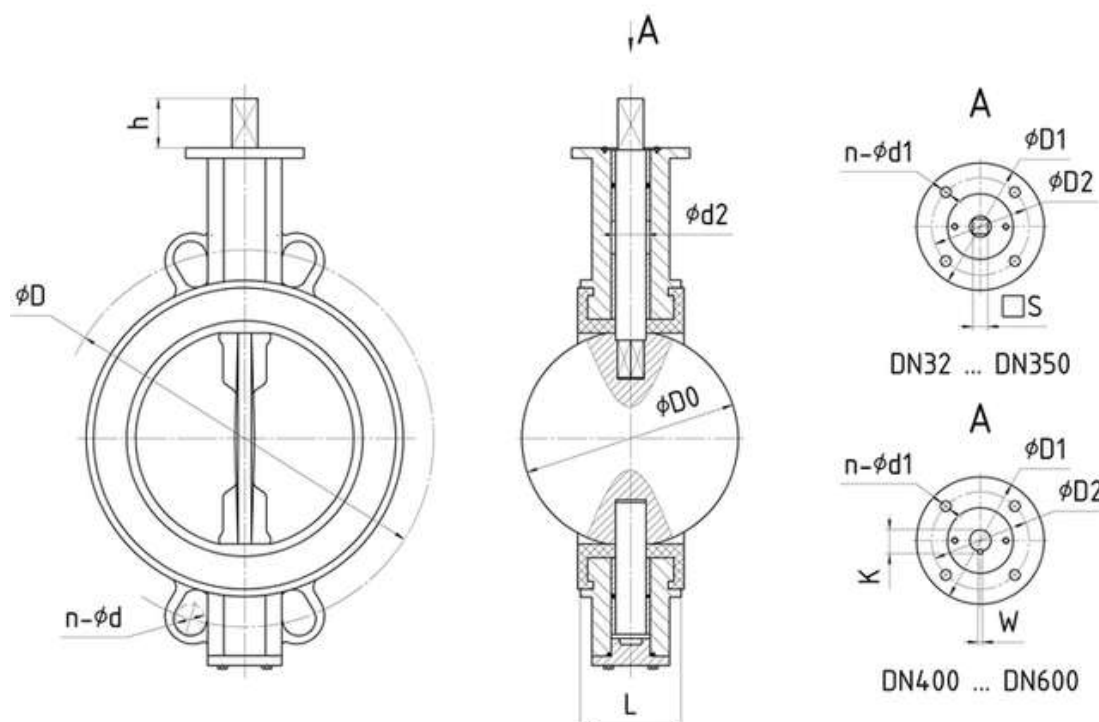
It can be manufactured from other materials according to the customer's technical requirements

BUTTERFLY VALVES

SERIES: 300 MODEL : 301

Nominal diameter: **DN25 ... DN1200**

Nominal pressure: **PN10 ... PN16**



FLANGE FACING DIMENSIONS FOR PN10, PN16

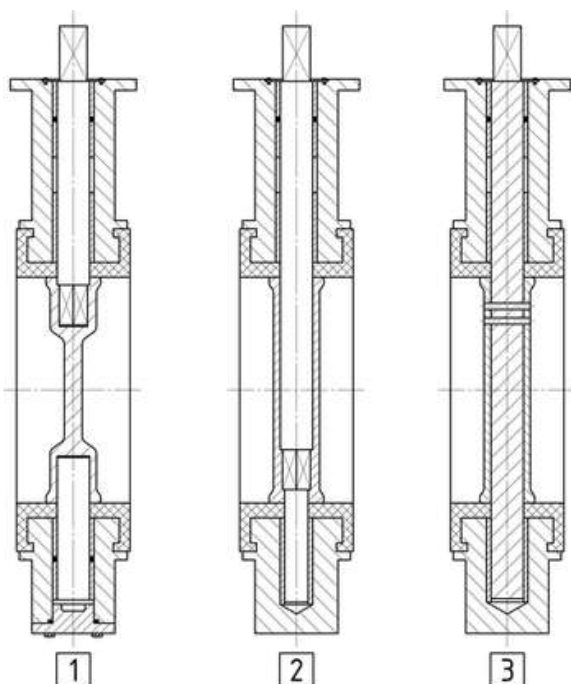
DN	L, mm	PN10		PN16		h	D0	D1	D2	n- Ød1	d2	S	K	W	ISO 5211
		D	n- Ød	D	n- Ød										
50	43	125	4-Ø18	125	4-Ø18	28	53	65	50	4-Ø7	12.6	9	-	-	F05
65	46	145	4-Ø18/8-Ø18	145	4-Ø18/8-Ø18	28	64	65	50	4-Ø7	12.6	9	-	-	F05
80	46	160	8-Ø18	160	8-Ø18	28	79	65	50	4-Ø7	12.6	9	-	-	F05
100	52	180	8-Ø18	180	8-Ø18	28	104	90	70	4-Ø10	15.77	11	-	-	F07
125	56	210	8-Ø18	210	8-Ø18	28	123	90	70	4-Ø10	18.92	14	-	-	F07
150	56	240	8-Ø22	240	8-Ø22	28	156	90	70	4-Ø10	18.92	14	-	-	F07
200	60	295	8-Ø22	295	12-Ø22	38	202	125	102	4-Ø12	22.1	17	-	-	F10
250	68	350	12-Ø22	355	12-Ø26	38	250	125	102	4-Ø12	28.45	22	-	-	F10
300	78	400	12-Ø22	410	12-Ø26	38	302	125	102	4-Ø12	31.6	22	-	-	F10
350	78	460	16-Ø22	470	16-Ø26	45	333	150	125	4-Ø14	31.6	22	-	-	F12
400	102	515	16-Ø26	525	16-Ø30	51	390	175	140	4-Ø18	33.15	-	36.15	10	F14
450	114	565	20-Ø26	585	20-Ø30	51	441	175	140	4-Ø18	37.95	-	40.95	10	F14
500	127	620	20-Ø26	650	20-Ø33	57	492	175	140	4-Ø18	41.12	-	44.12	10	F14
600	154	725	20-Ø30	770	20-Ø36	70	593	210	165	4-Ø22	50.62	-	54.65	16	F16

Upon request, tabular values are provided for DN700 to DN1200

BUTTERFLY VALVES

SERIES: 300 MODEL : 301

DESIGNS OF STEM ATTACHMENT TO THE DISC



TYPE 1

Double-stem connection

This design allows for a slimmer disc profile, resulting in a larger flow area and reduced pressure drop. However, the increased number of components lead to higher production cost.

TYPE 2

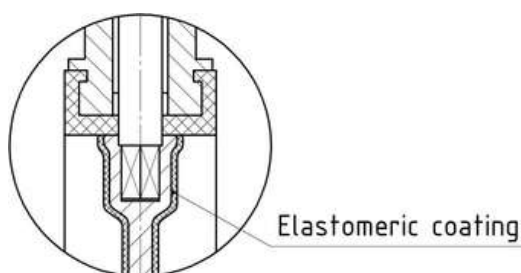
Single-stem connection

A simplified design ensures easy servicing and part replacement, with fewer components and lower assembly cost. While ideal for compact installations, it typically results in a thicker disc section, slightly reducing the effective flow area and increasing flow resistance.

TYPE 3

Pinned connection

Locking pins securely transmit torque from the stem to the disc, effectively preventing stem rotation under dynamic loads. Nevertheless, long-term exposure to aggressive chemicals may compromise pin integrity, making this design unsuitable for corrosive service environments.



OPTIONAL ELASTOMERIC COATING

Optionally, the disc can be coated with an elastomeric layer to enhance resistance against chemically aggressive or abrasive media. The coating material is selected based on the characteristics of the operating environment, including chemical composition, temperature, and mechanical load conditions.



The elastomeric coating can be applied to the disc in all attachment configurations.

BUTTERFLY VALVES

SERIES: 300 MODEL : 302

NOMINAL DIAMETER	DN32 ... DN1200
NOMINAL PRESSURE	PN10, PN16
PURPOSE	Shut-off and control valve
CONNECTION TYPE	Flanged
MEDIUM TEMPERATURE	-15°C ... +110°C
MEDIUM	Water, air, steam, petroleum products, ethyl alcohol (ethanol), oil-derived products, acids, alkalis, acetic acid, chemically aggressive media, etc.



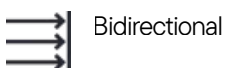
DESIGN FEATURES OF THE MODEL

- Replaceable seat seal;
- One- or two-piece stem;
- Wide selection of sealing materials;
- Pinless connection between stem and disc (optional);
- Ease of installation and user-friendly operation.

TYPES OF CONTROL

- Manual (handwheel, gearbox);
- Pneumatic actuator;
- Electric actuator.

FLOW DIRECTION



GENERAL APPLICATIONS

The valve is designed for general applications with liquids, gases, and slurries, including chemically aggressive Medium, where tightness and corrosion resistance are of key importance. The body design ensures easy flanged installation. The soft seat enables bidirectional operation with zero leakage. For applications involving aggressive or corrosive Medium, the use of a two-piece stem with a splined connection or a pinless through-stem design is recommended. These solutions minimize the risk of stem corrosion or damage during operation, which is particularly important for long-term service under demanding conditions.

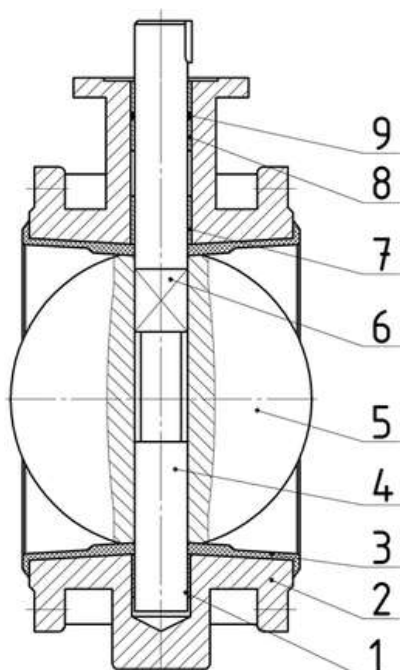
COMPLIANCE STANDARDS

Category		Standard
Product compliance		Directive PED 2014/68/EU
Manufacturing and designing		EN 593
Marking		EN 19
Leakage class		"A" ISO 5208
Mounting flange		ISO 5211
Connection	Face-to-face length	EN 558
	Flange dimensions	EN 1092-1
Testing	Hydrostatic and functional	EN 12266-1



BUTTERFLY VALVES

SERIES: 300 MODEL : 302



No	Name
1	Lower bushing
2	Body
3	Seat
4	Lower stem
5	Disc
6	Upper stem
7	Upper bushing
8	Short bushing
9	O-ring

MATERIALS OF THE MAIN COMPONENTS

Name	Material	Medium temperature	Medium
Seat	EPDM	-15°C ... +110°C	Water, steam, weak solutions of alkalis and acids
	NBR	-15°C ... +90°C	Petroleum products, diesel, mineral oils, propane, butane
	NR	-5°C ... +70°C	Water, moderately abrasive media
	Neoprene	-5°C ... +100°C	Water, steam, weak solutions of alkalis and acids, oils
	CSM	-5°C ... +100°C	Abrasive media, chemically aggressive media, polluted water
Body	A216 WCB/1.0619	-	-
	AISI304/1.4308		
	GGG40/EN-GJS-400-15		
	GG25		
	AISI316/1.4408		
Disc	AISI304/1.4308	-20°C ... +160°C	Water, seawater, contaminated water, air, steam, oil products, petroleum products, oils, acids, alkalis, salts, aggressive chemical substances
	AISI316/1.4408		
	GGG40/EN-GJS-400-15		Water, superheated water, weak solutions of acids and alkalis
	GGG40/EN-GJS-400-15 + rubber-coated disc	Operating temperature range for rubber	-

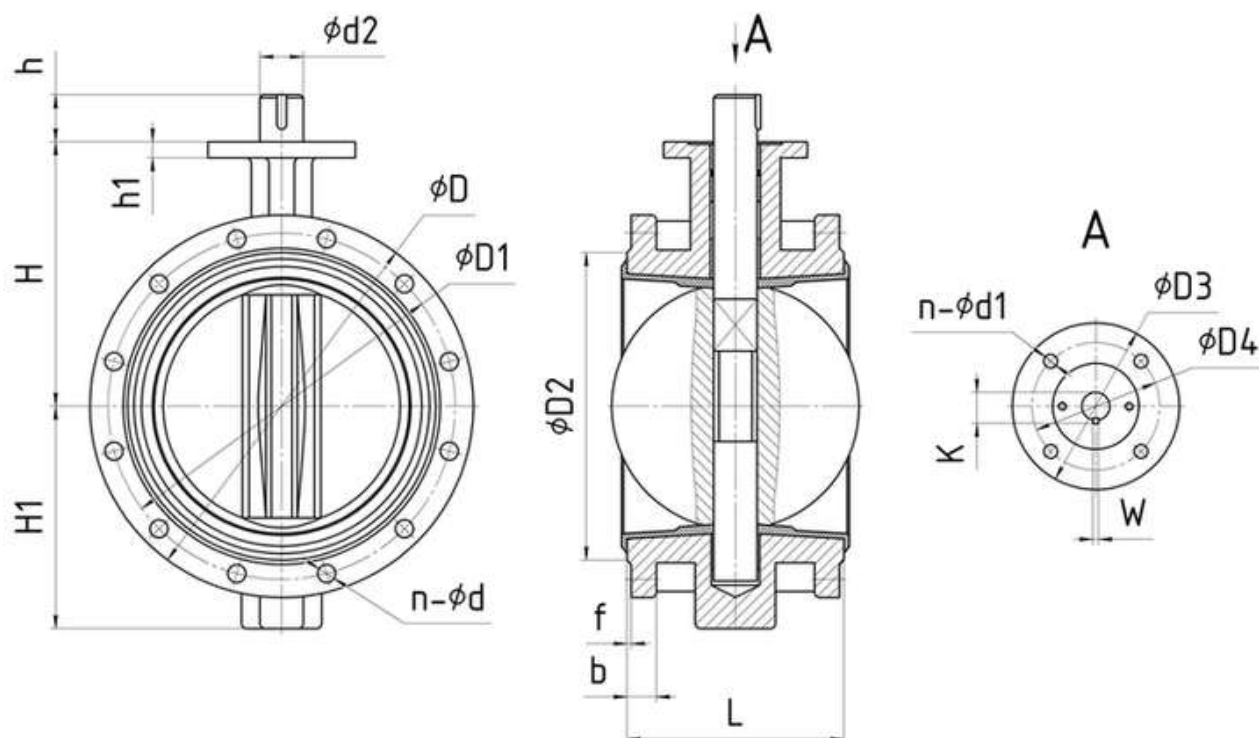
It can be manufactured from other materials according to the customer's technical requirements.

BUTTERFLY VALVES

SERIES: 300 MODEL : 302

Nominal diameter: **DN32 ... DN1200**

Nominal pressure: **PN10 ... PN16**



FLANGE FACING DIMENSIONS FOR PN10

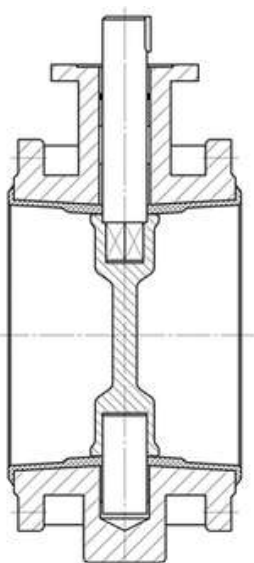
DN	L, mm	D	D1	D2	n- Ød	b	f	H	H1	h	h1	D3	D4	n- Ød1	d2	K	W	ISO 5211
50	108	165	125	102	4-Ø18	18	3	120	80	28	13	65	50	4-Ø7	12.6	13.8	3	F05
65	112	185	145	122	4-Ø18/8-Ø18	18	3	130	89	28	13	65	50	4-Ø7	12.6	13.8	3	F05
80	114	200	160	138	8-Ø18	20	3	145	95	28	13	65	50	4-Ø7	12.6	13.8	3	F05
100	127	220	180	158	8-Ø18	20	3	155	114	28	13	90	70	4-Ø10	15.77	17.77	5	F07
125	140	250	210	188	8-Ø18	22	3	170	125	28	13	90	70	4-Ø10	18.92	20.92	5	F07
150	140	285	240	212	8-Ø22	22	3	190	139	28	13	90	70	4-Ø10	18.92	20.92	5	F07
200	152	340	295	268	8-Ø22	24	3	205	170	38	15	125	102	4-Ø12	22.1	24.1	5	F10
250	165	395	350	320	12-Ø22	26	3	235	198	38	15	125	102	4-Ø12	28.45	31.45	8	F10
300	178	445	400	370	12-Ø22	26	4	280	223	38	20	125	102	4-Ø12	31.6	34.6	8	F10
350	190	505	460	430	16-Ø22	26	4	310	254	45	20	150	125	4-Ø14	31.6	34.6	8	F12
400	216	565	515	482	16-Ø26	26	4	340	306	51	22	175	140	4-Ø18	33.15	36.15	10	F14
450	222	615	565	532	20-Ø26	28	4	375	345	51	22	175	140	4-Ø18	37.95	40.95	10	F14
500	229	670	620	585	20-Ø26	28	4	430	378	57	22	175	140	4-Ø18	41.12	44.12	10	F14
600	267	780	725	685	20-Ø30	34	5	500	440	70	22	210	165	4-Ø22	50.62	54.65	16	F16

Upon request, tabular values are provided for DN700 to DN1200

BUTTERFLY VALVES

SERIES: 300 MODEL : 302

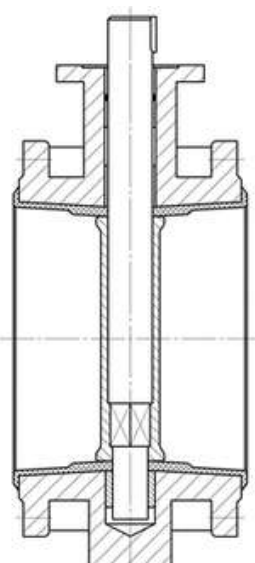
DESIGNS OF STEM ATTACHMENT TO THE DISC



TYPE 1

Double-stem connection

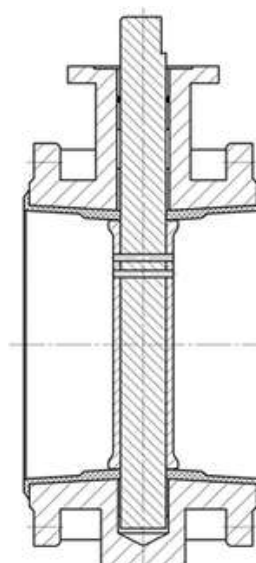
This design allows for a slimmer disc profile, resulting in a larger flow area and reduced pressure drop. However, the increased number of components lead to higher production cost.



TYPE 2

Single-stem connection

A simplified design ensures easy servicing and part replacement, with fewer components and lower assembly cost. While ideal for compact installations, it typically results in a thicker disc section, slightly reducing the effective flow area and increasing flow resistance.



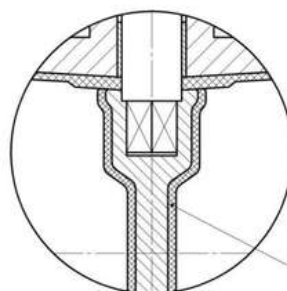
TYPE 3

Pinned connection

Locking pins securely transmit torque from the stem to the disc, effectively preventing stem rotation under dynamic loads. Nevertheless, long-term exposure to aggressive chemicals may compromise pin integrity, making this design unsuitable for corrosive service.

OPTIONAL ELASTOMERIC COATING

Optionally, the disc can be coated with an elastomeric layer to enhance resistance against chemically aggressive or abrasive media. The coating material is selected based on the characteristics of the operating environment, including chemical composition, temperature, and mechanical load conditions.



Elastomeric coating



The elastomeric coating can be applied to the disc in all attachment configurations.

BUTTERFLY VALVES

SERIES 300, MODEL : 303

NOMINAL DIAMETER	DN400 ... DN2000
NOMINAL PRESSURE	PN10, PN16
PURPOSE	Shut-off and control valve
CONNECTION TYPE	Flanged
MEDIUM TEMPERATURE	-15°C ... +110°C
MEDIUM	Water, weak solutions of acids and alkalis, air, overheated water, moderately abrasive media, etc.



DESIGN FEATURES OF THE MODEL

- Replaceable seat;
- Single- or double-component stem;
- Lightweight design;
- Shortened face-to-face length.

TYPE OF CONTROL

- Manual (lever, gearbox);
- Pneumatic actuator;
- Electric actuator.

FLOW DIRECTION



GENERAL APPLICATIONS

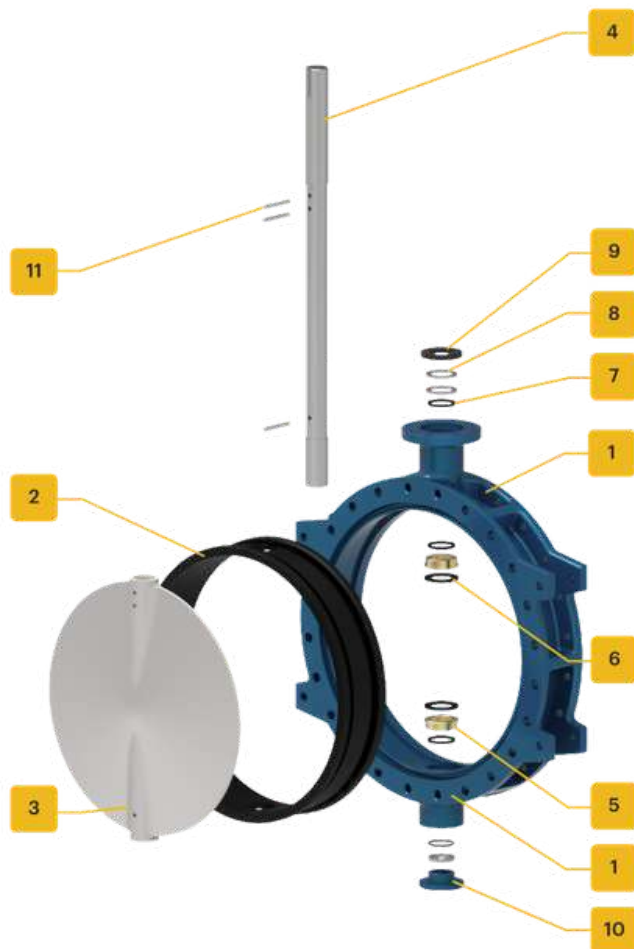
The valve is designed for general-purpose applications involving weak solutions of acids and alkalis, air, overheated water, and media with moderate abrasive content. Its short face-to-face dimension allows installation in confined spaces and compact piping layouts. An optional rubber-coated disc is available to enhance corrosion resistance and sealing performance in chemically aggressive or abrasive environments.

COMPLIANCE STANDARDS

Category		Standard
Product compliance		Directive PED 2014/68/EU
Manufacturing and designing		EN 593
Marking		EN 19
Leakage class		"A" ISO 5208
Mounting flange		ISO 5211
Connection	Face-to-face length	EN 558
	Flange dimensions	EN 1092-1
Testing	Hydrostatic and functional	EN 12266-1

BUTTERFLY VALVES

SERIES 300, MODEL : 303



No	Name
1	Body
2	Seat
3	Disc
4	Stem
5	Bushing
6	O-ring
7	O-ring
8	Bushing
9	Upper cap
10	Body cap
11	Pin

MATERIALS OF THE MAIN COMPONENTS

Name	Material	Medium temperature	Medium
Seat	EPDM	-15°C ... +110°C	Water, steam, weak solutions of alkalis and acids
	NBR	-15°C ... +90°C	Petroleum products, diesel, mineral oils, propane, butane
Body	GGG40/EN-GJS-400-15	-	-
	A216 WCB/1.0619		
Disc	AISI304/1.4308	-15°C ... +110°C	Water, weak solutions of acids and alkalis, air, overheated water
	AISI316/1.4408		
	GGG40/EN-GJS-400-15 + rubber-coated disc	Operating temperature range for seals	-

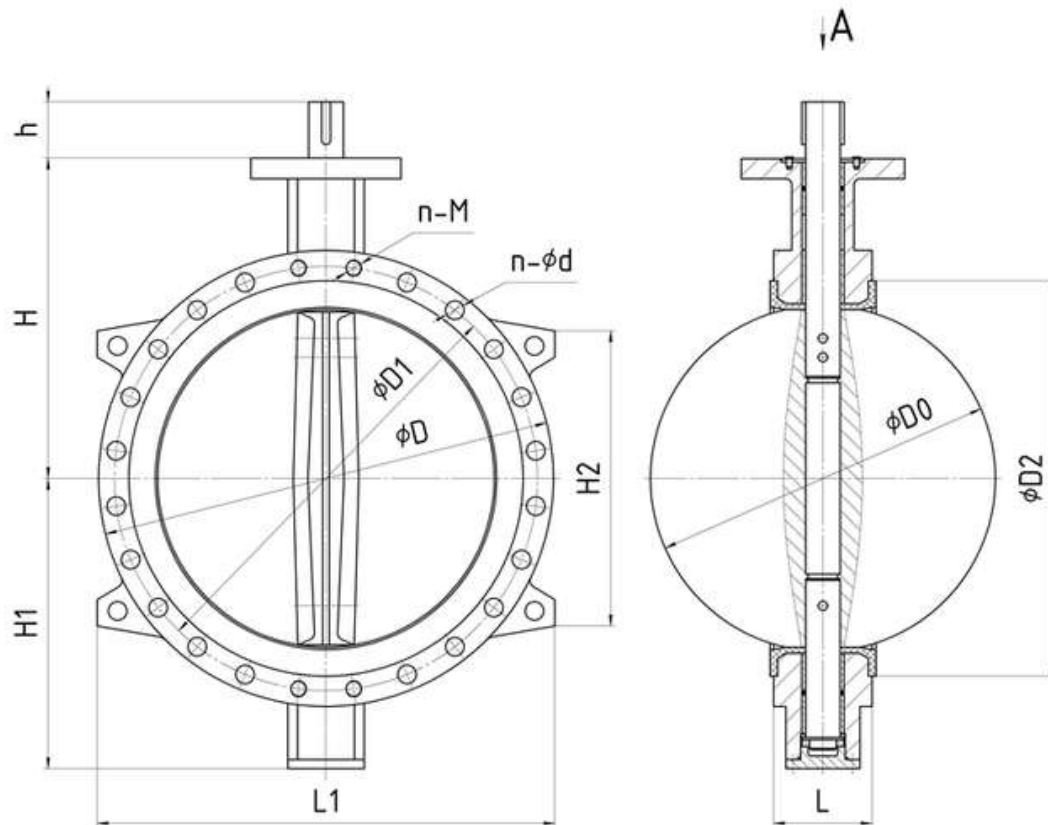
It can be manufactured from other materials according to the customer's technical requirements.

BUTTERFLY VALVES

SERIES 300, MODEL : 303

Nominal diameter: **DN400 ... DN2000**

Nominal pressure: **PN10 ... PN16**



FLANGE FACING DIMENSIONS FOR PN10

DN	L, mm	D	D1	D2	D0	n- ϕd	n-M	H	H1	H2	L1	h
400	102	565	515	450	390	12- $\phi 26$	4-M24	400	325	337	600	51
450	114	615	565	501	441	16- $\phi 26$	4-M24	422	345	370	660	51
500	127	670	620	555	492	16- $\phi 26$	4-M24	480	378	412	735	57
600	154	780	725	660	593	16- $\phi 30$	4-M27	562	475	483	860	70
700	165	895	840	753	695	20- $\phi 30$	4-M27	624	543	520	926	66
800	190	1015	950	860	795	20- $\phi 33$	4-M30	672	606	586	1045	66
900	203	1115	1050	963	865	24- $\phi 33$	4-M30	720	670	648	1155	110
1000	216	1230	1160	1064	965	24- $\phi 36$	4-M33	800	735	717	1285	135
1200	254	1455	1380	1278	1160	28- $\phi 39$	4-M36	941	878	849	1515	150
1400	279	1675	1590	1490	1385	32- $\phi 42$	4-M39	1040	1009	963	1715	150
1600	318	1915	1820	1704	1574	36- $\phi 48$	4-M45	1150	1132	1101	1960	180
1800	356	2115	2020	1893	1775	36- $\phi 48$	8-M45	1280	1270	1213	2160	230
2000	406	2325	2230	2105	1955	40- $\phi 48$	8-M45	1390	1350	1334	2375	280

BUTTERFLY VALVES

SERIES 300, MODEL : 303

Nominal diameter: **DN400 ... DN2000**

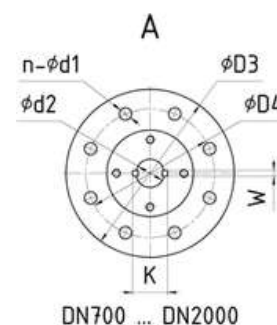
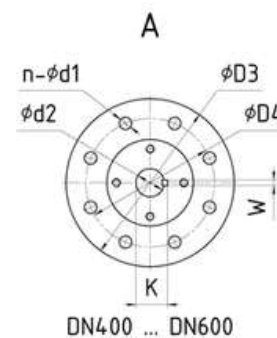
Nominal pressure: **PN10 ... PN16**

FLANGE FACING DIMENSIONS FOR PN16

DN	L, mm	D	D1	D2	D0	n-Ød	n-M	H	H1	H2	L1	h
400	102	580	525	450	390	12-Ø30	4-M27	400	325	337	600	60
450	114	640	585	501	441	16-Ø30	4-M27	422	345	370	660	60
500	127	715	650	555	492	16-Ø33	4-M30	480	378	412	735	75
600	154	840	770	660	593	16-Ø36	4-M33	562	475	483	860	75
700	165	910	840	753	695	20-Ø36	4-M33	624	543	520	926	70
800	190	1025	950	860	795	20-Ø39	4-M36	672	606	586	1045	75
900	203	1125	1050	963	865	24-Ø39	4-M36	720	670	648	1155	110
1000	216	1255	1170	1064	965	24-Ø42	4-M39	800	735	717	1285	135
1200	254	1485	1390	1278	1160	28-Ø48	4-M45	941	878	849	1515	150
1400	279	1685	1590	1490	1385	32-Ø48	4-M45	1040	1009	963	1715	150
1600	318	1930	1820	1704	1574	36-Ø56	4-M52	1150	1132	1101	1960	180
1800	356	2130	2020	1893	1775	36-Ø56	8-M52	1280	1270	1213	2160	230
2000	406	2345	2230	2105	1955	40-Ø62	8-M56	1390	1350	1334	2375	280

FLANGE DIMENSIONS FOR PART-TURN ACTUATOR ATTACHMENTS (ISO 5211)

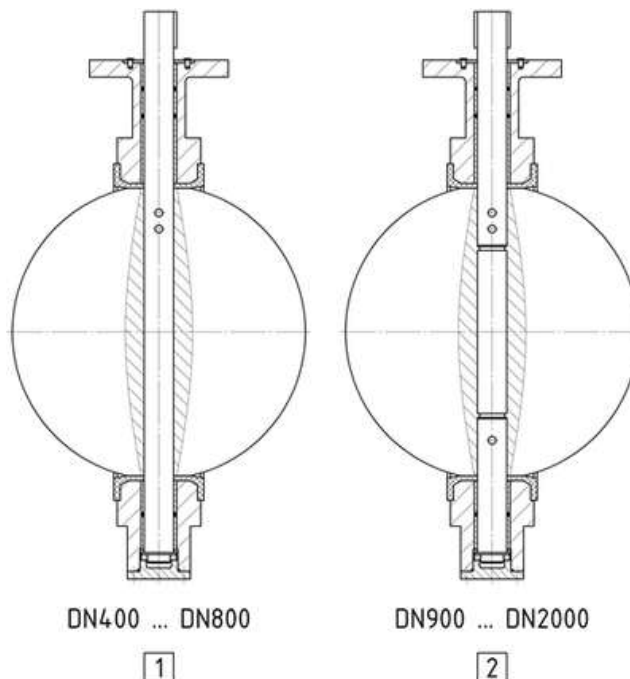
DN	D3	D4	n-Ød	PN10			PN16			Flange type
				d2	W	K	d2	W	K	
400	175	140	4-Ø18	33.15	10	36.15	37.95	10	40.95	F14
450	175	140	4-Ø18	37.95	10	40.95	42.86	12	45.86	F14
500	175	140	4-Ø18	41.12	10	44.12	45.72	14	49.22	F14
600	210	165	4-Ø22	50.63	16	54.65	53.98	16	57.98	F16
700	300	254	8-Ø18	63.35	18	71.4	63.35	18	71.4	F25
800	300	254	8-Ø18	63.35	18	71.4	70	20	79	F25
900	300	254	8-Ø18	75	2	84	80	22	90	F25
1000	300	254	8-Ø18	85	22	95	90	25	100	F25
1200	350	298	8-Ø22	105	28	117	105	28	117	F30
1400	415	356	8-Ø33	120	32	134	120	32	134	F35
1600	415	356	8-Ø33	160	40	178	160	40	178	F35
1800	475	406	8-Ø40	160	40	178	160	40	178	F40
2000	475	406	8-Ø40	160	40	178	160	40	178	F40



BUTTERFLY VALVES

SERIES 300, MODEL : 303

DESIGNS OF STEM ATTACHMENT TO THE DISC



TYPE 1

Single-stem connection

Features a through-disc stem supported by bushings at both ends, ensuring symmetrical torque transmission and precise disc alignment. Used for DN400–DN800 valves, offering robust performance with simplified assembly and minimal mechanical deflection.

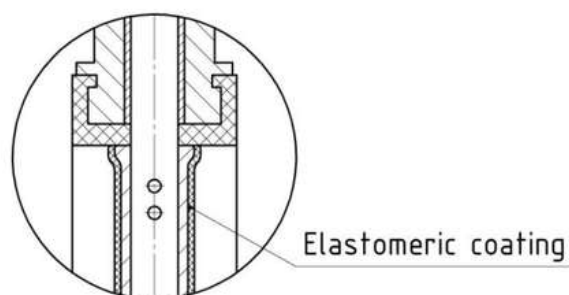
TYPE 2

Double-stem connection

Used for DN900–DN2000 valves, utilizes two shorter stems connected to the disc via pinned interfaces. This design facilitates easier handling of large components and improves installation efficiency while maintaining reliable torque transmission and disc stability.

OPTIONAL ELASTOMERIC COATING

Optionally, the disc can be coated with an elastomeric layer to enhance resistance against chemically aggressive or abrasive media. The coating material is selected based on the characteristics of the operating environment, including chemical composition, temperature, and mechanical load conditions.



The elastomeric coating can be applied to the disc in all attachment configurations.

BUTTERFLY VALVES

SERIES: 300 MODEL: 306

NOMINAL DIAMETER	DN50 ... DN2000
NOMINAL PRESSURE	PN6 ... PN100
PURPOSE	Shut-off and control valve
CONNECTION TYPE	Flanged, lug, wafer, butt-welded
MEDIUM TEMPERATURE	-196°C ... +600°C
MEDIUM	Water, seawater, polluted water, air, steam, oil products, oils, acids, alkalis, salts, chemically aggressive media



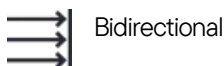
DESIGN FEATURES OF THE MODEL

- Metal-to-metal seal for high temperature up to +600°C;
- Metal-to-graphite seal to ensure class A tightness in one or two directions;
- Replaceable graphite or metal sealing element;
- Low torque (important for actuator selection);
- High cycle performance compared to valves with symmetrical discs;
- Valve design with extended bearings for high-temperature operation;
- Wide selection of body and disc materials
- available for use in aggressive media.

TYPE OF CONTROL

- Manual (lever, gearbox);
- Pneumatic actuator;
- Electric actuator.

FLOW DIRECTION



GENERAL APPLICATIONS

The triple offset design ensures significantly higher cycle life compared to valves with a concentric or symmetrical disc. The geometry of the three offsets eliminates friction between the disc and seat during opening and closing, resulting in smooth operation and extended service life. This design provides uniform sealing contact around the entire seat perimeter, enabling reliable performance even under high temperature conditions. Valves can be manufactured with bidirectional sealing, allowing flow in either direction. This is achieved by integrating spring-loaded seats that maintain consistent contact with the disc. However, for certain diameters, reverse flow may result in a pressure drop due to seat dynamics.

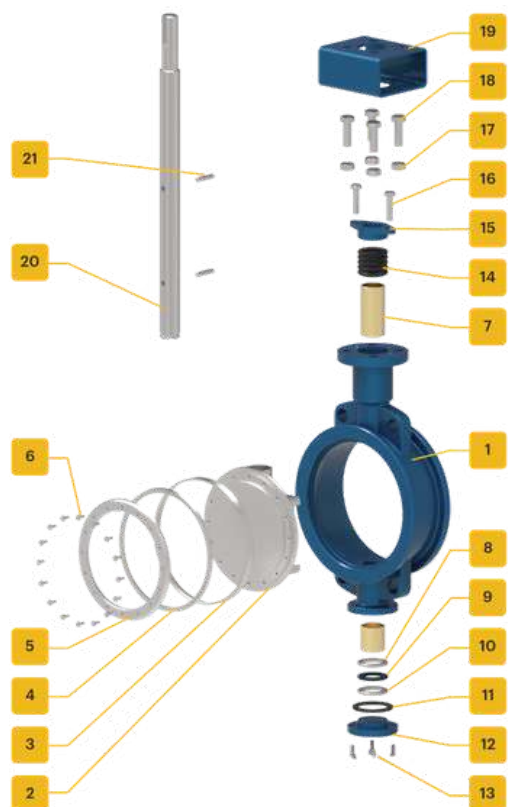
COMPLIANCE STANDARDS

Category		Standard
Product compliance		Directive PED 2014/68/EU
Manufacturing and designing		EN 593
Marking		EN 19
Leakage class		"A" ISO 5208
Mounting flange		ISO 5211
Connection	Face-to-face length	EN 558
	Flange dimensions	EN 1092-1
	Welding end dimensions	EN 12627
Testing	Hydrostatic and functional	EN 12266-1



BUTTERFLY VALVES

SERIES: 300 MODEL: 306



No	Name
1	Body
2	Disc
3	Seat
4	Disc seal
5	Seat clamp plate
6	Screw
7	Bushing
8	Retaining ring
9	O-ring
10	Retaining ring
11	Gasket
12	Bottom cover
13	Screw
14	Packing
15	Packing gland
16	Bolt
17	Nut
18	Bolt
19	Mounting plate
20	Stem
21	Pin

MATERIALS OF THE MAIN COMPONENTS

Name	Material	Medium temperature	Medium
Seat	AISI304/1.4308 + graphite	+425°C	Water, seawater, contaminated water, air, steam, petroleum products, oils, acids, alkalis, salts, chemically aggressive media
	AISI316/1.4408 + graphite	+425°C	
	Duplex 2205 + graphite	+300°C	Water, contaminated water, air, steam, oils, petroleum products, oils, weak acids and alkalis, chemically aggressive media, seawater, salts
	Metal	+600°C	
Body	A216 WCB/1.0619	-29°C ... +425°C	Water, steam, petroleum products
	AISI304/1.4308	-196°C ... +600°C	Chemically aggressive media, mineral oils and greases, gasoline, hot water, abrasive media
	AISI316/1.4408		Chemically aggressive media, mineral oils and greases, gasoline, hot water
	AISI316Ti/1.4571		Chemically aggressive media, sulfuric acid, petroleum products
	AISI 904L/1.4539	-45°C ... +340°C	Water, steam, petroleum products, gas
	A352 LCB		
Disc	A216 WCB/1.0619	-29°C ... +425°C	Water, steam, petroleum products
	AISI304/1.4308	-196°C ... +600°C	Chemically aggressive media, mineral oils and greases, gasoline, hot water, abrasive media
	AISI316/1.4408		Chemically aggressive media, mineral oils and greases, gasoline, hot water
	AISI316Ti/1.4571		Chemically aggressive media, sulfuric acid, petroleum products
	AISI 904L/1.4539	-45°C ... +340°C	Water, steam, petroleum products, gas
	A352 LCB		

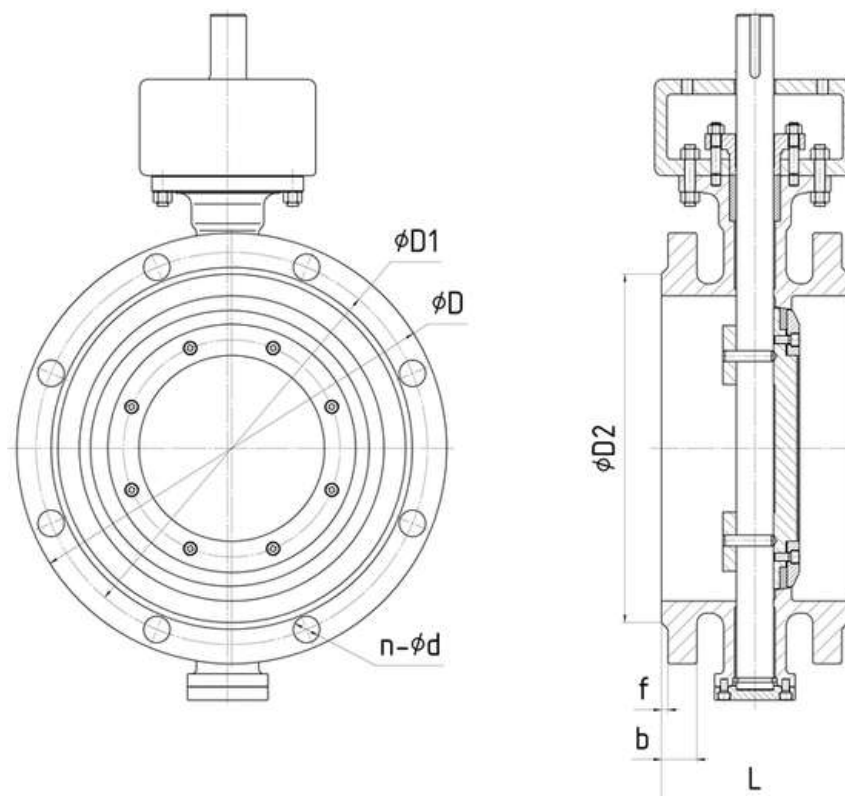
It can be manufactured from other materials according to the customer's technical requirements.

BUTTERFLY VALVES

SERIES: 300 MODEL: 306

Nominal diameter: **DN50 ... DN2000**

Nominal pressure: **PN6 ... PN100**



FLANGE FACING DIMENSIONS FOR PN10, PN16

DN	L (EN 558, series 13), mm	L (EN 558, series 20), mm	f	PN10					PN16				
				D	D1	D2	n-Ød	b	D	D1	D2	n-Ød	b
50	108	43	3	165	125	102	4-Ø18	18	165	125	102	4-Ø18	18
65	112	46	3	185	145	122	4-Ø18/8-Ø18	18	185	145	122	4-Ø18/8-Ø18	18
80	114	46	3	200	160	138	8-Ø18	20	200	160	138	8-Ø18	20
100	127	52	3	220	180	158	8-Ø18	20	220	180	158	8-Ø18	20
125	140	56	3	250	210	188	8-Ø18	22	250	210	188	8-Ø18	22
150	140	56	3	285	240	212	8-Ø22	22	285	240	212	8-Ø22	22
200	152	60	3	340	295	268	8-Ø22	24	340	295	268	12-Ø22	24
250	165	68	3	395	350	320	12-Ø22	26	405	355	320	12-Ø26	26
300	178	78	4	445	400	370	12-Ø22	26	460	410	378	12-Ø26	28
350	190	78	4	505	460	430	16-Ø22	26	520	470	438	16-Ø26	30
400	216	102	4	565	515	482	16-Ø26	26	580	525	490	16-Ø30	32
450	222	114	4	615	565	532	20-Ø26	28	640	585	550	20-Ø30	40
500	229	127	4	670	620	585	20-Ø26	28	715	650	610	20-Ø33	44
600	267	154	5	780	725	685	20-Ø30	34	840	770	725	20-Ø36	54

* Upon request, tabular values are provided for DN700 to DN2000.

* Can be manufactured with alternative face-to-face dimensions in accordance with EN 558.

BUTTERFLY VALVES

SERIES: 300 MODEL: 306

Nominal diameter: **DN50 ... DN2000**

Nominal pressure: **PN6 ... PN100**

FLANGE FACING DIMENSIONS FOR PN10, PN16

DN	L (EN 558, series 13), mm	L (EN 558, series 20), mm	f	PN25					PN40				
				D	D1	D2	n-Ød	b	D	D1	D2	n-Ød	b
50	108	43	3	165	125	102	4-Ø18	20	165	125	102	4-Ø18	20
65	112	46	3	185	145	122	8-Ø18	22	185	145	122	8-Ø18	22
80	114	46	3	200	160	138	8-Ø18	24	200	160	138	8-Ø18	24
100	127	52	3	235	190	162	8-Ø22	24	235	190	162	8-Ø22	24
125	140	56	3	270	220	188	8-Ø26	26	270	220	188	8-Ø26	26
150	140	56	3	300	250	218	8-Ø26	28	300	250	218	8-Ø26	28
200	152	60	3	360	310	278	12-Ø26	30	375	320	285	12-Ø30	34
250	165	68	3	425	370	335	12-Ø30	32	450	385	345	12-Ø33	38
300	178	78	4	485	430	395	16-Ø30	34	515	450	410	16-Ø33	42
350	190	78	4	555	490	450	16-Ø33	38	580	510	465	16-Ø36	46
400	216	102	4	620	550	505	16-Ø36	40	660	585	535	16-Ø39	50
450	222	114	4	670	600	555	20-Ø36	46	685	610	560	20-Ø39	57
500	229	127	4	730	660	615	20-Ø36	48	755	670	615	20-Ø42	57
600	267	154	5	845	770	720	20-Ø39	58	890	795	735	20-Ø48	72

* Upon request, tabular values are provided for DN700 to DN2000.

* Can be manufactured with alternative face-to-face dimensions in accordance with EN 558.

FLANGE FACING DIMENSIONS FOR PN63, PN100

DN	L (EN 558, series 13), mm	L (EN 558, series 20), mm	f	PN63					PN100				
				D	D1	D2	n-Ød	b	D	D1	D2	n-Ød	b
50	108	43	3	180	135	102	4-Ø22	26	195	145	102	4-Ø26	30
65	112	46	3	205	160	122	8-Ø22	26	220	170	122	8-Ø26	34
80	114	46	3	215	170	138	8-Ø22	28	230	180	138	8-Ø26	36
100	127	52	3	250	200	162	8-Ø26	30	265	210	162	8-Ø30	40
125	140	56	3	295	240	188	8-Ø30	34	315	250	188	8-Ø33	40
150	140	56	3	345	280	218	8-Ø33	36	355	290	218	12-Ø33	4
200	152	60	3	415	345	285	12-Ø36	42	430	360	285	12-Ø36	52
250	165	68	3	470	400	345	12-Ø36	46	505	430	345	12-Ø39	60
300	178	78	4	530	460	410	16-Ø36	52	585	500	410	16-Ø42	68
350	190	78	4	600	525	465	16-Ø39	56	655	560	465	16-Ø48	74
400	216	102	4	670	585	535	16-Ø42	60	-	-	535	-	-

* Upon request, tabular values are provided for DN700 to DN2000.

* Can be manufactured with alternative face-to-face dimensions in accordance with EN 558.

BUTTERFLY VALVES

SERIES: 300 MODEL : 307

NOMINAL DIAMETER	DN50 ... DN1200
NOMINAL PRESSURE	PN10, PN16
PURPOSE	Shut-off and control valve
CONNECTION TYPE	Flanged, lug, wafer
MEDIUM TEMPERATURE	-60°C ... +180°C
MEDIUM	Sulfuric acid, nitric acid, chromic acid, acetic acid, hydrochloric acid, phosphoric acid and other acids



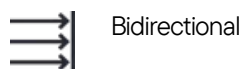
DESIGN FEATURES OF THE MODEL

- High chemical resistance of the sealing and disc ensures reliable performance in chemically aggressive media;
- Two-piece body;
- Tightness class "A";
- Centric butterfly valve with a symmetrically positioned disc relative to the body axis.

TYPE OF CONTROL

- Manual (lever, gearbox);
- Pneumatic actuator;
- Electric actuator.

FLOW DIRECTION



Bidirectional

GENERAL APPLICATIONS

The lined butterfly valve is designed for use in chemically aggressive media, including acids, alkalis, and petroleum products containing solid particles up to 2 mm (with a maximum volume concentration of 0.5%). A key feature of the design is the seal made of chemically resistant polymer, which ensures excellent protection against corrosion and aggressive substances. The valve body consists of two bolted sections, allowing easy maintenance and seal replacement, while also extending the product's service life.

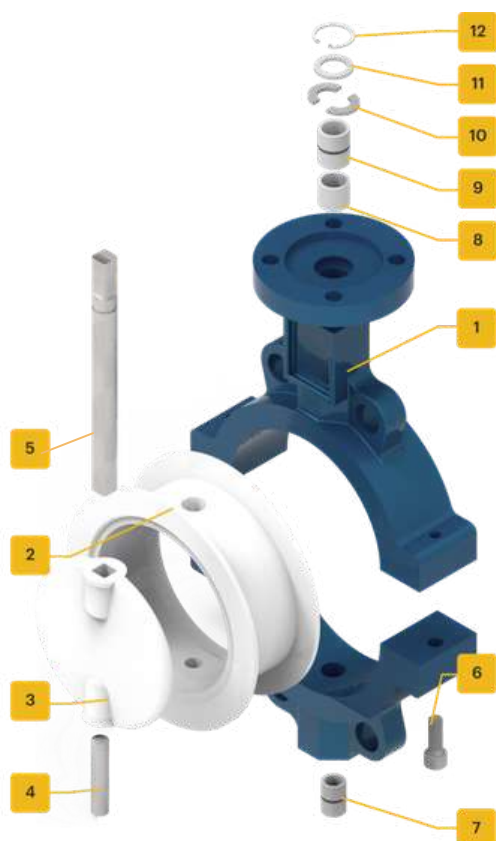
COMPLIANCE STANDARDS

Category		Standard
Product compliance		Directive PED 2014/68/EU
Manufacturing and designing		EN 593
Marking		EN 19
Leakage class		"A" ISO 5208
Mounting flange		ISO 5211
Connection	Face-to-face length	EN 558
	Flange dimensions	EN 1092-1
Testing	Hydrostatic and functional	EN 12266-1

CE

BUTTERFLY VALVES

SERIES: 300 MODEL : 307



No Name

- | No | Name |
|----|----------------|
| 1 | Body |
| 2 | Seat |
| 3 | Disc |
| 4 | Lower stem |
| 5 | Lower stem |
| 6 | Screw |
| 7 | Lower bushing |
| 8 | Upper bushing |
| 9 | Short bushing |
| 10 | Retaining ring |
| 11 | Sealing ring |
| 12 | Locking ring |

MATERIALS OF THE MAIN COMPONENTS

Name	Material	Medium temperature	Medium
Seat	PTFE	-60°C ... +180°C	Sulfuric acid, nitric acid, chromic acid, acetic acid, hydrochloric acid, and other acids
	FEP	-60°C ... +150°C	
	PU	-60°C ... +100°C	
	PFA	-60°C ... +180°C	
Body	AISI316/1.4408	-60°C ... +180°C	-
	AISI304/1.4308		
	A216 WCB/1.0619	-29°C ... +180°C	
Disc	AISI316/1.4408 + PTFE/FEP/PU/PFA	-60°C ... +180°C	Sulfuric acid, nitric acid, chromic acid, acetic acid, hydrochloric acid, and other acids
	AISI304/1.4308 + PTFE/FEP/PU/PFA		
	A216 WCB/1.0619 + PTFE/FEP/PU/PFA	-29°C ... +180°C	

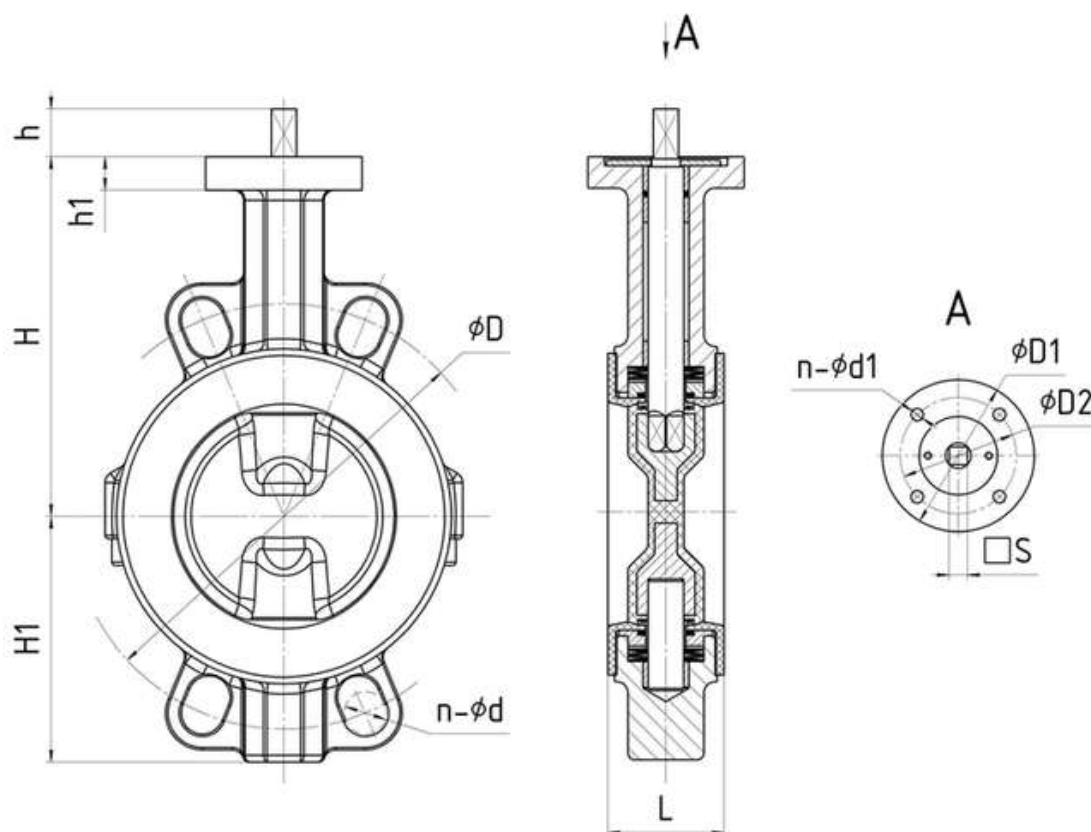
It can be manufactured from other materials according to the customer's technical requirements.

BUTTERFLY VALVES

SERIES: 300 MODEL : 307

Nominal diameter: **DN50 ... DN1200**

Nominal pressure: **PN10 ... PN16**



FLANGE FACING DIMENSIONS FOR PN10, PN16

DN	L, mm	PN10		PN16		H	H1	h	h1	n- Ød1	D1	D2	S	ISO 5211
		D	n-Ød	D	n- Ød									
50	43	125	4-Ø18	125	4-Ø18	134	68	20	13	4-Ø10	90	70	9	F07
65	46	145	4-Ø18/8-Ø18	145	4-Ø18/8-Ø18	145	78	20	13	4-Ø10	90	70	9	F07
80	46	160	8-Ø18	160	8-Ø18	150	85	20	13	4-Ø10	90	70	9	F07
100	52	180	8-Ø18	180	8-Ø18	160	110	20	14	4-Ø10	90	70	11	F07
125	56	210	8-Ø18	210	8-Ø18	178	130	20	14	4-Ø10	90	70	14	F07
150	56	240	8-Ø22	240	8-Ø22	197	140	20	15	4-Ø10	90	70	14	F07
200	60	295	8-Ø22	295	12-Ø22	239	175	30	16	4-Ø12	125	17	17	F10
250	68	350	12-Ø22	355	12-Ø26	278	215	30	18	4-Ø12	125	22	22	F10
300	78	400	12-Ø22	410	12-Ø26	315	250	30	20	4-Ø14	150	22	22	F12

* Upon request, tabular values are provided for DN350 to DN1200.

BUTTERFLY VALVES

SERIES: 300 MODEL : 308

NOMINAL DIAMETER	DN25 ... DN1000
NOMINAL PRESSURE	PN10, PN16
PURPOSE	Shut-off and control valve
CONNECTION TYPE	Wafer
MEDIUM TEMPERATURE	-40°C ... +140°C
MEDIUM	Water, acid and alkali solutions, air, chemically aggressive media.



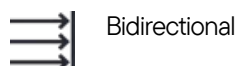
DESIGN FEATURES OF THE MODEL

- High chemical resistance;
- Fully thermoplastic body with short face-to-face length;
- Replaceable seats.

TYPE OF CONTROL

- Manual (lever, gearbox);
- Pneumatic actuator;
- Electric actuator.

FLOW DIRECTION



GENERAL APPLICATIONS

The valve features a lightweight design thanks to its body made of plastic material. The material is corrosion-resistant and ensures long service life even in chemically aggressive environments such as acids and alkalis.

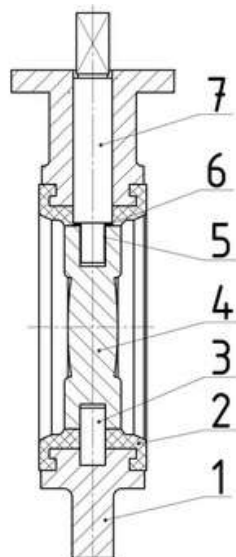
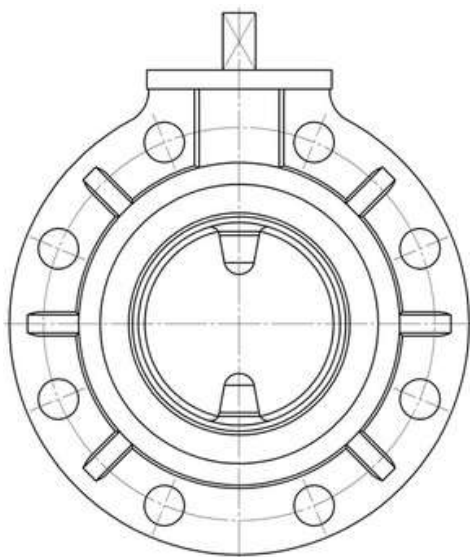
The valve is easy to install and maintain, has low weight, and offers high chemical resistance. Its compact design allows installation in systems with limited space.

COMPLIANCE STANDARDS

Category		Standard
Product compliance		Directive PED 2014/68/EU
Manufacturing and designing		EN 593
Marking		EN 19
Leakage class		"A" ISO 5208
Mounting flange		ISO 5211
Connection	Face-to-face length	EN 558
	Flange dimensions	EN 1092-1
Testing	Hydrostatic and functional	EN 12266-1

BUTTERFLY VALVES

SERIES: 300 MODEL : 308



No	Name
1	Body
2	Seat
3	Lower stem
4	Disc
5	O-ring
6	O-ring
7	Upper stem

MATERIALS OF THE MAIN COMPONENTS

Name	Material	Medium temperature	Medium
Body	UPVC	-14°C ... +70°C	Water, dilute acid and alkali solutions, air, overheated water.
	PVDF	-40°C ... +140°C	
	PP-H	0°C ... +80°C	
	CPVC	-20°C ... +95°C	
Disc	UPVC	-14°C ... +70°C	Water, dilute acid and alkali solutions, air, overheated water.
	PVDF	-40°C ... +140°C	
	PP-H	0°C ... +80°C	
	CPVC	-20°C ... +95°C	
Seat	EPDM	-40°C ... +140°C	-
	VITON	-29°C ... +140°C	

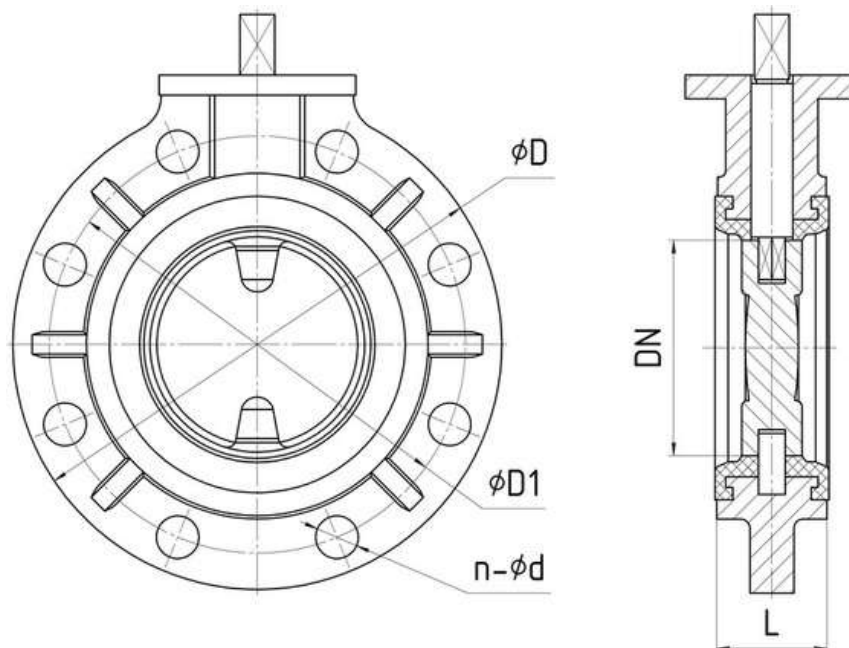
It can be manufactured from other materials according to the customer's technical requirements.

BUTTERFLY VALVES

SERIES: 300 MODEL : 308

Nominal diameter: **DN25 ... DN1000**

Nominal pressure: **PN10 ... PN16**



FLANGE FACING DIMENSIONS FOR PN10, PN16

DN	L	ΔP , MPa (Bar)	PN10			PN16		
			D	D1	n- ϕd	D	D1	n- ϕd
25	37	0.7 (7)	115	85	4- $\phi 14$	115	85	4- $\phi 14$
32	37	0.7 (7)	140	100	4- $\phi 18$	140	100	4- $\phi 18$
40	38	0.7 (7)	150	110	4- $\phi 18$	150	110	4- $\phi 18$
50	40	0.7 (7)	165	125	4- $\phi 18$	165	125	4- $\phi 18$
65	45	0.7 (7)	185	145	4- $\phi 18$ / 8- $\phi 18$	185	145	4- $\phi 18$ / 8- $\phi 18$
80	46	0.7 (7)	200	160	8- $\phi 18$	200	160	8- $\phi 18$
100	55	0.6 (6)	220	180	8- $\phi 18$	220	180	8- $\phi 18$
125	62	0.5 (5)	250	210	8- $\phi 18$	250	210	8- $\phi 18$
150	67	0.5 (5)	285	240	8- $\phi 22$	285	240	8- $\phi 22$
200	85	0.4 (4)	340	295	8- $\phi 22$	340	295	12- $\phi 22$
250	105	0.3 (3)	395	350	12- $\phi 22$	405	355	12- $\phi 26$
300	120	0.3 (3)	445	400	12- $\phi 22$	460	410	12- $\phi 26$
350	130	0.3 (3)	505	460	16- $\phi 22$	520	470	16- $\phi 26$
400	140	0.3 (3)	565	515	16- $\phi 26$	580	525	16- $\phi 30$

Upon request, tabular values are provided for DN450 to DN1000.

Available with alternative face-to-face dimension (L).

BALL VALVE

SERIES: 400 MODEL : 401

NOMINAL DIAMETER	DN15 ... DN1200
NOMINAL PRESSURE	PN10 ... PN40
PURPOSE	Shut-off valve
CONNECTION TYPE	Flanged, welded
MEDIUM TEMPERATURE	-29°C ... +200°C
MEDIUM	Water, steam, condensate, petroleum products



DESIGN FEATURES OF THE MODEL

- Full or reduced bore;
- Fully one-piece welded body;
- Trunnion-mounted or floating ball.

TYPES OF CONTROL

- Manual (lever, gearbox);
- Pneumatic actuator;
- Electric actuator.

FLOW DIRECTION



GENERAL APPLICATIONS

This ball valve is designed for operation with water, steam, petroleum products, natural gas, and diluted acids and alkalis. The ball sealing element is pressed against the seat by the process medium pressure, ensuring Class "A" tightness according to ISO 5208. In the metal-to-metal configuration, Class "A" tightness is achieved through a spring-loaded seat and precise coatings applied to the sealing surfaces, which compensate for thermal and mechanical fluctuations.

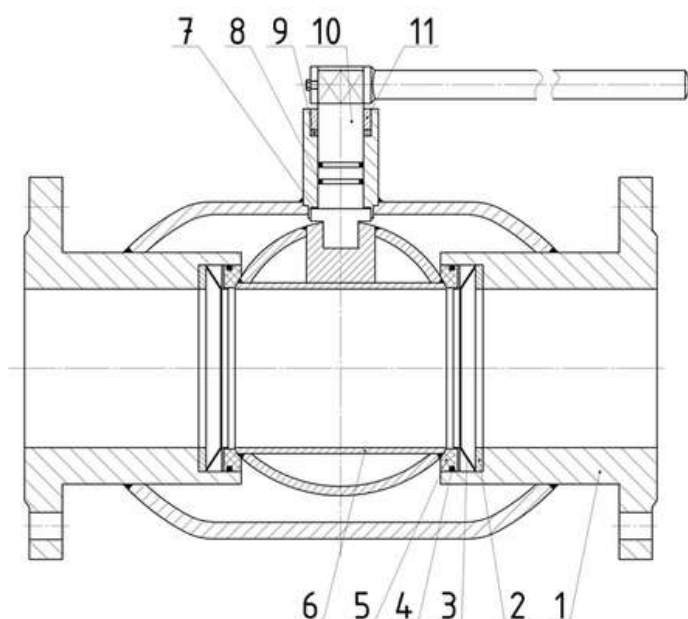
COMPLIANCE STANDARDS

Category		Standard
Product compliance		Directive PED 2014/68/EU
Manufacturing and designing		EN 1983, API 6D, API 608, ASME B16.34
Marking		EN 19
Leakage class		"A" ISO 5208
Connection	Face-to-face length	EN 558, ASME B16.10
	Flange dimensions	EN 1092-1, ASME B16.5, ASME B16.47
	Butt weld end dimensions	ASME B16.25
	Threaded connection dimensions	EN 10226-1, ISO 228-1, ASME B16.11
Tests	Hydrostatic and functional	EN 12266-1, API 598
	Fire-resistant (fire safe)	API 6FA, API 607, ISO 10497

CE

BALL VALVE

SERIES: 400 MODEL : 401



No	Name
1	Body
2	Sealing ring
3	Spring
4	O-ring
5	Seat
6	Ball
7	Gasket
8	O-ring
9	Packing seal
10	Stem
11	Packing

MATERIALS OF THE MAIN COMPONENTS

Name	Material	Medium temperature	Medium
Seat	PTFE	-29°C ... +200°C	Water, steam, hot water, weak acid and alkali solutions, petroleum products, gas, chemically aggressive environments
	RPTFE		
	PEEK	-29°C ... +250°C	Water, steam, hot water, weak acid and alkali solutions, petroleum products, gas, chemically aggressive environments, high-temperature environments
	Metal	*depending on the material	Abrasive medium, high-temperature, steam, diluted acid and alkali solutions, petroleum products, gas
Body	A216 WCB/1.0619	-29°C ... +300°C	Water, steam, hot water, weak acid and alkali solutions, petroleum products, gas, chemically aggressive environments, high-temperature environments
	AISI304/1.4308		
	AISI316/1.4408		
Ball	AISI304/1.4308	-29°C ... +300°C	Water, steam, hot water, weak acid and alkali solutions, petroleum products, gas, chemically aggressive environments, high-temperature environments
	AISI316/1.4408		

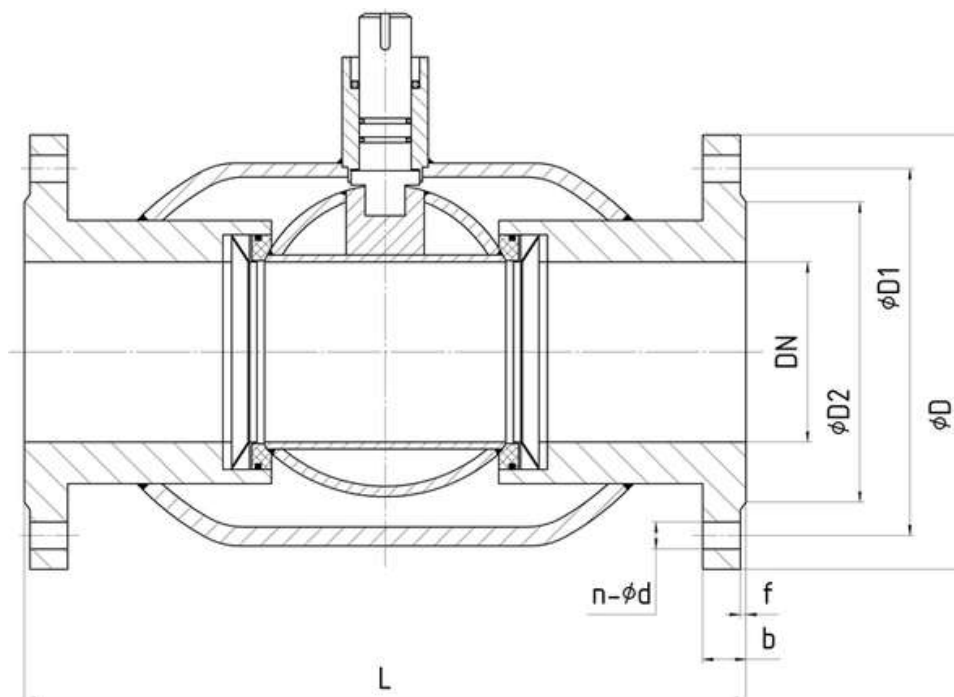
It can be manufactured from other materials according to the customer's technical requirements.

BALL VALVE

SERIES: 400 MODEL : 401

Nominal diameter: **DN15 ... DN1200**

Nominal pressure: **PN10 ... PN16**



FLANGE FACING DIMENSIONS FOR PN10, PN16

DN	L (EN 558, series 1)	L (EN 558, series 12)	f	PN10					PN16				
				D	D1	D2	n-ød	b	D	D1	D2	n-ød	b
15	130	130	2	95	65	45	4-Ø14	16	95	65	45	4-Ø14	16
20	150	130	2	105	75	58	4-Ø14	18	105	75	58	4-Ø14	18
25	160	140	2	115	85	68	4-Ø14	18	115	85	68	4-Ø14	18
32	180	165	2	140	100	78	4-Ø18	18	140	100	78	4-Ø18	18
40	200	165	3	150	110	88	4-Ø18	18	150	110	88	4-Ø18	18
50	230	203	3	165	125	102	4-Ø18	18	165	125	102	4-Ø18	18
65	290	222	3	185	145	122	4-Ø18 / 8-Ø18	18	185	145	122	4-Ø18 / 8-Ø18	18
80	310	241	3	200	160	138	8-Ø18	20	200	160	138	8-Ø18	20
100	350	305	3	220	180	158	8-Ø18	20	220	180	158	8-Ø18	20
125	400	356	3	250	210	188	8-Ø18	22	250	210	188	8-Ø18	22
150	480	394	3	285	240	212	8-Ø22	22	285	240	212	8-Ø22	22
200	600	457	3	340	295	268	8-Ø22	24	340	295	268	12-Ø22	24
250	730	533	3	395	350	320	12-Ø22	26	405	355	320	12-Ø26	26
300	850	610	4	445	400	370	12-Ø22	26	460	410	378	12-Ø26	28
350	980	686	4	505	460	430	16-Ø22	26	520	470	438	16-Ø26	30
400	1100	762	4	565	515	482	16-Ø26	26	580	525	490	16-Ø30	32

* Upon request, tabular values are provided for DN450 to DN1200.

* Can be made with any type of flange.

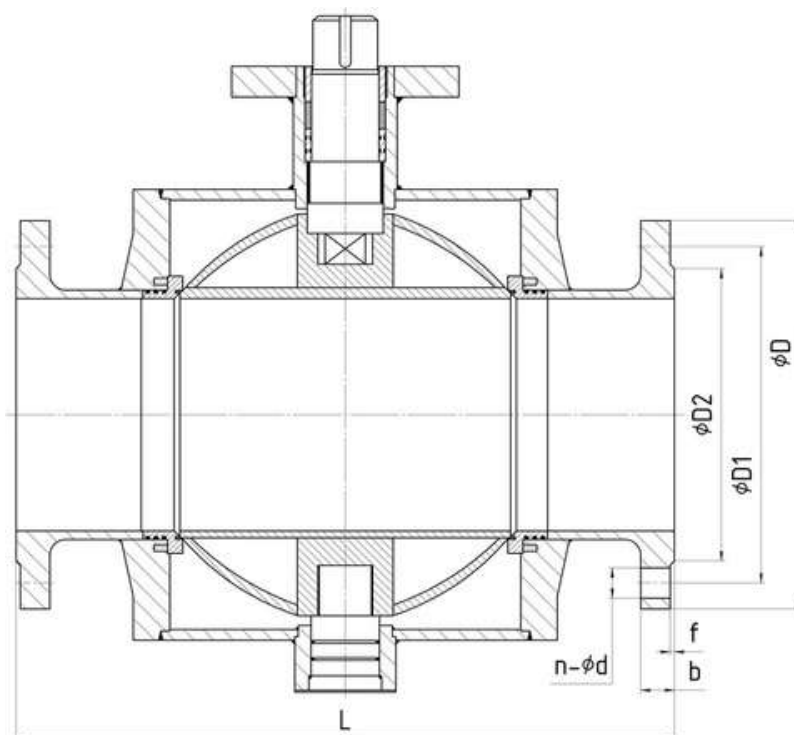
* Can be made with a different face-to-face length (L).

BALL VALVE

SERIES: 400 MODEL : 401

Nominal diameter: **DN15 ... DN1200**

Nominal pressure: **PN25 ... PN40**



FLANGE FACING DIMENSIONS FOR PN25, PN40

DN	L (EN 558, series 1)	L (EN 558, series 12)	f	PN25					PN40				
				D	D1	D2	n-ød	b	D	D1	D2	n-ød	b
15	130	130	2	95	65	45	4-Ø14	16	95	65	45	4-Ø14	16
20	150	130	2	105	75	58	4-Ø14	18	105	75	58	4-Ø14	18
25	160	140	2	115	85	68	4-Ø14	18	115	85	68	4-Ø14	18
32	180	165	2	140	100	78	4-Ø18	18	140	100	78	4-Ø18	18
40	200	165	3	150	110	88	4-Ø18	18	150	110	88	4-Ø18	18
50	230	203	3	165	125	102	4-Ø18	20	165	125	102	4-Ø18	20
65	290	222	3	185	145	122	8-Ø18	22	185	145	122	8-Ø18	22
80	310	241	3	200	160	138	8-Ø18	24	200	160	138	8-Ø18	24
100	350	305	3	235	190	162	8-Ø22	24	235	190	162	8-Ø22	24
125	400	356	3	270	220	188	8-Ø26	26	270	220	188	8-Ø26	26
150	480	394	3	300	250	218	8-Ø26	28	300	250	218	8-Ø26	28
200	600	457	3	360	310	278	12-Ø26	30	375	320	285	12-Ø30	34
250	730	533	3	425	370	335	12-Ø30	32	450	385	345	12-Ø33	38
300	850	610	4	485	430	395	16-Ø30	34	515	450	410	16-Ø33	42
350	980	686	4	555	490	450	16-Ø33	38	580	510	465	16-Ø36	46
400	1100	762	4	620	550	505	16-Ø36	40	660	585	535	16-Ø39	50

* Upon request, tabular values are provided for DN450 to DN1200.

* Can be made with any type of flange.

* Can be made with a different face-to-face length (L).

BALL VALVE

SERIES: 400 MODEL : 408

NOMINAL DIAMETER	DN15 ... DN250
NOMINAL PRESSURE	PN10 ... PN100
PURPOSE	Shut-off valve
CONNECTION TYPE	Flanged, welded
MEDIUM TEMPERATURE	-29°C ... +300°C
MEDIUM	Water, steam, hot water, diluted acid and alkali solutions, petroleum products, gas, chemically aggressive medium, high-temperature medium



DESIGN FEATURES OF THE MODEL

- Two-piece body valve design;
- Full or reduced bore;
- Long and short face-to-face length;
- Trunnion-mounted or floating ball.

TYPES OF CONTROL

- Manual (lever, gearbox);
- Pneumatic actuator;
- Electric actuator.

FLOW DIRECTION



GENERAL APPLICATIONS

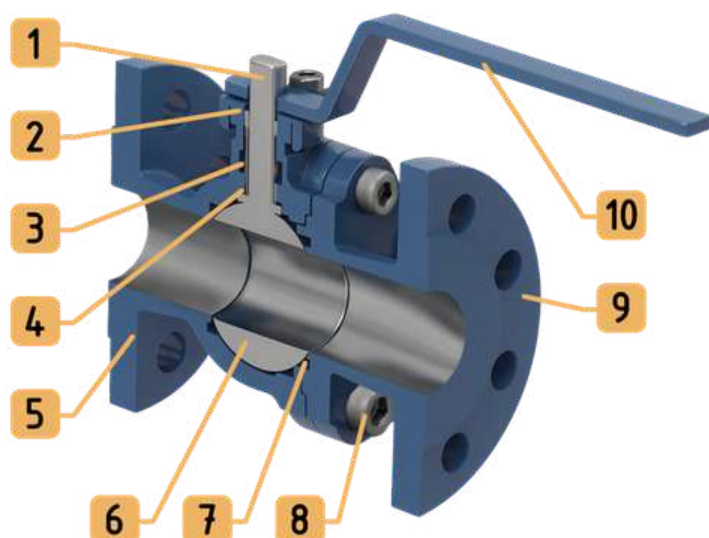
This ball valve is designed for operation with water, steam, petroleum products, natural gas, and diluted acids and alkalis. The ball sealing element is pressed against the seat by the process medium pressure, ensuring class "A" tightness according to ISO 5208. In the metal-to-metal configuration, class "A" tightness is achieved through a spring-loaded seat and precise coatings applied to the sealing surfaces, which compensate for thermal and mechanical fluctuations. The valve body is made in a two-piece bolted design, providing easy access to internal components for maintenance and repair.

COMPLIANCE STANDARDS

Category		Standard
Product compliance		Directive PED 2014/68/EU
Manufacturing and designing		EN 1983, API 6D, API 608, ASME B16.34
Marking		EN 19
Leakage class		"A" ISO 5208
Connection	Face-to-face length	EN 558, ASME B16.10
	Flange dimensions	EN 1092-1, ASME B16.5, ASME B16.47
	Butt weld end dimensions	ASME B16.25
Tests	Hydrostatic and functional	EN 12266-1, API 598
	Fire-resistant (fire safe)	API 6FA, API 607, ISO 10497

BALL VALVE

SERIES: 400 MODEL : 408



No	Name
1	Stem
2	Packing
3	Packing seal
4	Bushing
5	Body
6	Ball
7	Seat
8	Bolt
9	Body
10	Lever

MATERIALS OF THE MAIN COMPONENTS

Name	Material	Medium temperature	Medium
Seat	PTFE	-29°C ... +200°C	Water, steam, hot water, weak acid and alkali solutions, petroleum products, gas, chemically aggressive medium
	RPTFE		
	PEEK	-29°C ... +250°C	Water, steam, hot water, weak acid and alkali solutions, petroleum products, gas, chemically aggressive medium, high-temperature medium
	Metal	*depending on the material	Abrasive medium, high-temperature medium, steam, diluted acid and alkali solutions, petroleum products, gas
Body	A216 WCB/1.0619	-29°C ... +300°C	Water, steam, hot water, weak acid and alkali solutions, petroleum products, gas, chemically aggressive medium, high-temperature medium
	AISI304/1.4308		
	AISI316/1.4408		
Ball	AISI304/1.4308	-29°C ... +300°C	Water, steam, hot water, weak acid and alkali solutions, petroleum products, gas, chemically aggressive medium, high-temperature medium
	AISI316/1.4408		

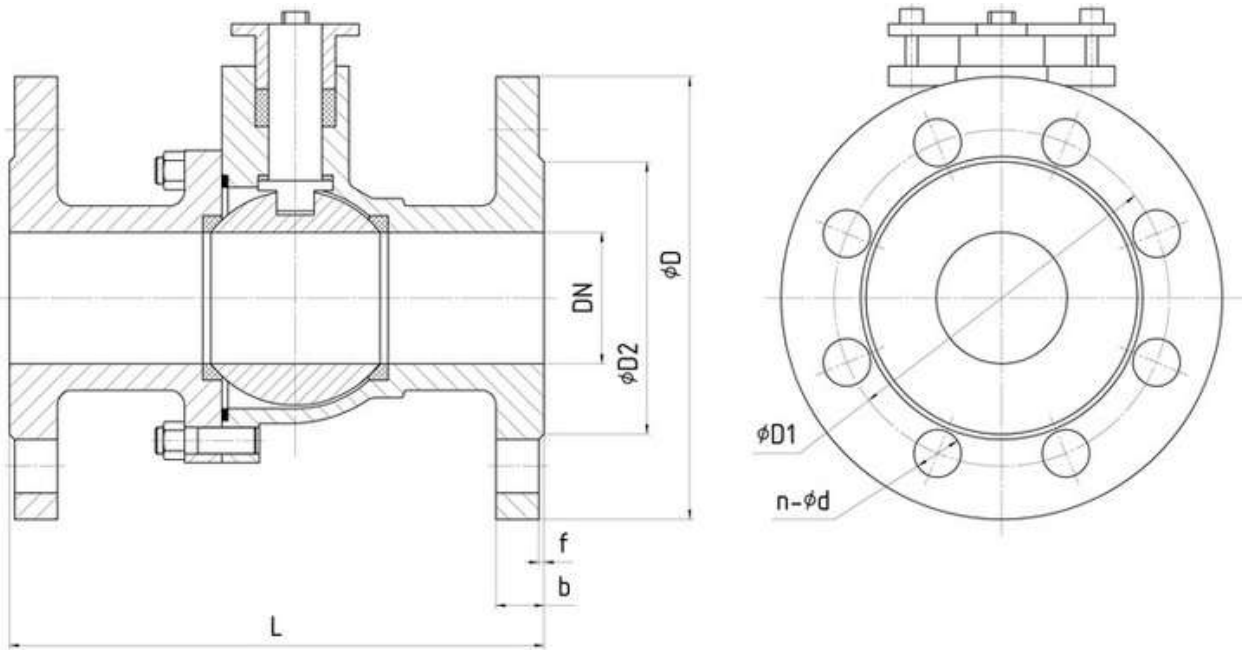
It can be manufactured from other materials according to the customer's technical requirements.

BALL VALVE

SERIES: 400 MODEL : 408

NOMINAL DIAMETER: **DN15 ... DN250**

NOMINAL PRESSURE: **PN10 ... PN16**



FLANGE FACING DIMENSIONS FOR PN10, PN16

DN	L (EN 558, series 1)	L (EN 558, series 14)	f	PN10					PN16				
				D	D1	D2	n-ød	b	D	D1	D2	n-ød	b
15	130	115	2	95	65	45	4-Ø14	16	95	65	45	4-Ø14	16
20	150	120	2	105	75	58	4-Ø14	18	105	75	58	4-Ø14	18
25	160	125	2	115	85	68	4-Ø14	18	115	85	68	4-Ø14	18
32	180	130	2	140	100	78	4-Ø18	18	140	100	78	4-Ø18	18
40	200	140	3	150	110	88	4-Ø18	18	150	110	88	4-Ø18	18
50	230	150	3	165	125	102	4-Ø18	18	165	125	102	4-Ø18	18
65	290	170	3	185	145	122	4-Ø18 / 8-Ø18	18	185	145	122	4-Ø18 / 8-Ø18	18
80	310	180	3	200	160	138	8-Ø18	20	200	160	138	8-Ø18	20
100	350	190	3	220	180	158	8-Ø18	20	220	180	158	8-Ø18	20
125	400	200	3	250	210	188	8-Ø18	22	250	210	188	8-Ø18	22
150	480	210	3	285	240	212	8-Ø22	22	285	240	212	8-Ø22	22
200	600	230	3	340	295	268	8-Ø22	24	340	295	268	12-Ø22	24
250	730	250	3	395	350	320	12-Ø22	26	405	355	320	12-Ø26	26

* Can be made with any type of flange.

* Can be made with a different face-to-face length (L).

BALL VALVE

SERIES: 400 MODEL : 408

NOMINAL DIAMETER: **DN15 ... DN250**

NOMINAL PRESSURE: **PN25 ... PN100**

FLANGE FACING DIMENSIONS FOR PN25, PN40

DN	L (EN 558, series 1)	L (EN 558, series 14)	f	PN25					PN40				
				D	D1	D2	n-ød	b	D	D1	D2	n-ød	b
15	130	115	2	95	65	45	4-Ø14	16	95	65	45	4-Ø14	16
20	150	120	2	105	75	58	4-Ø14	18	105	75	58	4-Ø14	18
25	160	125	2	115	85	68	4-Ø14	18	115	85	68	4-Ø14	18
32	180	130	2	140	100	78	4-Ø18	18	140	100	78	4-Ø18	18
40	200	140	3	150	110	88	4-Ø18	18	150	110	88	4-Ø18	18
50	230	150	3	165	125	102	4-Ø18	20	165	125	102	4-Ø18	20
65	290	170	3	185	145	122	8-Ø18	22	185	145	122	8-Ø18	22
80	310	180	3	200	160	138	8-Ø18	24	200	160	138	8-Ø18	24
100	350	190	3	235	190	162	8-Ø22	24	235	190	162	8-Ø22	24
125	400	200	3	270	220	188	8-Ø26	26	270	220	188	8-Ø26	26
150	480	210	3	300	250	218	8-Ø26	28	300	250	218	8-Ø26	28
200	600	230	3	360	310	278	12-Ø26	30	375	320	285	12-Ø30	34
250	730	250	3	425	370	335	12-Ø30	32	450	385	345	12-Ø33	38

FLANGE FACING DIMENSIONS FOR PN63, PN100

DN	L (EN 558, series 1)	L (EN 558, series 14)	f	PN63					PN100				
				D	D1	D2	n-ød	b	D	D1	D2	n-ød	b
15	130	115	2	105	75	45	4-Ø14	20	105	75	45	4-Ø14	20
20	150	120	2	130	90	58	4-Ø18	22	130	90	58	4-Ø18	22
25	160	125	2	140	100	68	4-Ø18	24	140	100	68	4-Ø18	24
32	180	130	2	155	110	78	4-Ø22	26	155	110	78	4-Ø22	26
40	200	140	3	170	125	88	4-Ø22	28	170	125	88	4-Ø22	28
50	230	150	3	180	135	102	4-Ø22	26	195	145	102	4-Ø26	30
65	290	170	3	205	160	122	8-Ø22	26	220	170	122	8-Ø26	34
80	310	180	3	215	170	138	8-Ø22	28	230	180	138	8-Ø26	36
100	350	190	3	250	200	162	8-Ø26	30	265	210	162	8-Ø30	40
125	400	200	3	295	240	188	8-Ø30	34	315	250	188	8-Ø33	40
150	480	210	3	345	280	218	8-Ø33	36	355	290	218	12-Ø33	44
200	600	230	3	415	345	285	12-Ø36	42	430	360	285	12-Ø36	52
250	730	250	3	470	400	345	12-Ø36	46	505	430	345	12-Ø39	60

* Can be made with any type of flange.

* Can be made with a different face-to-face length (L).

BALL VALVE

SERIES: 400 MODEL : 410

NOMINAL DIAMETER	DN10 ... DN100
NOMINAL PRESSURE	PN10 ... PN63
PURPOSE	Shut-off valve
CONNECTION TYPE	Threaded
MEDIUM TEMPERATURE	-29°C ... +300°C
MEDIUM	Water, steam, hot water, phosphoric and sulfuric acid, pulp, cellulose, petroleum products, chemically aggressive environments



DESIGN FEATURES OF THE MODEL

- Three-piece body, easy to maintain;
- Full bore;
- Locking device.

TYPE OF CONTROL

- Manual (lever, gearbox);
- Pneumatic actuator;
- Electric actuator.

FLOW DIRECTION



GENERAL APPLICATIONS

This ball valve is designed for operation with water, steam, petroleum products, natural gas, and diluted acids and alkalis. The ball sealing element is pressed against the seat by the process medium pressure, ensuring class "A" tightness according to ISO 5208. In the metal-to-metal configuration, class "A" tightness is achieved through a spring-loaded seat and precise coatings applied to the sealing surfaces, which compensate for thermal and mechanical fluctuations. The valve body is made in a three-piece bolted design, providing easy access to internal components for maintenance and repair. The pipeline connection is implemented with a threaded (female) end.

COMPLIANCE STANDARDS

Category		Standard
Product compliance		Directive PED 2014/68/EU
Manufacturing and designing		EN 1983, API 6D, API 608, ASME B16.34
Marking		EN 19
Leakage class		"A" ISO 5208
Connection	Face-to-face length	EN 558, ASME B16.10
	Threaded connection dimensions	EN 10226-1, ISO 228-1, ASME B16.11
Testing	Hydrostatic and functional	EN 12266-1, API 598
	Fire-resistant (fire safe)	API 6FA, API 607, ISO 10497

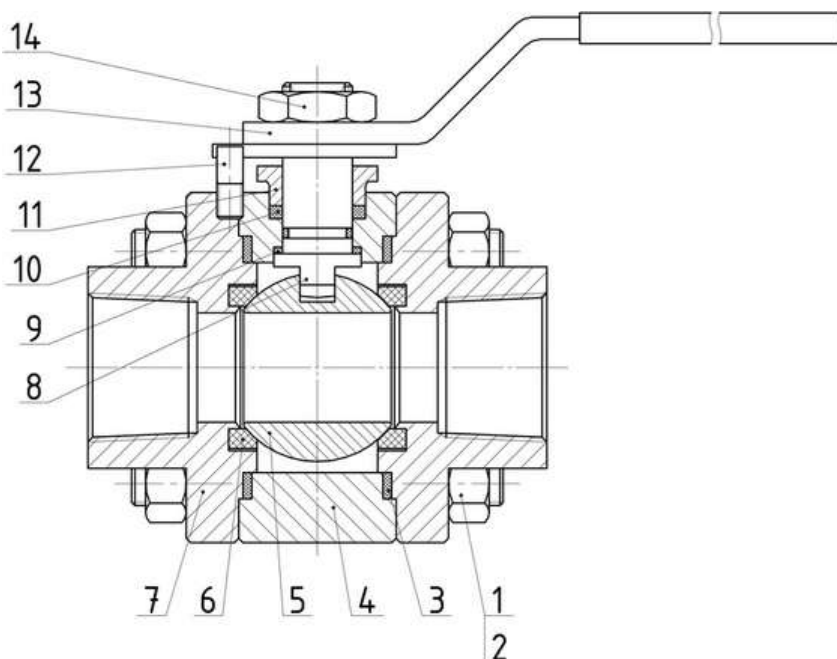
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BALL VALVE

SERIES: 400 MODEL : 410

NOMINAL DIAMETER: **DN15 ... DN250**

NOMINAL PRESSURE: **PN16 ... PN63**



No	Name
1	Bolt
2	Nut
3	Gasket
4	Body
5	Ball
6	Seat
7	Body
8	Stem
9	Gasket
10	Packing seal
11	Gland
12	Pin
13	Lever
14	Nut

MATERIALS OF THE MAIN COMPONENTS

Name	Material	Medium temperature	Medium
Seat	PTFE	-29°C ... +200°C	Water, steam, hot water, weak acid and alkali solutions, petroleum products, gas, chemically aggressive media
	RPTFE		
	PEEK	-29°C ... +250°C	Water, steam, hot water, weak acid and alkali solutions, petroleum products, gas, chemically aggressive media, high-temperature media
	Metal	*depending on the material	Abrasive media, high-temperature media, steam, diluted acid and alkali solutions, petroleum products, gas
Body	A216 WCB/1.0619	-29°C ... +300°C	Water, steam, hot water, weak acid and alkali solutions, petroleum products, gas, chemically aggressive media, high-temperature media
	AISI304/1.4308		
	AISI316/1.4408		
Ball	AISI304/1.4308	-29°C ... +300°C	Water, steam, hot water, weak acid and alkali solutions, petroleum products, gas, chemically aggressive media, high-temperature media
	AISI316/1.4408		

It can be manufactured from other materials according to the customer's technical requirements.

BALL VALVE

SERIES: 400 MODEL : 413

NOMINAL DIAMETER	DN25 ... DN1200
NOMINAL PRESSURE	PN10 ... PN250
PURPOSE	Shut-off valve
CONNECTION TYPE	Flanged, welded
MEDIUM TEMPERATURE	-29°C ... +300°C
MEDIUM	Water, steam, hot water, diluted acid and alkali solutions, petroleum products, gas, chemically aggressive media, high-temperature media



DESIGN FEATURES OF THE MODEL

- Three-piece body design;
- Full bore;
- Trunnion-mounted or floating ball.

TYPE OF CONTROL

- Manual (lever, gearbox);
- Pneumatic actuator;
- Electric actuator.

FLOW DIRECTION



GENERAL APPLICATIONS

This ball valve is designed for operation with water, steam, petroleum products, natural gas, and diluted acids and alkalis. The ball sealing element is pressed against the seat by the process medium pressure, and the available configurations with soft seat, metal seat, and PMSS (Primary Metal Secondary Soft) ensure class "A" tightness according to ISO 5208. The PMSS design combines a primary metal seal with an additional soft element, providing high reliability and stable performance under thermal and mechanical fluctuations. The valve body is made in a three-piece bolted design, providing easy access to internal components for maintenance and repair.

COMPLIANCE STANDARDS

Category		Standard
Product compliance		Directive PED 2014/68/EU
Manufacturing and designing		EN 1983, API 6D, API 608, ASME B16.34
Marking		EN 19
Leakage class		"A" ISO 5208
Connection	Face-to-face length	EN 558, ASME B16.10
	Flange dimensions	EN 1092-1, ASME B16.5, ASME B16.47
	Butt weld end dimensions	ASME B16.25
Testing	Hydrostatic and functional	EN 12266-1, API 598
	Fire-resistant (fire safe)	API 6FA, API 607, ISO 10497

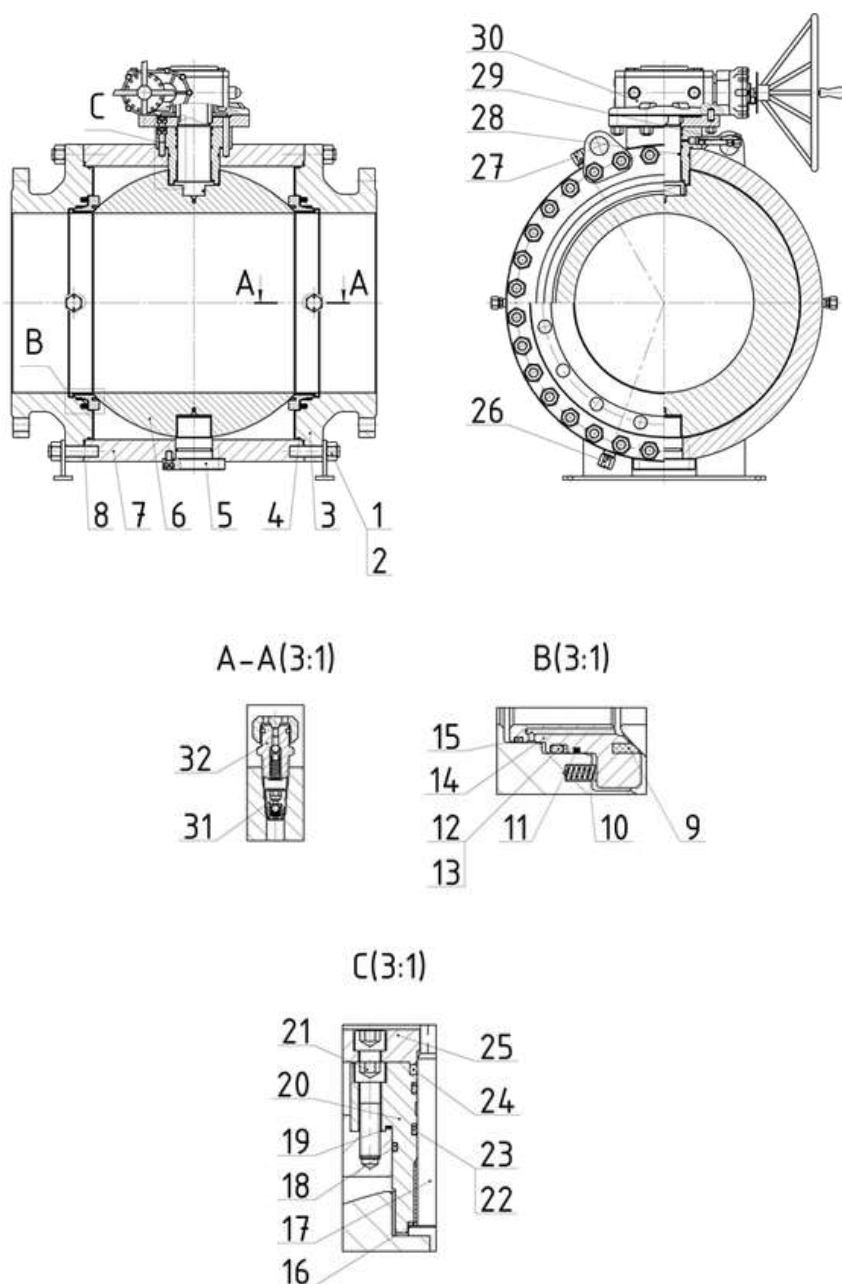
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BALL VALVE

SERIES: 400 MODEL : 413

NOMINAL DIAMETER: **DN25 ... DN1200**

NOMINAL PRESSURE: **PN10 ... PN250**



No	Name
1	Bolt
2	Nut
3	Body
4	O-ring
5	Body dolna
6	Ball
7	Body
8	Gasket
9	Seat
10	Spring
11	Gasket
12	O-ring
13	Thrust washer
14	Seat retaining element
15	O-ring
16	Thrust bearing
17	Stem
18	O-ring
19	Gasket
20	Stuffing box
21	Bolt
22	O-ring
23	Thrust washer
24	Packing seal
25	Mounting plate
26	Drain valve
27	Drain valve
28	Antistatic element
29	Grease nipple
30	Gearbox
31	Check valve
32	Grease fitting

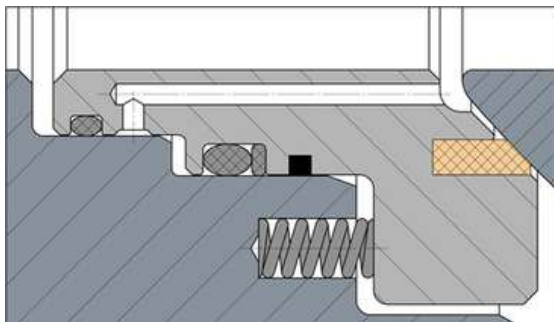


The design and configuration of the ball valve may vary depending on the specific project requirements or customer preferences.

BALL VALVE

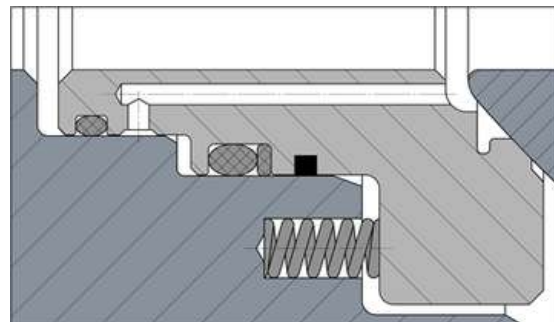
SERIES: 400 MODEL : 413

SOFT SEAT



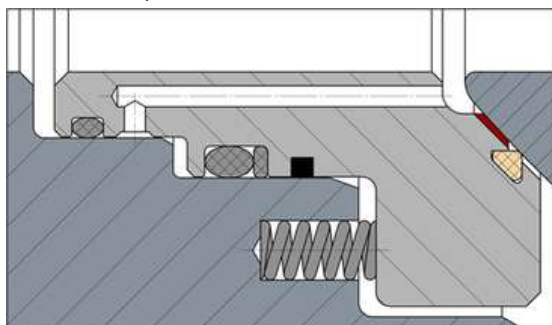
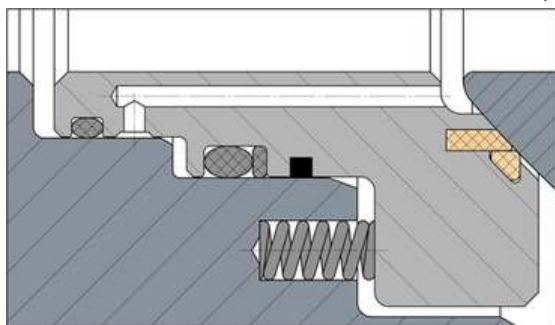
Tightness is achieved when the seat material contacts the ball surface. The soft seat is placed in the seat retaining ring and pressed against the ball by a spring, ensuring contact even at low line pressure. The soft sealing can be made of PTFE, PEEK, Nylon, or Devlon.

METAL SEAT



Tightness is achieved through contact between the metal ring and the ball. The seat ring can be made with a chromium carbide coating, ENP, TCC, or hardfacing with Stellite or an equivalent material.

PMSS (Primary Metal Secondary Soft)



Tightness is achieved through simultaneous contact of the metal ring (primary seat) and the soft insert (secondary insert) with the ball. Sealing is provided by elastomers or thermoplastics placed inside the metal ring. The metal rings can be coated with ENP, TCC, CCC, or Stellite to enhance wear and corrosion resistance.

PMSS (Primary Metal Secondary Soft)

Trunnion-mounted ball valves are also available with double piston seats (Double Piston seats). In this design, the pressure in the cavity acts on both the inlet and outlet seats, creating a “double piston” effect in the seat rings, which enhances tightness. Valves with double piston seats require an external cavity relief mechanism when operating with incompressible liquids.

MATERIALS OF THE MAIN COMPONENTS

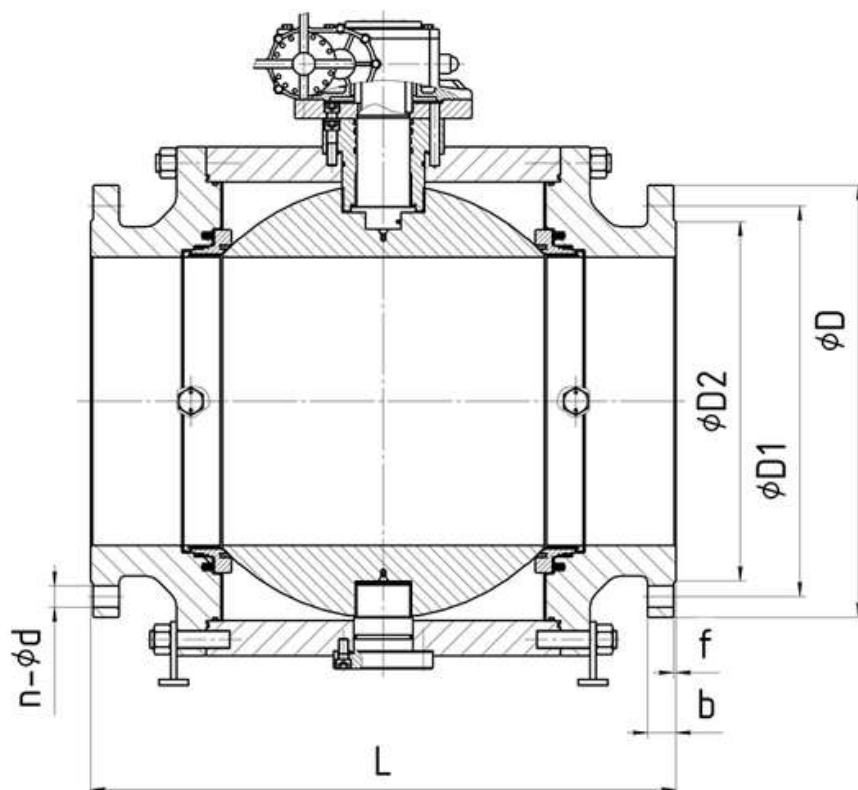
Name	Material
Seat	PTFE, RPTFE, PTFE+C, NYLON, DEVLON, Viton, +Stellite, +TCC
Body	A216 WCB/1.0619, A350 LF2, A105, Q235
Ball	AISI304/1.4308, AISI316/1.4408, A105, A105+ENP, AISI316/1.4408/304+Stellite

BALL VALVE

SERIES: 400 MODEL : 413

NOMINAL DIAMETER: **DN25 ... DN1200**

NOMINAL PRESSURE: **PN10 ... PN250**



FLANGE FACING DIMENSIONS FOR PN10, PN16

DN	L (EN 558, series 1)	f	PN10					PN16				
			D	D1	D2	n-ød	b	D	D1	D2	n-ød	b
25	160	2	115	85	68	4-Ø14	18	115	85	68	4-Ø14	18
32	180	2	140	100	78	4-Ø18	18	140	100	78	4-Ø18	18
40	200	3	150	110	88	4-Ø18	18	150	110	88	4-Ø18	18
50	230	3	165	125	102	4-Ø18	18	165	125	102	4-Ø18	18
65	290	3	185	145	122	4-Ø18 / 8-Ø18	18	185	145	122	4-Ø18 / 8-Ø18	18
80	310	3	200	160	138	8-Ø18	20	200	160	138	8-Ø18	20
100	350	3	220	180	158	8-Ø18	20	220	180	158	8-Ø18	20
125	400	3	250	210	188	8-Ø18	22	250	210	188	8-Ø18	22
150	480	3	285	240	212	8-Ø22	22	285	240	212	8-Ø22	22
200	600	3	340	295	268	8-Ø22	24	340	295	268	12-Ø22	24
250	730	3	395	350	320	12-Ø22	26	405	355	320	12-Ø26	26
300	850	4	445	400	370	12-Ø22	26	460	410	378	12-Ø26	28
350	980	4	505	460	430	16-Ø22	26	520	470	438	16-Ø26	30
400	1100	4	565	515	482	16-Ø26	26	580	525	490	16-Ø30	32

* Upon request, tabular values are provided for DN450 to DN1200.

* Can be made with any type of flange.

* Can be made with a different face-to-face length (L).

BALL VALVE

SERIES: 400, MODEL : 413

NOMINAL DIAMETER: **DN25 ... DN1200**

NOMINAL PRESSURE: **PN10 ... PN250**

FLANGE FACING DIMENSIONS FOR PN25, PN40

DN	L (EN 558, series 1)	f	PN25					PN40				
			D	D1	D2	n-ød	b	D	D1	D2	n-ød	b
25	160	2	115	85	68	4-Ø14	18	115	85	68	4-Ø14	18
32	180	2	140	100	78	4-Ø18	18	140	100	78	4-Ø18	18
40	200	3	150	110	88	4-Ø18	18	150	110	88	4-Ø18	18
50	230	3	165	125	102	4-Ø18	20	165	125	102	4-Ø18	20
65	290	3	185	145	122	8-Ø18	22	185	145	122	8-Ø18	22
80	310	3	200	160	138	8-Ø18	24	200	160	138	8-Ø18	24
100	350	3	235	190	162	8-Ø22	24	235	190	162	8-Ø22	24
125	400	3	270	220	188	8-Ø26	26	270	220	188	8-Ø26	26
150	480	3	300	250	218	8-Ø26	28	300	250	218	8-Ø26	28
200	600	3	360	310	278	12-Ø26	30	375	320	285	12-Ø30	34
250	730	3	425	370	335	12-Ø30	32	450	385	345	12-Ø33	38
300	850	4	485	430	395	16-Ø30	34	515	450	410	16-Ø33	42
350	980	4	555	490	450	16-Ø33	38	580	510	465	16-Ø36	46
400	1100	4	620	550	505	16-Ø36	40	660	585	535	16-Ø39	50

*Upon request, tabular values are provided for DN450 to DN1200.

FLANGE FACING DIMENSIONS FOR PN63, PN100

DN	L (EN 558, series 1)	f	PN63					PN100				
			D	D1	D2	n-ød	b	D	D1	D2	n-ød	b
25	160	2	140	100	68	4-Ø18	24	140	100	68	4-Ø18	24
32	180	2	155	110	78	4-Ø22	26	155	110	78	4-Ø22	26
40	200	3	170	125	88	4-Ø22	28	170	125	88	4-Ø22	28
50	230	3	180	135	102	4-Ø22	26	195	145	102	4-Ø26	30
65	290	3	205	160	122	8-Ø22	26	220	170	122	8-Ø26	34
80	310	3	215	170	138	8-Ø22	28	230	180	138	8-Ø26	36
100	350	3	250	200	162	8-Ø26	30	265	210	162	8-Ø30	40
125	400	3	295	240	188	8-Ø30	34	315	250	188	8-Ø33	40
150	480	3	345	280	218	8-Ø33	36	355	290	218	12-Ø33	4
200	600	3	415	345	285	12-Ø36	42	430	360	285	12-Ø36	52
250	730	3	470	400	345	12-Ø36	46	505	430	345	12-Ø39	60
300	850	4	530	460	410	16-Ø36	52	585	500	410	16-Ø42	68
350	980	4	600	525	465	16-Ø39	56	655	560	465	16-Ø48	74
400	1100	4	670	585	535	16-Ø42	60	-	-	535	-	-

*Upon request, tabular values are provided for DN450 to DN1200.

* Can be made with any type of flange.



Face-to-face length can be supplied according to ASME B16.10, EN 558, or customized to the specific customer requirements.

BALL VALVE / SEGMENT

SERIES: 400, MODEL : 421

NOMINAL DIAMETER	DN15 ... DN300
NOMINAL PRESSURE	PN10 ... PN40
PURPOSE	Control and shut-off
CONNECTION TYPE	Flanged
MEDIUM TEMPERATURE	-29°C ... +350°C
MEDIUM	Water, steam, hot water, condensate, phosphoric acid, sulfuric acid, pulp, cellulose, petroleum products, chemically aggressive media



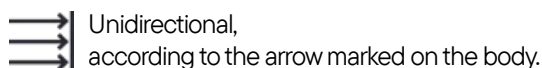
DESIGN FEATURES OF THE MODEL

- V-segment with a wide selection of wear-resistant coatings;
- equal-percentage control characteristic;
- low torque;
- short face-to-face length;
- trunnion-mounted ball.

TYPE OF CONTROL

- Manual (Lever, gearbox);
- Pneumactical actuator;
- Electric actuator.

FLOW DIRECTION



LEAKAGE CLASS

According to ISO 5208;
for shut-off valves: "A";
for control valves: IV, V, VI.

GENERAL APPLICATIONS

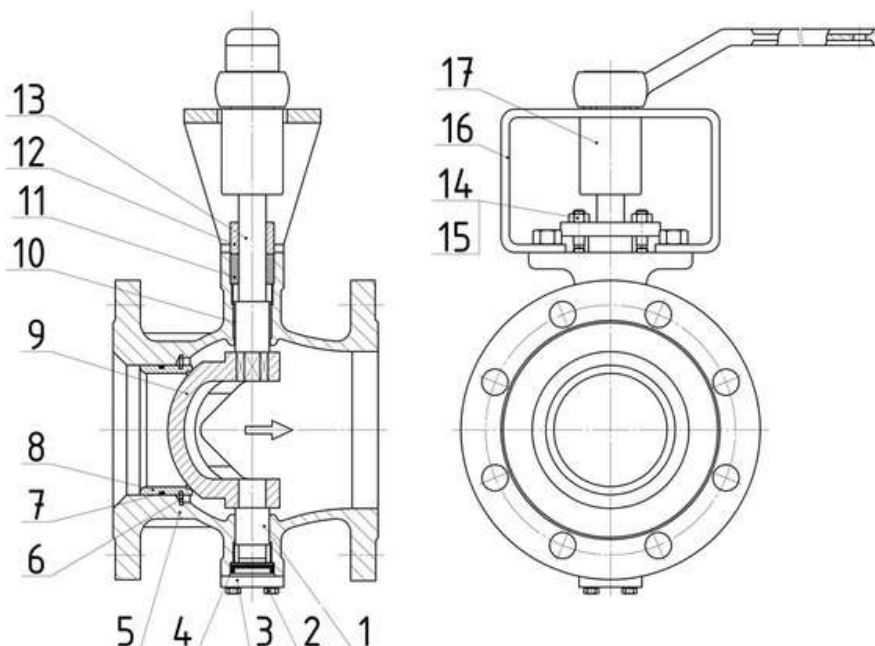
This segment ball valve is designed for complete shut-off and flow control of the working medium. It can operate with water, steam, petroleum products, natural gas, and diluted acids and bases. The V-shaped ball segment ensures a stable flow characteristic and high tightness. Available configurations include soft-seat and metal-seat designs, which guarantee Class A tightness in accordance with ISO5208. For control applications, the valve meets leakage classes IV, V, and VI, allowing selection of the appropriate tightness level depending on the medium and operating conditions.

COMPLIANCE STANDARDS

Category		Standard
Product compliance		Directive PED 2014/68/EU
Manufacturing and designing		EN 1983, API 6D, API 608, ASME B16.34
Marking		EN 19
Leakage class	Shut-off	"A" according to ISO 5208
	Control	IV, V, VI according to ISO 5208
Connection	Face-to-face length	EN 558, ASME B16.10
	Flange dimensions	EN 1092-1, ASME B16.5, ASME B16.47
Testing	Hydrostatic and functional	EN 12266-1, API 598
	Fire-resistant (fire safe)	API 6FA, API 607, ISO 10497

BALL VALVE / SEGMENT

SERIES: 400, MODEL : 421



No	Name
1	Lower stem
2	Bolt
3	Lower body
4	O-ring
5	Body
6	Spring
7	O-ring
8	Seat
9	Segment
10	Bushing
11	Packing seal
12	Gland
13	Upper stem
14	Bolt
15	Nut
16	Yoke assembly
17	Adapter

MATERIALS OF THE MAIN COMPONENTS

Name	Material	Medium temperature	Medium
Seat	PCTFE / PTFE	-29°C ... +120°C	Water, steam, hot water, phosphoric and sulfuric acid, pulp, petroleum products, chemically aggressive media
	PEEK / PTFE	-29°C ... +150°C	
	PEEK / grafit	-29°C ... +240°C	
	DEVILON / PTF	-29°C ... +120°C	
	AISI 904L/1.4539 AISI304/1.4308 AISI316/1.4408 AISI 904L/1.4539 AISI316Ti/1.4571 + (Stellite / Tungsten carbide / Durable coating) / Graphite	-29°C ... +350°C	Water, steam, hot water, pulp, cellulose, petroleum products, chemically aggressive media
Body	A216 WCB/1.0619	-29°C ... +350°C	Water, steam, petroleum products, gas
	AISI304/1.4308		Water, steam, hot water, pulp, petroleum products, chemically aggressive media
	AISI316/1.4408		Water, steam, hot water, phosphoric and sulfuric acids, pulp, petroleum products, chemically aggressive media
	AISI 904L/1.4539		Water, steam, hot water, phosphoric and sulfuric acids, pulp, petroleum products, chemically aggressive media
	AISI316Ti/1.4571		Water, steam, hot water, phosphoric and sulfuric acids, pulp, petroleum products, chemically aggressive media
Segment	AISI304/1.4308	-29°C ... +350°C	Water, steam, hot water, pulp, petroleum products, chemically aggressive media.
	AISI316/1.4408		Water, steam, hot water, phosphoric and sulfuric acids, pulp, petroleum products, chemically aggressive media
	AISI 904L/1.4539		Water, steam, hot water, phosphoric and sulfuric acids, pulp, petroleum products, chemically aggressive media
	AISI316Ti/1.4571		Water, steam, hot water, phosphoric and sulfuric acids, pulp, petroleum products, chemically aggressive media

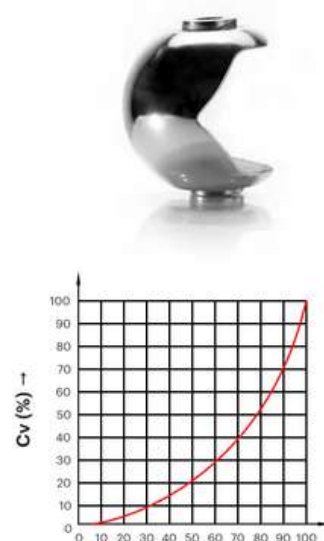
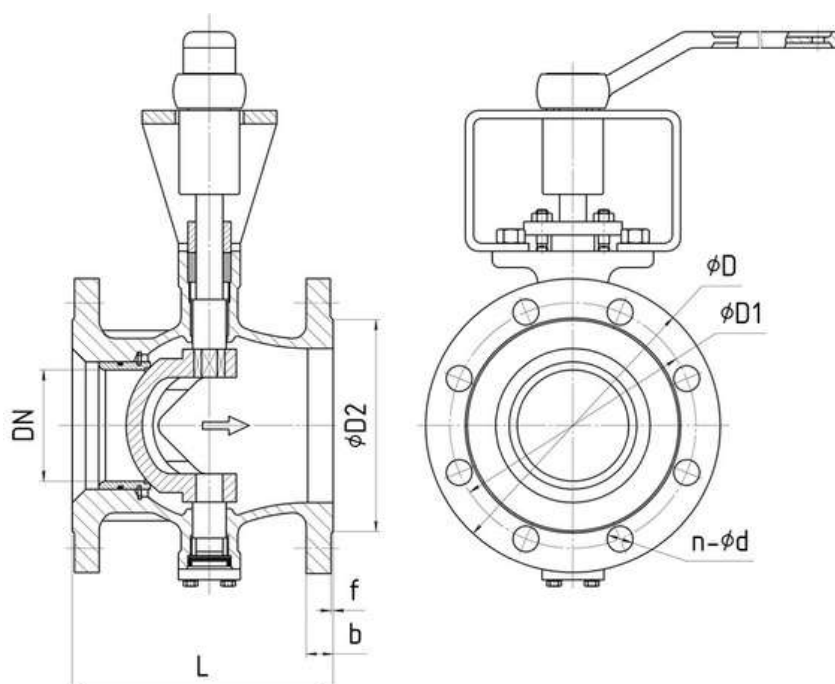
It can be manufactured from other materials according to the customer's technical requirements.

BALL VALVE / SEGMENT

SERIES: 400, MODEL : 421

NOMINAL DIAMETER: **DN25 ... DN1200**

NOMINAL PRESSURE: **PN10 ... PN250**



FLANGE FACING DIMENSIONS FOR PN16, PN25

DN	L	f	PN16					PN25				
			D	D1	D2	n-ød	b	D	D1	D2	n-ød	b
25	102	2	115	85	68	4-Ø14	18	115	85	68	4-Ø14	18
32	102	2	140	100	78	4-Ø18	18	140	100	78	4-Ø18	18
40	114	3	150	110	88	4-Ø18	18	150	110	88	4-Ø18	18
50	124	3	165	125	102	4-Ø18	18	165	125	102	4-Ø18	20
65	145	3	185	145	122	4-Ø18 / 8-Ø18	18	185	145	122	8-Ø18	22
80	165	3	200	160	138	8-Ø18	20	200	160	138	8-Ø18	24
100	194	3	220	180	158	8-Ø18	20	235	190	162	8-Ø22	24
125	194	3	250	210	188	8-Ø18	22	270	220	188	8-Ø26	26
150	229	3	285	240	212	8-Ø22	22	300	250	218	8-Ø26	28
200	243	3	340	295	268	12-Ø22	24	360	310	278	12-Ø26	30
250	297	3	405	355	320	12-Ø26	26	425	370	335	12-Ø30	32
300	338	4	460	410	378	12-Ø26	28	485	430	395	16-Ø30	34

*Can be made with any type of flange

*Can be made with a different face-to-face length (L)

GATE VALVE

SERIES: 500 MODEL : 501

NOMINAL DIAMETER	DN15 do DN1200
NOMINAL PRESSURE	PN10 do PN100
PURPOSE	Shut-off valve
MEDIUM TEMPERATURE	-196°C ... +425°C
CONNECTION TYPE	Flanged, welded
MEDIUM	Aggressive and non-aggressive liquids, steam, petroleum products, alkalis, acids, water, etc.



DESIGN FEATURES OF THE MODEL

- One-piece monolithic body;
- Full bore;
- Valve for high pressure applications;
- Metal - metal seal with Class "A" tightness;
- Extended and ribbed cover design for use at very low and high temperatures;
- Rising stem or non rising stem;
- Solid wedge;

TYPE OF CONTROL

- Manual (lever, gearbox);
- Electric actuator.

FLOW DIRECTION



GENERAL APPLICATIONS

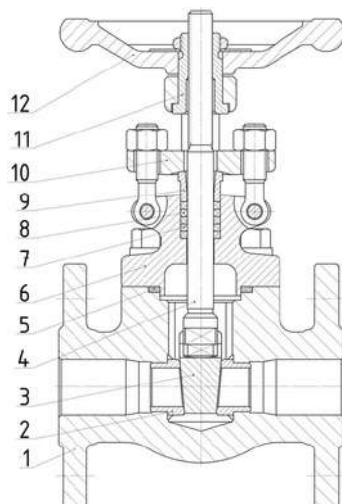
This type of gate valve is equipped with a solid wedge, which provides a simple and durable structure with high mechanical resistance. The solid wedge guarantees reliable tightness at high pressure and temperature. It is mainly recommended for clean media such as water, steam, petroleum products and gas. In the presence of solid particles, increased wear of sealing surfaces may occur, which significantly shortens the service life of the gate valve.

COMPLIANCE STANDARDS

Category		Standard
Product compliance		Directive PED 2014/68/EU
Manufacturing and designing		EN 1984, EN 1171, API 6D, API 600, ASME B16.34
Marking		EN 19
Leakage class		"A" ISO 5208
Testing		EN 12266-1, API 598
Connection	Face-to-face length	EN 558, ASME B16.10
	Flange dimensions	EN 1092-1, EN 1092-2, ASME B16.5, ASME B16.47
	Butt weld end dimensions	ASME B16.25

GATE VALVE

SERIES: 500 MODEL : 501



No	Name
1	Body
2	Seat
3	Wage
4	Stem
5	Gasket
6	Body
7	Packing seal A
8	Packing seal B
9	Bushing
10	Gland
11	Stem nut
12	Handwheel

MATERIALS OF THE MAIN COMPONENTS

Name	Material	Medium temperature	Medium
Seat	+Stellite	-	-
	+13Cr		
	*Body material		
Body	A216 WCB/1.0619	-29C...+425C	Water, steam, non-aggressive medium
	A217 WC6		Water, high-temperature steam, non-aggressive medium
	A352 LCB	-45C...+340C	Water, steam, non-aggressive medium (suitable for use at low ambient temperatures)
	A352 LC1	-60C...+340C	
	AISI304/1.4308	-196C...+425C	Water, steam, aggressive medium (depends on the exact material grade)
	AISI316/1.4408		
	AISI 904L/1.4539		Chemically aggressive medium (phosphoric acid, sulfuric acid, etc.)
Wedge	A216 WCB/1.0619	-29C...+425C	Water, steam, non-aggressive medium
	A217 WC6		Water, high-temperature steam, non-aggressive medium
	A352 LCB	-45C...+340C	Water, steam, non-aggressive medium (suitable for use at low ambient temperatures)
	A352 LC1	-60C...+340C	
	AISI304/1.4308	-196C...+425C	Water, steam, aggressive medium (depends on the exact material grade)
	AISI316/1.4408		
	AISI 904L/1.4539		Chemically aggressive medium (phosphoric acid, sulfuric acid, etc.)

It can be manufactured from other materials according to the customer's technical requirements.

STANDARD TRIM MATERIAL SELECTION (API 600)

Trim No	Wedge	Seat	Stem
1	Wedge material + 13Cr	+13Cr	ASTM A182 F6a
2	Wedge material + AISI304/1.4308	+AISI304/1.4308	ASTM A182 F304
5	Wedge material + Stellite	+Stellite	ASTM A182 F6a
8	Wedge material + 13Cr / Stellite	+Stellite / +13Cr	ASTM A182 F6a
10	Wedge material + AISI316/1.4408	+AISI316/1.4408	ASTM A182 F316

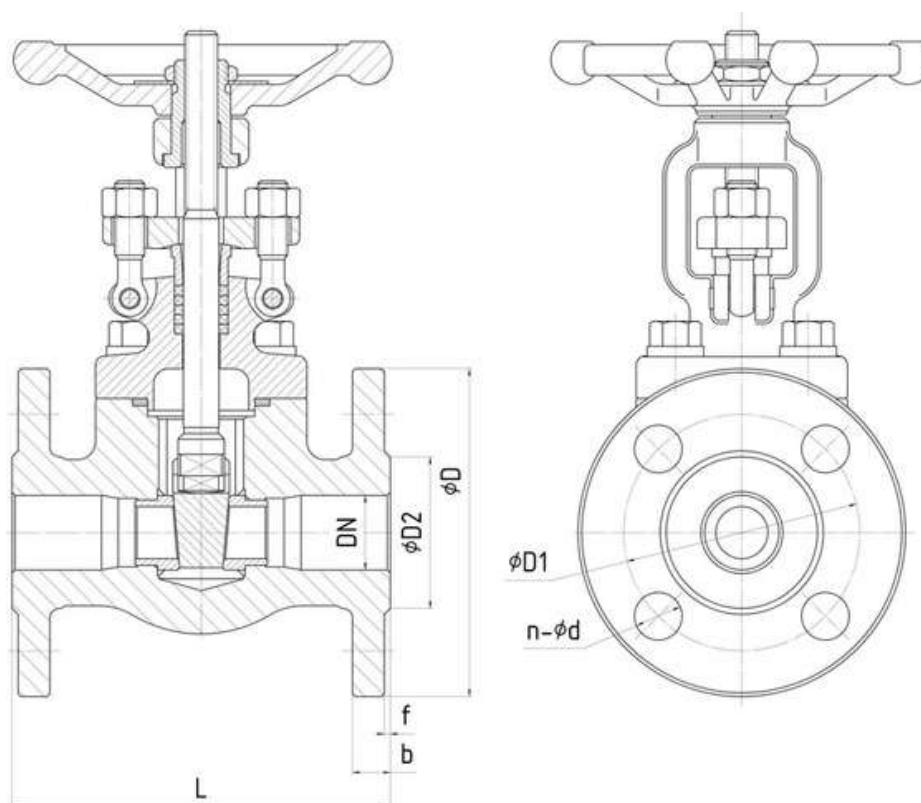
GATE VALVE

SERIES: 500 MODEL : 501

NOMINAL DIAMETER: **DN15 ... DN1200**

NOMINAL PRESSURE: **PN10 ... PN100**

RISING STEM



FLANGE FACING DIMENSIONS FOR PN10, PN16

DN	L (EN 558, series 3)	f	PN10					PN16				
			D	D1	D2	n-ød	b	D	D1	D2	n-ød	b
15	108	2	95	65	45	4-Ø14	16	95	65	45	4-Ø14	16
20	117	2	105	75	58	4-Ø14	18	105	75	58	4-Ø14	18
25	127	2	115	85	68	4-Ø14	18	115	85	68	4-Ø14	18
32	140	2	140	100	78	4-Ø18	18	140	100	78	4-Ø18	18
40	165	3	150	110	88	4-Ø18	18	150	110	88	4-Ø18	18
50	178	3	165	125	102	4-Ø18	18	165	125	102	4-Ø18	18
65	190	3	185	145	122	4-Ø18 / 8-Ø18	18	185	145	122	4-Ø18 / 8-Ø18	18
80	203	3	200	160	138	8-Ø18	20	200	160	138	8-Ø18	20
100	229	3	220	180	158	8-Ø18	20	220	180	158	8-Ø18	20
125	254	3	250	210	188	8-Ø18	22	250	210	188	8-Ø18	22
150	267	3	285	240	212	8-Ø22	22	285	240	212	8-Ø22	22
200	292	3	340	295	268	8-Ø22	24	340	295	268	12-Ø22	24
250	330	3	395	350	320	12-Ø22	26	405	355	320	12-Ø26	26

*Can be made with any type of flange

*Can be made with a different face-to-face length (L)

GATE VALVE

SERIES: 500 MODEL : 501

NOMINAL DIAMETER: **DN15 ... DN1200**

NOMINAL PRESSURE: **PN10 ... PN100**

FLANGE FACING DIMENSIONS FOR PN25, PN40

DN	L (EN 558, series 4)	f	PN25					PN40				
			D	D1	D2	n-ød	b	D	D1	D2	n-ød	b
15	140	2	95	65	45	4-Ø14	16	95	65	45	4-Ø14	16
20	152	2	105	75	58	4-Ø14	18	105	75	58	4-Ø14	18
25	165	2	115	85	68	4-Ø14	18	115	85	68	4-Ø14	18
32	178	2	140	100	78	4-Ø18	18	140	100	78	4-Ø18	18
40	190	3	150	110	88	4-Ø18	18	150	110	88	4-Ø18	18
50	216	3	165	125	102	4-Ø18	20	165	125	102	4-Ø18	20
65	241	3	185	145	122	8-Ø18	22	185	145	122	8-Ø18	22
80	283	3	200	160	138	8-Ø18	24	200	160	138	8-Ø18	24
100	305	3	235	190	162	8-Ø22	24	235	190	162	8-Ø22	24
125	381	3	270	220	188	8-Ø26	26	270	220	188	8-Ø26	26
150	403	3	300	250	218	8-Ø26	28	300	250	218	8-Ø26	28
200	419	3	360	310	278	12-Ø26	30	375	320	285	12-Ø30	34
250	457	3	425	370	335	12-Ø30	32	450	385	345	12-Ø33	38

FLANGE FACING DIMENSIONS FOR PN63, PN100

DN	L (EN 558, series 26), mm	f	PN63					PN100				
			D	D1	D2	n-ød	b	D	D1	D2	n-ød	b
50	250	3	180	135	102	4-Ø22	26	195	145	102	4-Ø26	30
65	290	3	205	160	122	8-Ø22	26	220	170	122	8-Ø26	34
80	310	3	215	170	138	8-Ø22	28	230	180	138	8-Ø26	36
100	350	3	250	200	162	8-Ø26	30	265	210	162	8-Ø30	40
125	400	3	295	240	188	8-Ø30	34	315	250	188	8-Ø33	40
150	450	3	345	280	218	8-Ø33	36	355	290	218	12-Ø33	4
200	550	3	415	345	285	12-Ø36	42	430	360	285	12-Ø36	52
250	650	3	470	400	345	12-Ø36	46	505	430	345	12-Ø39	60
300	750	4	530	460	410	16-Ø36	52	585	500	410	16-Ø42	68
350	850	4	600	525	465	16-Ø39	56	655	560	465	16-Ø48	74
400	950	4	670	585	535	16-Ø42	60	-	-	535	-	-

*Can be made with any type of flange

*Can be made with a different face-to-face length (L)

GATE VALVE

SERIES: 500 MODEL: 502

NOMINAL DIAMETER	DN50 ... DN1200
NOMINAL PRESSURE	PN10 ... PN100
PURPOSE	Shut-off valve
CONNECTION TYPE	Flanged, butt weld
MEDIUM TEMPERATURE	-196°C ... +425°C
MEDIUM	Aggressive and non-aggressive liquids, steam, petroleum products, alkalis, acids, water, etc.



DESIGN FEATURES OF THE MODEL

- One-piece monolithic body;
- Full bore;
- Valve for high-pressure applications;
- Metal-to-metal seal with class 'A' tightness;
- Extended and ribbed bonnet design for use in very low and high temperatures;
- Rising stem or non-rising stem;
- Flexible wedge.

TYPE OF CONTROL

- Manual operator (handwheel, gearbox);
- Electric actuator.

FLOW DIRECTION



GENERAL APPLICATIONS

This type of wedge gate valve is equipped with a flexible wedge, which improves sealing by compensating for thermal and mechanical deformations. However, it is not recommended for use with media containing solid particles, because the metal-to-metal sealing design typically requires a collection pocket at the bottom of the flow path to ensure complete circumferential sealing between the body seats and the wedge surfaces. Solid particles can accumulate in this pocket and, during closing, may get onto the sealing surfaces, accelerating wear and significantly reducing the valve's service life.

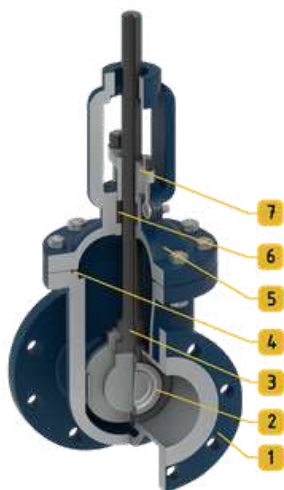
COMPLIANCE STANDARDS

Category		Standard
Product compliance		Directive PED 2014/68/EU
Manufacturing and designing		EN 1984, EN 1171, API 6D, API 600, ASME B16.34
Marking		EN 19
Leakage class		"A" ISO 5208
Testing		EN 12266-1, API 598
Connection	Face-to-face length	EN 558, ASME B16.10
	Flange dimensions	EN 1092-1, EN 1092-2, ASME B16.5, ASME B16.47
	Butt weld end dimensions	ASME B16.25

CE

GATE VALVE

SERIES: 500 MODEL: 502



No Name

- 1 Body
- 2 Wedge
- 3 Seat
- 4 Gasket
- 5 Body
- 6 Packing seal
- 7 Gland

MATERIALS OF THE MAIN COMPONENTS

Name	Material	Medium temperature	Medium
Seat	+Stellite	-	-
	+13Cr		
	*Body material		
Body	A216 WCB/1.0619	-29C...+425C	Water, steam, non-aggressive medium
	A217 WC6		Water, high-temperature steam, non-aggressive medium
	A352 LCB	-45C...+340C	Water, steam, non-aggressive medium (suitable for use at low ambient temperatures)
	A352 LC1	-60C...+340C	
	AISI304/1.4308	-196C...+425C	Water, steam, aggressive medium (depends on the exact material grade)
	AISI316/1.4408		
	AISI 904L/1.4539		Chemically aggressive medium (phosphoric acid, sulfuric acid, etc.)
Wedge	A216 WCB/1.0619	-29C...+425C	Water, steam, non-aggressive medium
	A217 WC6		Water, high-temperature steam, non-aggressive medium
	A352 LCB	-45C...+340C	Water, steam, non-aggressive medium (suitable for use at low ambient temperatures)
	A352 LC1	-60C...+340C	
	AISI304/1.4308	-196C...+425C	Water, steam, aggressive medium (depends on the exact material grade)
	AISI316/1.4408		
	AISI 904L/1.4539		Chemically aggressive medium (phosphoric acid, sulfuric acid, etc.)

It can be manufactured from other materials according to the customer's technical requirements.

STANDARD TRIM MATERIAL SELECTION (API 600)

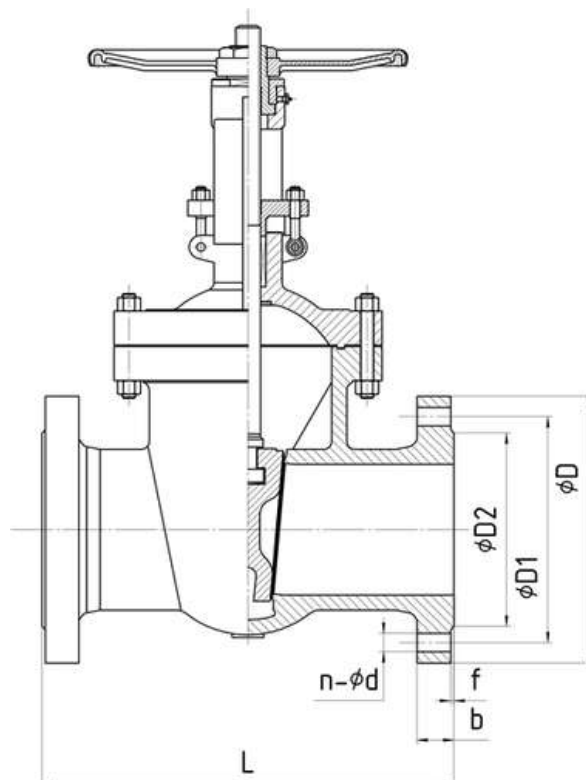
Trim No	Wedge	Seat	Stem
1	Wedge material + 13Cr	+13Cr	ASTM A182 F6a
2	Wedge material + AISI304/1.4308	+AISI304/1.4308	ASTM A182 F304
5	Wedge material + Stellite	+Stellite	ASTM A182 F6a
8	Wedge material + 13Cr / Stellite	+Stellite / +13Cr	ASTM A182 F6a
10	Wedge material + AISI316/1.4408	+AISI316/1.4408	ASTM A182 F316

GATE VALVE

SERIES: 500 MODEL: 502

NOMINAL DIAMETER: **DN50 ... DN1200** NOMINAL PRESSURE: **PN10 ... PN100**

RISING STEM



FLANGE FACING DIMENSIONS FOR PN10, PN16

DN	L (EN 558, series 15), mm	f	PN10					PN16				
			D	D1	D2	n-Ød	b	D	D1	D2	n-Ød	b
50	250	3	165	125	102	4-Ø18	18	165	125	102	4-Ø18	18
65	270	3	185	145	122	4-Ø18/8-Ø18	18	185	145	122	4-Ø18/8-Ø18	18
80	280	3	200	160	138	8-Ø18	20	200	160	138	8-Ø18	20
100	300	3	220	180	158	8-Ø18	20	220	180	158	8-Ø18	20
125	325	3	250	210	188	8-Ø18	22	250	210	188	8-Ø18	22
150	350	3	285	240	212	8-Ø22	22	285	240	212	8-Ø22	22
200	400	3	340	295	268	8-Ø22	24	340	295	268	12-Ø22	24
250	450	3	395	350	320	12-Ø22	26	405	355	320	12-Ø26	26
300	500	4	445	400	370	12-Ø22	26	460	410	378	12-Ø26	28
350	550	4	505	460	430	16-Ø22	26	520	470	438	16-Ø26	30
400	600	4	565	515	482	16-Ø26	26	580	525	490	16-Ø30	32
450	650	4	615	565	532	20-Ø26	28	640	585	550	20-Ø30	40
500	700	4	670	620	585	20-Ø26	28	715	650	610	20-Ø33	44
600	800	5	780	725	685	20-Ø30	34	840	770	725	20-Ø36	54

* Tabulated values are available upon request for DN700 ... DN1200



Face-to-face length can be supplied according to ASME B16.10, EN 558, or customized to the specific customer requirements.

GATE VALVE

SERIES: 500 MODEL: 502

NOMINAL DIAMETER: DN50 ... DN1200 NOMINAL PRESSURE: PN10 ... PN100

FLANGE FACING DIMENSIONS FOR PN25, PN40

DN	L (EN 558, series 15), mm	L (EN 558, series 26), mm	f	PN25					PN40				
				D	D1	D2	n-Ød	b	D	D1	D2	n-Ød	b
50	250	250	3	165	125	102	4-Ø18	20	165	125	102	4-Ø18	20
65	270	290	3	185	145	122	8-Ø18	22	185	145	122	8-Ø18	22
80	280	310	3	200	160	138	8-Ø18	24	200	160	138	8-Ø18	24
100	300	350	3	235	190	162	8-Ø22	24	235	190	162	8-Ø22	24
125	325	400	3	270	220	188	8-Ø26	26	270	220	188	8-Ø26	26
150	350	450	3	300	250	218	8-Ø26	28	300	250	218	8-Ø26	28
200	400	550	3	360	310	278	12-Ø26	30	375	320	285	12-Ø30	34
250	450	650	3	425	370	335	12-Ø30	32	450	385	345	12-Ø33	38
300	500	750	4	485	430	395	16-Ø30	34	515	450	410	16-Ø33	42
350	550	850	4	555	490	450	16-Ø33	38	580	510	465	16-Ø36	46
400	600	950	4	620	550	505	16-Ø36	40	660	585	535	16-Ø39	50
450	650	1050	4	670	600	555	20-Ø36	46	685	610	560	20-Ø39	57
500	700	1150	4	730	660	615	20-Ø36	48	755	670	615	20-Ø42	57
600	800	1350	5	845	770	720	20-Ø39	58	890	795	735	20-Ø48	72

* Tabulated values are available upon request for DN700 ... DN1200

FLANGE FACING DIMENSIONS FOR PN63, PN100

DN	L (EN 558, series 26), mm	f	PN63					PN100				
			D	D1	D2	n-Ød	b	D	D1	D2	n-Ød	b
50	250	3	180	135	102	4-Ø22	26	195	145	102	4-Ø26	30
65	290	3	205	160	122	8-Ø22	26	220	170	122	8-Ø26	34
80	310	3	215	170	138	8-Ø22	28	230	180	138	8-Ø26	36
100	350	3	250	200	162	8-Ø26	30	265	210	162	8-Ø30	40
125	400	3	295	240	188	8-Ø30	34	315	250	188	8-Ø33	40
150	450	3	345	280	218	8-Ø33	36	355	290	218	12-Ø33	4
200	550	3	415	345	285	12-Ø36	42	430	360	285	12-Ø36	52
250	650	3	470	400	345	12-Ø36	46	505	430	345	12-Ø39	60
300	750	4	530	460	410	16-Ø36	52	585	500	410	16-Ø42	68
350	850	4	600	525	465	16-Ø39	56	655	560	465	16-Ø48	74
400	950	4	670	585	535	16-Ø42	60	-	-	535	-	-

* Tabulated values are available upon request for DN700 ... DN1200



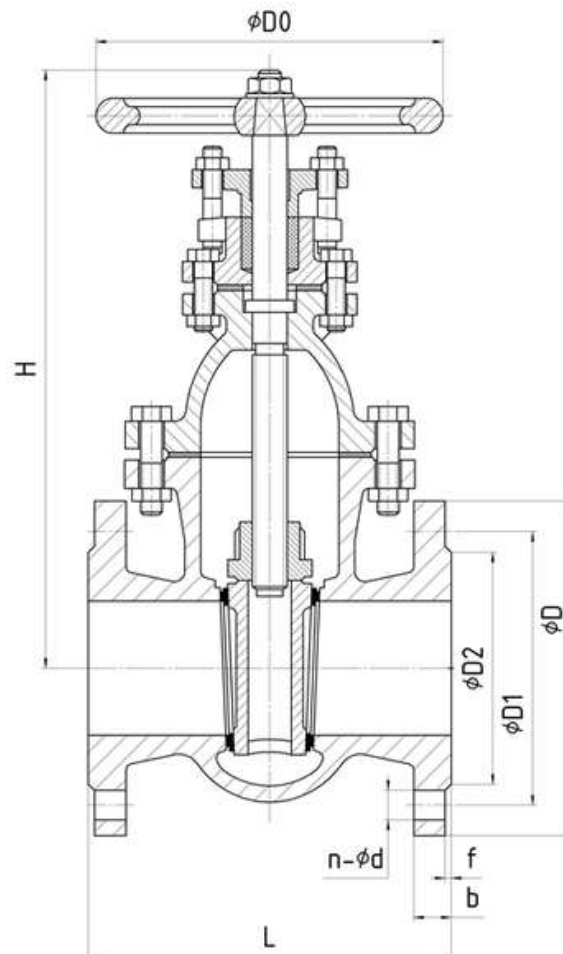
Face-to-face length can be supplied according to ASME B16.10, EN 558, or customized to the specific customer requirements.

GATE VALVE

SERIES: 500 MODEL: 502

NOMINAL DIAMETER: **DN50 ... DN1200** NOMINAL PRESSURE: **PN10 ... PN100**

NON-RISING STEM



FLANGE FACING DIMENSIONS FOR PN16, PN25

DN	L (series 14, EN 558)	H	D0	f	PN16					PN25				
					D	D1	D2	n-Ød	b	D	D1	D2	n-Ød	b
50	150	232	200	3	165	125	102	4-Ø18	18	165	125	102	4-Ø18	20
65	170	258	200	3	185	145	122	4-Ø18/8-Ø18	18	185	145	122	8-Ø18	22
80	180	281	220	3	200	160	138	8-Ø18	20	200	160	138	8-Ø18	24
100	190	315	250	3	220	180	158	8-Ø18	20	235	190	162	8-Ø22	24
125	200	358	280	3	250	210	188	8-Ø18	22	270	220	188	8-Ø26	26
150	210	408	280	3	285	240	212	8-Ø22	22	300	250	218	8-Ø26	28
200	230	500	320	3	340	295	268	12-Ø22	24	360	310	278	12-Ø26	30
250	250	572	350	3	405	355	320	12-Ø26	26	425	370	335	12-Ø30	32
300	270	662	400	4	460	410	378	12-Ø26	28	485	430	395	16-Ø30	34

GATE VALVE

SERIES: 500 MODEL: 504

NOMINAL DIAMETER	DN50 ... DN1200
NOMINAL PRESSURE	PN10, PN16, PN25
PURPOSE	Shut-off valve
CONNECTION TYPE	Flanged
MEDIUM TEMPERATURE	-15 °C ... +110 °C
MEDIUM	Water, air, petroleum products, diesel fuel, mineral oils, and lubricants



DESIGN FEATURES OF THE MODEL

- Non-rising stem;
- Full bore;
- Resilient wedge with rubber coating allows the use of this gate valve in media with low abrasive properties;
- Long or short face-to-face length;
- One-piece cast body;
- Suitable for installation on horizontal and vertical pipelines with various flow directions.

TYPE OF CONTROL

- Manual operator (Handwheel)
- Electric actuator
- Pneumatic actuator

FLOW DIRECTION



 Capability for installation of a valve bypass line

GENERAL APPLICATIONS

The 504 gate valve with a resilient wedge features a metal wedge fully covered with elastomer material, providing enhanced tightness and corrosion resistance. It is suitable for use in slightly abrasive media and is commonly employed in water distribution systems, wastewater installations, and for non-aggressive liquids.

Gate valves should not be left partially open or partially closed when operating with media containing suspended solids, as prolonged exposure may lead to erosion of the rubber coating due to particle impact, which can compromise tightness and reduce the valve's service life.

COMPLIANCE STANDARDS

Category		Standard
Product compliance		Directive PED 2014/68/EU
Manufacturing and designing		EN 1984, EN 1171, API 6D, API 600, ASME B16.34
Marking		EN 19
Leakage class		"A" ISO 5208
Testing		EN 12266-1, API 598
Connection	Face-to-face length	EN 558, ASME B16.10
	Flange dimensions	EN 1092-1, EN 1092-2, ASME B16.5, ASME B16.47

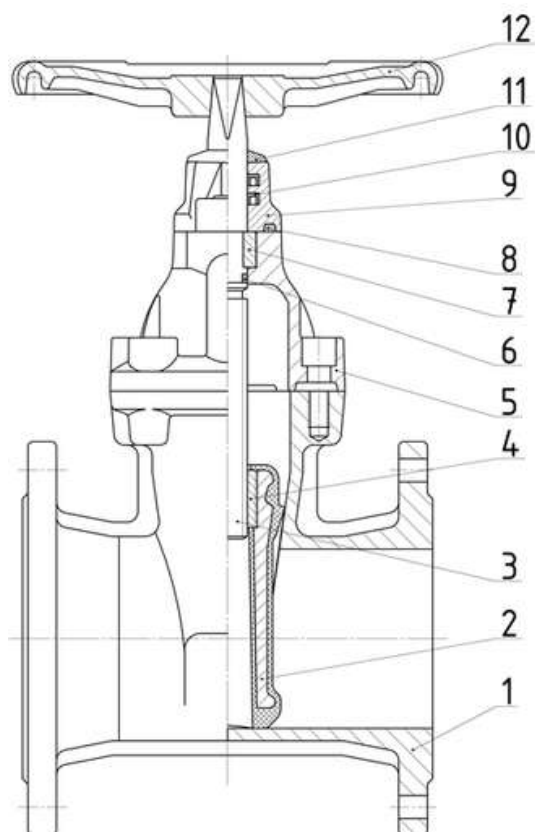
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GATE VALVE

SERIES: 500 MODEL: 504

NOMINAL DIAMETER: **DN50 ... DN1200**

NOMINAL PRESSURE: **PN10 ... PN25**



No	Name
----	------

- | | |
|----|------------------|
| 1 | Body |
| 2 | Wedge |
| 3 | Stem |
| 4 | Nut |
| 5 | Body |
| 6 | Backseat bushing |
| 7 | Thrust bearing |
| 8 | O-ring |
| 9 | Upper body |
| 10 | V-ring |
| 11 | Dust cover |
| 12 | Handwheel |

MATERIALS OF THE MAIN COMPONENTS

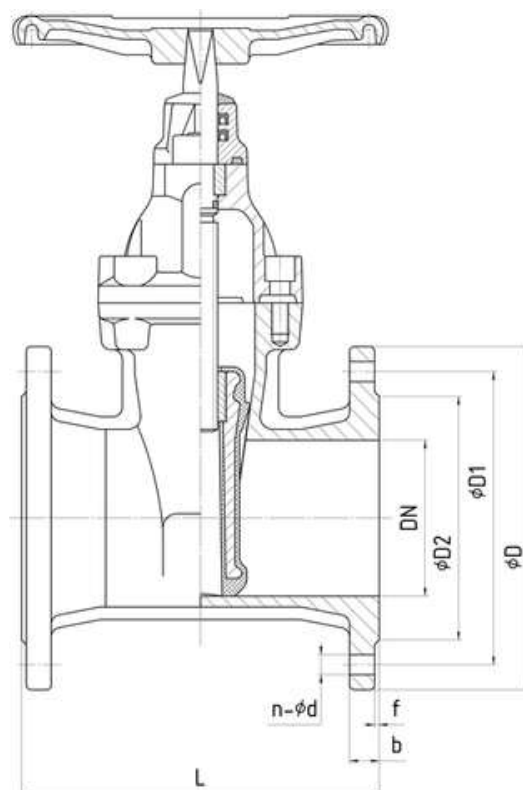
Name	Material	Medium temperature	Medium
Body	GGG40/EN-GJS-400-15	-15°C ... +110°C	Water, air, superheated water, non-aggressive medium
	GGG50/EN-GJS-500-7	-15°C ... +110°C	Water, steam, air, oil, non-corrosive medium
Wedge	GGG40/EN-GJS-400-15	-15°C ... +110°C	Water, air, superheated water, non-aggressive medium
	GGG50/EN-GJS-500-7	-15°C ... +110°C	Water, steam, air, oil, non-corrosive medium
Seat	EPDM	-15°C ... +110°C	Water, air, superheated water, non-aggressive medium
	NBR	-15°C ... +90°C	Petroleum products, diesel fuel, mineral oils, and lubricants

It can be manufactured from other materials according to the customer's technical requirements.

GATE VALVE

SERIES: 500 MODEL: 504

NOMINAL DIAMETER: **DN50 ... DN1200** NOMINAL PRESSURE: **PN10 ... PN25**



FLANGE FACING DIMENSIONS FOR PN10, PN16

DN	L (EN 558, series 14, short face-to-face length)	L (EN 558, series 15 long face-to-face length)	f	PN10					PN16				
				D	D1	D2	n - Ød	b	D	D1	D2	n - Ød	b
50	150	250	3	165	125	102	4-Ø18	18	165	125	102	4-Ø18	18
65	170	270	3	185	145	122	4-Ø18 / 8-Ø18	18	185	145	122	4-Ø18 / 8-Ø18	18
80	180	280	3	200	160	138	8-Ø18	20	200	160	138	8-Ø18	20
100	190	300	3	220	180	158	8-Ø18	20	220	180	158	8-Ø18	20
125	200	325	3	250	210	188	8-Ø18	22	250	210	188	8-Ø18	22
150	210	350	3	285	240	212	8-Ø22	22	285	240	212	8-Ø22	22
200	230	400	3	340	295	268	8-Ø22	24	340	295	268	12-Ø22	24
250	250	450	3	395	350	320	12-Ø22	26	405	355	320	12-Ø26	26
300	270	500	4	445	400	370	12-Ø22	26	460	410	378	12-Ø26	28
350	290	550	4	505	460	430	16-Ø22	26	520	470	438	16-Ø26	30
400	310	600	4	565	515	482	16-Ø26	26	580	525	490	16-Ø30	32
450	330	650	4	615	565	532	20-Ø26	28	640	585	550	20-Ø30	40
500	350	700	4	670	620	585	20-Ø26	28	715	650	610	20-Ø33	44
600	390	800	6	780	725	685	20-Ø30	34	840	770	725	20-Ø36	54
700	430	900	6	895	840	800	24-Ø30	34	910	840	795	24-Ø36	-
800	470	1000	6	1015	950	905	24-Ø33	34	1025	950	900	24-Ø39	-

* Tabulated values are available upon request for DN900–DN1200

GATE VALVE

SERIES: 500 MODEL: 504

NOMINAL DIAMETER: **DN50 ... DN1200** NOMINAL PRESSURE: **PN10 ... PN25**

FLANGE FACING DIMENSIONS FOR PN25

DN	Dimensions, mm							
	L (EN 558, series 14, short face-to-face length)	L (EN 558, series 15 long face-to-face length)	D	D1	D2	n - Ød	b	f
50	150	250	165	125	102	4-ø18	20	3
65	170	270	185	145	122	8-ø18	22	3
80	180	280	200	160	138	8-ø18	24	3
100	190	300	235	190	162	8-ø22	24	3
125	200	325	270	220	188	8-ø26	26	3
150	210	350	300	250	218	8-ø26	28	3
200	230	400	360	310	278	12-ø26	30	3
250	250	450	425	370	335	12-ø30	32	3
300	270	500	485	430	395	16-ø30	34	4
350	290	550	555	490	450	16-ø33	38	4
400	310	600	620	550	505	16-ø36	40	4
450	330	650	670	600	555	20-ø36	46	4
500	350	700	730	660	615	20-ø36	48	4
600	390	800	845	770	720	20-ø39	58	5

* Tabulated values are available upon request for DN700–DN1200

GLOBE VALVE

SERIES: 600 MODEL : 601

NOMINAL DIAMETER	DN15 ... DN500
NOMINAL PRESSURE	PN10 ... PN100
PURPOSE	Shut-off and flow control
CONNECTION TYPE	Flanged, butt weld ends
MEDIUM TEMPERATURE	-196°C ... +540°C
MEDIUM	Aggressive and non-aggressive liquids, steam, petroleum products, alkalis, acids, water



DESIGN FEATURES OF THE MODEL

- Wide selection of body materials, sealing materials, and sealing inserts;
- Forged valve for high-pressure applications;
- Extended and ribbed bonnet design for cryogenic and high-temperature applications;
- Interchangeable plug (change of Cv value);

TYPE OF CONTROL

- Manual (lever, handwheel);
- Pneumatic actuator;
- Electric actuator.

LEAKAGE CLASS

According to ISO 5208

For shut-off valves: 'A' – metal/metal, metal/PTFE;

For control valves: IV, V, VI – metal/metal, metal/PTFE.

FLOW DIRECTION


 Unidirectional: flow can occur from the bottom or from the top of the plug

GENERAL APPLICATIONS

A globe valve is a type of shut-off and control valve in which the closing element (plug) moves linearly along the stem axis, closing or opening the flow of the working medium. During closing, the plug moves downward between the body sealing surfaces, ensuring tight shut-off. When opening, it rises upward, allowing the medium to pass. Full opening minimizes flow resistance, while partial opening allows precise flow control. The body design introduces additional hydraulic resistance but provides high control accuracy.

COMPLIANCE STANDARDS

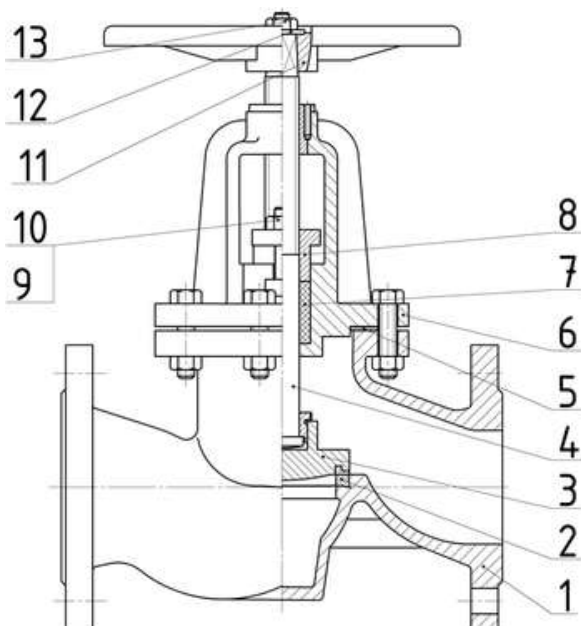
Category		Standard
Product compliance		Directive PED 2014/68/EU
Manufacturing and designing		EN 13709, EN 13789, API 602, API 623, ASME B16.34
Marking		EN 19
Leakage class		"A" ISO 5208
Testing		EN 12266-1, API 598
Connection	Face-to-face length	EN 558, ASME B16.10
	Flange dimensions	EN 1092-1, ASME B16.5, ASME B16.47
	Butt weld end dimensions	EN 12627, ASME B16.25

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GLOBE VALVE

SERIES: 600 MODEL : 601

NOMINAL DIAMETER: **DN15 ... DN500** NOMINAL PRESSURE: **PN10 ... PN100**



No	Name
1	Body
2	Seat
3	Wedge
4	Stem
5	Gasket
6	Body
7	Packing seal
8	Gland
9	Bolt
10	Nut
11	Handwheel
12	Gasket
13	Nut

MATERIALS OF THE MAIN COMPONENTS

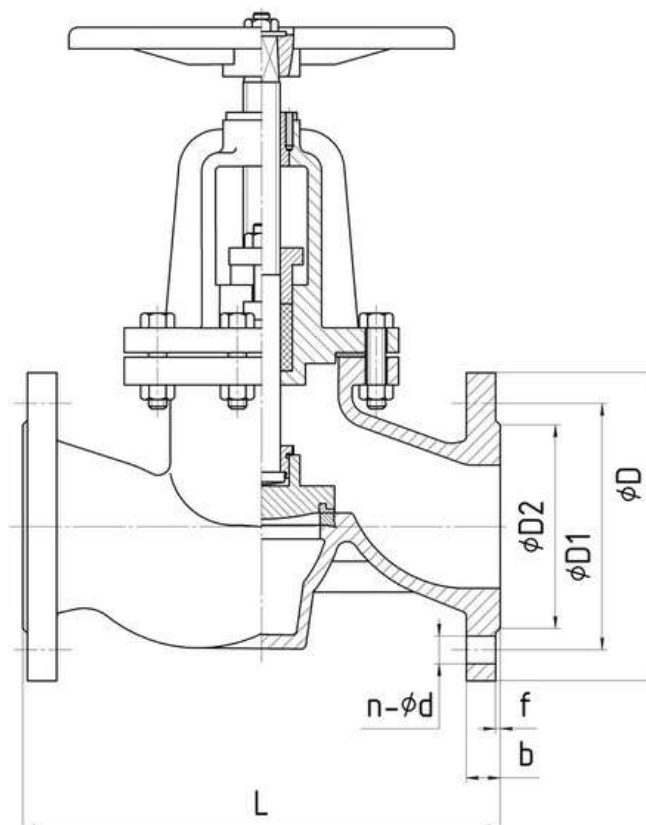
Name	Material	Medium temperature	Medium
Seat	PTFE	-60C...+200C	Water, steam, chemically aggressive medium, petroleum products, acids, alkalis
	Metal-metal	*depending on the material	
Body	A216 WCB/1.0619	-29C...+425C	Water, steam, non-aggressive medium
	A217 WC6	-29C...+540C	Water, high-temperature steam, non-aggressive medium
	A352 LCB	-45C...+340C	Water, steam, non-aggressive medium (suitable for use at low ambient temperatures)
	A352 LC1	-60C...+340C	
	AISI304/1.4308	-196C...+540C	Water, steam, aggressive medium (depending on the exact material grade)
	AISI316/1.4408		
	AISI 904L/1.4539	-196C...+400C	Chemically aggressive medium (phosphoric acid, sulfuric acid)
	GGG40/EN-GJS-400-15	-20C...+400C	Water, superheated water, non-aggressive medium
Plug	A216 WCB/1.0619	-29C...+425C	Water, steam, non-aggressive medium
	A217 WC6	-29C...+540C	Water, high-temperature steam, non-aggressive medium
	A352 LCB	-45C...+340C	Water, steam, non-aggressive medium (suitable for use at low ambient temperatures)
	A352 LC1	-60C...+340C	
	AISI304/1.4308	-196C...+540C	Water, steam, aggressive medium (depends on the exact material grade)
	AISI316/1.4408		
	AISI 904L/1.4539	-196C...+400C	Chemically aggressive medium (phosphoric acid, sulfuric acid)
	A105	-29C...+425C	Water, steam, air, oil, non-corrosive medium
	GGG40/EN-GJS-400-15	-20C...+400C	Water, superheated water, non-aggressive medium

It can be manufactured from other materials according to the customer's technical requirements.

GLOBE VALVE

SERIES: 600 MODEL : 601

NOMINAL DIAMETER: **DN15 ... DN500** NOMINAL PRESSURE: **PN10 ... PN100**



FLANGE FACING DIMENSIONS FOR PN10, PN16

DN	L (EN 558, series 1)	f	PN10					PN16				
			D	D1	D2	n-ød	b	D	D1	D2	n-ød	b
15	130	2	95	65	45	4-Ø14	16	95	65	45	4-Ø14	16
20	150	2	105	75	58	4-Ø14	18	105	75	58	4-Ø14	18
25	160	2	115	85	68	4-Ø14	18	115	85	68	4-Ø14	18
32	180	2	140	100	78	4-Ø18	18	140	100	78	4-Ø18	18
40	200	3	150	110	88	4-Ø18	18	150	110	88	4-Ø18	18
50	230	3	165	125	102	4-Ø18	18	165	125	102	4-Ø18	18
65	290	3	185	145	122	4-Ø18 / 8-Ø18	18	185	145	122	4-Ø18 / 8-Ø18	18
80	310	3	200	160	138	8-Ø18	20	200	160	138	8-Ø18	20
100	350	3	220	180	158	8-Ø18	20	220	180	158	8-Ø18	20
125	400	3	250	210	188	8-Ø18	22	250	210	188	8-Ø18	22
150	480	3	285	240	212	8-Ø22	22	285	240	212	8-Ø22	22
200	600	3	340	295	268	8-Ø22	24	340	295	268	12-Ø22	24
250	730	3	395	350	320	12-Ø22	26	405	355	320	12-Ø26	26

*Can be made with any type of flange

*Can be made with a different face-to-face length (L)

*Tabulated values are available upon request for DN300–DN500

GLOBE VALVE

SERIES: 600 MODEL : 601

NOMINAL DIAMETER: **DN15 ... DN500** NOMINAL PRESSURE: **PN10 ... PN100**

FLANGE FACING DIMENSIONS FOR PN25, PN40

DN	L (EN 558, series 1)	f	PN25					PN40				
			D	D1	D2	n-ød	b	D	D1	D2	n-ød	b
15	130	2	95	65	45	4-Ø14	16	95	65	45	4-Ø14	16
20	150	2	105	75	58	4-Ø14	18	105	75	58	4-Ø14	18
25	160	2	115	85	68	4-Ø14	18	115	85	68	4-Ø14	18
32	180	2	140	100	78	4-Ø18	18	140	100	78	4-Ø18	18
40	200	3	150	110	88	4-Ø18	18	150	110	88	4-Ø18	18
50	230	3	165	125	102	4-Ø18	20	165	125	102	4-Ø18	20
65	290	3	185	145	122	8-Ø18	22	185	145	122	8-Ø18	22
80	310	3	200	160	138	8-Ø18	24	200	160	138	8-Ø18	24
100	350	3	235	190	162	8-Ø22	24	235	190	162	8-Ø22	24
125	400	3	270	220	188	8-Ø26	26	270	220	188	8-Ø26	26
150	480	3	300	250	218	8-Ø26	28	300	250	218	8-Ø26	28
200	600	3	360	310	278	12-Ø26	30	375	320	285	12-Ø30	34
250	730	3	425	370	335	12-Ø30	32	450	385	345	12-Ø33	38

*Tabulated values are available upon request for DN300–DN500

FLANGE FACING DIMENSIONS FOR PN63, PN100

DN	L (EN 558, series 1)	L (EN 558, series 14)	f	PN63					PN100				
				D	D1	D2	n-ød	b	D	D1	D2	n-ød	b
15	130	115	2	105	75	45	4-Ø14	20	105	75	45	4-Ø14	20
20	150	120	2	130	90	58	4-Ø18	22	130	90	58	4-Ø18	22
25	160	125	2	140	100	68	4-Ø18	24	140	100	68	4-Ø18	24
32	180	130	2	155	110	78	4-Ø22	26	155	110	78	4-Ø22	26
40	200	140	3	170	125	88	4-Ø22	28	170	125	88	4-Ø22	28
50	230	150	3	180	135	102	4-Ø22	26	195	145	102	4-Ø26	30
65	290	170	3	205	160	122	8-Ø22	26	220	170	122	8-Ø26	34
80	310	180	3	215	170	138	8-Ø22	28	230	180	138	8-Ø26	36
100	350	190	3	250	200	162	8-Ø26	30	265	210	162	8-Ø30	40
125	400	200	3	295	240	188	8-Ø30	34	315	250	188	8-Ø33	40
150	480	210	3	345	280	218	8-Ø33	36	355	290	218	12-Ø33	44
200	600	230	3	415	345	285	12-Ø36	42	430	360	285	12-Ø36	52
250	730	250	3	470	400	345	12-Ø36	46	505	430	345	12-Ø39	60

*Can be made with any type of flange

*Can be made with a different face-to-face length (L)

*Tabulated values are available upon request for DN300–DN500

BALL CHECK VALVE

SERIES: 700 MODEL : 702

NOMINAL DIAMETER	DN40 ... 600
NOMINAL PRESSURE	PN10, PN16
PURPOSE	Backflow prevention
CONNECTION TYPE	Flanged, butt-welded
MEDIUM TEMPERATURE	-30°C +120°C
MEDIUM	Water, oil, heterogeneous media containing solid impurities, aggressive media



DESIGN FEATURES OF THE MODEL

- High flow capacity;
- Ease of maintenance;
- Self cleaning ball;
- Low pressure drop.

FLOW DIRECTION MEDIUM



LEAKAGE CLASS

"A" in accordance with ISO 5208.

GENERAL APPLICATIONS

The gravity-operated ball check valve is designed to prevent backflow in pipeline systems. The sealing element is a freely moving ball, which drops onto the seat by gravity when the flow stops or reverses, ensuring tight shut-off. The valve features full bore, minimizing pressure losses. The metal ball is coated with EPDM or NBR elastomer, improving sealing and reducing noise during operation. The simple springless design ensures high reliability and low maintenance requirements, making the valve ideal for liquids containing solid particles, wastewater, and sludge.

COMPLIANCE STANDARDS

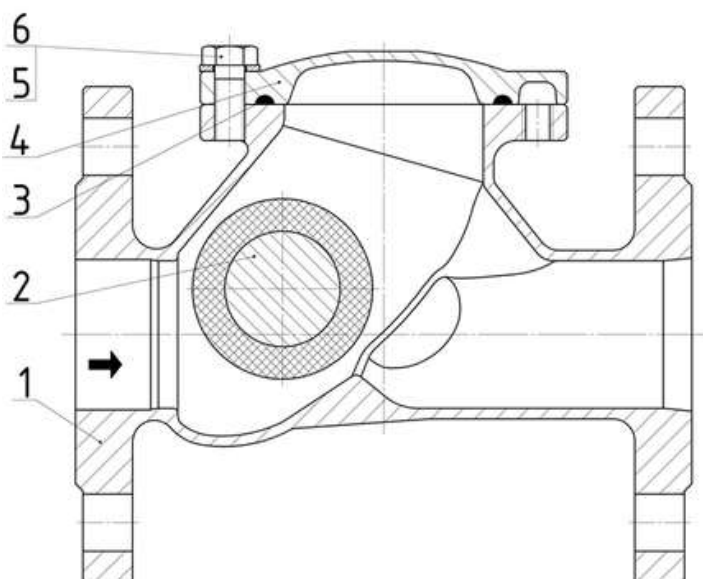
Category		Standard
Product compliance		Directive PED 2014/68/EU
Manufacturing and designing		EN 16767, API 6D, API 594, ASME B16.34
Marking		EN 19
Leakage class		"A" ISO 5208
Testing		EN 12266-1, API 598
Connection	Face-to-face length	EN 558, ASME B16.10
	Flange dimensions	EN 1092-1, ASME B16.5, ASME B16.47
	Weld end dimensions	EN 12627, ASME B16.25

BALL CHECK VALVE

SERIES: 700 MODEL : 702

NOMINAL DIAMETER: **DN40 ... DN600**

NOMINAL PRESSURE: **PN10 ... PN16**



No	Name
1	Body
2	Ball
3	Gasket
4	Body
5	Bolt
6	Washer

MATERIALS OF THE MAIN COMPONENTS

Name	Material	Medium temperature	Medium
Body	GGG40 / EN-GJS-400-15	-20C...+120C	Water, non-aggressive medium
	A216 WCB/1.0619	-29C...+120C	Water, steam, non-aggressive medium
	A352 LCB	-30C...+120C	Water, steam, non-aggressive medium (can be used at low ambient temperatures)
	AISI304/1.4308		Water, steam, aggressive medium (depends on the exact grade of the material)
	AISI316/1.4408		
	AISI 904L/1.4539		Chemically aggressive media (phosphoric acid, sulfuric acid, etc.)
Ball	Metal+NBR	-30C...+80C	Oils, gas, petroleum products
	Metal+EPDM	-30C...+120C	Water, diluted acid and alkali solutions

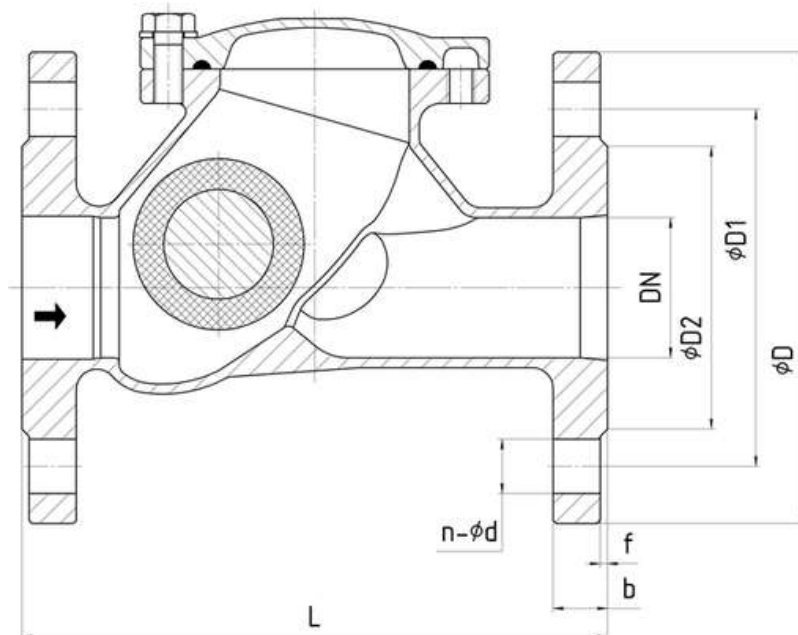
It can be manufactured from other materials according to the customer's technical requirements.

CHECK BALL VALVE

SERIES: 700 MODEL : 702

NOMINAL DIAMETER: DN40 ... DN600

NOMINAL PRESSURE: PN10 ... PN16



FLANGE FACING DIMENSIONS FOR PN10, PN16

DN	L	f	PN10					PN16				
			D	D1	D2	n-ød	b	D	D1	D2	n-ød	b
40	180	3	150	110	88	4-Ø18	18	150	110	88	4-Ø18	18
50	200	3	165	125	102	4-Ø18	18	165	125	102	4-Ø18	18
65	240	3	185	145	122	4-Ø18/8-Ø18	18	185	145	122	4-Ø18/8-Ø18	18
80	260	3	200	160	138	8-Ø18	20	200	160	138	8-Ø18	20
100	300	3	220	180	158	8-Ø18	20	220	180	158	8-Ø18	20
125	350	3	250	210	188	8-Ø18	22	250	210	188	8-Ø18	22
150	400	3	285	240	212	8-Ø22	22	285	240	212	8-Ø22	22
200	500	3	340	295	268	8-Ø22	24	340	295	268	12-Ø22	24
250	600	3	395	350	320	12-Ø22	26	405	355	320	12-Ø26	26
300	700	4	445	400	370	12-Ø22	26	460	410	378	12-Ø26	28
350	800	4	505	460	430	16-Ø22	26	520	470	438	16-Ø26	30
400	900	4	565	515	482	16-Ø26	26	580	525	490	16-Ø30	32
450	1000	4	615	565	532	20-Ø26	28	640	585	550	20-Ø30	40
500	1100	4	670	620	585	20-Ø26	28	715	650	610	20-Ø33	44
600	1300	5	780	725	685	20-Ø30	34	840	770	725	20-Ø36	54

*Can be manufactured with any flange type.

*Can be manufactured with a different face-to-face length (L).

WAFFER CHECK VALVE

SERIES: 700, MODEL : 703

NOMINAL DIAMETER	DN25 ... DN1000
NOMINAL PRESSURE	PN6 ... PN40
PURPOSE	Backflow prevention
CONNECTION TYPE	Wafer
MEDIUM TEMPERATURE	-80°C ... +600°C
MEDIUM	Cold and hot water, heating water, cooling water, compressed air, inert gases, industrial water, non-abrasive wastewater.



DESIGN FEATURES OF THE MODEL

- Low opening and closing pressure;
- Lightweight design;
- Short face-to-face length - occupies less space.

FLOW DIRECTION MEDIUM



LEAKAGE CLASS

In accordance with ISO 5208:

"A" – soft seal;

"C" – metal/metal.

GENERAL APPLICATIONS

The wafer check valve is designed for use with water, steam, petroleum products, natural gas, and chemical mixtures. It operates automatically: the closing element opens under flow pressure and closes when the pressure drops or flow reverses, preventing backflow.

The compact wafer design with a short face-to-face length allows installation in pipelines with limited space. Spring-assisted versions are available (faster closing, reduced risk of water hammer) as well as non-spring versions (gravity closing).

COMPLIANCE STANDARDS

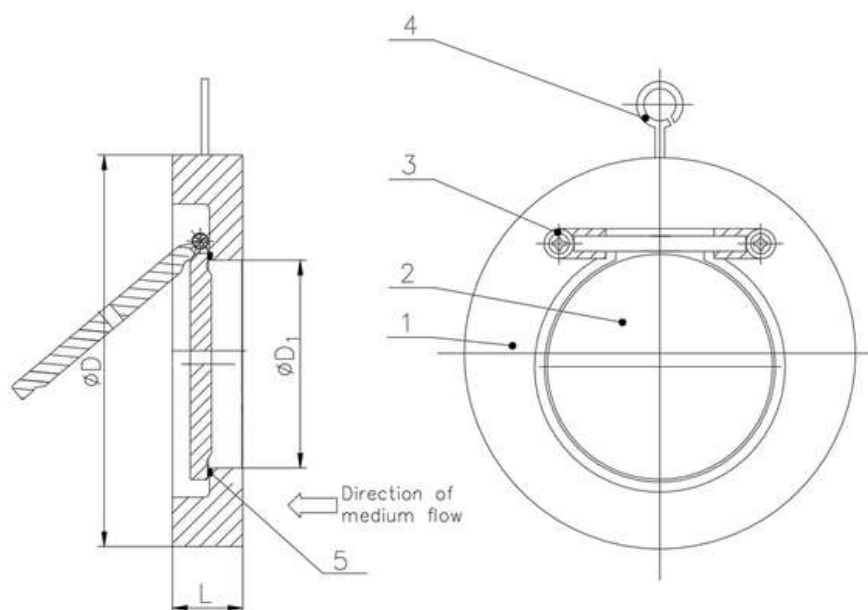
Category		Standard
Product compliance		Directive PED 2014/68/EU
Manufacturing and designing		EN 16767, API 6D, API 594, ASME B16.34
Marking		EN 19
Leakage class		"A" ISO 5208
Testing		EN 12266-1, API 598
Connection	Face-to-face length	EN 558, ASME B16.10
	Flange dimensions	EN 1092-1, ASME B16.5, ASME B16.47

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WAFFER CHECK VALVE

SERIES: 700, MODEL : 703

NOMINAL DIAMETER: **DN25 ... DN1000** NOMINAL PRESSURE: **PN6 ... PN40**



No	Name
1	Body
2	Disc
3	Screw
4	Ring
5	Seat

MATERIALS OF THE MAIN COMPONENTS

Name	Material	Medium temperature	Medium
Seat	EPDM	-30°C ... +130°C	Water, steam, weak solutions of alkalis and acids
	NBR	-30°C ... +100°C	Petroleum products, diesel fuel, mineral oils, propane, butane
	FKM (Viton)	-40°C ... +200°C	Chemically aggressive media, mineral oils and greases, gasoline, hot water
	Silicon	-20°C ... +160°C	Acetic acid, ethyl alcohol, ethylene glycol, water, milk, food additives
	PTFE	-80°C ... +180°C	Abrasive media, chemically aggressive media, water with contaminants
	metal-metal	*depending on the material	Water, sea water, contaminated water, air, steam, oil products, petroleum products, oils, acids, alkalis, salts, aggressive chemical substances.
Body / Disc	A216 WCB/1.0619	-29°C ... +425°C	Water, steam, non-aggressive media
	AISI304/1.4308	-80°C ... +600°C	Water, sea water, contaminated water, air, steam, oil products, petroleum products, oils, acids, alkalis, salts, aggressive chemical substances.
	AISI316/1.4408		
	AISI316L/1.4409		
	Duplex 2205	-46°C ... +300°C	Water, seawater, aggressive chemical substances, acids, alkalis, steam

It can be manufactured from other materials according to the customer's technical requirements.

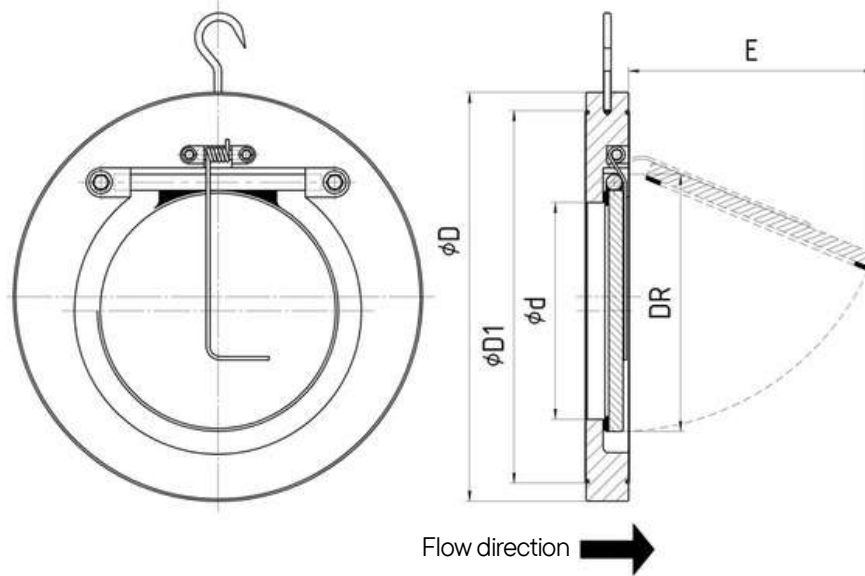
CHECK VALVE

WAFER-TYPE CHECK VALVE

SERIES: 700, MODEL : 703

NOMINAL DIAMETER: **DN25 ... DN1000**

NOMINAL PRESSURE: **PN6 ... PN40**



FLANGE FACING DIMENSIONS FOR PN10, PN16, PN25, PN40

DN	PN10	PN16	PN25	PN40	L	d	D1	E	DR
	D								
32	85				15	18	59	22	37
40	95				16	22	72	25	43
50	109				14	32	86	37	54
65	129				14	40	109	50	70
80	144				14	54	119	61	82
100	164	164	-	-	18	70	146	77	106
125	195	195	-	-	18	92	173	98	131
150	220	220	-	-	20	112	197	120	159
200	275	275	-	-	22	154	255	160	207
250	-	331	-	-	26	192	312	190	260
300	380	-	-	-	32	227	363	220	309
350	440	-	-	-	38	266	416	250	341
400	491	-	-	-	44	310	467	290	392
450	541	-	-	-	52	350	520	340	442
500	596	-	-	-	58	400	550	390	493
600	698	-	-	-	62	486	660	470	594

* Tabulated values are available upon request for DN700–DN1000

SWING CHECK VALVE

SERIES: 700 MODEL : 704

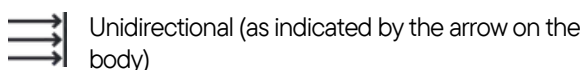
NOMINAL DIAMETER	DN40 ... DN1000
NOMINAL PRESSURE	PN10 ... PN63
PURPOSE	Backflow prevention
CONNECTION TYPE	Flanged, butt weld ends
MEDIUM TEMPERATURE	-80°C ... +600°C
MEDIUM	Water, steam, aggressive and non-aggressive liquids, petroleum products, oils, alkalis, acids



DESIGN FEATURES OF THE MODEL

- Full bore;
- For high-pressure applications;
- Easy maintenance;
- Wide selection of body and disc materials.

FLOW DIRECTION MEDIUM



LEAKAGE CLASS

According to ISO 5208:
"A" – metal/metal.

GENERAL APPLICATIONS

Designed for use with aggressive and non-aggressive media, including water, steam, hydrocarbons, and chemical mixtures. The valve operates automatically; the check element opens under the pressure of the flowing medium and closes when the pressure drops or reverse flow occurs, preventing backflow. No external control is required — the valve operates solely using the flow energy, ensuring reliable unidirectional operation.

COMPLIANCE STANDARDS

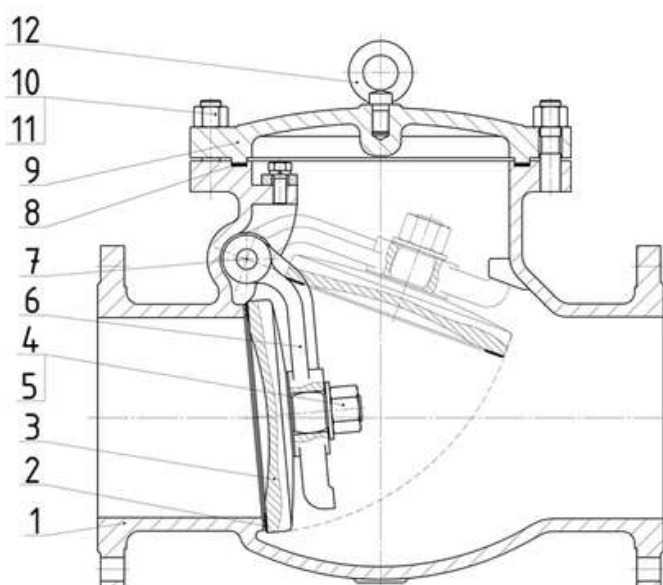
Category		Standard
Product compliance		Directive PED 2014/68/EU
Manufacturing and designing		EN 16767, API 6D, API 594, ASME B16.34
Marking		EN 19
Leakage class		"A" ISO 5208
Testing		EN 12266-1, API 598
Connection	Face-to-face length	EN 558, ASME B16.10
	Flange dimensions	EN 1092-1, ASME B16.5, ASME B16.47
	Butt weld end dimensions	EN 12627, ASME B16.25

SWING CHECK VALVE

SERIES: 700 MODEL : 704

NOMINAL DIAMETER: **DN40 ... DN1000**

NOMINAL PRESSURE: **PN10 ... PN63**



NoName

- 1 Body
- 2 Seat
- 3 Disc
- 4 Nut
- 5 Gasket
- 6 Hinge
- 7 Pin
- 8 Gasket
- 9 Body
- 10 Nut
- 11 Pin
- 12 Lifting lug

MATERIALS OF THE MAIN COMPONENTS

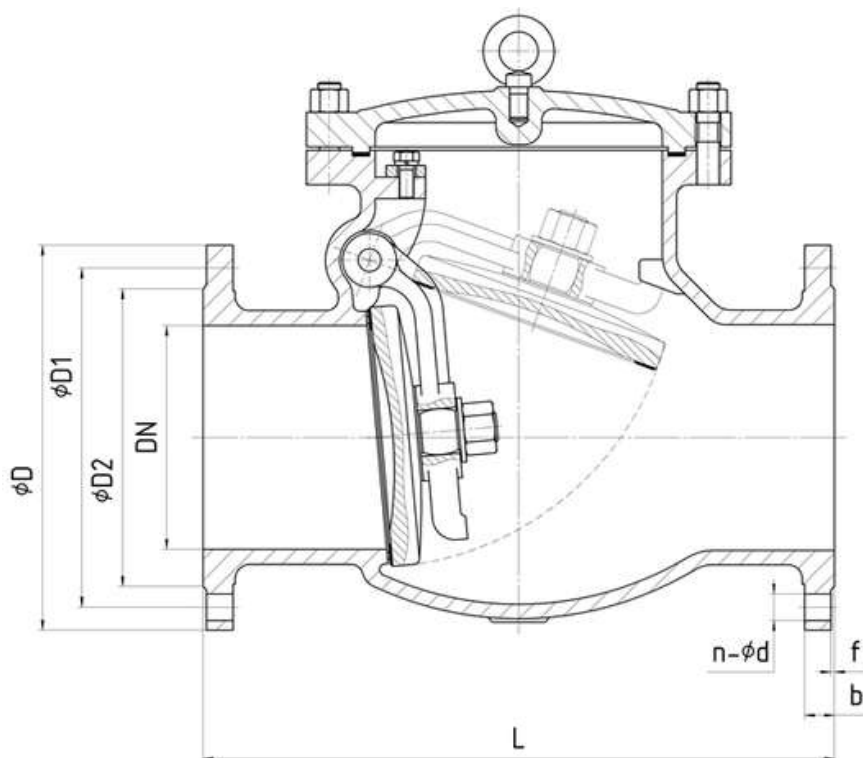
Name	Material	Medium temperature	Medium
Body	A216 WCB/1.0619	-29C...+425C	Water, steam, non-aggressive medium
	A217 WC6	-30C...+595C	Water, high-temperature steam, non-aggressive medium
	A352 LCB	-46C...+345C	Water, steam, non-aggressive medium (suitable for use at low ambient temperatures)
	A352 LC1	-80C...+340C	
	AISI304/1.4308	-80C...+600C	Water, steam, aggressive medium (depending on the exact material grade)
	AISI316/1.4408	-80C...+600C	
	AISI 904L/1.4539	-80C...+400C	Chemically aggressive medium (phosphoric acid, sulfuric acid, etc.)
Disc	A216 WCB/1.0619	-29C...+425C	Water, steam, aggressive medium (depends on the exact material grade)
	A217 WC6	-30C...+595C	Water, high-temperature steam, non-aggressive medium
	A352 LCB	-46C...+345C	Water, steam, non-aggressive medium (suitable for use at low ambient temperatures)
	A352 LC1	-60C...+340C	
	AISI304/1.4308	-60C...+540C	Water, steam, aggressive medium (depending on the exact material grade)
	AISI316/1.4408	-60C...+540C	
	AISI 904L/1.4539	-60C...+400C	Chemically aggressive medium (phosphoric acid, sulfuric acid, etc.)

It can be manufactured from other materials according to the customer's technical requirements.

SWING CHECK VALVE

SERIES: 700 MODEL : 704

NOMINAL DIAMETER: **DN40 ... DN1000** NOMINAL PRESSURE: **PN10 ... PN63**



FLANGE FACING DIMENSIONS FOR PN10, PN16

DN	L (EN 558, series 1)	f	PN10					PN16				
			D	D1	D2	n-ød	b	D	D1	D2	n-ød	b
40	200	3	150	110	88	4-Ø18	18	150	110	88	4-Ø18	18
50	230	3	165	125	102	4-Ø18	18	165	125	102	4-Ø18	18
65	290	3	185	145	122	4-Ø18/8-Ø18	18	185	145	122	4-Ø18/8-Ø18	18
80	310	3	200	160	138	8-Ø18	20	200	160	138	8-Ø18	20
100	350	3	220	180	158	8-Ø18	20	220	180	158	8-Ø18	20
125	400	3	250	210	188	8-Ø18	22	250	210	188	8-Ø18	22
150	480	3	285	240	212	8-Ø22	22	285	240	212	8-Ø22	22
200	600	3	340	295	268	8-Ø22	24	340	295	268	12-Ø22	24
250	730	3	395	350	320	12-Ø22	26	405	355	320	12-Ø26	26
300	850	4	445	400	370	12-Ø22	26	460	410	378	12-Ø26	28
350	980	4	505	460	430	16-Ø22	26	520	470	438	16-Ø26	30
400	1100	4	565	515	482	16-Ø26	26	580	525	490	16-Ø30	32
450	1200	4	615	565	532	20-Ø26	28	640	585	550	20-Ø30	40
500	1250	4	670	620	585	20-Ø26	28	715	650	610	20-Ø33	44
600	1450	5	780	725	685	20-Ø30	34	840	770	725	20-Ø36	54

* Tabulated values are available upon request for DN700–DN1000

SWING CHECK VALVE

SERIES: 700 MODEL : 704

NOMINAL DIAMETER: **DN40 ... DN1000**

NOMINAL PRESSURE: **PN10 ... PN63**

FLANGE FACING DIMENSIONS FOR PN25, PN40

DN	L (EN 558, series 1)	f	PN25					PN40				
			D	D1	D2	n-Ød	b	D	D1	D2	n-Ød	b
40	200	3	150	110	88	4-Ø18	18	150	110	88	4-Ø18	18
50	230	3	165	125	102	4-Ø18	20	165	125	102	4-Ø18	20
65	290	3	185	145	122	8-Ø18	22	185	145	122	8-Ø18	22
80	310	3	200	160	138	8-Ø18	4	200	160	138	8-Ø18	24
100	350	3	235	190	162	8-Ø22	24	235	190	162	8-Ø22	24
125	400	3	270	220	188	8-Ø26	26	270	220	188	8-Ø26	26
150	480	3	300	250	218	8-Ø26	28	300	250	218	8-Ø26	28
200	600	3	360	310	278	12-Ø26	30	375	320	285	12-Ø30	34
250	730	3	425	370	335	12-Ø30	32	450	385	345	12-Ø33	38
300	750	4	485	430	395	16-Ø30	34	515	450	410	16-Ø33	42
350	850	4	555	490	450	16-Ø33	38	580	510	45	16-Ø36	46
400	950	4	620	550	505	16-Ø36	40	660	585	535	16-Ø39	50
450	1050	4	670	600	555	20-Ø36	46	685	610	560	20-Ø39	57
500	1150	4	730	660	615	20-Ø36	48	755	670	615	20-Ø42	57
600	1350	5	845	770	720	20-Ø39	58	890	795	735	20-Ø48	72

* Tabulated values are available upon request for DN700–DN1000

FLANGE FACING DIMENSIONS FOR PN63

DN	L (EN 558, series 26)	f	PN63				
			D	D1	D2	n-Ød	b
40	240	3	170	125	88	4-Ø22	28
50	250	3	180	135	102	4-Ø22	26
65	290	3	205	160	122	8-Ø22	26
80	310	3	215	170	138	8-Ø22	28
100	350	3	250	200	162	8-Ø26	30
125	400	3	295	240	188	8-Ø30	34
150	450	3	345	280	218	8-Ø33	36
200	550	3	415	345	285	12-Ø36	42
250	650	3	470	400	345	12-Ø36	46
300	750	4	530	460	410	16-Ø36	52
350	850	4	600	525	465	16-Ø39	56
400	950	4	670	585	535	16-Ø42	60

* Tabulated values are available upon request for DN450–DN1000

CHECK VALVE

DUAL PLATE

SERIES: 700 MODEL: 706

NOMINAL DIAMETER	DN25 ... DN1200
NOMINAL PRESSURE	PN10 ... PN40
PURPOSE	Backflow prevention
CONNECTION TYPE	Wafer
MEDIUM TEMPERATURE	-80°C ... +600°C
MEDIUM	Cold and hot water, heating water, cooling water, compressed air, inert gases, industrial water, non-abrasive wastewater



DESIGN FEATURES OF THE MODEL

- Low opening and closing pressure;
- Suitable for horizontal and vertical installation;
- Lightweight design;
- Compact face-to-face length .

FLOW DIRECTION MEDIUM



Unidirectional (as indicated by the arrow on the body).

LEAKAGE CLASS

According to ISO 5208:
"A" – metal/metal.

GENERAL APPLICATIONS

The double-flap check valve operates automatically: the two-part disc opens under the flow pressure, and a spring placed between the flaps ensures rapid and reliable closure when the pressure drops or reverse flow occurs, preventing backflow. The compact wafer-type design with a short face-to-face length allows installation in systems with limited space on pipelines. Thanks to its double-flap construction, the valve features low flow resistance and high reliability across a wide range of industrial applications.

COMPLIANCE STANDARDS

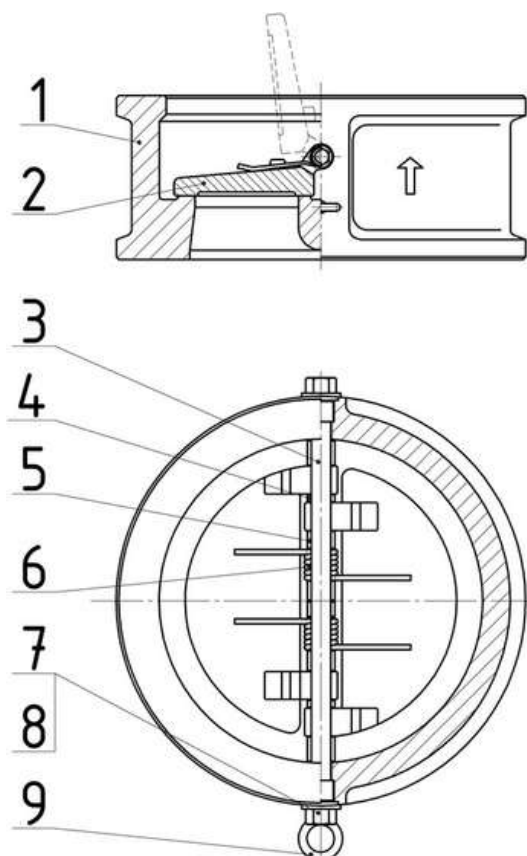
Category		Standard
Product compliance		Directive PED 2014/68/EU
Manufacturing and designing		EN 16767, API 6D, API 594, ASME B16.34
Marking		EN 19
Leakage class		"A" ISO 5208
Testing		EN 12266-1, API 598
Connection	Face-to-face length	EN 558, ASME B16.10
	Flange dimensions	EN 1092-1, ASME B16.5, ASME B16.47

CE

CHECK VALVE

DUAL PLATE

SERIES: 700 MODEL: 706



No Name

- 1 Body
- 2 Disc
- 3 Stem
- 4 Gasket
- 5 Spring washer
- 6 Spring
- 7 Blind plug
- 8 Gasket
- 9 Lifting lug

MATERIALS OF THE MAIN COMPONENTS

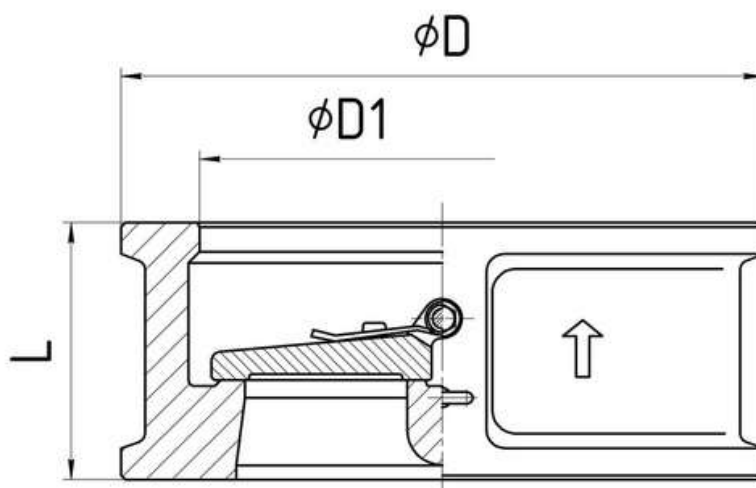
Name	Material	Medium temperature	Medium
Seat	EPDM	-30°C ... +130°C	Water, steam, diluted acid and alkali solutions
	NBR	-30°C ... +100°C	Petroleum products, diesel fuel, mineral oils, propane, butane
	FKM (Viton)	-40°C ... +200°C	Chemically aggressive medium, mineral oils and lubricants, gasoline, hot water
	Silicon	-20°C ... +160°C	Acetic acid, ethyl alcohol, ethylene glycol, water, milk, food additives
	PTFE	-80°C ... +180°C	Abrasive medium, chemically aggressive medium, contaminated water
	metal-metal	*depending on the material	Water, seawater, contaminated water, air, steam, oil products, petroleum products, oils, acids, alkalis, salts, aggressive chemicals
Body / Disc	A216 WCB/1.0619	-29°C ... +425°C	Water, steam, non-aggressive medium
	AISI304/1.4308	-80°C ... +600°C	Water, seawater, contaminated water, air, steam, oil products, petroleum products, oils, acids, alkalis, salts, aggressive chemicals
	AISI316/1.4408		
	AISI316L/1.4409		
	Duplex 2205	-46°C ... +300°C	Water, seawater, chemically aggressive medium, acids, alkalis, steam

It can be manufactured from other materials according to the customer's technical requirements.

CHECK VALVE

DUAL PLATE

SERIES: 700 MODEL: 706



FLANGE FACING DIMENSIONS FOR PN10, PN16, PN25

DN	L (EN 558, series 16)	D1	D		
			PN10	PN16	PN25
50	43	65	107	107	107
65	46	80	127	127	127
80	64	94	142	142	142
100	64	117	162	162	162
125	70	145	192	192	192
150	76	170	218	218	222
200	89	224	273	273	282
250	114	265	328	328	339
300	114	310	378	382	399
350	127	360	438	442	456
400	140	410	487	494	513
450	152	450	537	554	563
500	152	505	592	616	623
600	178	624	694	733	730
700	229	720	803	803	851

* Tabulated values are available upon request for DN800–DN1200

* Can be made with a different face-to-face length (L)

CHECK VALVE

GLOBE-TYPE CHECK VALVE

SERIES: 700 MODEL: 707

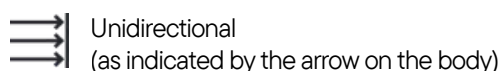
NOMINAL DIAMETER	DN15 ... DN400
NOMINAL PRESSURE	PN10 ... PN40
PURPOSE	Backflow prevention
CONNECTION TYPE	Flanged, butt weld, threaded
MEDIUM TEMPERATURE	-80°C ... +600°C
MEDIUM	Water, steam, aggressive and non-aggressive liquids, petroleum products, oils, alkalis, acids



DESIGN FEATURES OF THE MODEL

- For high-pressure applications;
- Easy maintenance;
- Wide selection of body and plug materials.

FLOW DIRECTION MEDIUM



LEAKAGE CLASS

According to ISO 5208:
"A" – metal/metal.

GENERAL APPLICATIONS

The lift-type check valve operates automatically: the plug lifts from the seat under the flow pressure and returns to the closed position when the pressure drops or reverse flow occurs. Guided plug movements ensure precise seating and high tightness. The valve requires no external actuation — it operates solely using the flow energy, offering a compact design and reliable protection against backflow.

COMPLIANCE STANDARDS

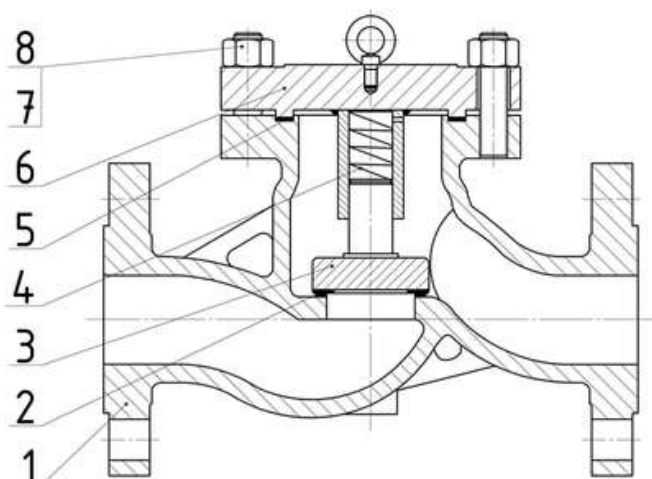
Category		Standard
Product compliance		Directive PED 2014/68/EU
Manufacturing and designing		EN 16767, API 6D, API 594, ASME B16.34
Marking		EN 19
Leakage class		"A" ISO 5208
Testing		EN 12266-1, API 598
Connection	Face-to-face length	EN 558, ASME B16.10
	Flange dimensions	EN 1092-1, ASME B16.5, ASME B16.47
	Butt weld end dimensions	EN 12627, ASME B16.25
	Threaded connection dimensions	EN 10226-1, ISO 228-1, ASME B16.11

CE

CHECK VALVE

GLOBE-TYPE CHECK VALVE

SERIES: 700 MODEL: 707



NoName

- 1 Body
- 2 Seat
- 3 Plug
- 4 Spring
- 5 Gasket
- 6 Body
- 7 Nut
- 8 Pin

MATERIALS OF THE MAIN COMPONENTS

Name	Material	Medium temperature	Medium
Body	A216 WCB/1.0619	-29°C ... +425°C	Water, steam, non-aggressive medium
	A217 WC6	-30°C ... +595°C	Water, high-temperature steam, non-aggressive medium
	A352 LCB	-46°C ... +345°C	Water, steam, non-aggressive medium (suitable for use at low ambient temperatures)
	A352 LC1	-46°C ... +340°C	
	AISI304/1.4308	-80°C ... +600°C	Water, steam, aggressive medium (depending on the exact material grade)
	AISI316/1.4408	-80°C ... +600°C	
	AISI 904L/1.4539	-80°C ... +400°C	Chemically aggressive medium (phosphoric acid, sulfuric acid, etc.)
Plug	A216 WCB/1.0619	-29°C ... +425°C	Water, steam, non-aggressive medium
	A217 WC6	-30°C ... +595°C	Water, high-temperature steam, non-aggressive medium
	A352 LCB	-46°C ... +345°C	Water, steam, non-aggressive medium (suitable for use at low ambient temperatures)
	A352 LC1	-46°C ... +340°C	
	AISI304/1.4308	-80°C ... +600°C	Water, steam, aggressive medium (depending on the exact material grade)
	AISI316/1.4408	-80°C ... +600°C	
	AISI 904L/1.4539	-80°C ... +400°C	Chemically aggressive medium (phosphoric acid, sulfuric acid, etc.)

It can be manufactured from other materials according to the customer's technical requirements.

STANDARD TRIM MATERIAL SELECTION (API 600)

Trim No	Nominal trim design (Trim)	Plug	Seat
1	F6	Plug material + 13Cr	+13Cr
2	304	Plug material + AISI304/1.4308	+AISI304/1.4308
5	Welded overlay	Plug material + Stellite	+Stellite
8	F6 welded overlay	Plug material + 13Cr / Stellite	+Stellite / +13Cr
10	316	Plug material + AISI316/1.4408	+AISI316/1.4408

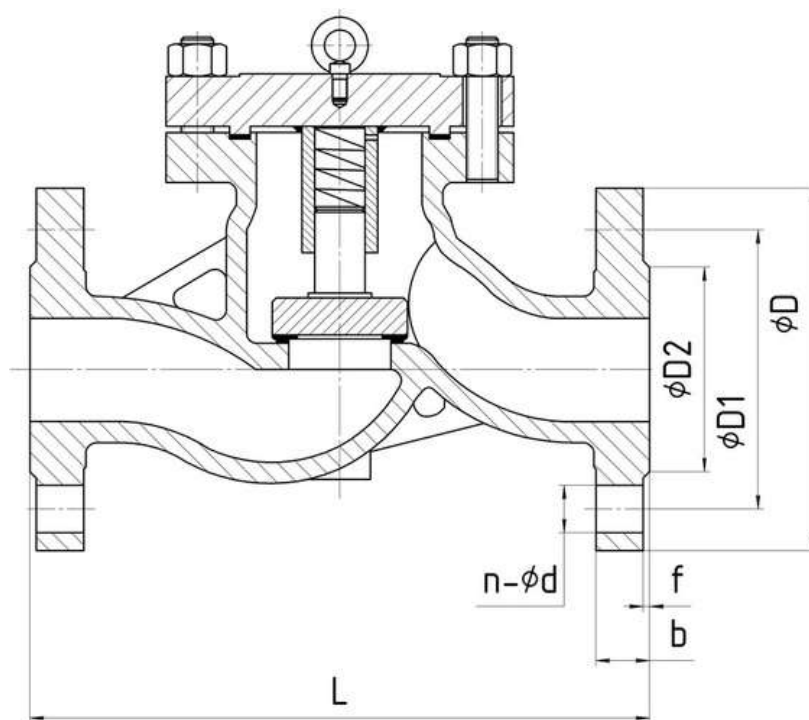
CHECK VALVE

GLOBE-TYPE CHECK VALVE

SERIES: 700 MODEL: 707

NOMINAL DIAMETER: **DN15 ... DN400**

NOMINAL PRESSURE: **PN10 ... PN40**



FLANGE FACING DIMENSIONS FOR PN10, PN16

DN	L (EN 558, series 1)	f	PN10					PN16				
			D	D1	D2	n-ød	b	D	D1	D2	n-ød	b
15	130	2	95	65	45	4-Ø14	16	95	65	45	4-Ø14	16
25	160	2	115	85	68	4-Ø14	18	115	85	68	4-Ø14	18
32	180	2	140	100	78	4-Ø18	18	140	100	78	4-Ø18	18
40	200	3	150	110	88	4-Ø18	18	150	110	88	4-Ø18	18
50	230	3	165	125	102	4-Ø18	18	165	125	102	4-Ø18	18
65	290	3	185	145	122	4-Ø18 / 8-Ø18	18	185	145	122	4-Ø18 / 8-Ø18	18
80	310	3	200	160	138	8-Ø18	20	200	160	138	8-Ø18	20
100	350	3	220	180	158	8-Ø18	20	220	180	158	8-Ø18	20
125	400	3	250	210	188	8-Ø18	22	250	210	188	8-Ø18	22
150	480	3	285	240	212	8-Ø22	22	285	240	212	8-Ø22	22
200	600	3	340	295	268	8-Ø22	24	340	295	268	12-Ø22	24
250	730	3	395	350	320	12-Ø22	26	405	355	320	12-Ø26	26
300	850	4	445	400	370	12-Ø22	26	460	410	378	12-Ø26	28
350	980	4	505	460	430	16-Ø22	26	520	470	438	16-Ø26	30
400	1100	4	565	515	482	16-Ø26	26	580	525	490	16-Ø30	32

*Can be made with any type of flange

*Can be made with a different face-to-face length (L)

CHECK VALVE

GLOBE-TYPE CHECK VALVE

SERIES: 700 MODEL: 707

NOMINAL DIAMETER: **DN15 ... DN400**

NOMINAL PRESSURE: **PN10 ... PN40**

FLANGE FACING DIMENSIONS FOR PN25, PN40

DN	L (EN 558, series 1)	f	PN25					PN40				
			D	D1	D2	n-ød	b	D	D1	D2	n-ød	b
15	130	2	95	65	45	4-Ø14	16	95	65	45	4-Ø14	16
25	160	2	115	85	68	4-Ø14	18	115	85	68	4-Ø14	18
32	180	2	140	100	78	4-Ø18	18	140	100	78	4-Ø18	18
40	200	3	150	110	88	4-Ø18	18	150	110	88	4-Ø18	18
50	230	3	165	125	102	4-Ø18	20	165	125	102	4-Ø18	20
65	290	3	185	145	122	8-Ø18	22	185	145	122	8-Ø18	22
80	310	3	200	160	138	8-Ø18	24	200	160	138	8-Ø18	24
100	350	3	235	190	162	8-Ø22	24	235	190	162	8-Ø22	24
125	400	3	270	220	188	8-Ø26	26	270	220	188	8-Ø26	26
150	480	3	300	250	218	8-Ø26	28	300	250	218	8-Ø26	28
200	600	3	360	310	278	12-Ø26	30	375	320	285	12-Ø30	34
250	730	3	425	370	335	12-Ø30	32	450	385	345	12-Ø33	38
300	850	4	485	430	395	16-Ø30	34	515	450	410	16-Ø33	42
350	980	4	555	490	450	16-Ø33	38	580	510	465	16-Ø36	46
400	1100	4	620	550	505	16-Ø36	40	660	585	535	16-Ø39	50

*Can be made with any type of flange

*Can be made with a different face-to-face length (L)

COUNTERWEIGHT CHECK VALVES

SERIES: 700 MODEL: 712

NOMINAL DIAMETER	DN40 ... DN1000
NOMINAL PRESSURE	PN10 ... PN63
PURPOSE	Backflow prevention
CONNECTION TYPE	Flanged, butt weld, wafer
MEDIUM TEMPERATURE	-80°C ... +600°C
MEDIUM	Water, steam, aggressive and non-aggressive liquids, petroleum products, oils, alkalis, acids



DESIGN FEATURES OF THE MODEL

- Full bore;
- For high-pressure applications;
- Easy maintenance;
- Wide selection of body and disc materials.

FLOW DIRECTION MEDIUM

-  Unidirectional
 Unidirectional (as indicated by the arrow on the body)

LEAKAGE CLASS

According to ISO 5208:
"A" - metal/metal.

GENERAL APPLICATIONS

Designed for operation with aggressive and non-aggressive media, including water, steam, hydrocarbons, and chemical mixtures. The valve operates automatically: the flap opens under the pressure of the flowing medium and closes with the help of a counterweight when the pressure drops or reverse flow occurs. The lever and weight mechanism ensures rapid and reliable closure, protecting the system from backflow and water hammer. No external actuation is required - the valve operates solely using the flow energy.

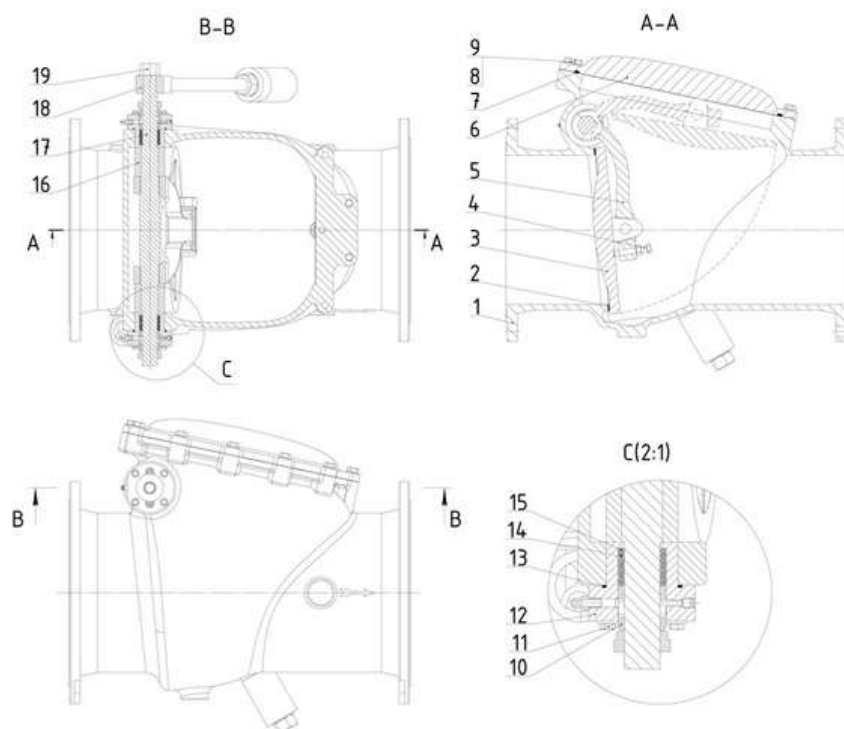
COMPLIANCE STANDARDS

Category		Standard
Product compliance		Directive PED 2014/68/EU
Manufacturing and designing		EN 16767, API 6D, API 594, ASME B16.34
Marking		EN 19
Leakage class		"A" ISO 5208
Testing		EN 12266-1, API 598
Connection	Face-to-face length	EN 558, ASME B16.10
	Flange dimensions	EN 1092-1, ASME B16.5, ASME B16.47
	Butt weld end dimensions	EN 12627, ASME B16.25

COUNTERWEIGHT CHECK VALVES

SERIES: 700 MODEL: 712

NOMINAL DIAMETER: **DN40 ... DN1000** NOMINAL PRESSURE: **PN10 ... PN63**



No	Name
1	Body
2	Seat
3	Disc
4	Bolt
5	Hinge
6	Body
7	Gasket
8	Bolt
9	Gasket
10	Shaft bushing
11	Bolt
12	Shaft fastening element
13	Gasket
14	Seal
15	O-ring
16	Retaining ring
17	Stem
18	Counterweight
19	Nut

MATERIALS OF THE MAIN COMPONENTS

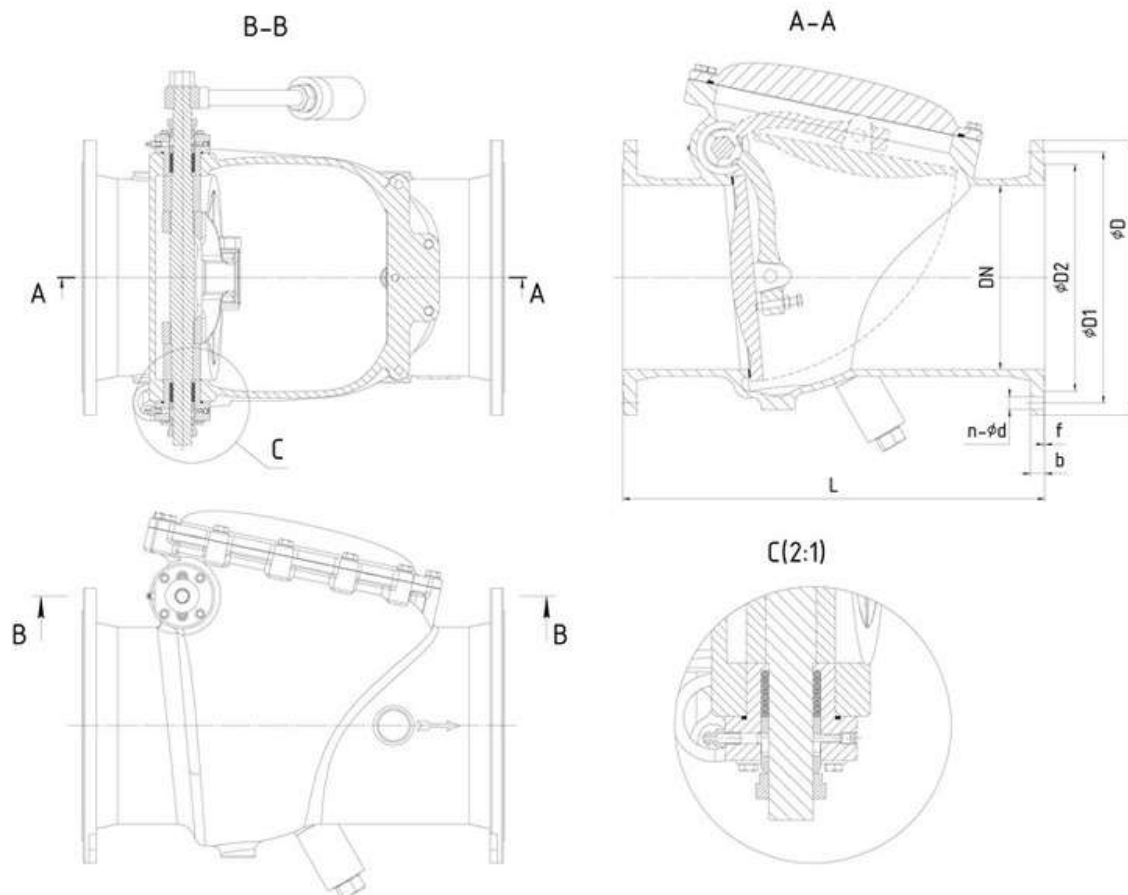
Name	Material	Medium temperature	Medium
Body	A216 WCB/1.0619	-29C...+425C	Water, steam, non-aggressive medium
	A217 WC6	-30C...+595C	Water, high-temperature steam, non-aggressive medium
	A352 LCB	-46C...+345C	Water, steam, non-aggressive medium (suitable for use at low ambient temperatures)
	A352 LC1	-80C...+340C	
	AISI304/1.4308	-80C...+600C	Water, steam, aggressive medium (depending on the exact material grade)
	AISI316/1.4408	-80C...+600C	
	AISI 904L/1.4539	-80C...+400C	Chemically aggressive medium (phosphoric acid, sulfuric acid, etc.)
	GGG50/EN-GJS-500-7	-20C...+400C	Water, steam, air, oil, non-corrosive medium
Disc	A216 WCB/1.0619	-29C...+425C	Water, steam, non-aggressive medium
	A217 WC6	-30C...+595C	Water, high-temperature steam, non-aggressive medium
	A352 LCB	-46C...+345C	Water, steam, non-aggressive medium (suitable for use at low ambient temperatures)
	A352 LC1	-60C...+340C	
	AISI304/1.4308	-60C...+540C	Water, steam, aggressive medium (depending on the exact material grade)
	AISI316/1.4408	-60C...+540C	
	AISI 904L/1.4539	-60C...+400C	Chemically aggressive medium (phosphoric acid, sulfuric acid, etc.)
	GGG50/EN-GJS-500-7	-20C...+400C	Water, steam, air, oil, non-corrosive medium

It can be manufactured from other materials according to the customer's technical requirements.

COUNTERWEIGHT CHECK VALVES

SERIES: 700 MODEL: 712

NOMINAL DIAMETER: **DN40 ... DN1000** NOMINAL PRESSURE: **PN10 ... PN63**



FLANGE FACING DIMENSIONS FOR PN10, PN16

DN	L (EN 558, series 48)	f	PN10					PN16				
			D	D1	D2	n- ϕd	b	D	D1	D2	n- ϕd	b
40	180	3	150	110	88	4- $\phi 18$	18	150	110	88	4- $\phi 18$	18
50	200	3	165	125	102	4- $\phi 18$	18	165	125	102	4- $\phi 18$	18
65	240	3	185	145	122	4- $\phi 18/8-\phi 18$	18	185	145	122	4- $\phi 18/8-\phi 18$	18
80	260	3	200	160	138	8- $\phi 18$	20	200	160	138	8- $\phi 18$	20
100	300	3	220	180	158	8- $\phi 18$	20	220	180	158	8- $\phi 18$	20
125	350	3	250	210	188	8- $\phi 18$	22	250	210	188	8- $\phi 18$	22
150	400	3	285	240	212	8- $\phi 22$	22	285	240	212	8- $\phi 22$	22
200	500	3	340	295	268	8- $\phi 22$	24	340	295	268	12- $\phi 22$	24
250	600	3	395	350	320	12- $\phi 22$	26	405	355	320	12- $\phi 26$	26
300	700	4	445	400	370	12- $\phi 22$	26	460	410	378	12- $\phi 26$	28
350	800	4	505	460	430	16- $\phi 22$	26	520	470	438	16- $\phi 26$	30
400	900	4	565	515	482	16- $\phi 26$	26	580	525	490	16- $\phi 30$	32
450	1000	4	615	565	532	20- $\phi 26$	28	640	585	550	20- $\phi 30$	40
500	1100	4	670	620	585	20- $\phi 26$	28	715	650	610	20- $\phi 33$	44
600	1300	5	780	725	685	20- $\phi 30$	34	840	770	725	20- $\phi 36$	54

* Tabulated values are available upon request for DN700–DN1000

COUNTERWEIGHT CHECK VALVES

SERIES: 700 MODEL: 712

NOMINAL DIAMETER: **DN40 ... DN1000** NOMINAL PRESSURE: **PN10 ... PN63**

FLANGE FACING DIMENSIONS FOR PN25, PN40

DN	L (EN 558, series 1)	f	PN25					PN40				
			D	D1	D2	n-Ød	b	D	D1	D2	n-Ød	b
40	200	3	150	110	88	4-Ø18	18	150	110	88	4-Ø18	18
50	230	3	165	125	102	4-Ø18	20	165	125	102	4-Ø18	20
65	290	3	185	145	122	8-Ø18	22	185	145	122	8-Ø18	22
80	310	3	200	160	138	8-Ø18	4	200	160	138	8-Ø18	24
100	350	3	235	190	162	8-Ø22	24	235	190	162	8-Ø22	24
125	400	3	270	220	188	8-Ø26	26	270	220	188	8-Ø26	26
150	480	3	300	250	218	8-Ø26	28	300	250	218	8-Ø26	28
200	600	3	360	310	278	12-Ø26	30	375	320	285	12-Ø30	34
250	730	3	425	370	335	12-Ø30	32	450	385	345	12-Ø33	38
300	750	4	485	430	395	16-Ø30	34	515	450	410	16-Ø33	42
350	850	4	555	490	450	16-Ø33	38	580	510	45	16-Ø36	46
400	950	4	620	550	505	16-Ø36	40	660	585	535	16-Ø39	50
450	1050	4	670	600	555	20-Ø36	46	685	610	560	20-Ø39	57
500	1150	4	730	660	615	20-Ø36	48	755	670	615	20-Ø42	57
600	1350	5	845	770	720	20-Ø39	58	890	795	735	20-Ø48	72

* Tabulated values are available upon request for DN700–DN1000

FLANGE FACING DIMENSIONS FOR PN63

DN	L (EN 558, series 2)	f	PN63				
			D	D1	D2	n-Ød	b
40	260	3	170	125	88	4-Ø22	28
50	300	3	180	135	102	4-Ø22	26
65	340	3	205	160	122	8-Ø22	26
80	380	3	215	170	138	8-Ø22	28
100	430	3	250	200	162	8-Ø26	30
125	500	3	295	240	188	8-Ø30	34
150	550	3	345	280	218	8-Ø33	36
200	650	3	415	345	285	12-Ø36	42
250	775	3	470	400	345	12-Ø36	46
300	900	4	530	460	410	16-Ø36	52
350	1025	4	600	525	465	16-Ø39	56
400	1150	4	670	585	535	16-Ø42	60

* Tabulated values are available upon request for DN450–DN1000

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