

## CATALOG25



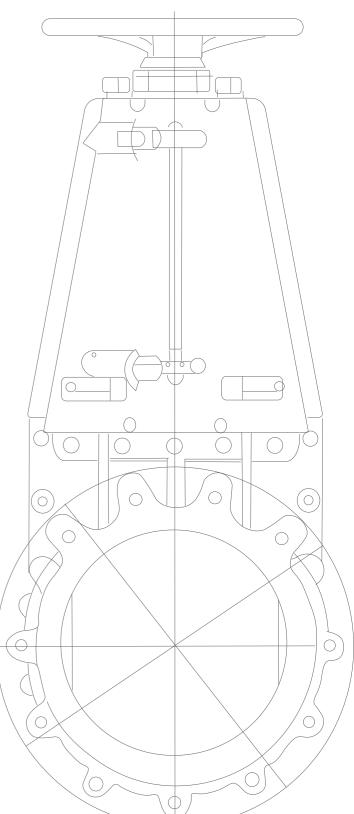


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# **Biotop**

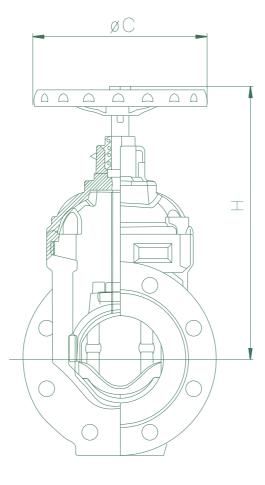
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## **EAZ EK Gate Valve Gulf Type** DN 40...600, PN 10...16





## **Description** EAZ EK

## **General data of Product**

Construction end-to-end dimension:

- Face-to-face length:

  ► Wide F5 row 1, series 15 according to EN558.
- ▶ Medium F3 row 2, series 3 according to EN 558.
- ▶ Short F4 row 3, series 14 according to EN 558.

Resilient-seated gate valve with bolted cover connection; Gulf-type made of special materials and with special coating. Proven design with innovative improvements, such as plastic sliding caps on the wedge, guarantee low operating torques even after many years of use. Suitable for use in water distribution, in power plants, in industry and in pressure management.

## **General technical data**

Nominal diameter DN	401200
Nominal pressure PN	PN 10 kgf/cm2, PN 16 kgf/cm2, PN 25 kgf/cm22. (PN 40 kgf/cm2 according to order)
Controlled fluid	Water, Wastewater, Sea water
Normal valve position	Fully open / Fully closed
Controlled fluid temperature, °C	0 +70°C
Pipeline connection	Flanged EN 1092-2
Tightness	A
Valve installation method	Well and non-well method
Valve type	With wedge locking element
Cosntruction type of the flow part of the product body	Fully ported

## **Placement categories**

Open air, chambers and wells with high humidity, in the ground, in enclosed spaces. At the customer's request, a valve with an electric drive (hydraulic drive, pneumatic drive) with a maximum moisture and dust protection rating of IP68 is supplied. The valves can be ordered in a version for non-drain installation. Construction is sealed. The valve can be located in flooded areas without the risk of liquid getting inside from the outside.

A variant with a heating cover is available.







Information about main part materials Scheme and dimensions:

Type of shaping of the product body	Cast				
Body	Ductile iron EN-GJS-400-15 (GGG-40), (Can be made from GGG-50, stainless steel)				
Cover	Ductile iron EN-GJS-400-15 (GGG-40), (Can be made from GGG-50, stainless steel)				
Wedge	Ductile iron EN-GJS-400-15 (GGG-40), (Can be made from GGG-50, stainless steel), elastomer coating EPDM (drinking water) or NBR (waste and industrial water). PTFE wedge guides.				
Bonnet bolts	SS201				
O-ring	O-rings (seals) made of EPDM elastomer (drinking water) or NBR (waste and industrial water).				
Stem	X20Ck13				
Spindle type	Non-retractable.				
Bonnet gasket	EPDM				
Brass nut	Brass BS2872/2874				
Gasket	SS201				
Bolt	SS201				
Type of coverage of the internal and external surfaces of the valve body	High-quality epoxy powder coverage layer thickness 300 microns, no pores, smooth surface.				

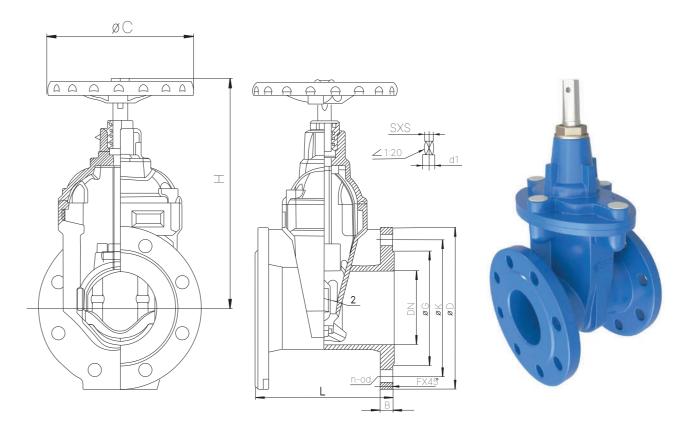
Doliobility	Average total resource, cycles (hours), not less than	12,000 cycles with electric control. 5000 cycles in manual mode.					
Reliability indicators	Probability of failure-free operation	depends on operating conditions and compliance with the manufacturer's recommendations on operating mode and maintenance frequency.					
Assigned	Specified time in service	up to 50 years.					
Assigned indicators	Assigned resource, cycles (hours)	up to 15,000 cycles with electrical control. up to 5000 cycles in manual mode.					

## Max. force on the flywheel, N (chr), no more than:

DN	40	50	65	80	100	125	150	200	250	300	350	400	500	600
Max. for,N	400	500	520	640	634,92	793,65	952,38	1000	1000	1200	1400	1269,84	1587,30	1666,67

## Resistance coefficient: in the "open" position for uncompressed liquid (water):

DN	40	50	65	80	100	125	150	200	250	300	400	500	600	600/500
Coeff.	0,2	0,17	0,15	0,13	0,12	0,12	0,11	0,1	0,09	0,07	0,04	0,02	0,01	0,02



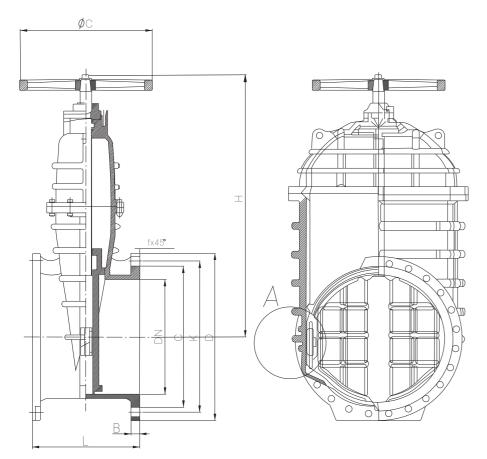
DN	40	50	65	80	100	125	150	200	250	300	350	400	450	500	600
PN	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
L\F4	140	150	170	180	190	200	210	230	250	270	290	310	330	350	390
L\F5	140	240	250	270	280	300	320	350	450	500	550	600	650	700	800
	150														
D	150	165	185	200	220	250	285	340	405	460	520	580	640	715	840
K	110	125	145	160	180	210	240	295	355	410	470	525	585	650	725
G	88	100	120	135	156	186	212	268	318	373	433	483	546	605	710
В	19	19	19	19	19	19	19	20	22	24,5	26,5	28	30	31,5	36
С	160	160	160	200	200	250	250	280	320	350	400	500	500	500	600
n-фd	4- ф19	4- ф19	4- ф19	8- ф19	8- ф19	8- ф19	8- ф23	12- ф23	12- ф28	12- ф28	16- ф28	16- ф31	20- ф31	20- ф34	20- ф37
f	3	3	3	3	3	3	3	3	3	3	3	4	4	4	5
Н	240	240	259	295	327	388	431	527	609	698	796	943	1032	1114	1259
Turns/ stroke	6,5	7	9	11	13,5	12,5	15	17	21	25	29,5	33	37,5	41,5	50
Weight PN16	8,2	9,2	12	14	18	24	31	50	77	107	183	228	320	394	580

DN	200	250	300	350	400	450	500	600
PN	10	10	10	10	10	10	10	10
L\F4	230	250	270	290	310	330	350	390
L\F5	350	450	500	550	600	650	700	800
D	340	405	460	520	580	640	715	840
K	295	350	400	460	515	565	620	725
G	268	318	370	430	480	528	582	680
В	20	22	24,5	26,5	28	30	31,5	36
С	280	320	350	400	500	500	500	600
n-Ød	8-ф23	12-ф23	12-ф23	16-ф23	16-ф28	20-ф28	20-ф28	20-ф30
	3	3	3	3	4	4	4	5
Н	527	609	698	796	943	1032	1114	1259
Turns/ stroke	17	21	25	29,5	33	37,5	41,5	50
Weight PN10	50	77	107	183	228	320	394	580

## Types of drives:

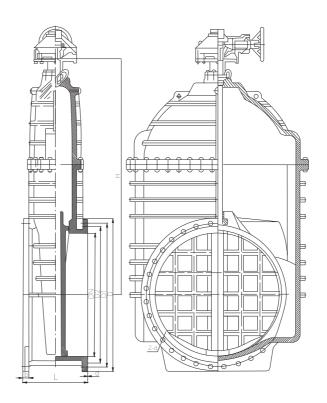
Manual (flywheel, rod), electric.

## **Drawing and dimensions**



DN	700	800	900		
PN	10	10	10		
L\F4	430	470	510		
L\F5	900	1000	1100		
D	910	1025	1115		
	840	950	1050		
G	797	909	1001		
В	39,5	43	46,5		
С	800	800	-		
n-Ød	24-ф31	24-ф34	28-Ф34		
	5	5	5		
Н	1492	1630	2018		
Turns/ stroke	43,8	50	52		
Weight PN10	-	1276	1600		

DN	700	800	900
PN	16	16	16
L\F4	430	470	510
L\F5	900	1000	1100
D	910	1025	1115
K	840	950	1050
G	797	909	1001
В	39,5	43	46,5
С	800	800	-
n-Ød	24-ф37	24-ф41	28-Ф39
f	5	5	5
Н	1492	1630	2018
Turns/ stroke	43,8	50	52
Weight PN16	-	-	-



DN	1000	1200	1000	1200
PN	10	10	16	16
L\F4	550	630	550	630
L\F5	1200	1400	1200	1400
D	1255	1485	1255	1485
D1	1160	1380	1170	1390
D2	1112	1112	1115	1115
Н	1825	2294	1825	2294
b	50	57	50	57
	5	5	5	5
Z-d	28-37	32-41	28-44	32-50
H1	60	80	60	80
Turns/ stroke	63,5	75	63,5	75
Weight	-	-	3050	4660

## **Electric drives:**

Version	General industrial / Explosion-proof
Voltage, V	den ands an
Power, kWt	depends on:  rotation speed of the drive output shaft (from 4 to 180 rpm),  type of electric motor (DC/AC, 2-/3-phase power supply, voltage)
Gear ratio Voltage, V	Find actuator manufacturer's documentation
Efficiency, %	

## **Test results:**

		Maximum	ı available	Test pressure:		
DN	PN	operating pressure, bar	operating temperature for water according to DVGW W270, °C	in a construction with water, bar	if closing with water, bar	
401200	16	16	50	24	17,6	
2001200	10	10	50	15	11	



## Manufacturer's warranty

The manufacturer guarantees the normal operation of original products, subject to the consumer's compliance with the operating, transportation, storage, and maintenance conditions specified in the instruction manual. The warranty period is 120 months from the date of installation, but not more than 126 months from the date of delivery, provided that it is used strictly for its intended purpose in the scope of application. Warranty obligations are valid only if the manufacturer's warranty seals are preserved and there are no traces of excessive external influence on the product. This warranty does not apply to consumable (wearable) materials, as well as to defects and damage resulting from improper storage, transportation, handling, unprofessional installation, violation of the operating instructions, untimely or insufficient maintenance tech, service and care.

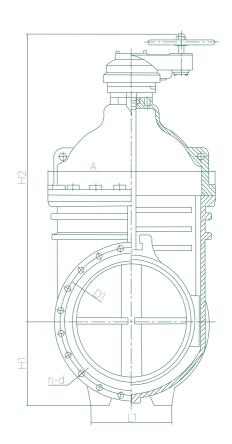
## Conservation

Store fittings in a clean, dry, ventilated area, away from heating devices. Elastomer parts (seals) should be protected from direct sunlight. The fittings can be stored at ambient temperatures from -20°C to +50°C (with appropriate packaging).

## EAZ MK F3

GGate valve EAZ MK F3 for wastewater with metal seal, flange, construction length is short, non-retractable spindle DN 350...1600, PN 10





**Description** Gate valve EAZ MK F3

**Functionality** For installation as a locking device on pipelines.

## Main characteristics

Construction end-to-end dimension:

Medium F3 – row 2, series 3 according to EN 558 (BS 5163).

Metallic-sealing gate valve with oval-type for waste-water applications. The zinc-free bronze seat rings and stem nut make it particularly resistant to media contained in waste water. Depending on its nominal diameter, it can also be used for pressures of up to 16 bar. Also suitable for industrial applications.

## **Technical details**

Nominal diameter DN	3501600
Nominal pressure PN	PN 10 kgf/cm2, PN 16 kgf/cm2, PN 25 kgf/cm2. (PN 40 kgf/cm2 according to order)
Controlled fluid	Water, Wastewater, Sea water
Normal valve position	Fully open / Fully closed
Controlled fluid temperature, °C	0 +70°C
Pipeline connection	Flanged EN 1092-2
Tightness	A

## **Placement categories**

Open air, chambers and wells with high humidity, in the ground, in enclosed spaces According to the customer's request, a valve with an electric drive (hydraulic drive, pneumatic drive) with a maximum

moisture and dust protection rating of IP68 is supplied.

The valves can be ordered in a version for non-drain installation. The construction is sealed. The valve can be located in flooded areas without the risk of liquid getting inside from the outside.

A variant with a heating jacket is available.

## **Materials of details**

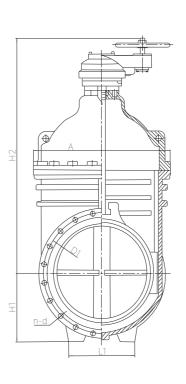
Body	Ductile iron EN-GJS-400-15 (GGG-40), (Can be made from GGG-50, stainless steel)
Bonnet	Ductile iron EN-GJS-400-15 (GGG-40), (Can be made from GGG-50, stainless steel)
Wedge	Ductile iron EN-GJS-400-15 (GGG-40), (Can be made from GGG-50, stainless steel). Wedge/housing seal type – metal/metal. Metal seal material – bronze/bronze, stainless steel/stainless steel). To reduce friction, the wedge has bronze inserts on the guides. Fastening of bronze inserts CuAl8 or CuSn12.
Cover screws	Stainless steel A2. (A4 version is possible).
Wedge seat, body	Bronze AB2
Stem	Stainless steel SS420
Bearing	Bronze
Noncorrosive coating	High quality epoxy coating 300 microns thick.

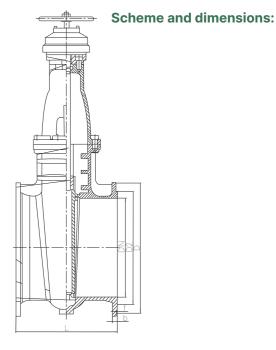
	Average full service life, years, not less	50 years			
Reliability indicators	Average total resource, cycles (hours), not less	12000 cycles with electric control 5000 cycles in manual mode			
	Probability of failure-free operation	depends on operating conditions and compliance with the manufacturer's recommendations on operating mode and maintenance frequency			
	Specified time in service	up to 50 years			
Assigned indicators	Assigned resource, cycles (hours)	up to 15000 cycles with electrical control up to 5000 cycles in manual mode			

### **Test results**

		Maxi		aximum allowed:	Test pressure:		
10		PN	working pressure, bar	operating temperature for neutral liquid, °C	in a construction with water, bar	if closing with water, bar	
35	501600	10	10	60	15	11	
35	501600	16	16	70	24	17	

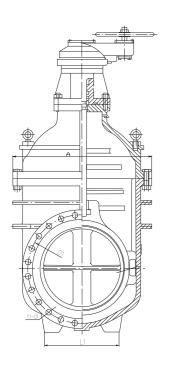


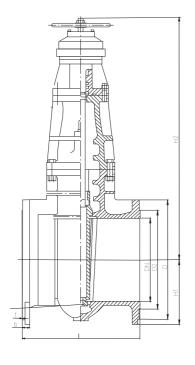




DN	PN	L	D	D1	D2	b	f	n-d	H1	H2	L1
350	10	381	505	460	429	24.5	4	16-ф23	546	976	270
400	10	406	565	515	480	24.5	4	16-ф28	606	1068	300
450	10	432	615	565	530	25.5	4	20-ф28	680	1180	330
500	10	457	670	620	582	26.5	4	20-ф28	730	1247	370
600	10	508	780	725	682	30	5	20-ф31	850	1416	430

DN	PN	L	D	D1	D2	b	f	n-d	H1	H2	L1
350	16	381	520	470	429	26.5	4	16-ф28	270	376	270
400	16	406	580	525	480	28	4	16-ф31	300	1068	300
450	16	432	640	585	548	30	4	20-ф31	330	1180	330
500	16	457	715	650	609	31.5	4	20-ф34	370	1247	370
600	16	508	840	770	720	36	5	20-ф37	430	1416	430







							_					
DN	PN	L	D	D1	D2	b	f	n-d	Α	L1	H1	H2
700	10	610	895	840	794	32.5	5	24-ф31	1156	495	495	1808
800	10	660	1015	950	901	35	5	24-ф34	1242	540	540	1953
900	10	711	1115	1050	1001	37.5	5	28-ф34	1423	600	645	2132
1000	10	811	1230	1160	1112	40	5	28-ф37	1448	680	680	2362
1200	10	960	1455	1380	1328	45	5	32-ф41	1625	800	800	2652
1400	10	960	1675	1590	1530	46	5	36-ф44	1860	870	870	2972
1600	10	1140	1915	1820	1750	49	5	40-ф50	2065	1000	1000	3380

DN	PN	L	D	D1	D2	b	f	n-d	А	L1	H1	H2
700	16	610	910	840	794	39.5	5	24-ф37	1156	495	495	1808
800	16	660	1025	950	901	43	5	24-ф41	1242	540	540	1953
900	16	711	1125	1050	1001	46.5	5	28-ф41	1423	600	645	2132
1000	16	811	1255	1170	1112	50	5	28-ф44	1448	680	680	2362
1200	16	960	1485	1390	1328	57	5	32-ф50	1625	825	825	2652
1400	16	960	1685	1590	1530	60	5	36-ф50	1860	870	870	3010
1600	16	1140	1930	1820	1750	65	5	40-ф57	2065	1000	1000	3410



The manufacturer guarantees the performance of original products, subject to the consumer's compliance with the operating, transportation, storage, and maintenance conditions specified in the instruction manual. The warranty period is 120 months from the date of installation, but not more than 136 months from the date of delivery, provided that it is used strictly for its intended purpose in the scope of application. Warranty obligations are valid only if the manufacturer's warranty seals are preserved and there are no traces of excessive external influence on the product. This warranty does not apply to consumable (wearable) materials, as well as to defects and damage resulting from improper storage, transportation, handling, unprofessional installation, violation of the operating instructions, untimely or insufficient maintenance. service and care.





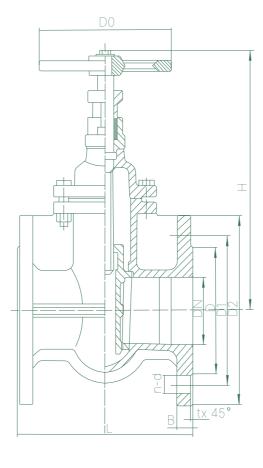
## Conservation

Store fittings in a clean, dry, ventilated area, away from heating devices. Elastomer parts (seals) should be protected from direct sunlight. The fittings can be stored at ambient temperatures from -20°C to +50°C (with appropriate packaging).

## **EAZ MK F4**

Gate valve EAZ MK F4 for wastewater with metal seal, flange, construction length is short, non-retractable spindle DN 50...1600, PN 10





**Description** Gate valve EAZ MK F4

Functionality For installation as a locking device on pipelines.

## **Main characteristics**

Construction end-to-end dimension:

Short F4 - row 3, series 14 according to EN 558.

Metallic-sealing gate valve with flat-type face-to-face length of Basic Series 14 for waste-water applications. The zinc-free bronze seat rings and stem nut make it particularly resistant to media contained in waste water. Also suitable for industrial applications

### General technical data

Nominal diameter DN	501600
Nominal pressure PN	PN 10 kgf/cm2
Controlled fluid	Water, Wastewater, Sea water
Normal valve position	Fully open / Fully closed
Controlled fluid temperature, °C	0 +70°C
Pipeline connection	Flanged EN 1092-2
Tightness	A

## **Placement categories**

Open air, chambers and wells with high humidity, in the ground, in enclosed spaces According to the customer's request, a valve with an electric drive (hydraulic drive, pneumatic drive) with a maximum moisture and dust protection rating of IP68 is supplied.

The valves can be ordered in a version for non-drain installation. The construction is sealed. The valve can be located in flooded areas without the risk of liquid getting inside from the outside.

A variant with a heating jacket is available.

## Information about main part materials

Body	Ductile iron EN-GJS-400-15 (GGG-40), (Can be made from GGG-50, stainless steel)
Bonnet	Ductile iron EN-GJS-400-15 (GGG-40), (Can be made from GGG-50, stainless steel)
Wedge	Ductile iron EN-GJS-400-15 (GGG-40), (Can be made from GGG-50, stainless steel). Wedge/housing seal type – metal/metal. Metal seal material – bronze/bronze, stainless steel/stainless steel). To reduce friction, the wedge has bronze inserts on the guides. Fastening of bronze inserts CuAl8 or CuSn12.
Cover screws	Stainless steel A2. (A4 version is possible).
Wedge seat, body	Bronze AB2
Stem	Stainless steel SS420
Bearing	Bronze
Noncorrosive coating	High quality epoxy coating 300 microns thick.

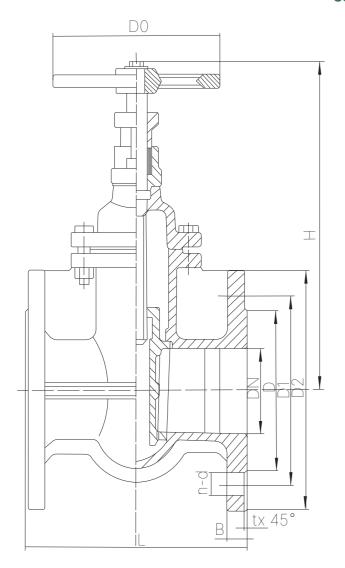
Acceptance Information
The images are approximate. The manufacturer reserves the right to make technical improvements and use similar materials or materials of higher quality.

Reliability indicators	Average full service life, years, not less	50 years
	Average total resource, cycles (hours), not less	12000 cycles with electric control 5000 cycles in manual mode
	Probability of failure-free operation	depends on operating conditions and compliance with the manufacturer's recommendations on operating mode and maintenance frequency
Aggiggad	Specified time in service	up to 50 years
Assigned indicators	Assigned resource, cycles (hours)	up to 15000 cycles with electrical control up to 5000 cycles in manual mode

## Test results

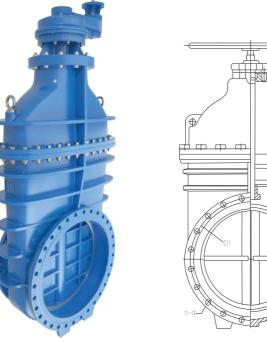
		Ma	aximum allowed:	Test pressure:				
DN	PN	working pressure, bar	operating temperature for neutral liquid, °C	in a construction with water, bar	if closing with water, bar			
501600	10	10	60	15	11			

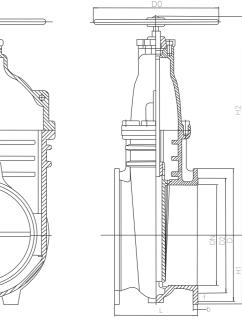
## **Scheme and dimensions:**



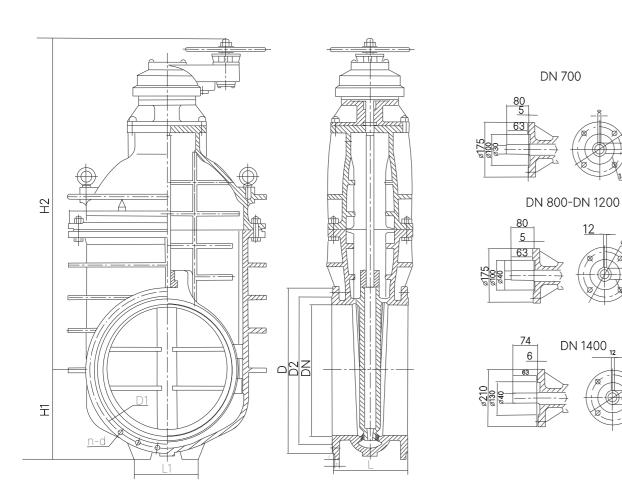
DN	PN	L	D	D1	D2	В	f	n-d	D0	No. of holes	Turns/ stroke	Weight
40	140	150	110	84	16	3	4- ф19	160	245	4	14	9,5
50	150	165	125	99	16	3	4- ф19	160	255	4	16	11
65	170	185	145	118	16	3	4- ф19	160	277	4	20	15,5
80	180	200	160	132	17	3	8- ф19	160	304	8	24	17
100	190	220	180	156	17	3	8- ф19	200	332	8	29	23
125	200	250	210	184	18	3	8- ф19	200	388	8	29	33,5
150	210	285	240	211	20	3	8- ф23	250	455	8	34	42
200	230	340	295	266	21	3	8- ф23	250	538	8	45	61,5
250	250	405	350	319	23	3	12- ф23	320	629	12	54	95
300	270	460	400	370	24	4	12- ф23	320	730	12	66	127

## Scheme and dimensions:





DN	PN	L	D	D1	D2	b	f	n-d	H1	H2	D0
350	10	290	505	460	429	24,5	4	16-ф23	275	860	460
400	10	310	515	515	480	24,5	4	16-ф28	320	954	460
450	10	330	565	565	530	25,5	4	20-ф28	335	1039	460
500	10	350	620	620	582	26,5	4	20-ф28	390	1120	640
600	10	390	725	725	682	30	5	20-ф31	456	1280	900



DN	PN	L	D	D1	D2	b	f	n-d	А	L1	H1	H2	T (Nm)
700	10	430	895	840	794	32.5	5	24-ф31	1136	480	480	1875	193
800	10	470	1015	950	901	35	5	24-ф34	1223	540	540	2037	159
900	10	510	1115	1050	1001	37.5	5	28-ф34	1396	600	645	2201	203
1000	10	550	1230	1160	1112	40	5	28-ф37	1468	700	680	2480	239
1200	10	630	1455	1380	1328	45	5	32-ф41	1625	800	800	2786	344
1400	10	710	1675	1590	1530	46	5	36-ф44	1860	870	870	3046	474
1600	10	790	1915	1820	1750	49	5	40-ф50	2065	1000	1000	3459	-

## Manufacturer's warranty

The manufacturer guarantees the performance of original products, subject to the consumer's compliance with the operating, transportation, storage, and maintenance conditions specified in the instruction manual. The warranty period is 120 months from the date of installation, but not more than 136 months from the date of delivery, provided that it is used strictly for its intended purpose in the scope of application. Warranty obligations are valid only if the manufacturer's warranty seals are preserved and there are no traces of excessive external influence on the product. This warranty does not apply to consumable (wearable) materials, as well as to defects and damage resulting from improper storage, transportation, handling, unprofessional installation, violation of the operating instructions, untimely or insufficient maintenance. service and care.





## Conservation

Store fittings in a clean, dry, ventilated area, away from heating devices. Elastomer parts (seals) should be protected from direct sunlight. The fittings can be stored at ambient temperatures from -20°C to +50°C (with appropriate packaging).



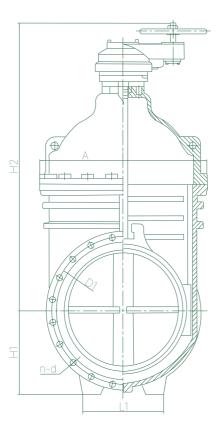


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## **EAZ MK F5**

Gate valve EAZ MK F5 for wastewater with metal seal, flange, construction length is short, non-retractable spindle DN 50...1600, PN 10





**Description** Gate valve EAZ MK F5

Functionality For installation as a locking device on pipelines.

### **Main characteristics**

Construction end-to-end dimension:

Wide F5 - row 1, series 15 according to EN558.

Metallic-sealing gate valve with oval-type face-to-face length of Basic Series 15 for waste-water applications. The zinc-free bronze seat rings and stem nut make it particularly resistant to media contained in waste water. Depending on its nominal diameter, it can also be used for pressures of up to 16 bar. Also suitable for industrial applications.

## **Technical details**

Nominal diameter DN	501600
Nominal pressure PN	PN 10 kgf/cm2,PN 16 kgf/cm2
Controlled fluid	Water, Wastewater, Sea water
Normal valve position	Fully open / Fully closed
Controlled fluid temperature, °C	0 +70°C
Pipeline connection	Flanged EN 1092-2
Tightness	A

## **Placement categories**

Open air, chambers and wells with high humidity, in the ground, in enclosed spaces According to the customer's request, a valve with an electric drive (hydraulic drive, pneumatic drive) with a maximum moisture and dust protection rating of IP68 is supplied.

The valves can be ordered in a version for non-drain installation. The construction is sealed. The valve can be located in flooded areas without the risk of liquid getting inside from the outside.

A variant with a heating jacket is available.

## **Materials of details**

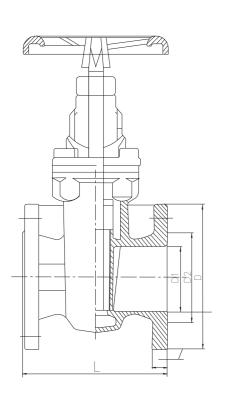
Body	Ductile iron EN-GJS-400-15 (GGG-40), (Can be made from GGG-50, stainless steel)
Bonnet	Ductile iron EN-GJS-400-15 (GGG-40), (Can be made from GGG-50, stainless steel)
Wedge	Ductile iron EN-GJS-400-15 (GGG-40), (Can be made from GGG-50, stainless steel). Wedge/housing seal type – metal/metal. Metal seal material – bronze/bronze, stainless steel/stainless steel). To reduce friction, the wedge has bronze inserts on the guides. Fastening of bronze inserts CuAl8 or CuSn12.
Cover screws	Stainless steel A2. (A4 version is possible).
Wedge seat, body	Bronze AB2
Stem	Stainless steel SS420
Bearing	Bronze
Noncorrosive coating	High quality epoxy coating 300 microns thick.

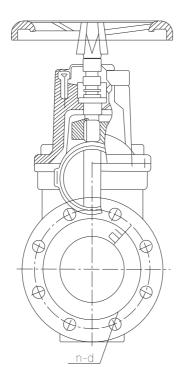
	Average full service life, years, not less	50 years
Reliability indicators	Average total resource, cycles (hours), not less	12000 cycles with electric control 5000 cycles in manual mode
	Probability of failure-free operation	depends on operating conditions and compliance with the manufacturer's recommendations on operating mode and maintenance frequency
A seignes al	Specified time in service	up to 50 years
Assigned indicators	Assigned resource, cycles (hours)	up to 15000 cycles with electrical control up to 5000 cycles in manual mode

## **Test results**

	PN	Ma	aximum allowed:	Test pressure:			
DN		working pressure, bar	operating temperature for neutral liquid, °C	in a construction with water, bar	if closing with water, bar		
501600	10	10	60	15	11		
501600	16	16	70	24	17		

## Scheme and dimensions:

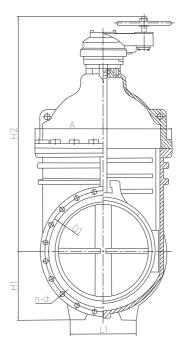


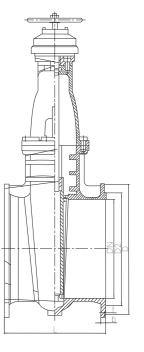


DN	PN	L	D	D1	D2	В	f	n-d	D0	Н	Turns/ stroke	Weight
40	16	240	150	110	84	16	3	4- ф19	160	245	14	11
50	16	250	165	125	99	16	3	4- φ19	160	255	16	13
65	16	270	185	145	118	16	3	4- ф19	160	277	20	18
80	16	280	200	160	132	17	3	8- ф19	160	304	24	21
100	16	300	220	180	156	17	3	8- ф19	200	332	29	28
125	16	325	250	210	184	18	3	8- ф19	200	388	29	40
150	16	350	285	240	211	20	3	8- ф23	250	455	34	50
200	16	400	340	295	266	21	3	12- ф23	250	538	45	82
250	16	450	405	350	319	23	3	12- ф28	320	629	54	125
300	16	500	460	400	370	24	4	12- ф28	320	730	66	167
200	10	400	340	295	266	21	3	8- ф23	250	538	45	62
250	10	450	405	350	319	23	3	12- ф23	320	629	54	95
300	10	500	460	400	370	24	4	12- ф23	320	730	66	127

## Scheme and dimensions:



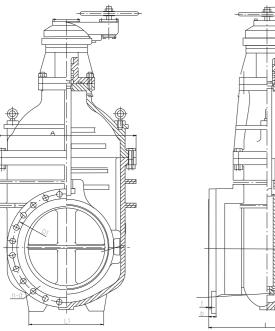


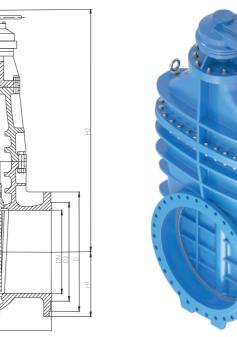


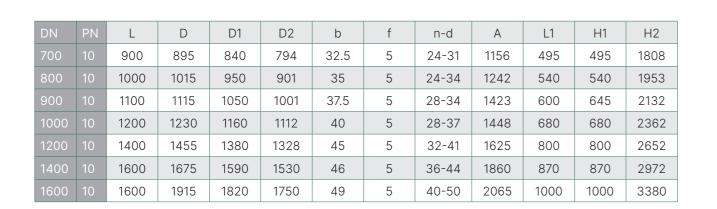
DN	PN	L	D	D1	D2	b	f	n-d	H1	H2	L1
350	10	550	505	460	429	24,5	4	16-23	270	976	270
400	10	600	565	515	480	24,5	4	16-28	300	1068	300
450	10	650	615	565	530	25,5	4	20-28	330	1180	330
500	10	700	670	620	582	26,5	4	20-28	370	1247	370
600	10	800	780	725	682	30	5	20-31	430	1416	430

DN	PN	L	D	D1	D2	b	f	n-d	H1	H2	L1
350	16	550	520	470	429	26,5	4	16-28	270	976	270
400	16	600	580	525	480	28	4	16-31	300	1068	300
450	16	650	640	585	548	30	4	20-31	330	1180	330
500	16	700	715	650	609	31,5	4	20-34	370	1247	370
600	16	800	840	770	720	36	5	20-37	430	1416	430

## Scheme and dimensions:













DN	PN	L	D	D1	D2	b	f	n-d	А	L1	H1	H2
700	16	900	910	840	794	39.5	5	24-37	1156	495	495	1808
800	16	1000	1025	950	901	43	5	24-41	1242	540	540	1953
900	16	1100	1125	1050	1001	46.5	5	28-41	1423	600	645	2132
1000	16	1200	1255	1160	1112	50	5	28-44	1448	680	680	2362
1200	16	1400	1485	1380	1328	57	5	32-50	1625	800	800	2652
1400	16	1600	1685	1590	1530	60	5	36-50	1860	870	870	3010
1600	16	1600	1930	1820	1750	65	5	40-57	2065	1000	1000	3410

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## Conservation

Store fittings in a clean, dry, ventilated area, away from heating devices. Elastomer parts (seals) should be protected from direct sunlight. The fittings can be stored at ambient temperatures from -20°C to +50°C (with appropriate packaging).

## Manufacturer's warranty

The manufacturer quarantees the performance of original products, subject to the consumer's compliance with the operating, transportation, storage, and maintenance conditions specified in the instruction manual. The warranty period is 120 months from the date of installation, but not more than 136 months from the date of delivery, provided that it is used strictly for its intended purpose in the scope of application. Warranty obligations are valid only if the manufacturer's warranty seals are preserved and there are no traces of excessive external influence on the product. This warranty does not apply to consumable (wearable) materials, as well as to defects and damage resulting from improper storage, transportation, handling, unprofessional installation, violation of the operating instructions, untimely or insufficient maintenance. service and care.



## **EAZ ZT**

Title Knife gate valve EAZ ZT for water and wastewater DN 50-2000, PN 10,8, 6, 4, 2, 1



**Designation** EAZ ZT

**Scope** For installation as a locking device on pipelines.

## Main characteristics

Face-to-face length: acc. to EN 558, basic series 20 (DIN 3202 / K1)

Resilient-seated knife-gate valve in fully flanged design, sealing in both flow directions, with integrated scraper system and free flow passage. Operation via handwheel. The enlarged bottom seal and the metallic limit stop of the knife in the body ensure perfect tightness. Suitable for use as shut-off valve in waste-water applications, in dams, in power plants and in industry.

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**Technical data** 

Nominal diameter DN	502000
Nominal pressure PN	PN 10 kgf/cm <sup>2</sup> , PN 8 kgf/cm <sup>2</sup> , PN 6 kgf/cm <sup>2</sup> , PN 4 kgf/cm <sup>2</sup> , PN 2 kgf/cm <sup>2</sup>
Controlled fluid	Water, Wastewater, Sea water
Normal shutter position	Fully open / Fully closed.
Working environment temperature, °C	0 +70°C.
Connection to the pipeline	With flange end acc. to EN 1092-2, PN 10
Tightness	Class A

## **Placement categories**

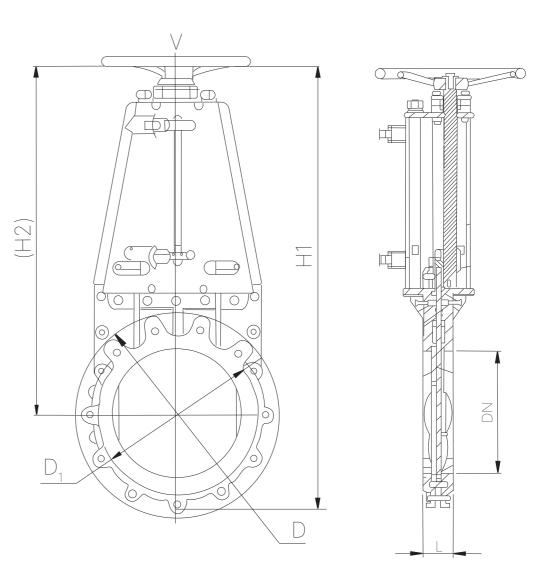
Open air, chambers and wells with high humidity, in the ground, in enclosed spaces. At the customer's request, a valve with an electric drive (hydraulic drive, pneumatic drive) with a maximum moisture and dust protection rating of IP68 is supplied.

## Information about materials of main parts

Body parts, bearing plate and gland	Ductile iron EN-GJS-400-15 (GGG-40)
Knife	SS304
Cover screws	Stainless steel A2. (A4 version is possible)
Spindle seal	O-rings (oil seals) made of NBR elastomer
Steam	2Cr13
Seal	PTFE
Stuffing box	Carbon steel FOCT1050-2013.
Bearing	GCr15
Corrosion protection	High quality epoxy coating layer thickness 300 microns, no pores, smooth surface

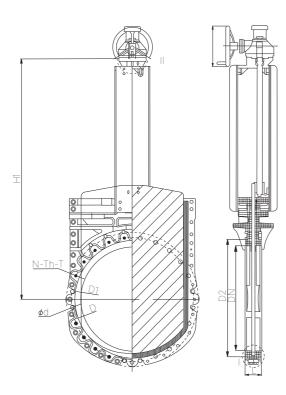
	Average total service life, years, not less than	20 years
Reliability indicators	Average total resource, cycles, not less than	1000 - in manual mode; 8000 - with electric control.
Indicators	Failure-free operation	The probability of failure-free operation depends on operating conditions and compliance manufacturer's recommendations for operation and maintenance.  Operation only in non-cavitation mode!
Assigned	Assigned service lifecycle	Up to 50 years.

## Scheme and dimensions:



DN	PN	L, mm	D, mm	D1, mm	D2, mm	V, mm	N-th	•	0	H1, mm	H2, mm	Weight
50	10	40	165	125	99	180	4-M16	4		369	292	6
65	10	40	185	145	118	200	4-M16	4		405	321	7
80	10	50	200	160	132	220	8-M16	4	4	433	343	9
100	10	50	220	180	156	240	8-M16	4	4	491	393	12
125	10	50	250	210	184	260	8-M16	2	6	593	470	17,5
150	10	60	285	240	211	280	8-M20	2	6	651	512	23
200	10	60	340	295	266	300	8-M20	2	6	774	608	33
250	10	70	405	350	319	320	12-M20	4	8	933	738	48
300	10	70	445	400	370	350	12-M20	4	8	1065	840	62
350	10	80	505	460	429	400	16-M20	6	10	1222	970	87
400	8	80	565	515	480	450	16-M24	6	10	1323	1040	104





						I			I	I			
DN	PN	L, mm	D, mm	D1, mm	D2, mm	DO, mm	N-th	Т	•	0	d, mm	H1, mm	ISO-I
450	8	89	615	565	530	450	20-M24	20	12	8	Ø27	1090	F12
500	6	114	670	620	582	450	20-M24	24	14	6	Ø27	1198	F14
550	6	114	725	680	638	450	20-M27	27	14	6	Ø30	1350	F14
600	6	114	780	725	682	500	20-M27	27	14	6	Ø30	1406	F16
700	4	127	895	840	794	500	24-M27	27	18	6	Ø30	1560	F16
800		127	1015	950	901	600	24-M30	30	18	6	Ø33	1871	F20
900	2.5	127	1115	1050	1001	600	28-M30	30	22	6	Ø33	2060	F20
1000	2.5	149	1230	1160	1112	600	28-M33	35	22	6	Ø36	2210	F20
1200	2	156	1455	1380	1328	600	32-M36	36	24	8	Ø39	2660	F25
1400	2	171	1675	1590	1530	600	36-M39	39	24	12	Ø42	3150	F30
1600	1	198	1915	1820	1750	700	40-M45	45	28	12	Ø48	3420	F30
1800	1	219	2115	2020	1950	700	44-M45	45	32	12	Ø48	3420	F30
2000	1	250	2325	2230	2150	700	48-M45	45	36	12	Ø48	4310	F30

## Manufacturer's warranty

The manufacturer guarantees the normal operating of original products, subject to the consumer's compliance with the operating, transportation, storage and maintenance conditions specified in the instruction guide. The warranty period is 120 months from the date of installation, but not more than 136 months from the date of delivery, subject to intended use in the scope of application.

Warranty obligations are valid only if the manufacturer's warranty seals are preserved and there are no traces of unauthorized intervention or excessive external influence on the product. This warranty does not apply to consumables materials, including seals, as well as defects and damage resulting from improper storage, transportation, handling, unprofessional installation, violation of operating instructions and safety regulations, untimely or insufficient maintenance and care.

## **Preservation information**

Store fittings in a clean, dry, ventilated area, away from heating devices. Elastomer parts (seals) should be protected from direct sunlight. The fittings can be stored at ambient temperatures from -20°C to +50°C (with appropriate packaging)/

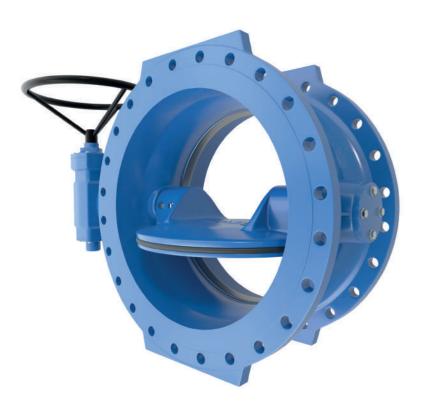


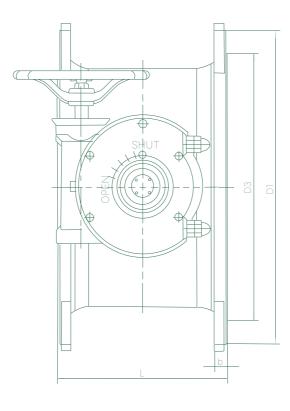


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## **EAZ EKT**

Title Butterfly Valve EAZ EKT for water DN 100...4000, PN 10...16





**Description** EAZ EKT

**Description** For installation as a shut-off device on pipelines.

## **General description**

Construction end -to-end length: Short F4 - EN 558-1, row 14 (DIN 3202, F4)

Double eccentric disc. The disc mounting sleeve requires no maintenance.

Body seat – high-alloy polished surfacing; protected from displacement, wear- and corrosion-resistant.

The profile seal on the disc can be replaced without removing the disc.

With self-locking, fully enclosed, maintenance-free worm gear with mechanical position indicator.

Vacuum tightness up to 1 torr.

## **Technical data**

Valve type	Double-offset flanged butterfly valve (resilient-seated)
Construction Type of design of the flow part	Partial flow area
Nominal diameter DN	1002000 (22004000 on request)
Nominal pressure PN	PN 10 kgf/cm², PN 16 kgf/cm², PN 25 kgf/cm². (PN 40 kgf/cm² according to order)
Controlled fluid	Water, Wastewater, Sea water
Normal shutter position	Fully open / Fully closed
Working environment temperature, °C	0 +70°C
Pipeline connection	Flange EN 1092-2
Tightness according, class	A

## **Placement category**

Open air, chambers and wells with high humidity, in the ground, in enclosed spaces. At the customer's request, a product is supplied with a maximum moisture and dust protection rating of the gearbox and electric drive IP68.

## **Materials**

Construction	Ductile iron EN-GJS-400-15 (GGG-40), (Can be made from GGG-50, stainless steel)
Cover	Ductile iron EN-GJS-400-15 (GGG-40), (Can be made from GGG-50, stainless steel)
Disc	Ductile iron EN-GJS-400-15 (GGG-40), (Can be made from GGG-50, stainless steel), EPDM elastomer coating (drinking water) or NBR (waste and process water)
Disc	Elastomer coating EPDM (drinking water) or NBR (waste and process water
Seal rings	EPDM
Shaft	20Cr13
Bush	SF-2
Packing	PTFE
Type of coating of product elements	High-quality epoxy powder coating layer thickness 300 microns, no pores, smooth surface.
Gearbox type	Worm. The design of the gearbox prevents rotation of the disk.

Reliability	Average total resource, cycles (hours), at least	20,000 cycles with electric control and 5000 cycles in manual mode
indicators	The probability of failure-free operation	Depends on operating conditions and compliance with the manufacturer's recommendations on operating mode and maintenance frequency.
Aggiorgad	Assigned service life	up to 50 years.
Assigned indicators	Assigned resource, cycles (hours)	up to 42,000 cycles in electrical control and 5,000 cycles in manual mode.

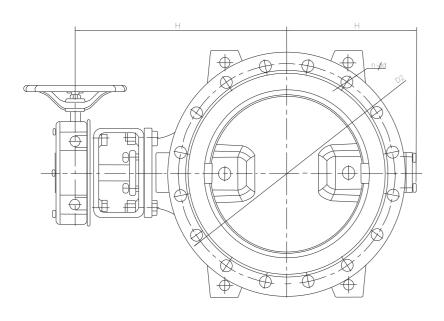
## Max. force on the flywheel, N (kgf), no more

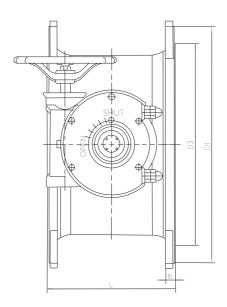
H/DN	150	200	250	300	350	400	450	500	600	700	800	900	1000	1100	1200
PN 10	60	110	150	240	300	360	430	540	690	290	400	310	400	390	360
PN 16	90	150	240	300	370	390	570	790	310	460	390	450	330	-	510

## Resistance coefficient: measured in the «open» position for an uncompressed liquid (water):

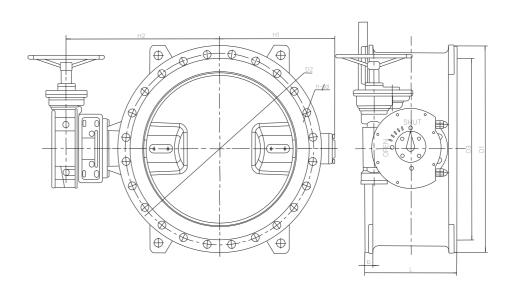
H/DN	150	200	250	300	350	400	450	500	600	700	800	900	1000	1200	1400	1600
PN 10	0,6	0,55	0,45	0,4	0,35	0,3	0,45	0,4	0,4	0,38	0,3	0,3	0,29	0,55	0,2	0,15
PN 16	0,6	0,55	0,45	0,4	0,35	0,5	0,45	0,5	0,46	0,41	0,38	0,36	0,34	0,55	0,3	0,25

## Scheme and dimensions:

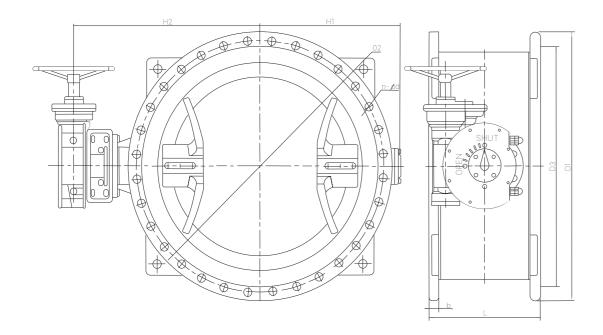




DN	L	D	)1	D	2	D	3	k	)	n-	Ød	H1	H2		rns/ oke	Wei	ight
		PN10	PN16	PN10	PN16	PN10	PN16	PN10	PN16	PN10	PN16			PN10	PN16	PN10	PN16
100	190	-	-	220	220	180	180	19	19	8- Ø23	8- Ø23	110	180	-	-	-	-
150	210	285	285	240	240	211	211	19	19	8- Ø23	8- Ø23	170	285	-	-	38	40
200	230	340	340	295	295	266	266	20	20	8- Ø23	12- Ø23	196	310	25	15	50	54
250	250	395	405	350	355	319	319	22	22	12- Ø23	12- Ø28	216	345	31	24	75	81
300	270	445	460	400	410	370	370	24,5	24,5	12- Ø23	12- Ø28	245	390	36	32	105	109
350	290	505	520	460	470	429	429	24,5	26,5	16- Ø23	16- Ø28	285	435	63	45	128	141
400	310	565	580	515	525	480	480	24,5	28	16- Ø28	16- Ø31	315	525	75	60	183	196
450	330	615	640	565	585	530	548	25,5	30	20- Ø28	20- Ø31	335	540	75	24	210	224
500	350	670	715	620	650	582	609	26,5	31,5	20- Ø28	20- Ø34	360	585	75	31	249	319



	DN L	L		D1		D2		D3		b		n-Ød		H2		Turns/ stroke		ight
			PN10	PN16	PN10	PN16	PN10	PN16	PN10	PN16	PN10	PN16			PN10	PN16	PN10	PN16
	600	390	780	840	725	770	682	720	30	36	20- Ø31	20- Ø37	425	745	46	75	366	454
	700	430	895	910	840	840	794	794	32,5	39,5	24- Ø31	24- Ø37	490	825	41	135	501	617
	800	470	1015	1025	950	950	901	901	35	43	24- Ø34	24- Ø40	552	900	52	135	737	791
9	900	510	1115	1125	1050	1050	1001	1001	37,5	46,5	28- Ø34	28- Ø40	600	965	70	70	873	1030



DN	L	D1		D2		D3		b		n-Ød		H1	H2	Turns/ stroke		Weight	
		PN10	PN16	PN10	PN16	PN10	PN16	PN10	PN16	PN10	PN16			PN10	PN16	PN10	PN16
1000	550	1230	1255	1160	1170	1112	1112	40	50	28- Ø37	28- Ø43	665	1105	80	68	1014	1153
1200	630	1455	1485	1380	1390	1328	1328	45	57	32- Ø40	32- Ø49	790	1270	96	73	1743	1815
1400	710	1675	1685	1590	1590	1530	1530	46	60	36- Ø43	36- Ø49	915	1395	130	118	3130	3235
1600	790	1915	1930	1820	1820	1750	1750	49	65	40- Ø49	40- Ø56	1045	1690	180	113	4000	4254
1800	870	2115	2130	2020	2020	1950	1950	52	70	44- Ø49	44- Ø56	1160	1450	-	-	5895	6527
2000	950	2325	2345	2230	2230	2150	2150	55	75	48- Ø49	48- Ø62	1315	1680	-	-	7000	8100

Types of drives:

Manual (flywheel, rod), electric

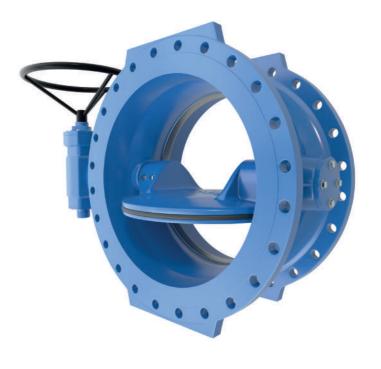
## **Electric drives**

Version	General industrial / Explosion-proof
Voltage, V	depends on:  ▶ rotation speed of the drive output shaft (from 4 to 180 rpm),  ▶ type of electric motor (DC/AC, 2-/3-phase power supply, voltage) See actuator manufacturer's documentation

<sup>\*</sup> Possible configuration with AUMA drives or equivalent For complete drive data, see the drive manufacturer's documentation.

### **Test results**

		Maxim	um permissible	Test pressure:			
DN	PN	operating pressure, bar	operating temperature for neutral liquid, °C	in a construction with water, bar	at closing with water, bar		
1501600	16	16	50	24	18		
2001600	10	10	50	15	11		





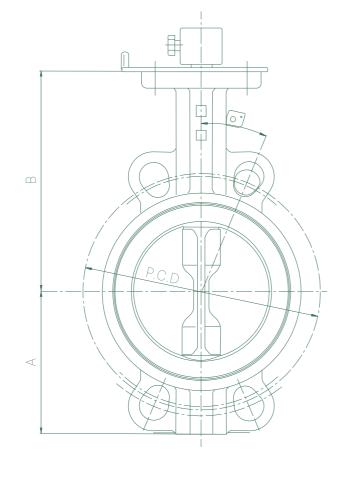
## Manufacturer's warranty

The manufacturer guarantees the operating of original products, subject to the consumer's compliance with the operating, transportation, storage and maintenance conditions specified in the instruction manual. The warranty period is 120 months from the date of installation, but not more than 136 months from the date of delivery, subject to intended use in the scope of application. Warranty obligations are valid only if the manufacturer's warranty seals are preserved and there are no traces of unauthorized intervention or excessive external influence on the product. This warranty does not apply to consumables (wear and tear) materials, including seals, as well as defects and damage resulting from improper storage, transportation, handling, unprofessional installation, violation of operating instructions and safety regulations, untimely or insufficient maintenance and care.

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# **EAZ CRX**Title Butterfly Valve CRX for water DN 50...600, PN 10...16





**Description** EAZ CRX

**Functionality** For installation as a locking device on pipelines.

## **General description**

Construction end-to end dimension (DIN 3202 / K1) series 20 according to EN558.

Flange connection as for PN 10 EN 1092-2.

Resilient-seated, wafer-type butterfly valve for flange mounting between pipeline flanges; disk with centric bearing; suitable for use in water applications. With replaceable liner mounted on a vulcanised seal carrier ring, and disk with triple bearing. Suitable for use in water treatment, water distribution, in dams, power plants and in industry.

## General technical data

Nominal diameter	40600 (7001400 according to order)
Nominal pressure	PN 10 kgf/cm2, PN 16 kgf/cm2, PN 25 kgf/cm2. (PN 40 kgf/cm2 according to order)
Controlled fluid	Water, Wastewater, Sea water
Normal valve position	Fully open / Fully closed
Controlled fluid temperature, °C	0 +70°C
Pipeline connection	Flanged EN 1092-2
Tightness in accordance type	A
Max. flow rate when disk is open	PN 10 - 3 m/s PN 16 - 4 m/s

## Placement category:

Open air, chambers and wells with high humidity, in the ground, in enclosed spaces. At the customer's request, a product is supplied with a maximum moisture and dust protection rating of the gearbox and electric drive IP68.

## Information about main part materials

Body	Ductile iron EN-GJS-400-15 (GGG-40), (Can be made from GGG-50, stainless steel)
Disk	Ductile iron EN-GJS-400-15 (GGG-40), (Can be made from GGG-50, stainless steel)
Sealing cup	EPDM (rubber based on a copolymer of ethylene, propylene and diene monomer)
Shaft	SS416
Seat	SS416
Noncorrosive coating:	High-quality epoxy coating layer thickness 300 microns, no pores, smooth surface.

		Average full service life, years, not less	10 years				
	Reliability indicators	Average total resource, cycles (hours), not less than	up to 5000 cycles in electrical control and 500 cycles in manual mode				
		Probability of failure-free operation	depends on operating conditions and compliance manufacturer's recommendations on operating mode and maintenance frequency				
Assissa	a al	Specified time in service	up to 50 years				
Assigne indicate		Assigned resource, cycles (hours)	up to 5000 cycles in electrical control and 500 cycles in manual mode				

Acceptance Information
The images are approximate. The manufacturer reserves the right to make technical improvements and use similar materials or materials of higher quality.

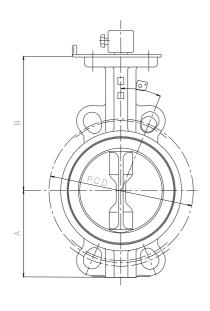
## Max. force on the lever (PN 10-16 DN 50-200), on the gearbox (PN 10-16 DN 250-600), N, no more

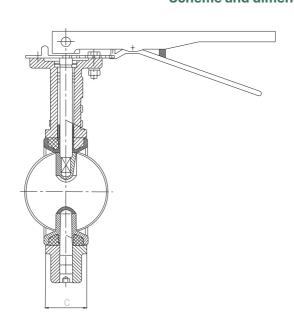
H/DN	50	65	80	100	125	150	200	250	300	350	400	450	500	600
PN 10	36	80	125	156	289	300	500	320	267	447	547	357	540	500
PN 16	45	80	134	178	356	367	634	380	333	473	725	440	640	566

## Resistance coefficient: measured in the «open» position for an uncompressed liquid (water):

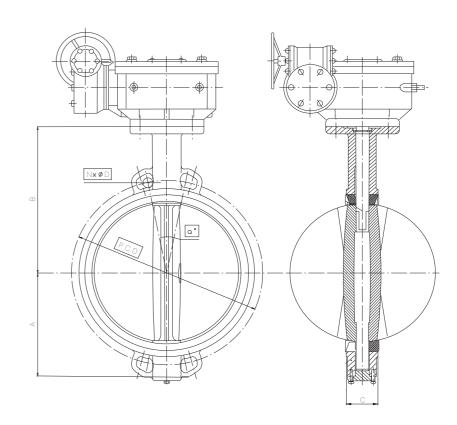
DN	50	65	80	100	125	150	200	250	300	350	400	450	500	600
Coeff	30	03	80	100	123	130	200	230	300	330	400	430	300	000
PN 10/16	0,78	0,95	0,96	0,7	0,41	0,28	0,32	0,33	0,30	0,29	0,29	0,28	0,27	0,26

## **Scheme and dimensions:**





DN	PN	А	В	С	P.C.D	4-ØD	0	Weight
50	16	72,5	130,5	43	Ø125	4-Ø19	45	2,5
65	16	77,5	146,5	46	Ø145	4-Ø19	45	3,1
80	16	92	156	46	Ø160	4-Ø19	22,5	4
100	16	109	168,5	52	Ø180	4-Ø19	22,5	5,1
125	16	127	190,5	56	Ø210	4-Ø19	22,5	7
150	16	141	213,5	56	Ø240	4-Ø23	22,5	8,9
200	16	166	246,5	60	Ø295	4-Ø23	15	18,5
250	16	203	283	68	Ø355	4-Ø28	15	22,3
300	16	236	318	78	Ø410	4-Ø28	15	34,8



DN	PN	А	В	С	P.C.D	4-ØD	0	Weight
350	10	272	327	78	Ø460	4-Ø23	11,25	48
400	10	304	405	85	Ø515	4-Ø28	11,25	68
450	10	335	409	105	Ø565	4-Ø28	9	112
500	10	368	460	129	Ø620	4-Ø28	9	147
600	10	428	516	152	Ø725	4-Ø31	9	230

DN	PN	А	В	С	P.C.D	4-ØD	0	Weight
350	16	272	327	78	Ø470	4-Ø28	11,25	43
400	16	304	405	85	Ø525	4-Ø31	11,25	62
450	16	335	409	105	Ø585	4-Ø31	9	90
500	16	368	460	129	Ø650	4-Ø34	9	125
600	16	428	516	152	Ø770	4-Ø37	9	185

## Types of drives:

Manual (handle, gear), electric (AUMA)

### **Electric drives**

Version	General industrial / Explosion-proof
Voltage, V	
power, kWt	depends on:  rotation speed of the drive output shaft (from 4 to 180 rpm),
Gear ratio	<ul> <li>r'otation speed of the drive output shaft (from 4 to 180 rpm),</li> <li>type of electric motor (DC/AC, 2-/3-phase power supply, voltage) See actuator manufacturer's documentation</li> </ul>
Efficiency, %	

## Data on electric drives installed on gates:

Complete actuator data can be found in the actuator manufacturer's documentation. Documentation is included with the drive upon delivery.

## **Test results**

	PN		Maximum available	Test pressure:			
DN		operating pressure, bar	Slice steel: working temperature for neutral liquid, °C	dci slice: working temperature for neutral liquid, °C	in a construction with water, bar	if closing with water, bar	
50600	16	16	100	70	24	18	
200600	10	10	100	70	15	11	



## Manufacturer's warranty

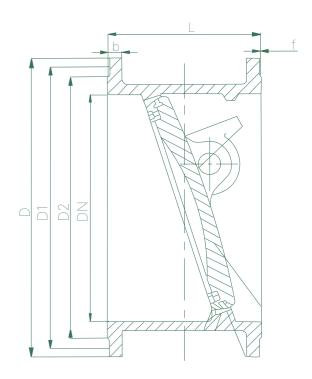
The manufacturer guarantees the performance of the products provided that the consumer complies with the operating, transportation, storage and maintenance conditions specified in the operating instructions.

The warranty period is 120 months from the date of commissioning, but not more than 136 months from the date of shipment.

Warranty obligations are valid only if the manufacturer's warranty seals are preserved and there are no traces of excessive external influence on the product.

# EAZ SMR Slanted Seat Tilting disk check valve DN 200...1600, PN 10...16





**Description** EAZ SMR

**Purpose** To prevent backflow of media in pipelines

## Main characteristics

Face-to-face length:

Short F4 – row 3 in accordance with ΓΟCT 3706-93 "Valves. Construction lengths», series 14 according to EN 558.

Metallic-sealing non-return valve with slanted seat for reducing the closing time and with specially shaped disk that supports the opening movement. Also available with internal damping unit for the reduction of pressure surges. The prerequisite for trouble-free operation is a minimum flow velocity of 1.5 m/s in the customer's plant. Suitable for use in water treatment applications, water distribution, in pretreated sewage, in power plants and in industry.

## **Technical details**

Nominal diameter DN according to ΓΟCT 28338-89 "Pipeline connections and fittings. Nominal diameters. Rows"	2001600.
Nominal pressure PN according to FOCT 26349-84 "Pipeline connections and fittings. Nominal (conditional) pressures. Rows"	PN 10 kgf/cm², PN 16 kgf/cm², PN 25 kgf/cm². (PN 40 kgf/cm² according to order)
Controlled fluid	Water, Wastewater, Sea water
Normal valve position	Fully open / Fully closed
Controlled fluid temperature, °C	0+70°C.
Pipeline connection	Flanged EN 1092-2
Tightness	A
Max. flow rate (stable)	PN 10 – 3 m/s; PN 16 – 4 m/s.
Minimum flow rate when mounting the valve in a vertical position	1,6 m/s.
Pressure drop across closed disk	No more than the maximum permissible operating pressure.
Noncorrosive coating	High-quality epoxy coating layer thickness 300 microns, no pores, smooth surface.

## **Placement category**

Open air, chambers and wells with high humidity, in the ground, in enclosed spaces (nominal values of climatic factors according to  $\Gamma$ OCT 15150-69 "Machines, instruments and other technical products. Designs for various climatic regions. Categories, operating conditions, storage and transportation in part of the impact of environmental climatic factors» for YXЛ 5 conditions, at ambient temperatures from 0 to 40 ° C).





## **Materials**

Construction	Ductile iron EN-GJS-400-15 (GGG-40) in accordance with GOST 7293-85 "Cast iron with nodular graphite for castings. Stamps." (Can be made from GGG-50, stainless steel).
Slice	Ductile iron EN-GJS-400-15 (GGG-40) in accordance with GOST 7293-85 "Cast iron with nodular graphite for castings. Stamps." (Can be made from GGG-50, stainless steel). High-quality epoxy coating layer thickness of at least 250 microns.
Shaft	Stainless steel steel 40X13 according to FOCT 5949-75
Shaft bearing	Zinc-free bronze
Seating	Surfacing made of steel 08X18H10, super clean processing

	Reliability indicators	Average total lifecycle, years, not less than	50 years			
		Average total resource, cycles, not less than	5000 cycles			
		Probability of failure-free operation	depends on operating conditions and compliance with the manufacturer's recommendations for operating mode and frequency of maintenance. service			
	Assigned	Specified time in service	up to 50 years			
	indicators	Assigned resource, cycles	up to 1000 cycles			

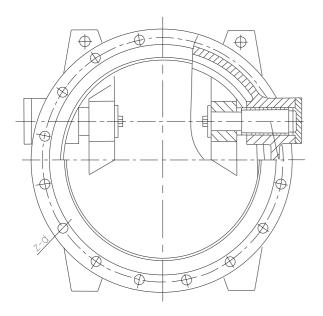
DN	200	250	300	350	400	450	500	600	700	800	900	1000	1200
ζ- number (Standard)	1,5	1,4	1,3	1,2	1,1	1,0	0,9	0,8	0,8	0,7	0,7	0,6	0,55
ζ - number (With damper)	1,8	1,7	1,6	1,5	1,4	1,3	1,2	1,1	1,0	0,9	0,9	0,8	0,7

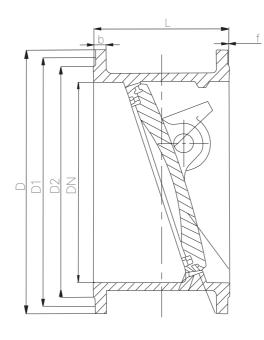
## Resistance coefficient in the "open" position for uncompressed liquid (water):

## Test results

DN	PN	Ма	ximum available:	Test pressure:		
		operating pressure, bar	operating temperature for neutral liquid, °C	in a construction with water, bar	if closing with water, bar	
2001600	16	16	50	24	17,6	
2001600	10	10	50	15	11	

## **Scheme and dimensions:**





DN	PN	L	D	D1	D2	b	Z-d	Weight
200	16	230	340	295	266	20	12-ф23	40
250	16	250	400	355	-	22	12-ф28	65
300	16	270	460	410	370	24,5	12-ф28	83
350	16	290	520	470	-	26,5	16-ф28	118
400	16	310	580	525	480	28	16-ф31	145
450	16	330	640	585	-	31,5	20-ф31	210
500	16	350	715	650	609	31,5	20-ф34	250
600	16	390	840	770	682	36	20-ф37	365
700	16	430	910	840	794	39,5	24-ф37	470
800	16	470	1025	950	901	43	24-ф40	750
900	16	510	1125	1050	1001	46,5	28-ф41	980
1000	16	550	1255	1170	1112	50	28-ф44	1250
1200	16	630	1485	1390	1328	57	32-ф50	1520
1400	16	710	1685	1590	1530	60	36-ф50	2250
1600	16	790	1930	1820	1750	65	40-φ57	-

DN	DNI	1	Б	D1	DO	h	7 d	Doo
DN	PN	L	D	D1	D2	b	Z-d	Bec
200	10	230	340	295	266	20	8-Ø23	40
250	10	250	400	350	-	22	12-Ø23	65
300	10	270	445	400	370	24,5	12-Ø23	83
350	10	290	520	460	-	26,5	16-Ø23	118
400	10	310	565	515	480	24,5	16-Ø28	145
450	10	330	615	565	-	26,5	20-Ø28	190
500	10	350	670	620	582	26,5	20-Ø28	220
600	10	390	780	725	682	30	20-Ø31	315
700	10	430	895	840	794	32,5	24-Ø31	420
800	10	470	1015	950	901	35	24-Ø34	640
900	10	510	1115	1050	1001	37,5	28-Ø34	910
1000	10	550	1230	1160	1112	40	28-Ø37	1150
1200	10	630	1455	1380	1328	45	32-Ø41	1520
1400	10	710	1675	1590	1530	46	36-Ø44	2250
1600	10	790	1915	1820	1750	49	40-Ø50	-

## Manufacturer's warranty

The manufacturer guarantees the performance of original products, subject to the consumer's compliance with the operating, transportation, storage, and maintenance conditions specified in the instruction manual. The warranty period is 120 months from the date of installation, but not more than 126 months from the date of delivery, provided that it is used strictly for its intended purpose in the scope of application. Warranty obligations are valid only if the manufacturer's warranty seals are preserved and there are no traces of excessive external influence on the product. This warranty does not apply to consumable (wearable) materials, as well as to defects and damage resulting from improper storage, transportation, handling, unprofessional installation, violation of the operating instructions, untimely or insufficient maintenance. service and care.

## Conservation

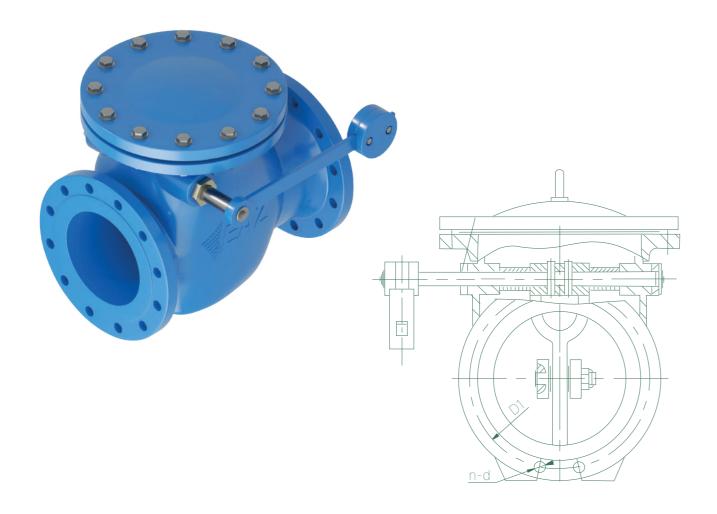
Store fittings in a clean, dry, ventilated area, away from heating devices. Elastomer parts (seals) should be protected from direct sunlight. The fittings can be stored at ambient temperatures from -20°C to +50°C (with appropriate packaging).





## **EAZ RP**

## Title Check valve EAZ RP metallic sealing - with lever and weight DN 100...1600, PN 10...16



**Description** EAZ RP

**Functionality** To prevent backflow in pipelines.

## **General description**

Construction end-to-end dimension

Face-to-face length: F6 - row 48, EN 558-1, (DIN 3202, F6).

Straight-seat check valve with external shaft and lever and weight. Highly cost-efficient due to high opening degree. Available with stainless-steel wire guard and limit signal for the open position as options. Its premium-quality materials make the valve particularly resistant to the media conveyed. The large inspection cover allows for easy maintenance. Suitable for use in wastewater applications, in power plants and in industry.

### **Technical details**

Nominal diameter DN	1001600.
Nominal pressure PN	PN 10 kgf/cm², PN 16 kgf/cm², PN 25 kgf/cm². (PN 40 kgf/cm² according to order)
Controlled fluid	Water, Wastewater, Sea water
Normal valve position	Fully open / Fully closed
Controlled fluid temperature, °C	0+70°C.
Pipeline connection	Flanged EN 1092-2
Tightness in accordance, class	A
Max. flow rate (stable)	PN 10 – 3 м/s; PN 16 – 4 м/s.
Minimum flow rate when mounting the valve in a vertical position	2 M/s.
Pressure drop across closed disk	No more than the maximum permissible operating pressure.

## Placement categories

Open air, chambers and wells with high humidity, in the ground, in enclosed spaces/

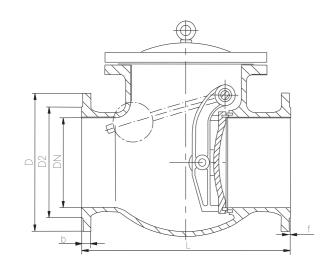
## **Materials of details**

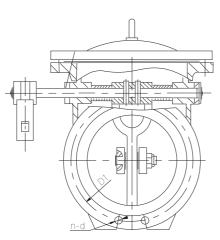
Construction, cover. slice	Ductile iron EN-GJS-400-15 (GGG-40), (Can be made from GGG-50, stainless steel)
Bonnet bolts	Stainless steel A4
Shaft	Stainless steel SS 431
Bush	Stainless steel +PTFE
Sealing ring	Bronze
Shaft seal	NBR/EPDM O-ring.
Level&Weight	Carbon Steel +Gray Iron
Noncorrosive coating	High-quality epoxy coating layer thickness 300 microns, no pores, smooth surface.



Reliability indicators	Average total lifecycle, years, not less than	50 years.
	Average total resource, cycles (hours), not less than	5000 Cycles
	Probability of failure-free operation	depends on operating conditions and compliance with the manufacturer's recommendations for operating mode and frequency of maintenance. service
Assigned	Specified time in service	up to 50 years
indicators	Assigned resource, cycles	up to 5000 cycles

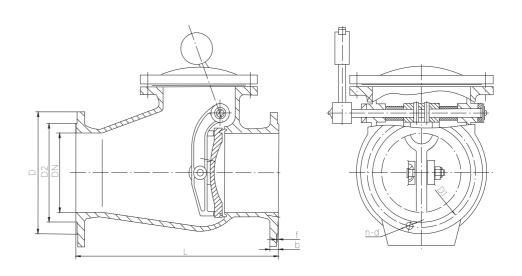
## **Schemes and dimensions:**





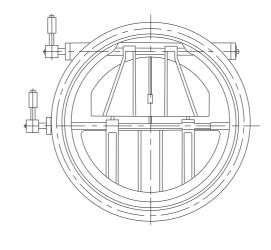
DN	PN	L	D	D1	D2	b	f	n-b	Weight
200	10	500	340	295	266	20	3	8-Ø23	125
250	10	600	405	355	319	22	3	12-Ø23	160
300	10	700	445	400	370	24,5	4	12-Ø23	210
350	10	800	520	470	429	24,5	4	16-Ø23	355
400	10	900	656	515	480	24,5	4	16-Ø28	470

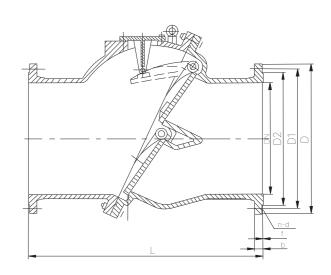
DN	PN	L	D	D1	D2	b	f	n-b	Weight
100	16	300	220	180	156	19	3	8-Ø19	38
125	16	350	250	210	184	19	3	8-Ø19	54
150	16	400	285	240	211	19	3	8-Ø23	71
200	16	500	340	295	266	20	3	12-Ø23	125
250	16	600	405	355	319	22	3	12-Ø28	160
300	16	700	460	410	370	24,5	4	12-Ø28	210
350	16	800	520	470	429	26,5	4	16-Ø28	355
400	16	900	580	525	480	28	4	16-Ø31	470



DN	PN	L	D	D1	D2	b	f	n-b	Weight
500	10	1100	670	620	582	26,5	4	20-Ø28	720
600	10	1300	780	725	682	30	5	20-Ø31	1000
700	10	1500	895	840	794	32,5	5	24-Ø31	1700

DN	PN	L	D	D1	D2	b	f	n-b	Weight
500	16	1100	715	650	609	31,5	4	20-Ø34	720
600	16	1300	840	770	720	36	5	20-Ø37	1000
700	16	1500	910	840	794	39,5	5	24-Ø37	1700





DN	PN	L	D	D1	D2	b	f	n-b	Weight
800	10	1700	1015	950	901	35	5	24-Ø34	2230
900	10	1900	1115	1050	1001	37,5	5	28-Ø34	-
1000	10	1510	1230	1160	1112	40	5	28-Ø37	-
1200	10	1700	1455	1380	1328	45	5	32-Ø41	-
1400	10	1800	1675	1590	1530	46	5	36-Ø44	-
1600	10	1900	1915	1820	1750	49	5	40-Ø50	-

DN	PN	L	D	D1	D2	b	f	n-b	Weight
800	16	1700	1025	950	901	43	5	24-Ø41	-
900	16	1900	1125	1050	1001	46,5	5	28-Ø41	-
1000	16	1510	1255	1170	1112	50	5	28-Ø44	-
1200	16	1700	1485	1390	1328	57	5	32-Ø50	-
1400	16	1800	1685	1590	1530	60	5	36-Ø50	-
1600	16	1900	1930	1820	1750	65	5	40-Ø57	-

### Test results

		Ма	ximum available	Test pressure:			
DN	PN	operating pressure, bar	operating temperature for neutral liquid, °C	in a construction with water, bar	if closing with water, bar		
1001600	16	16	80	24	17,6		
1001600	10	10	80	15	11		



## Manufacturer's warranty

The manufacturer guarantees the normal operating of original products, subject to the consumer's compliance with the operating, transportation, storage and maintenance conditions specified in the operating guide.

specified in the operating guide.

The warranty period is 120 months from the date of installation, but not more than 136 months from the date of delivery, subject to intended use in the scope of application.

Warranty obligations are valid only if the manufacturer's warranty seals are preserved and there are no traces of unauthorized intervention or excessive external influence on the product.

This warranty does not apply to consumables (wear and tear) materials, including seals, as well as defects and damage resulting from improper storage, transportation, handling, unprofessional installation, violation of operating instructions and safety regulations, untimely or insufficient maintenance and care.

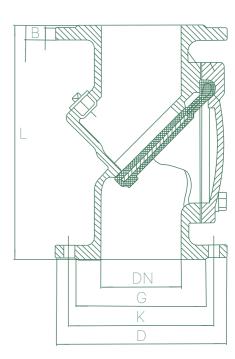


## Conservation

Store fittings in a clean, dry, ventilated area, away from heating devices. Elastomer parts (seals) should be protected from direct sunlight. The fittings can be stored at ambient temperatures from -20°C to +50°C (with appropriate packaging).







**Description** EAZ RTS

Functionality To prevent backflow of media in pipelines.

## **General Description**

Face-to-face length:

F6 - row 48 DIN 3202 according to, series 15 according to EN558.

Resilient-seated, slanted-seat check valve that opens even at low differential pressures. The disk can be used on both sides, which doubles its useful life. The one-piece and completely rubber-coated disk ensures a completely free passage and reduces the adhesion of dirt particles. Suitable for both horizontal and vertical installation in water treatment plants, in water distribution, in waste-water applications, in power plants and in industry.





## **Technical details**

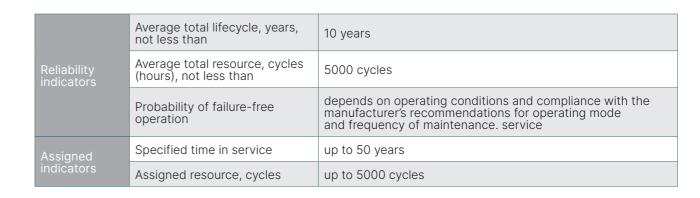
Nominal diameter DN	50600.
Nominal pressure PN	PN 10 kgf/cm², PN 16 kgf/cm², PN 25 kgf/cm². (PN 40 kgf/cm² according to order)
Controlled fluid	Water, Wastewater, Sea water
Normal valve position	Fully open / Fully closed
Controlled fluid temperature, °C	0+70°C.
Pipeline connection	Flanged EN 1092-2
Max. flow rate (stable)	PN 10 – 3 m/s; PN 16 – 4 m/s.
Minimum flow rate when mounting the valve in a vertical position	2 m/s.
Pressure drop across closed disk	No more than the maximum permissible operating pressure.

## **Placement categories**

Open air, chambers and wells with high humidity, in the ground, in enclosed spaces (nominal values of climatic factors according to  $\Gamma$ OCT 15150-69 "Machines, instruments and other technical products. Designs for various climatic regions. Categories, operating conditions, storage and transportation in part of the impact of environmental climatic factors» for UHL 5 conditions, at ambient temperatures from 0 to 40 ° C).

## **Materials**

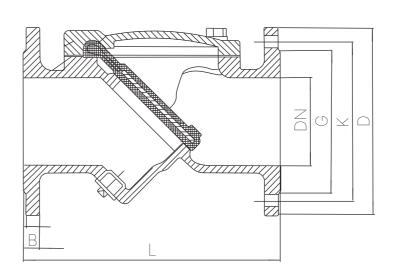
Construction	Ductile iron EN-GJS-400-15 (GGG-40), Can be made from GGG-50.
Cover	Ductile iron EN-GJS-400-15 (GGG-40), Can be made from GGG-50.
Rubber Flap	WCB encapsulated with EPDM vulcanized
Bonnet bolts	Stainless steel steel SS201 (DIN EN ISO 3506)
Gasket	EPDM
PIN	SS304
Plug	SS304
Anticorrosive coating	High-quality epoxy coating layer thickness 300 microns, no pores, smooth surface.

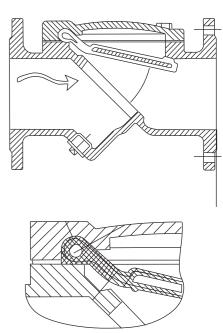


## Resistance coefficient in the "open" position for uncompressed liquid (water):

Max. flow rate	3 м/с	4 м/с		
Coefficient	3 M/C	4 M/C		
PN 10/16	0,60	0,50		

### **Schemes and dimensions:**





D1	DN L		_	ŀ	<	(	3	В	f	١	١	Н	Wei	ight
יוטו	١	L	D	PN10	PN16	PN10	PN16	Б	ı	PN10	PN16	П	PN10	PN16
50	)	200	165	125	125	100	100	19	3	4-Ø19	4-Ø19	88	8,5	8,5
65	5	240	185	145	145	120	120	19	3	4-Ø19	4-Ø19	94	12	12
80	)	260	200	160	160	135	135	19	3	8-Ø19	8-Ø19	110	14,4	14,4



DNI		D	ŀ	<	(	3	Б	f	1	١		Wei	ight
DN	L	U	PN10	PN16	PN10	PN16	В	ı	PN10	PN16	Н	PN10	PN16
100	300	220	180	180	156	156	19	3	8-Ø19	8-Ø19	115	19	19
125	350	250	210	210	186	186	19	3	8-Ø19	8-Ø19	165	-	-
150	400	285	240	240	212	212	19	3	8-Ø23	8-Ø23	170	33,5	33,5
200	500	340	295	295	268	268	20	3	8-Ø23	12-Ø23	224	68,5	68,5
250	600	405	350	355	318	318	22	3	12-Ø23	12-Ø28	261	120	120
300	700	460	400	410	370	373	24,5	3	12-Ø23	12-Ø28	310	160	160
350	800	520	460	470	430	433	26,5	3	16-Ø23	16-Ø28	320	-	-
400	900	580	515	525	480	483	28	3	16-Ø28	16-Ø31	380	-	-
450	965	640	565	585	528	546	30	4	20-Ø28	20-Ø31	455	-	-
500	1067	715	620	650	582	605	31,5	4	20-Ø28	20-Ø34	470	-	-
600	1295	840	725	770	680	720	36	4	20-Ø31	20-Ø37	550	-	-

## **Test results**

		Ма	ximum available	Test pressure:			
DN	PN	operating pressure, bar	operating temperature for neutral liquid, °C	in a construction with water, bar	if closing with water, bar		
50600	16	16	50	24	17,6		
200600	10	10	50	15	11		

## Manufacturer's warranty

The manufacturer guarantees the performance of original products, subject to the consumer's compliance with the operating, transportation, storage and maintenance conditions specified in the instruction

The warranty period is 120 months from the date of installation, but not more than 136 months from the date of delivery, subject to intended use in the scope of application.

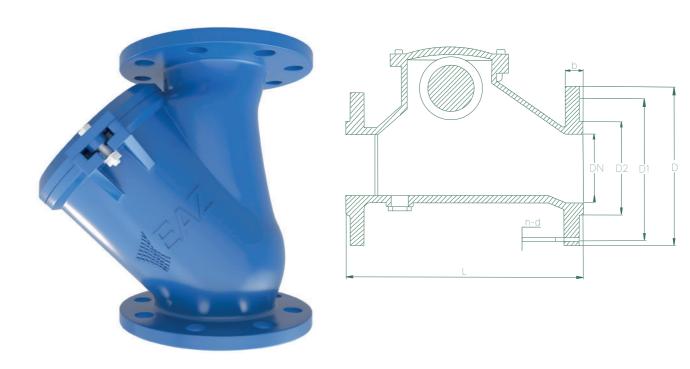
Warranty obligations are valid only if the manufacturer's warranty seals are preserved and there are no traces of unauthorized intervention or excessive external influence on the product.

This warranty does not apply to consumables (wear and tear) materials, including seals, as well as defects and damage resulting from improper storage, transportation, handling, unprofessional installation, violation of operating instructions and safety rules, untimely or insufficient maintenance and care.

## Conservation

Store fittings in a clean, dry, ventilated area, away from heating devices. Elastomer parts (seals) should be protected from direct sunlight. The fittings can be stored at ambient temperatures from -20°C to +50°C (with appropriate packaging).

## **EAZ KVR Title Ball Check Valve EAZ KVR** DN 50...300, PN 10...16



**Description** EAZ KVR

**Functionality** To prevent backflow of media in pipelines.

## **General description**

Construction end-to end dimension

Face-to-face length F6 - row 48, EN 558-1, (DIN 3202).

Resilient-seated non-return valve with sinking ball and free flow passage for minimum friction loss. Especially suitable for use in polluted media as the shape of the valve prevents the build-up of dirt. Highly maintenance-friendly due to the large clean-out hole. Suitable for use in waste-water applications, in power plants and in industry.



## General technical data

Nominal diameter DN	50300.
Nominal pressure PN	PN 10 kgf/cm <sup>2</sup> , PN 16 kgf/cm <sup>2</sup> , PN 25 kgf/cm <sup>2</sup>
Controlled fluid	Wastewater, Sea water
Normal valve position	Fully open / Fully closed
Controlled fluid temperature, °C	0+70°C.
Pipeline connection	Flanged EN 1092-2
Tightness	A
Maximum flow rate (stable)	up to 5 m/s.
Pressure drop across a closed ball	no more than the maximum permissible operating pressure.

## **Placement categories**

Open air, chambers and wells with high humidity, in the ground, in enclosed spaces.







## **Materials**

Body	Ductile iron EN-GJS-400-15 (GGG-40), Can be made from GGG-50.
Bonnet	Ductile iron EN-GJS-400-15 (GGG-40), Can be made from GGG-50.
Bonnet bolts	Stainless steel A2 DIN EN ISO 3506
Ball	Ductile iron EN-GJS-400-15 (GGG-40), NBR rubberized on all sides.
Corrosion protection:	High-quality epoxy coating layer thickness 300 microns, no pores, smooth surface.

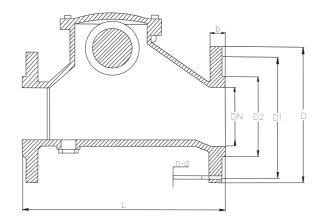
## Test results:

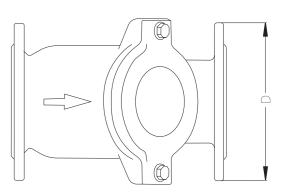
		Ma	aximum available	Test pi	ressure:
DN	PN	operating pressure, bar	operating temperature for water, °C	in a housing with water, bar	if closing with water, bar
50300	16	16	50	24	17,6
200300	10	10	50	15	11

## Resistance coefficient in the "open" position for uncompressed liquid (water):

DN valve Coefficient	50-125	150-300
at a flow speed of 5 m/s	0,5	1,2

## Scheme and dimensions:





DNI		[	)	D	)1	D	2	h	n-	Ød	We	ight
DN		PN 10	PN 16	D	D1	D	D1	b	PN 10	PN 16	PN 10	PN 16
50	200	165	125	125	125	102	102	19	4-Ø19	4-Ø19	8	8
65	240	185	145	145	145	122	122	19	4-Ø19	4-Ø19	11	11
80	260	200	160	160	160	138	138	19	8-Ø19	8-Ø19	13	13
100	300	220	180	180	180	158	158	19	8-Ø19	8-Ø19	19	19
125	350	250	210	210	210	188	188	19	8-Ø19	8-Ø19	28	28
150	400	285	240	240	240	2012	212	19	8-Ø23	8-Ø23	37	37
200	500	340	295	295	295	268	268	24	8-Ø23	12-Ø23	72	72
250	600	395	405	350	355	320	320	24	12-Ø23	12-Ø27	136	136
300	700	445	460	400	410	370	378	26	12-Ø23	12-Ø27	220	220

## Manufacturer's warranty

The manufacturer quarantees the work of original products, subject to the consumer's compliance with the operating, transportation, storage and maintenance conditions specified in the instruction manual. The warranty period is 120 months from the date of installation, but not more than 136 months from the date of delivery, subject to proper use in the scope of application.

Warranty obligations are valid only if the manufacturer's warranty seals are preserved and there are no traces of unauthorized intervention or excessive external influence on the product.

This warranty does not apply to consumables (wear and tear) materials, including seals, as well as defects and damage resulting from improper storage, transportation, handling, unprofessional installation, violation of operating instructions and safety rules, untimely or insufficient maintenance and care.

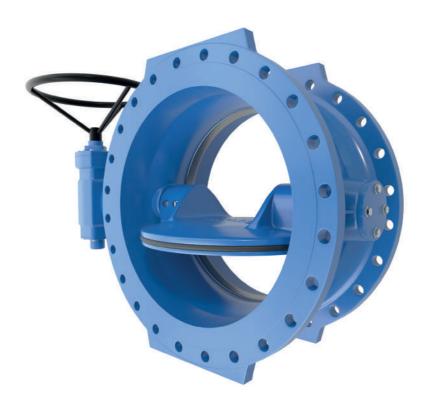


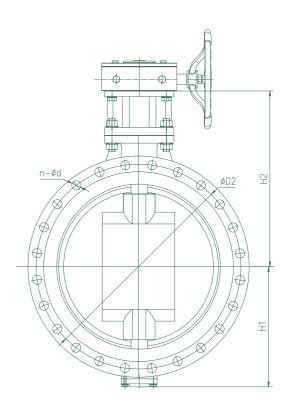
## **Preservation information**

Store fittings in a clean, dry, ventilated area, away from heating devices. Elastomer parts (seals) should be protected from direct sunlight. The fittings can be stored at ambient temperatures from -20°C to +50°C (with appropriate packaging).



Title Butterfly Valve wiht Dismantling Joint EAZ EKT-DJ for water DN 100...4000, PN 10...16





**Description** EAZ EKT DJ

**Description** For installation as a shut-off device on pipelines.

## **General description**

Face to face length: EN 558-2017

Double eccentric disc. The disc mounting sleeve requires no maintenance.

Body seat – high-alloy polished surfacing; protected from displacement, wear- and corrosion-resistant.

The profile seal on the disc can be replaced without removing the disc.

With self-locking, fully enclosed, maintenance-free worm gear with mechanical position indicator.

Vacuum tightness up to 1 torr.

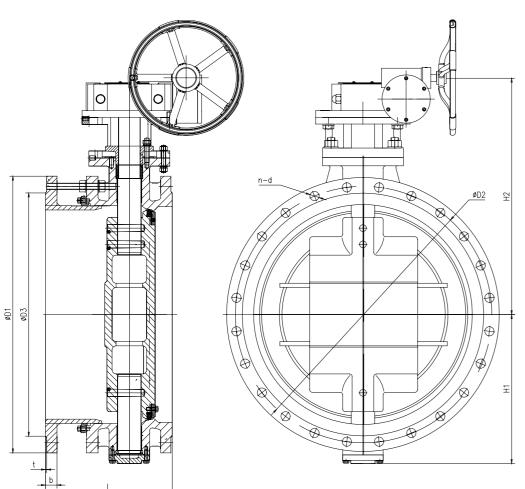


## **Technical data**

Valve type	Double-offset flanged butterfly valve (resilient-seated)
Construction Type of design of the flow part	Partial flow area
Nominal diameter DN	1002000 (22004000 on request)
Nominal pressure PN	PN 10 kgf/cm², PN 16 kgf/cm², PN 25 kgf/cm². (PN 40 kgf/cm² according to order)
Controlled fluid	Water, Wastewater, Sea water
Normal shutter position	Fully open / Fully closed
Working environment temperature, °C	0 +70°C
Pipeline connection	Flange EN 1092-2-2018
Tightness according, class	Α

## **Placement category**

Open air, chambers and wells with high humidity, in the ground, in enclosed spaces. At the customer's request, a product is supplied with a maximum moisture and dust protection rating of the gearbox and electric drive IP68.



## Materials

Body	Ductile iron EN-GJS-400-15 (GGG-40), (Can be made from GGG-50, stainless steel)
Cover	Ductile iron EN-GJS-400-15 (GGG-40), (Can be made from GGG-50, stainless steel)
Disc	Ductile iron EN-GJS-400-15 (GGG-40), (Can be made from GGG-50, stainless steel), EPDM elastomer coating (drinking water) or NBR (waste and process water)
Splie snap ring	304
Bush	SF-2
Seal ring	EPDM
Shaft	20Cr13
Pin	20Cr13
Pagking	PTFE
Sealing sleeve	WCB
Yoke	ST37-2
Seal ring Gland	ST37-2
Seal ring	EPDM
Drawtube	ST37-2
Type of coating of product elements	High-quality epoxy powder coating layer thickness 300 microns, no pores, smooth surface.
Gearbox type	Worm. The design of the gearbox prevents rotation of the disk.

Reliability indicators	Average total resource, cycles (hours), at least	20,000 cycles with electric control and 5000 cycles in manual mode
	The probability of failure-free operation	Depends on operating conditions and compliance with the manufacturer's recommendations on operating mode and maintenance frequency.
A i	Assigned service life	up to 50 years.
Assigned indicators	Assigned resource, cycles (hours)	up to 42,000 cycles in electrical control and 5,000 cycles in manual mode.

## Max. force on the flywheel, N (kgf), no more

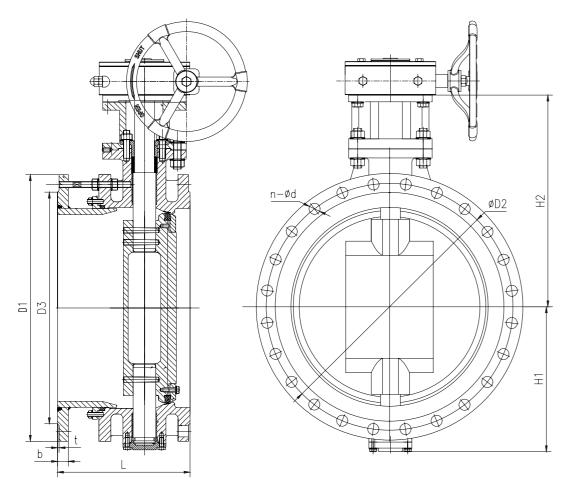
H / DN	150	200	250	300	350	400	450	500	600	700	800	900	1000	1100	1200
PN 10	60	110	150	240	300	360	430	540	690	290	400	310	400	390	360
PN 16	90	150	240	300	370	390	570	790	310	460	390	450	330	-	510

## Resistance coefficient: measured in the «open» position for an uncompressed liquid (water):

H/DN	150	200	250	300	350	400	450	500	600	700	800	900	1000	1200	1400	1600
PN 10	0,6	0,55	0,45	0,4	0,35	0,3	0,45	0,4	0,4	0,38	0,3	0,3	0,29	0,55	0,2	0,15
PN 16	0,6	0,55	0,45	0,4	0,35	0,5	0,45	0,5	0,46	0,41	0,38	0,36	0,34	0,55	0,3	0,25

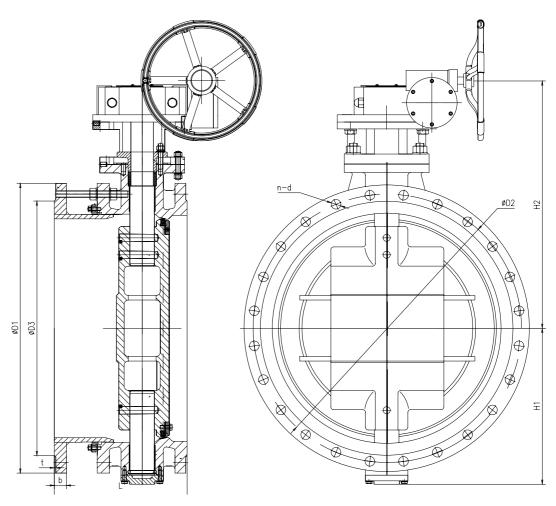


## Scheme and dimensions:



DN	PN	D1	D2	D3	b	t	L	n	Ød	H1	H2
200	10	340	295	266	20	3	230±20	8	23	196	310
250	10	395	350	319	22	3	250±20	12	23	216	345
300	10	445	400	370	24	4	270±25	12	23	245	390
350	10	505	460	429	24	4	290±25	16	23	285	435
400	10	565	515	480	24	4	310±25	16	28	315	525
450	10	615	565	530	25	4	350±25	20	28	335	540
500	10	670	620	582	26	4	350±25	20	28	360	585

						i					
DN	PN	D1	D2	D3	b	t	L	n	Ød	H1	H2
600	10	780	725	682	30	5	390±25	20	31	425	635
700	10	895	840	794	32	5	430±25	24	31	490	710
800	10	1015	950	901	37.5	5	470±30	24	34	552	790
900	10	1115	1050	1001	37	5	510±30	28	34	600	850
1000	10	1230	1160	1112	10	5	550±30	28	37	665	925
1100	10	1455	1380	1328	45	5	630±30	32	40	790	1040
1400	10	1675	1590	1530	46	5	710±30	36	43	916	1220
1600	10	1915	1820	1750	49	5	790±30	40	49	1045	1390
1800	10	2115	2020	1950	52	5	870±30	44	49	1160	1490
2000	10	2325	2230	2150	55	5	950±30	48	49	1315	1720



DN	PN	D1	D2	D3	b	t	L	n	Ød	H1	H2
200	16	340	295	266	20	3	230±20	8	23	196	310
250	16	405	355	319	22	3	250±20	12	28	216	345
300	16	460	410	370	24.5	4	270±25	12	28	245	390
350	16	520	470	429	26.5	4	290±25	16	28	285	435
400	16	580	515	525	28	4	310±25	16	31	315	525
450	16	640	585	548	30	4	350±25	20	31	335	540
500	16	715	650	609	31.5	4	350±25	20	34	360	585

DN	PN	D1	D2	D3	b	t	L	n	Ød	H1	H2
600	16	840	770	720	36	5	390±25	20	37	425	635
700	16	910	840	794	39.5	5	430±25	24	37	490	710
800	16	1025	950	901	43	5	470±30	24	40	552	790
900	16	1125	1050	1001	46.5	5	510±30	28	40	600	850
1000	16	1225	1170	1112	50	5	550±30	28	43	665	925
1200	16	1485	1390	1328	57	5	630±30	32	49	790	1040
1400	16	1685	1590	1530	60	5	710±30	36	49	916	1220
1600	16	1930	1820	1750	65	5	790±30	40	56	1045	1390
1800	16	2130	2020	1950	70	5	870±30	44	56	1160	1490
2000	16	2645	2230	2150	75	5	350±30	48	62	1315	1720

## **Electric drives**

Ve	ersion	General industrial / Explosion-proof
Vo	oltage, V	depends on:  ▶ rotation speed of the drive output shaft (from 4 to 180 rpm),  ▶ type of electric motor (DC/AC, 2-/3-phase power supply, voltage) See actuator manufacturer's documentation

<sup>\*</sup> Possible configuration with AUMA drives or equivalent For complete drive data, see the drive manufacturer's documentation.

## **Test results**

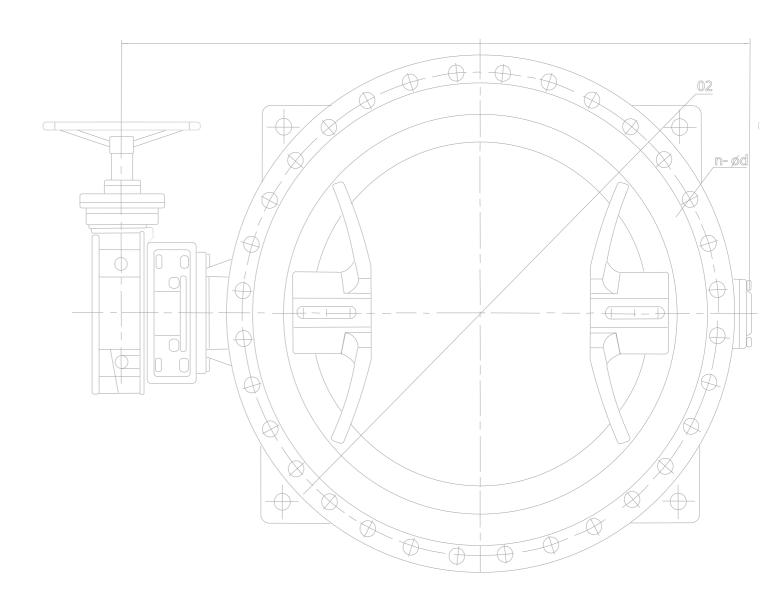
	PN	Maxim	um permissible	Test pressure:			
DN		operating pressure, bar	operating temperature for neutral liquid, °C	in a construction with water, bar	at closing with water, bar		
1501600	16	16	50	24	18		
2001600	10	10	50	15	11		



## Manufacturer's warranty

The manufacturer guarantees the operating of original products, subject to the consumer's compliance with the operating, transportation, storage and maintenance conditions specified in the instruction manual. The warranty period is 120 months from the date of installation, but not more than 136 months from the date of delivery, subject to intended use in the scope of application. Warranty obligations are valid only if the manufacturer's warranty seals are preserved and there are no traces of unauthorized intervention or excessive external influence on the product. This warranty does not apply to consumables (wear and tear) materials, including seals, as well as defects and damage resulting from improper storage, transportation, handling, unprofessional installation, violation of operating instructions and safety regulations, untimely or insufficient maintenance and care.







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