Products Catalogue

General Use Guidelines

Safety aspects

AMICON valves are renowned for their reliability and cutting-edge design. However, their safe handling is paramount, particularly when operated by untrained personnel or not used according to their intended purpose. Before any maintenance or operational tasks, it's imperative that those involved thoroughly read and comprehend the comprehensive operating instructions.
To prevent accidents, it's crucial to relieve pressure from the pipeline and eliminate any potential hazards. This involves shutting down pumps, closing valves, and ensuring the pipeline is completely emptied. Additionally, any inadvertent or unexpected valve operations, as well as potential risks posed by stored energy (such as compressed air or water), must be carefully avoided.
Following these safety protocols not only safeguards personnel but also enhances the overall performance and longevity of the valves. Should you require further clarification or assistance regarding the operation or maintenance of AMICON valves, don't hesitate to ask.

Prior to commissioning a Valve, it's essential to meticulously clean and, if necessary, re-grease visible moving parts such as the stem. Additionally, the pressure of the flow medium, including the differential pressure between the inlet and outlet sides, must be carefully checked to ensure it does not exceed the specified limit as per the order.
During installation, strict adherence to approved technical standards, such as DIN standards and relevant working sheets, is paramount. For valves requiring monitoring, it's imperative to comply with applicable laws and regulations, including but not limited to trading regulations, accident prevention regulations, steam boiler regulations, regulations for high-pressure gas mains, regulations for combustible liquids, and technical regulatory frameworks.
Local safety regulations and accident prevention rules must also be strictly followed to ensure the safe and proper operation of the Valve. By adhering to these guidelines, the installation and operation of the valve can proceed smoothly while maintaining safety standards. Should further clarification or assistance be required, don't hesitate to seek guidance.

Transportation

Transporting Amicon's ductile iron valves requires careful handling to prevent damage. Prior to mounting, any damages incurred during transportation must be repaired appropriately.
Due to their weight, manual handling of these valves is not feasible. Instead, transportation should be facilitated using lifting gears suitable for the weight involved, such as broad belts. These belts should be placed around the valve body, typically between the two connecting flanges. Valves equipped with eyebolts or lugs should be suspended from these devices in a proper manner.
It's essential to adhere to relevant safety regulations during transportation. Specifically, lifting gears should not be attached to the handwheel, stem, gearbox case, or flange holes, as this would contravene safety protocols.
By following these guidelines, transportation can be conducted safely and efficiently, minimizing the risk of damage to the valves, and ensuring their integrity upon installation. If further guidance is needed, consulting relevant safety regulations is recommended.

Storage

To maintain the integrity of the valves, it's crucial not to store them outdoors. During the storage period, they should be shielded from external elements and contaminants, such as dust and debris, by covering them with a tarpaulin.
When storing the valves, ensure they are positioned upright on their feet. Valves lacking feet should be placed with their counter flange resting flatly on intermediate trunks to prevent damage.
For long-term storage, select a location that meets specific conditions: it should be frost-protected, cool, dry, dust-free, and dark. Exposure to UV light is particularly detrimental to elastomers, so it's essential to keep them away from sunlight. The valves are designed to withstand storage temperatures ranging from -20°C to +70°C; however, any deviations from these temperatures should be addressed according to the product's operating instructions.
Adhering to these storage guidelines helps preserve the condition and functionality of the valves, ensuring they perform optimally when put into service. If further clarification is needed, referring to the product-specific operating instructions is advisable.

Installation into pipeline

- Remove all packing material from the valve before installation.
- To safeguard Valves against damage during transportation, use appropriate lifting gears like broad belts. Avoid using chains or ropes.
- Before installation, inspect the pipeline for impurities and foreign matter, and clean it if necessary.
- Valves should be installed with their stem in a vertical position. However, for technically pure flow media, the position can be adjusted as needed, ensuring easy access for operation and maintenance.
- For outdoor installations, customers must shield the valves from direct weather effects.
- Ensure the disc is fully closed before installation. Maintain a distance between pipe flanges that exceeds the valve's face-to-face dimension by at least 20 mm to prevent damage to sealing faces and facilitate gasket insertion.
- Ensure mating pipe flanges are plane-parallel and concentric.
- Tighten connecting bolts evenly and crosswise to prevent distortion. Install the pipe without torsion.
- Do not subject the valve to pressures exceeding its nominal pressure to avoid potential damage.

Installation of extension spindle (where applicable)

- The bottom coupling of the extension spindle is inserted into the valve stem square head.
- If available, the protective tube is pulled over the extension spindle and rests on the valve bonnet head.
- Optionally, the upper part of the stem may be equipped with a top cap for operation with a T-key in a surface box.
- To prevent the extension spindle from decoupling from the valve, a taper pin is inserted into the bottom coupling and the side holes of the valve stem head. For longer extension spindle lengths, a clamp may be necessary to provide additional support. This clamp can be fabricated as per the specific requirements of the site.

Operating

AMICON Valves are resilient-seated isolating valves designed for "ON-OFF" service. The valve closure is achieved by turning the handwheel in a clockwise direction without exerting excessive force. These valves are capable of accommodating flow from both directions.
Following installation, it is essential to verify the smooth operation of the valve. This involves operating the valve throughout its entire travel range, from fully open to fully closed, using the handwheel. This check ensures that the valve functions correctly and moves smoothly without any obstructions or impediments.

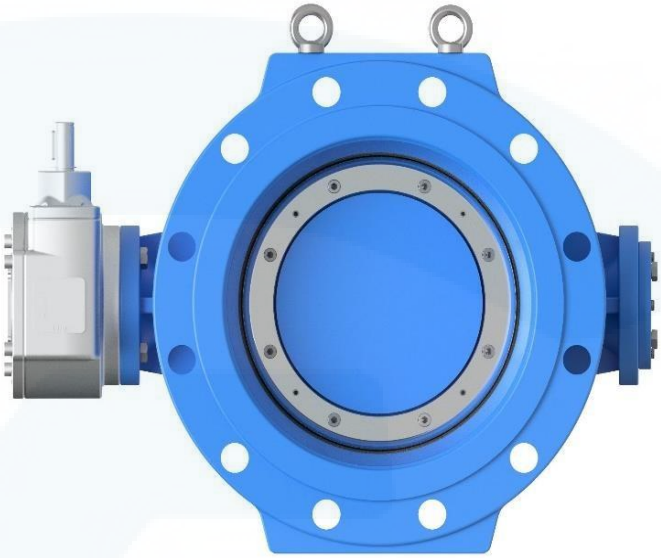
Maintenance

Before conducting any inspection or maintenance on the valve or its associated parts and attachments, it's imperative to follow a series of safety protocols. First, shut off the pressurized pipeline, relieve the pressure, and secure the system against unintentional activation. Depending on the nature and significance of the conveyed medium or fluid, ensure compliance with all relevant safety regulations.
Once maintenance work is completed, and before resuming operations, it's crucial to perform a thorough check of all connections to ensure they are securely fastened, thereby preventing any potential leaks. This rigorous adherence to safety procedures helps safeguard personnel and equipment, ensuring the continued safe and efficient operation of the system.

1. Butterfly Valve

Double Eccentric Butterfly Valve
DN 100–2000, PN10/16/25

Models: **BT20FG**
BT20FE

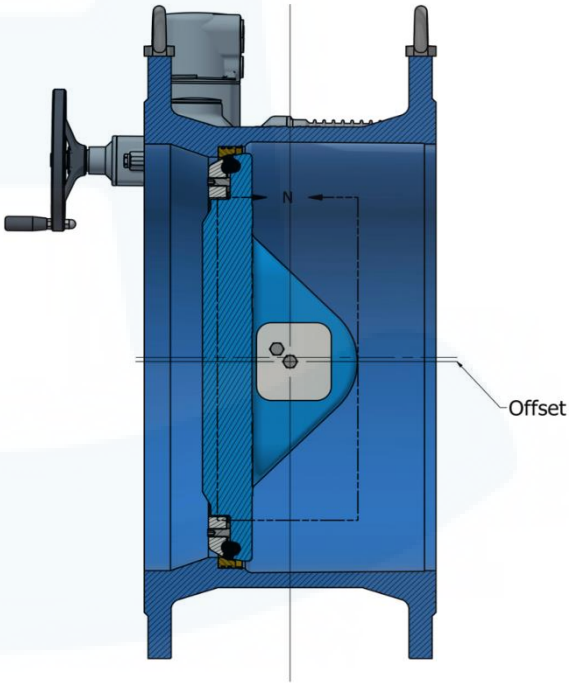


Description

Amicon's quarter turn Butterfly Valve is defined as Double Eccentric "Double Orifice" when it has two stems offset from the center. This creates a cam action during the application's process.

1st offset: The axis of the shaft is behind the centerline of the sealing point of the disc to seat.

2nd offset: The axis of the shaft is eccentric to the center of the valve/pipeline.

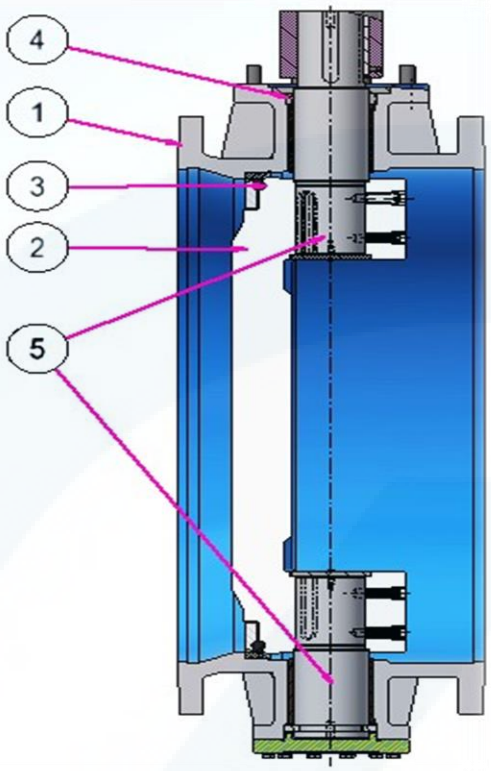


Specification

Models	BT20FG BT20FE
Design	Valves are designed according to EN593 & BS EN1074-1&2
Pressure Rating	10/16/25 bars
Connection	Flanged Ends
Flange Drilling	According to EN 1092-2, DIN2501 (Other Standards are available upon request)
Actuator types	Top flange according to ISO 5211 • Gearbox **(BT20FG)** • Electrical Actuator **(BT20FE)**
Operating Temperature	Up to 70 C°
Seat Design	• WRAS approved rubber seat to be inserted in the disc. • WRAS approved rubber seat can be more suitable for the characteristics of fluids. • WRAS approved rubber seat can be exchanged without dismantling of pipeline.
Use	• ISOLATION • REGULATION
Applications	• Potable Water. • Wastewater. • Storm Water. • Irrigation.
Coating	• WRAS approved Fusion Bonded Epoxy. • Other coating material are available upon request.

Double Eccentric Butterfly Valve
DN 100–2000, PN10/16/25

Models: **BT20FG**
BT20FE



1. Body.
2. Disc.
3. Disc Sealing.
4. Shaft Sealing.
5. Shaft.

Technical Characteristics

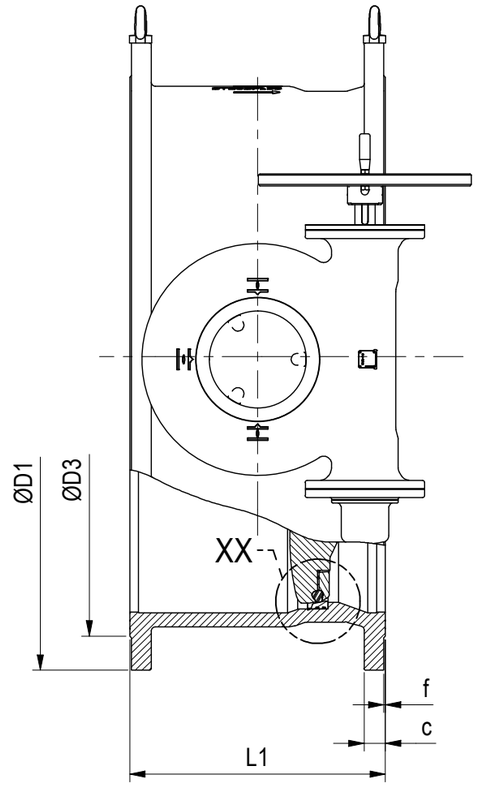
Body	Made of ductile iron according to DIN 1693 GGG40/50, internally and externally coated with WRAS approved fusion bonded epoxy.
Disc	Double eccentric supported disc: The opening and closing characteristics thereby minimize wear of disc seat so that continuous reliable service is Guaranteed.
Disc Sealing	Disc seat comprises a profiled seating ring, made of EPDM material, the raw material is WRAS approved. The ring has special shape which is firmly fitted to the disc periphery. The profiled seat ring is hold in place by stainless steel retaining ring bolted to the disc.
Shaft & Sealing	The corrosion-resistant and maintenance-free shaft works on sealing the shaft preventing leakage to the outside by means of O-ring seal. The shaft bearing is corrosion-resistant and maintenance-free.

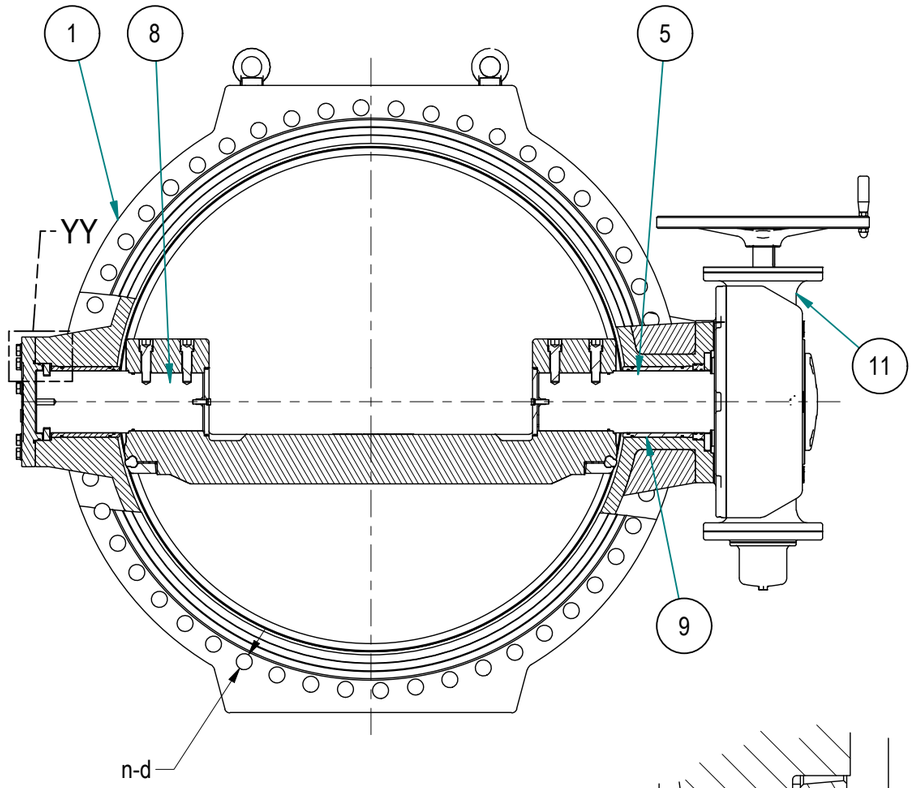
Face to Face Length According to EN 558

DN (mm)	Series 14 (mm)
100	190
150	210
200	230
250	250
300	270
350	290
400	310
450	330
500	350
600	390
700	430
800	470
900	510
1000	550
1200	630
1400	710
1600	790
1800	870
2000	950

Hydro Test Specification:

Standard	According to BS EN 12266.
Hydrostatic Shell test	1.5 x maximum service pressure.
Hydrostatic Seat test	1.1 x maximum service pressure.



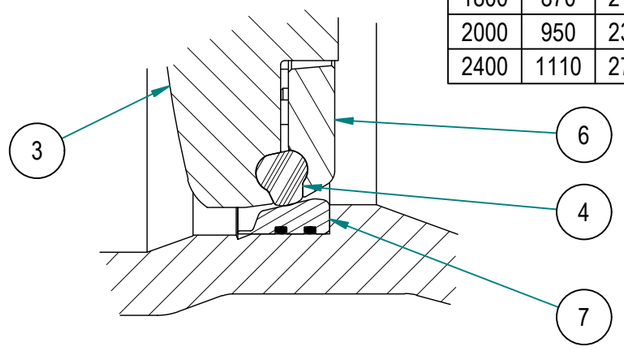


BELOW MATERIAL ARE SPECIFIED FOR TREATED SEWAGE APPLICATION

REF	DESCRIPTION	MATERIAL
1	BODY	DUCTILE IRON, GGG-40
2	COVER	DUCTILE IRON, GGG-40
3	DISC	DUCTILE IRON, GGG-40
4	PROFILED SEALING RING	EPDM
5	DRIVE SHAFT	STAINLESS STEEL,AISI 420
6	RETAINING RING	STAINLESS STEEL,AISI 304
7	SEAT RING	STAINLESS STEEL,AISI 304
8	STUB SHAFT	STAINLESS STEEL,AISI 420
9	BEARING BUSHES	TIN BRONZE, CuSn8
10	ORING	NBR, SHORE A70
11	Gear Box	-----

- FASTENERS IN CONTACT WITH WATER ARE STAINLESS STEEL, A2-70

DN	L1	FLANGE DETAILS							
		ØD1	ØD2	ØD3	c	f	Ød	Bolt	n
1300	670	1585	1490	1432	59	5	50	M45	32
1400	710	1685	1590	1530	60	5	50	M45	36
1500	750	1820	1710	1640	62.5	5	57	M52	36
1600	790	1930	1820	1750	65	5	57	M52	40
1800	870	2130	2020	1950	70	5	57	M52	44
2000	950	2345	2230	2150	75	5	62	M56	48
2400	1110	2760	2650	2570	68	6	62	M60	56



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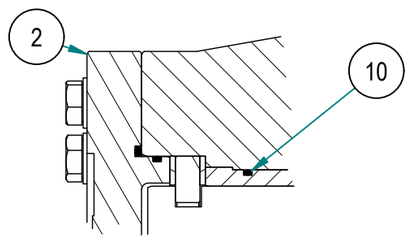

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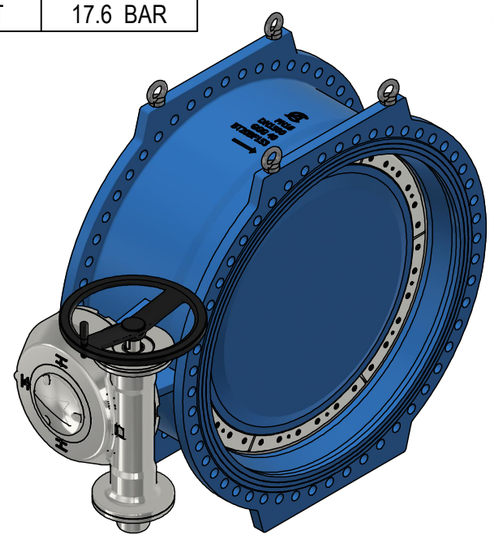
REFERENCE STANDARDS	
DESIGN & MANUFACTURING	BS EN 1074-1&2, BS EN593
FLANGE DETAILS	BS EN1092-2 , DIN 2501, PN16
FACE TO FACE	EN 558, SERIES 14
TEST PRESSURE	BS EN 12266

TESTING DETAILS	
DESCRIPTION	TEST PRESSURE
SHELL TEST	24 BAR
SEAT TEST	17.6 BAR



COATING: ATLEAST 250 µm min FBE Acc. to DIN 30677

COLOR: RAL 5015

VALVE OPERATION CAN BE WITH

- Gear Box ✓

NOTE:- 1) WE RESERVE THE RIGHT TO MAKE TECHNICAL AND DIMENSIONAL MODIFICATIONS AS A CONTINUOUS DEVELOPMENT.

ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE INDICATED.
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أميكون AMICON valves
P.O. BOX 3430 DAMMAM 31471, KSA
TEL: (03) 812 1214 FAX: (03) 812 1131

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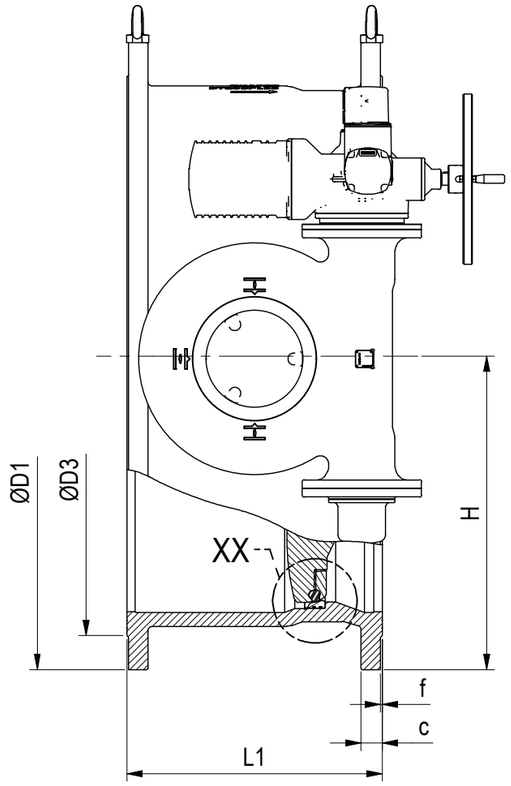
DESCRIPTION
DOUBLE ECCENTRIC BUTTERFLY DN1300- DN2400 PN16 WITH GEARBOX

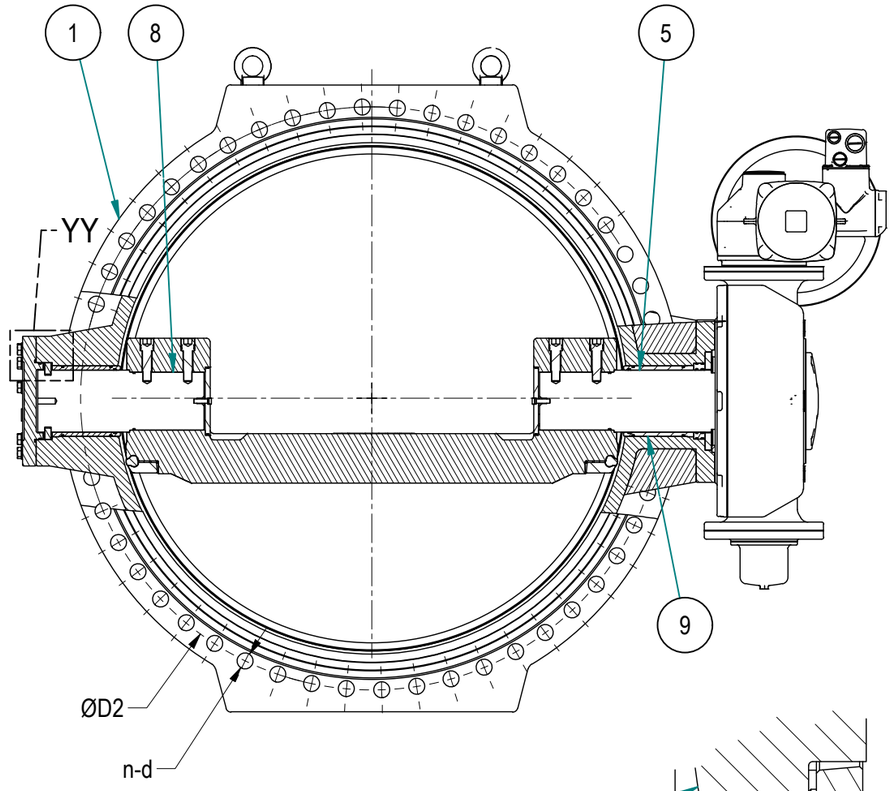
DRAWING NUMBER
1103-GAD

MATERIAL
SEE TABLE

WEIGHT: N/A
SCALE: NTS

2022	BY	DATE
DRAWN	SAT	29-08
CHECKED	ASK	29-08
APPROVED	RCL	29-08
REVISION	SIZE	**A3**



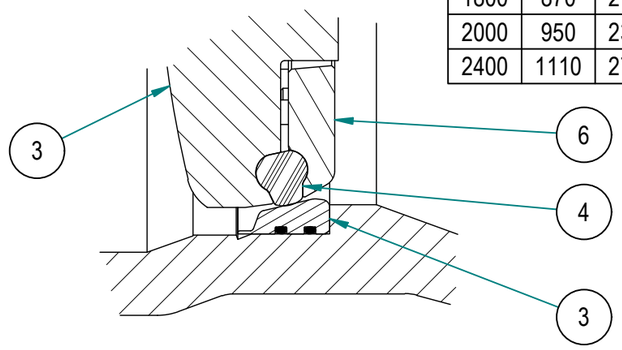


BELOW MATERIAL ARE SPECIFIED FOR TREATED SEWAGE APPLICATION

REF	DESCRIPTION	MATERIAL
1	BODY	DUCTILE IRON, GGG-40
2	COVER	DUCTILE IRON, GGG-40
3	DISC	DUCTILE IRON, GGG-40
4	PROFILED SEALING RING	EPDM
5	DRIVE SHAFT	STAINLESS STEEL,AISI 420
6	RETAINING RING	STAINLESS STEEL,AISI 304
7	SEAT RING	STAINLESS STEEL,AISI 304
8	STUB SHAFT	STAINLESS STEEL,AISI 420
9	BEARING BUSHES	TIN BRONZE, CuSn8
10	ORING	NBR, SHORE A70

- FASTENERS IN CONTACT WITH WATER ARE STAINLESS STEEL, A2-70

DN	L1	FLANGE DETAILS							
		ØD1	ØD2	ØD3	c	f	Ød	Bolt	n
1300	670	1585	1490	1432	59	5	50	M45	32
1400	710	1685	1590	1530	60	5	50	M45	36
1500	750	1820	1710	1640	62.5	5	57	M52	36
1600	790	1930	1820	1750	65	5	57	M52	40
1800	870	2130	2020	1950	70	5	57	M52	44
2000	950	2345	2230	2150	75	5	62	M56	48
2400	1110	2760	2650	2570	68	6	62	M60	56



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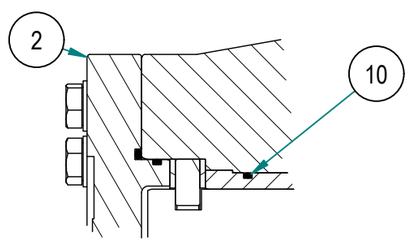

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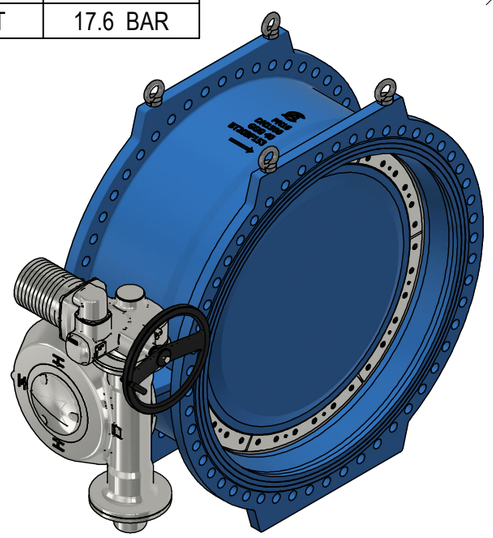
REFERENCE STANDARDS	
DESIGN & MANUFACTURING	BS EN 1074-1&2, BS EN593
FLANGE DETAILS	BS EN1092-2 , DIN 2501, PN16
FACE TO FACE	EN 558, SERIES 14
TEST PRESSURE	BS EN 12266

TESTING DETAILS	
DESCRIPTION	TEST PRESSURE
SHELL TEST	24 BAR
SEAT TEST	17.6 BAR



COATING: ATLEAST 250 µm min FBE Acc. to DIN 30677

COLOR: RAL 5015

VALVE OPERATION CAN BE WITH

- ELECTRIC ACTUATOR ✓

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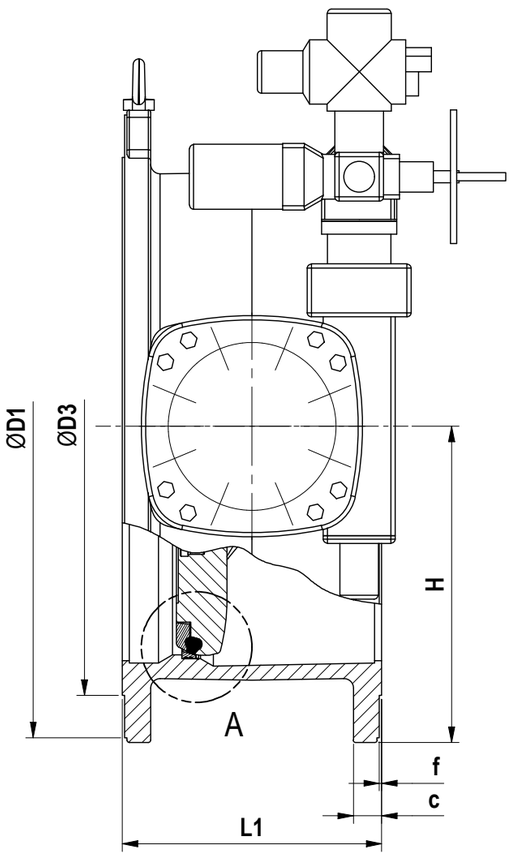
DESCRIPTION
DOUBLE ECCENTRIC BUTTERFLY WITH ELECTRIC ACTUATOR DN1300- DN2400 PN16

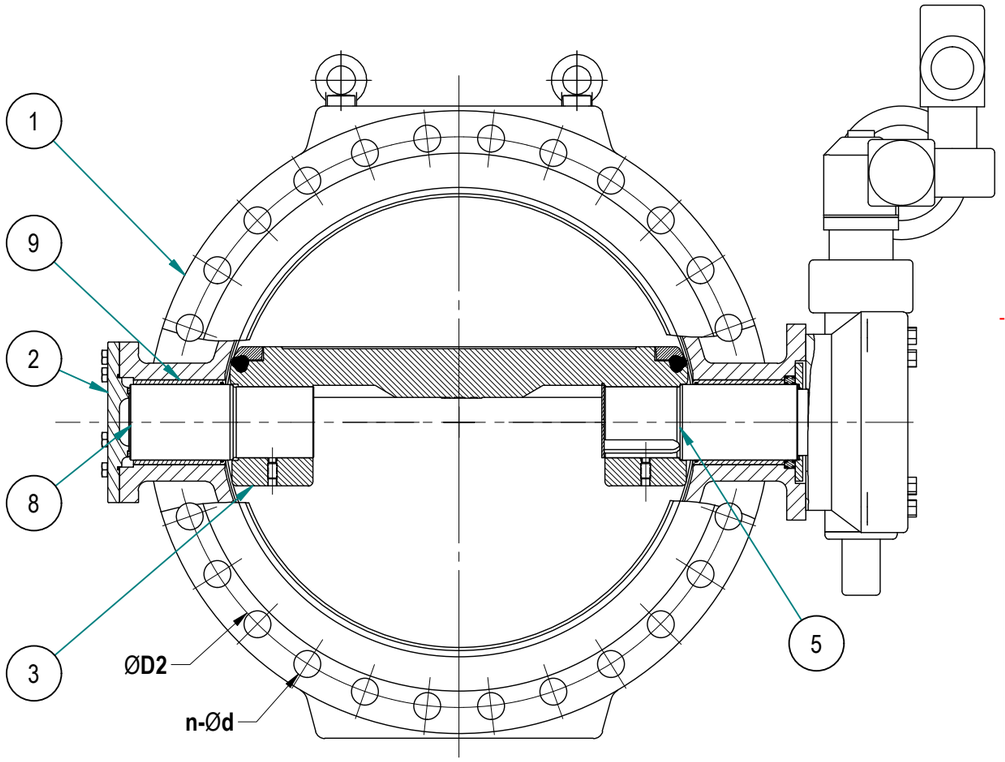
DRAWING NUMBER
1102-GAD

MATERIAL
SEE TABLE

WEIGHT: N/A
SCALE: NTS

2022	BY	DATE
DRAWN	SAT	29-08
CHECKED	ASK	29-08
APPROVED	RCL	29-08
REVISION	SIZE	A3





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BELOW MATERIAL ARE SPECIFIED FOR PORTABLE WATER APPLICATION

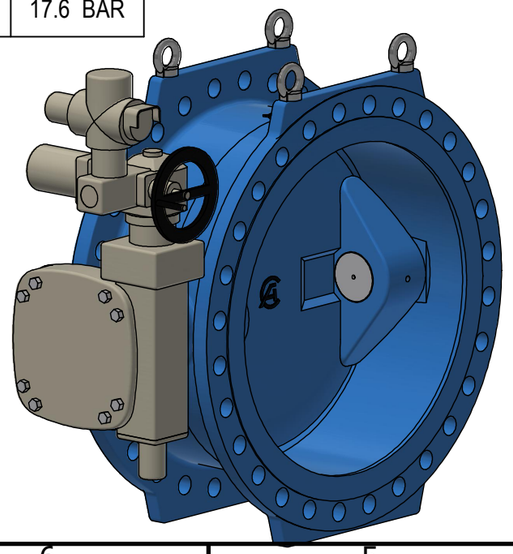
REF	DESCRIPTION	MATERIAL
1	BODY	DUCTILE IRON, GGG-40
2	COVER	DUCTILE IRON, GGG-40
3	DISC	DUCTILE IRON, GGG-40
4	PROFILED SEALING RING	EPDM
5	DRIVE SHAFT	STAINLESS STEEL, AISI 420
6	RETAINING RING	STAINLESS STEEL, AISI 304
7	SEAT RING	STAINLESS STEEL, AISI 304
8	STUB SHAFT	STAINLESS STEEL, AISI 420
9	BEARING BUSHES	TIN BRONZE, CuSn8

- FASTENERS IN CONTACT WITH WATER ARE STAINLESS STEEL, A4-80

DN	L1	H	FLANGED DETAILS							
			ØD1	ØD2	ØD3	c	f	Ød	Bolt	n
100	190	115	220	180	156	19	3	19	M16	8
150	210	142.5	285	240	211	19	3	23	M20	8
200	230	180	340	295	266	20	3	23	M20	12
250	250	202.5	400	355	319	22	3	28	M24	12
300	270	235	455	410	370	24.5	4	28	M24	12
350	290	265	520	470	429	26.5	4	28	M24	16
400	310	297.5	580	525	480	28	4	31	M27	16
450	330	327.5	640	585	548	31.5	4	31	M27	20
500	350	362.5	715	650	609	31.5	4	34	M30	20
600	390	425	840	770	720	36	5	37	M33	20
700	430	460	910	840	794	39.5	5	37	M33	24
800	470	517.5	1025	950	901	43	5	41	M36	24
900	510	575	1125	1050	1001	46.5	5	41	M36	28
1000	550	632.5	1255	1170	1112	50	5	44	M39	28
1200	630	750	1485	1390	1328	57	5	50	M45	32

REFERENCE STANDARDS	
DESIGN & MANUFACTURING	BS EN 1074-1&2, EN593
FLANGE DRILLING	BS EN 1092-2, PN16
FACE TO FACE	EN 558, SERIES 14
TEST PRESSURE	BS EN 12266

TESTING DETAILS	
DESCRIPTION	TEST PRESSURE
SHELL TEST	24 BAR
SEAT TEST	17.6 BAR



COATING: ATLEAST 250 µm min FBE Acc. to DIN 30677

COLOR: RAL 5015

VALVE OPERATION CAN BE WITH

- GEAR BOX
- ELECTRIC ACTUATOR ✓

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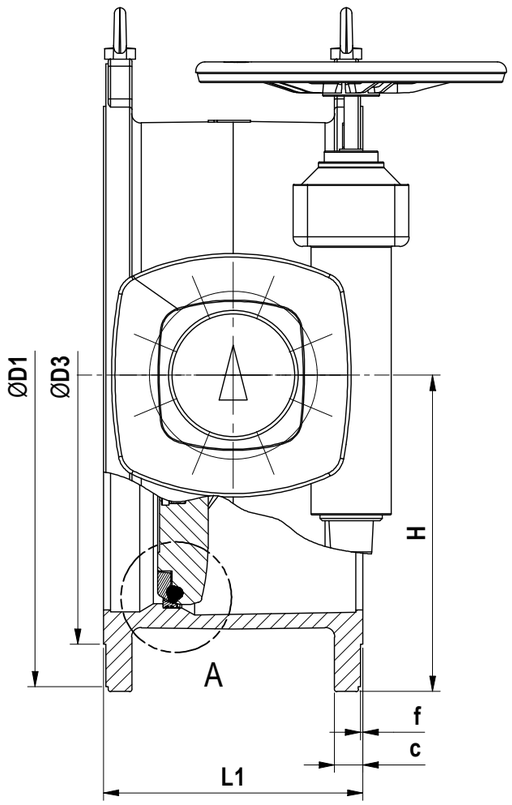
DESCRIPTION
DOUBLE ECCENTRIC BUTTERFLY VALVE WITH ELECTRIC ACTUATOR DN100 - DN2000 PN16

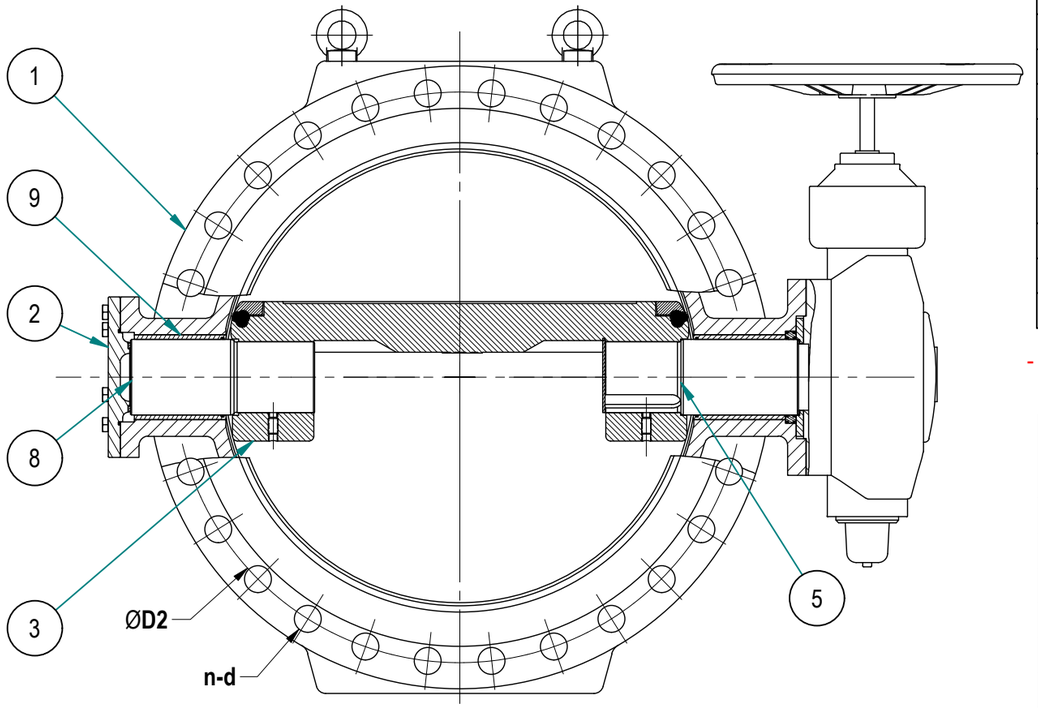
DRAWING NUMBER
1098-GAD

MATERIAL
SEE TABLE

WEIGHT: N/A
SCALE: NTS

2022	BY	DATE
DRAWN	SAT	17-08
CHECKED	ASK	17-08
APPROVED	RCL	17-08
REVISION	SIZE	A3





BELOW MATERIAL ARE SPECIFIED FOR PORTABLE WATER APPLICATION

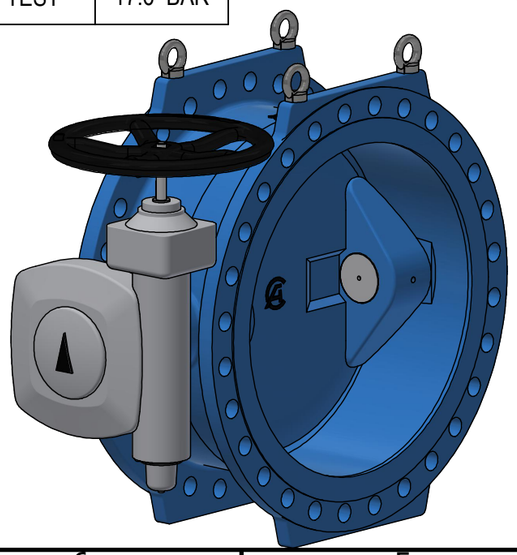
REF	DESCRIPTION	MATERIAL
1	BODY	DUCTILE IRON, GGG-40
2	COVER	DUCTILE IRON, GGG-40
3	DISC	DUCTILE IRON, GGG-40
4	PROFILED SEALING RING	EPDM
5	DRIVE SHAFT	STAINLESS STEEL, AISI 420
6	RETAINING RING	STAINLESS STEEL, AISI 304
7	SEAT RING	STAINLESS STEEL, AISI 304
8	STUB SHAFT	STAINLESS STEEL, AISI 420
9	BEARING BUSHES	TIN BRONZE, CuSn8

- FASTENERS IN CONTACT WITH WATER ARE STAINLESS STEEL, A2-70

DN	L1	H	FLANGED ENDS							
			ØD1	ØD2	ØD3	c	f	Ød	Bolt	n
100	190	115	220	180	156	19	3	19	M16	8
150	210	142.5	285	240	211	19	3	23	M20	8
200	230	180	340	295	266	20	3	23	M20	12
250	250	202.5	400	355	319	22	3	28	M24	12
300	270	235	455	410	370	24.5	4	28	M24	12
350	290	265	520	470	429	26.5	4	28	M24	16
400	310	297.5	580	525	480	28	4	31	M27	16
450	330	327.5	640	585	548	31.5	4	31	M27	20
500	350	362.5	715	650	609	31.5	4	34	M30	20
600	390	425	840	770	720	36	5	37	M33	20
700	430	460	910	840	794	39.5	5	37	M33	24
800	470	517.5	1025	950	901	43	5	41	M36	24
900	510	575	1125	1050	1001	46.5	5	41	M36	28
1000	550	632.5	1255	1170	1112	50	5	44	M39	28
1100	590	682.5	1355	1270	1218	53.5	5	44	M39	32
1200	630	750	1485	1390	1328	57	5	50	M45	32

REFERENCE STANDARDS	
DESIGN & MANUFACTURING	BS EN 1074-1&2, EN593
FLANGE DRILLING	BS EN 1092-2, DIN 2501,PN16
FACE TO FACE	EN 558, SERIES 14
TEST PRESSURE	BS EN 12266

TESTING DETAILS	
DESCRIPTION	TEST PRESSURE
SHELL TEST	24 BAR
SEAT TEST	17.6 BAR



COATING: 250 µm min FBE Acc. to DIN 30677

COLOR: RAL 5015

VALVE OPERATION CAN BE WITH

- GEAR BOX ✓
- ELECTRIC ACTUATOR

NOTE:- 1) WE RESERVE THE RIGHT TO MAKE TECHNICAL AND DIMENSIONAL MODIFICATIONS AS A CONTINUOUS DEVELOPMENT.

ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE INDICATED.
GENERAL MACHINING TOLERANCES IS ACCORDING TO ISO 2768-1 AND ISO 2768-2. IF IN DOUBT, PLEASE ASK. DO NOT SCALE DRAWING.

أميكون AMICON valves
P.O. BOX 3430 DAMMAM 31471, KSA
TEL: (03) 812 1214 FAX: (03) 812 1131

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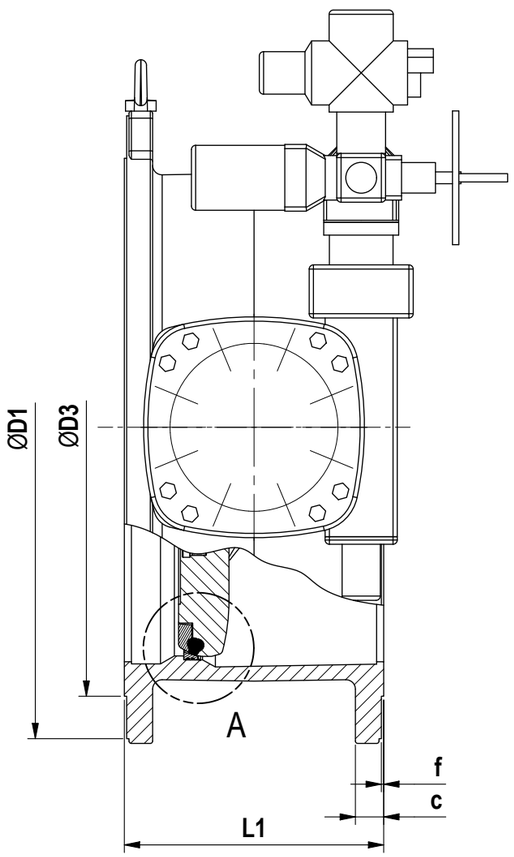
DESCRIPTION
DOUBLE ECCENTRIC BUTTERFLY VALVE WITH GEAR BOX DN100 - DN1200 PN16

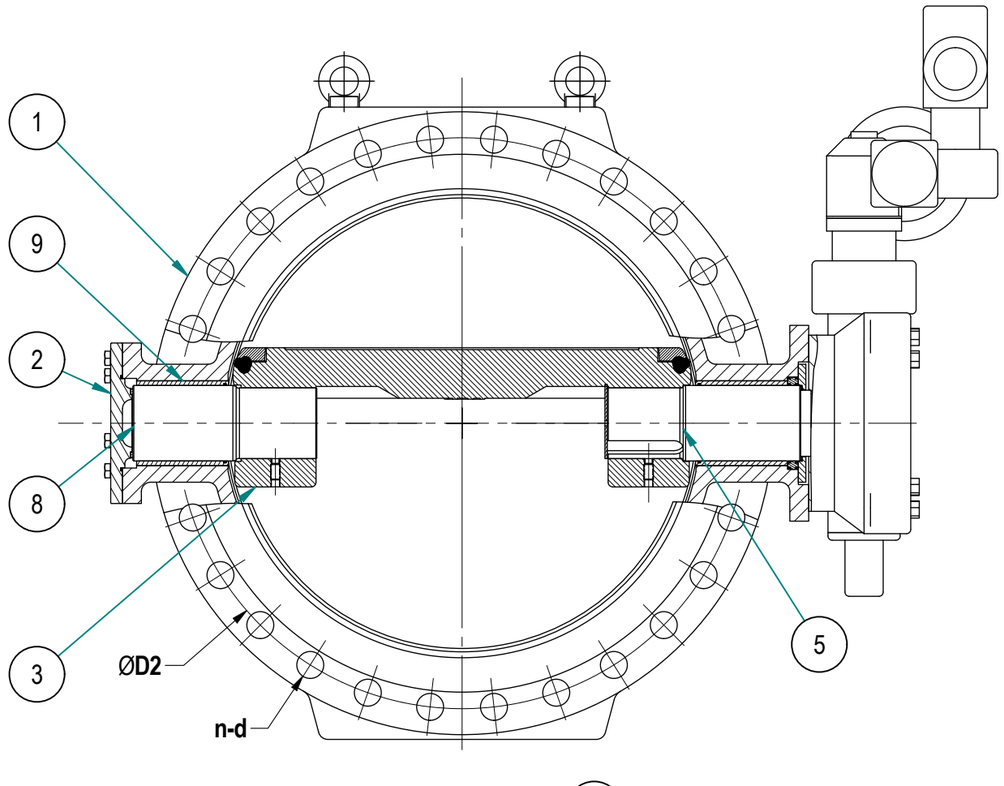
DRAWING NUMBER
1021-GAD

MATERIAL
SEE TABLE

WEIGHT: N/A
SCALE: NTS

2021	BY	DATE
DRAWN	VJS	19-04
CHECKED	ASK	19-04
APPROVED	RCL	19-04
REVISION	SIZE	A3





BELOW MATERIAL ARE SPECIFIED FOR PORTABLE WATER APPLICATION

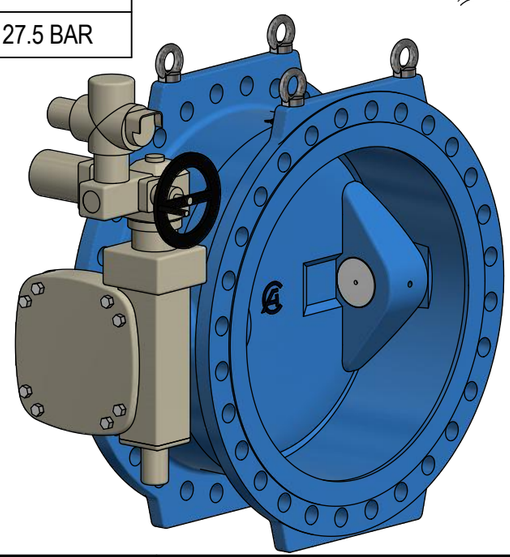
REF	DESCRIPTION	MATERIAL
1	BODY	DUCTILE IRON, GGG-40
2	COVER	DUCTILE IRON, GGG-40
3	DISC	DUCTILE IRON, GGG-40
4	PROFILED SEALING RING	EPDM
5	DRIVE SHAFT	STAINLESS STEEL, AISI 420
6	RETAINING RING	STAINLESS STEEL, AISI 304
7	SEAT RING	STAINLESS STEEL, AISI 304
8	STUB SHAFT	STAINLESS STEEL, AISI 420
9	BEARING BUSHES	TIN BRONZE, CuSn8

- FASTENERS IN CONTACT WITH WATER ARE STAINLESS STEEL, A2

DN	L1	FLANGED DETAILS							
		ØD1	ØD2	ØD3	c	f	Ød	Bolt	n
100	190	235	190	156	19	3	23	M20	8
150	210	300	250	211	20	3	28	M24	8
200	230	360	310	274	22	3	28	M24	12
250	250	425	370	330	24.5	3	31	M27	12
300	270	485	430	389	27.5	4	31	M27	16
350	290	555	490	448	30	4	34	M30	16
400	310	620	550	503	32	4	37	M33	16
450	330	670	600	548	34.5	4	37	M33	20
500	350	730	660	609	36.5	4	37	M33	20
600	390	845	770	720	42	5	41	M36	20
700	430	960	875	820	46.5	5	44	M39	24
800	470	1085	990	928	51	5	50	M45	24
900	510	1185	1090	1028	55.5	5	50	M45	28
1000	550	1320	1210	1140	60	5	57	M52	28
1200	630	1530	1420	1350	69	5	57	M52	32

REFERENCE STANDARDS	
DESIGN & MANUFACTURING	BS EN 1074-1&2, EN593
FLANGE DETAILS	BS EN 1092-2, PN25
FACE TO FACE	EN 558, SERIES 14
TEST PRESSURE	BS EN 12266

TESTING DETAILS	
DESCRIPTION	TEST PRESSURE
SHELL TEST	37.5 BAR
SEAT TEST	27.5 BAR



COATING: 250 µm min FBE Acc. to DIN 30677

COLOR: RAL 5015

VALVE OPERATION CAN BE WITH

- GEAR BOX
- ELECTRIC ACTUATOR ✓

* WE RESERVE THE RIGHT TO MAKE TECHNICAL AND DIMENSIONAL MODIFICATIONS AS A CONTINUOUS DEVELOPMENT.

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أميكون AMICON valves
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TEL: (03) 812 1214 FAX: (03) 812 1131

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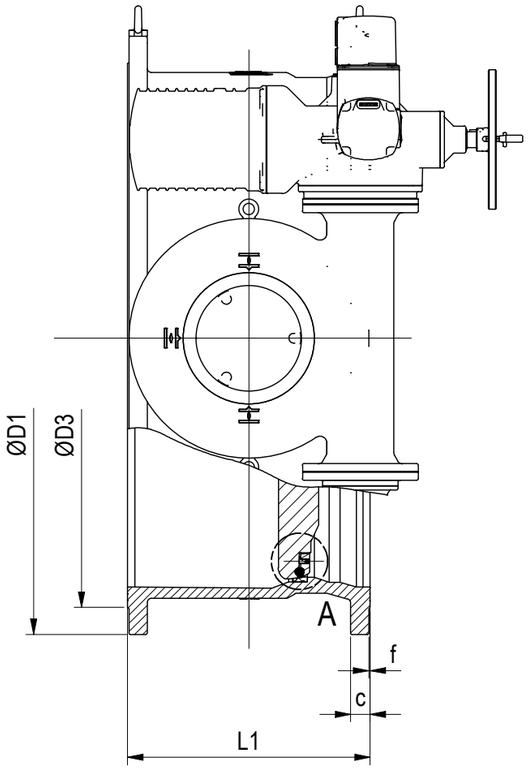
DESCRIPTION
DOUBLE ECCENTRIC BUTTERFLY VALVE WITH ACTUATOR DN100 - DN1200 PN25

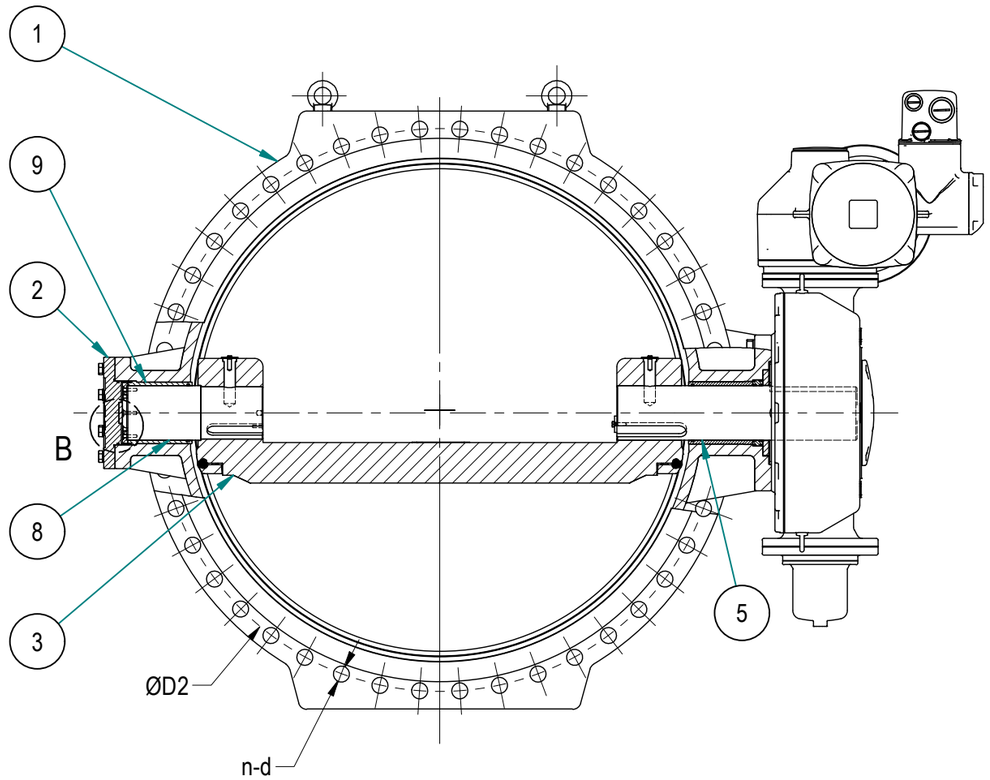
DRAWING NUMBER
1084-GAD

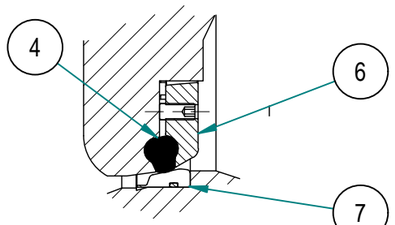
MATERIAL
SEE TABLE

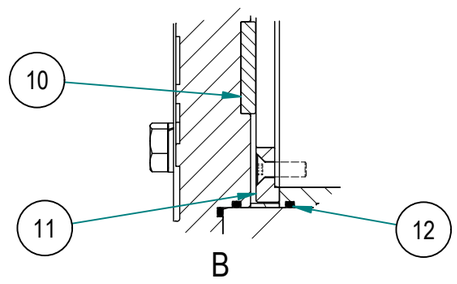
WEIGHT: N/A
SCALE: NTS

2022	BY	DATE
DRAWN	VJS	23-05-2022
CHECKED	ASK	23-05-2022
APPROVED	RCL	23-05-2022
REVISION	SIZE	A3









BELOW MATERIAL ARE SPECIFIED FOR PORTABLE WATER APPLICATION

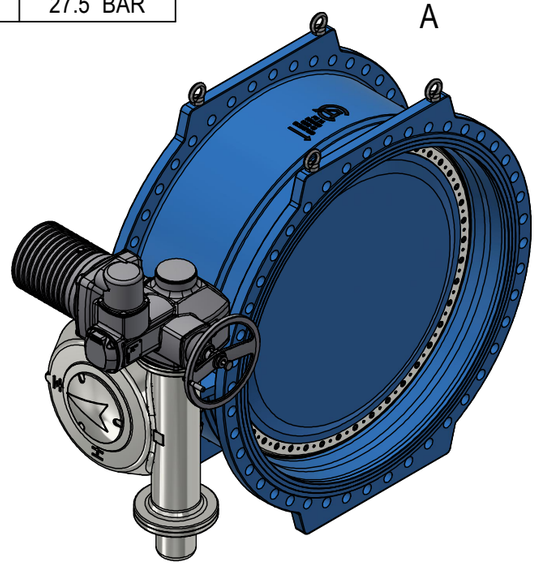
REF	DESCRIPTION	MATERIAL
1	BODY	DUCTILE IRON, GGG-40
2	COVER	DUCTILE IRON, GGG-40
3	DISC	DUCTILE IRON, GGG-40
4	PROFILED SEAL RING	EPDM
5	DRIVE SHAFT	STAINLESS STEEL,AISI 420
6	RETAINING RING	STAINLESS STEEL,AISI 304
7	SEAT RING	STAINLESS STEEL,AISI 304
8	STUB SHAFT	STAINLESS STEEL,AISI 420
9	BEARING BUSHES	TIN BRONZE,CuSn8
10	THRUST DISC	TIN BRONZE,CuSn8
11	THRUST RING	TIN BRONZE,CuSn8
12	ORING	NBR,SHORE A70
13	GEARBOX	.....

- FASTENERS IN CONTACT WITH WATER ARE STAINLESS STEEL, A2

DN	L1	FLANGE DETAILS							
		ØD1	ØD2	ØD3	c	f	Ød	Bolt	n
1400	710	1755	1640	1560	74	5	62	M56	36
1500	750	1865	1750	1678	77.5	5	62	M56	36
1600	790	1975	1860	1780	81	5	62	M56	40
1800	870	2195	2070	1985	88	5	70	M64	44
2000	950	2425	2300	2210	95	5	70	M64	48

REFERENCE STANDARDS	
DESIGN & MANUFACTURING	BS EN593
FLANGE DETAILS	BS EN 1092-2, PN25
FACE TO FACE	EN 558, SERIES 14
TEST PRESSURE	BS EN 12266

TESTING DETAILS	
DESCRIPTION	TEST PRESSURE
SHELL TEST	37.5 BAR
SEAT TEST	27.5 BAR



COATING: 250 µm min FBE Acc. to DIN 30677

COLOR: RAL 5015

VALVE OPERATION CAN BE WITH

- ELECTRIC ACTUATOR ✓

NOTE:- 1) WE RESERVE THE RIGHT TO MAKE TECHNICAL AND DIMENSIONAL MODIFICATIONS AS A CONTINUOUS DEVELOPMENT.

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TEL: (03) 812 1214 FAX: (03) 812 1131

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DESCRIPTION
DOUBLE ECCENTRIC BUTTERFLY DN1400-DN2000 PN25 WITH ELECTRIC ACTUATOR

MATERIAL
SEE TABLE

DRAWING NUMBER
1082-GAD

WEIGHT: N/A
SCALE: NTS

2022	BY	DATE
DRAWN	VJS	23-05-2022
CHECKED	ASK	23-05-2022
APPROVED	RCL	23-05-2022
REVISION	SIZE	A3

2. Gate Valve

Resilient Seated Gate Valve, Non-Rising Stem
DN 50–600, PN10/16/25

Models: GT10F

Flanged Ends

Socket Ends

Description

Gate Valve is generally used to completely shut off fluid flow or, in the fully open position, provide full flow in a pipeline. It is used either in the fully closed or fully open positions. The obturator (closing element) is made of ductile iron and fully covered with WRAS approved EPDM rubber so that the gate valve is Bi-directional and capable to prevent passing fluid from both sides.

Resilient Seated Gate Valve, Non-Rising Stem
DN 50–600, PN10/16/25

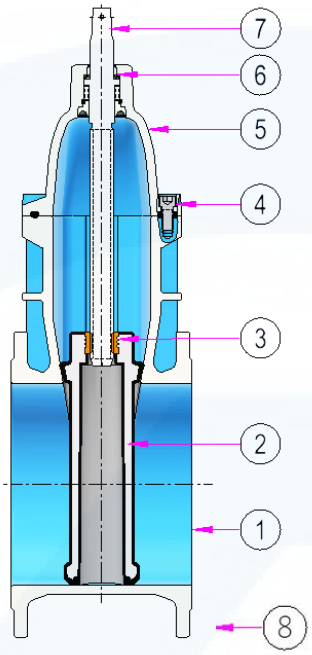
Models: GT10F

Specification

Model	GT10F
Design	Valves are designed according to EN1171 & BS EN1074-1&2
Pressure Rating	10/16/25 bars
Connection	• Flanged Ends • Socket Ends
Flange Drilling	According to EN 1092-2, DIN2501 (Other Standards are available upon request)
Actuator types	Top flange according to ISO 5211 • Gearbox • Electrical Actuator • Handwheel
Operating Temperature	Up to 70 C°
Seat Design	Resilient seated gate valves contain WRAS approved EPDM rubber encapsulated ductile iron gate. The valve is closed by appropriate rotation of the spindle which drives the gate against the cast internal sealing surfaces of the valve body. Sealing is achieved by the compression of the rubber encapsulation on the gate against the valve body.
Stem Type	Non-Raising
Use	ISOLATION
Applications	• Potable Water. • Wastewater. • Storm Water. • Irrigation.
Coating	• WRAS approved Fusion Bonded Epoxy. • Other coating material are available upon request.

Resilient Seated Gate Valve, Non-Rising Stem
DN 50–600, PN10/16/25

Models: GT10F



1. Body.
2. Wedge.
3. Stem Nut.
4. Bolts.
5. Bonnet.
6. Thrust Ring.
7. Shaft.
8. Feet.

Technical Characteristics

Body	Made of ductile iron according to DIN 1693 GGG40/50.
Wedge	Ductile iron gate fully encapsulated in EPDM rubber to ensure drop tight sealing.
Stem Nut	Stem nut prevents the wedge to rotate and locks the mechanism to be only vertical.
Bolts	Made of stainless-steel.
Bonnet	Contains the packing and mechanism areas, and made of ductile iron according to DIN 1693 GGG40/50.
Thrust Ring	Anti-friction thrust washer for low operating torques.
Shaft	Stem made of stainless steel for high strength and corrosion resistance.
Feet	Integral cast in feet for safe and easy storage.

Resilient Seated Gate Valve, Non-Rising Stem
DN 50–600, PN10/16/25

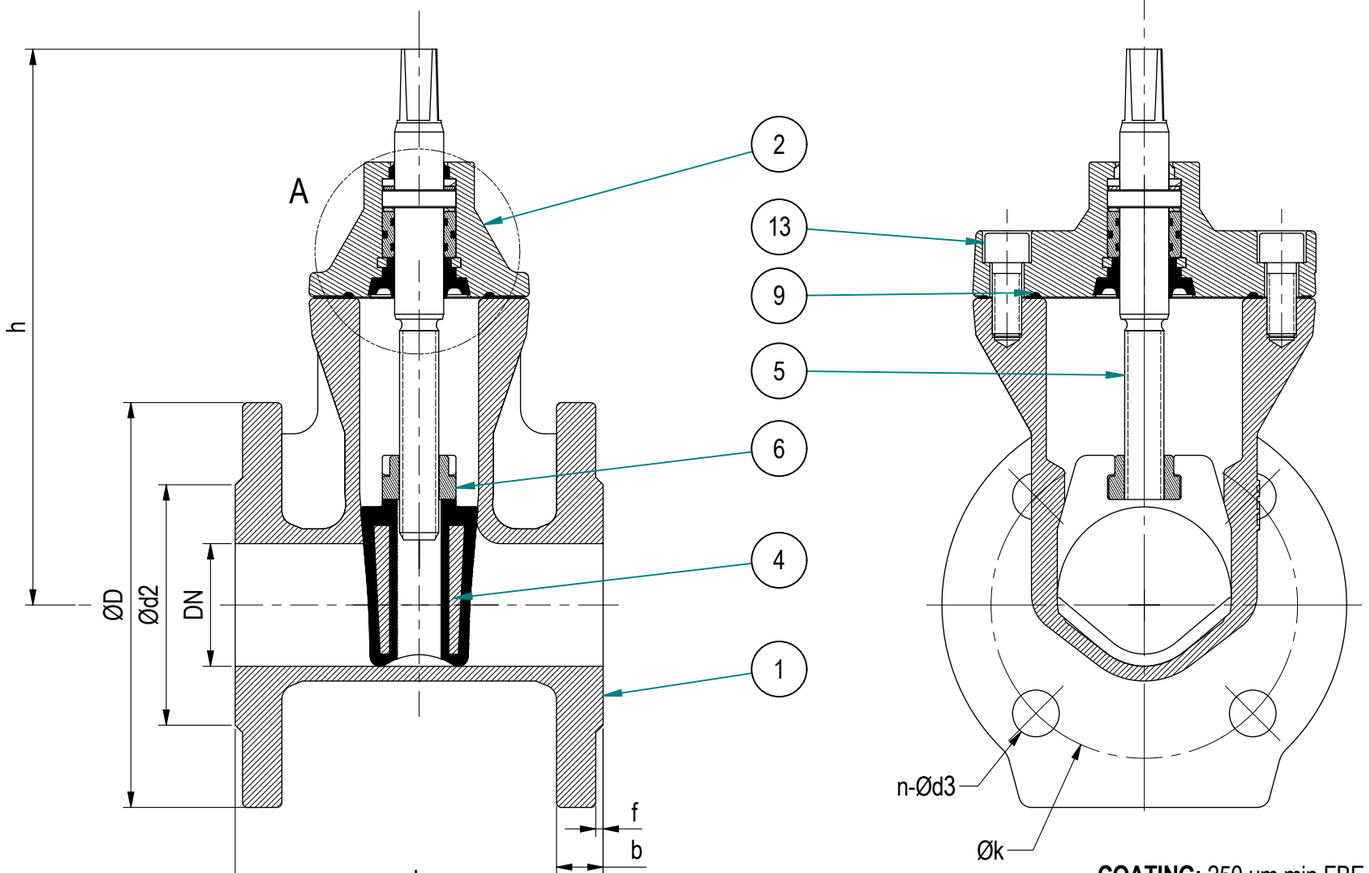
Models: GT10F

Face to Face Length According to EN 558

DN (mm)	Pressure at 16 bars Series 14 (mm)	Pressure at 25 bars Series 15 (mm)
50	150	250
65	170	270
80	180	280
100	190	300
150	210	350
200	230	400
250	250	450
300	270	500
350	290	550
400	310	600
450	330	650
500	350	700
600	390	800

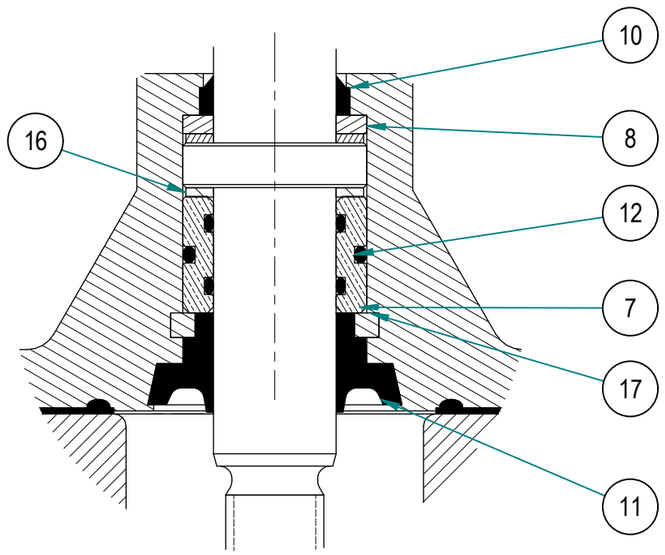
Hydro Test Specification:

Standard	According to BS EN 12266.
Hydrostatic Shell test	1.5 x maximum service pressure.
Hydrostatic Seat test	1.1 x maximum service pressure.

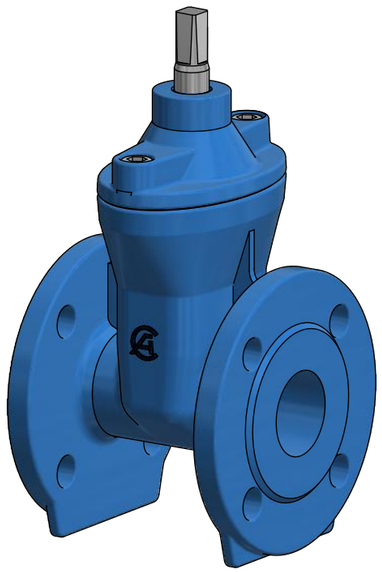


COATING: 250 µm min FBE

COLOR: RAL 5015 (SKY BLUE)



A (1 : 1)



BELOW MATERIALS ARE SPECIFIED FOR POTABLE WATER APPLICATIONS

REF	DESCRIPTION	MATERIAL
1	BODY	DUCTILE IRON, GGG-40
2	BONNET	DUCTILE IRON, GGG-40
3	HANDWHEEL	DUCTILE IRON, GGG-40
4	WEDGE	GGG40+EPDM
5	STEM	STAINLESS STEEL, AISI 420
6	STEM NUT	TIN BRONZE, CuSn6
7	BUSHING	TIN BRONZE, CuSn6
8	BACKUP RING	STAINLESS STEEL, AISI 420
9	GASKET	EPDM
10	WIPER SEAL	EPDM
11	CUFF	EPDM
12	O-RING	NBR
13	BONNET BOLT	STAINLESS STEEL, A2-70
14	HANDWHEEL WASHER	STAINLESS STEEL, A2-70
15	HANDWHEEL SCREW	STAINLESS STEEL, A2-70
16	WASHER	TEFLON
17	SPLIT RING	STAINLESS STEEL, AISI 304

TESTING DETAILS	
DESCRIPTION	TEST PRESSURE
SHELL TEST	24 BAR
SEAT TEST	17.6 BAR

REFERENCE STANDARD	
GENERAL DESIGN	EN 1074- 1&2
FACE TO FACE	EN 558 SERIES 14
FLANGE DETAILS	EN 1092-2 PN16
TESTING	EN 1074-1&2 \ EN 12266

DN	L	h	FLANGE DETAILS							
			ØD	Øk	b	Ød2	f	n	Bolt	Ød3
32	130	250	140	100	19	76	3	4	M16	19
40	140	250	150	110	19	84	3	4	M16	19
50	150	250	165	125	19	99	3	4	M16	19
65	170	280	185	145	19	118	3	4	M16	19

* DIMENSIONS SUBJECT TO CHANGE DUE TO CONTINOUS IMPROVEMENT.

ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE INDICATED.
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P.O. BOX 3430 DAMMAM 31471, KSA
TEL: (03) 812 1214 FAX: (03) 812 1131

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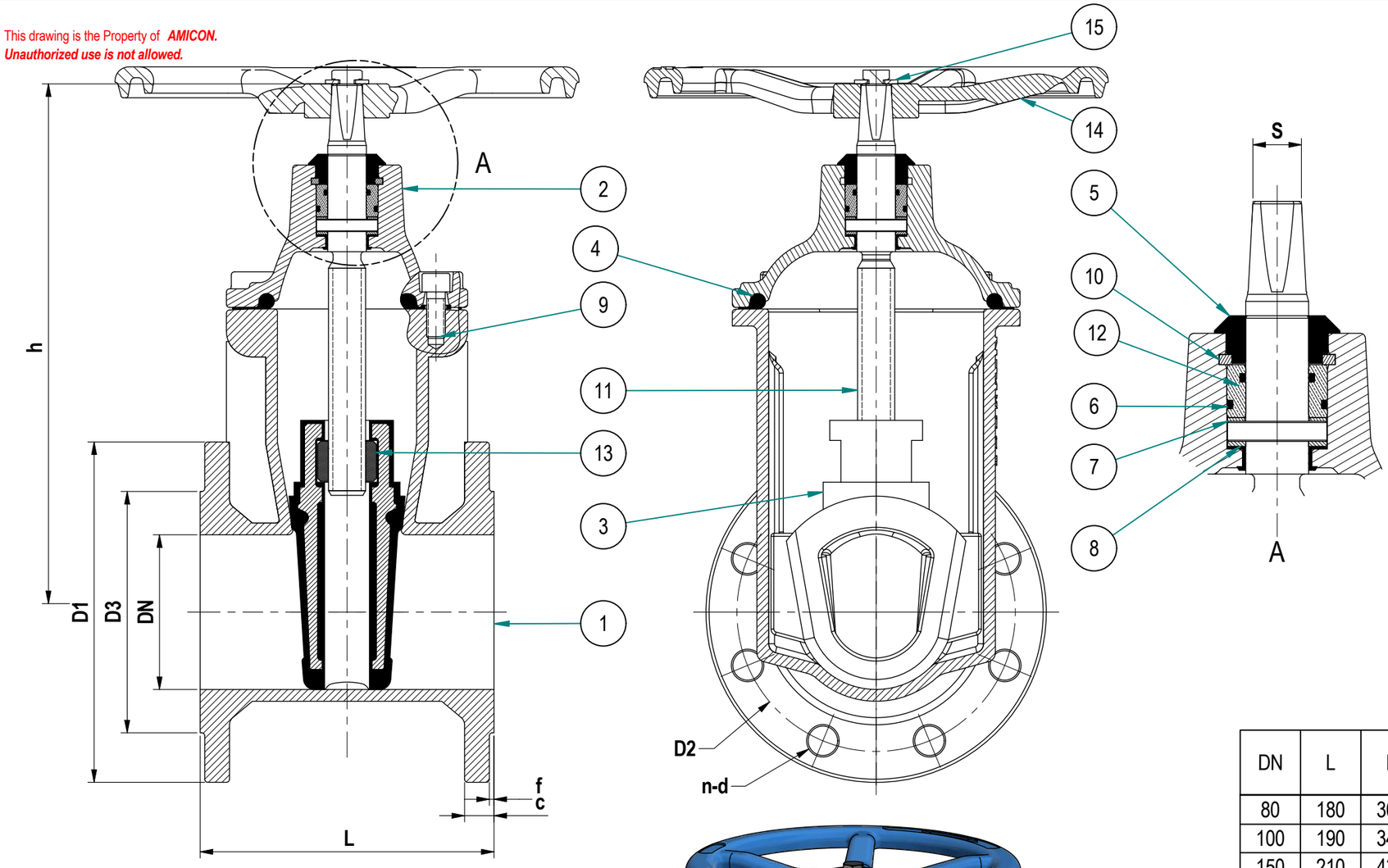
DESCRIPTION
RESILIENT SEAT DN32-DN65 PN16/10 GATE VALVE

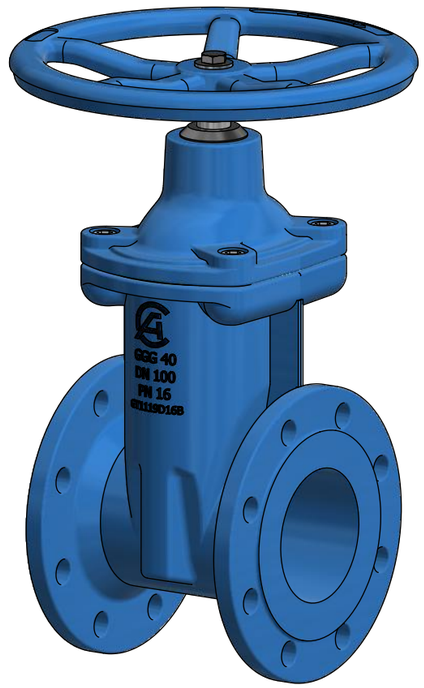
DRAWING NUMBER
1078-GAD

MATERIAL
SEE TABLE

WEIGHT: N/A
SCALE:

2021	BY	DATE
DRAWN	SAT	12-04
CHECKED	RCL	12-04
APPROVED		
REVISION	SIZE	A3





REF	DESCRIPTION	MATERIAL
1	BODY	DUCTILE IRON, GGG-40
2	BONNET	DUCTILE IRON, GGG-40
3	WEDGE RUBBERIZED	GGG-40 + EPDM
4	BONNET GASKET	EPDM
5	STEM GASKET	EPDM
6	O-RINGS	EPDM
7	WASHER	PTFE
8	SLEEVE	PTFE + EPDM
9	BONNET BOLT	STAINLESS STEEL, A2-70
10	THRUST RING	STAINLESS STEEL, AISI 304
11	STEM	STAINLESS STEEL, AISI 420
12	BUSHING	TIN BRONZE, CuSn6
13	STEM NUT	TIN BRONZE, CuSn6
14	HAND WHEEL	DUCTILE IRON, GGG-40
15	HANDWHEEL WASHER	STRAINLESS STEEL 304, A2-70

- FASTENERS ARE STAINLESS STEEL, A2-70

REFERENCE STANDARDS	
DESIGN & MANUFACTURING	BS EN 1074-1&2 COMPLY WITH AWWA C509
FACE TO FACE	EN 558 TABLE 2 SERIES 14
FLANGE	ISO 7005-2 / BS EN 1092-2 PN16

DN	L	h	s	FLANGED ENDS							
				D1	D2	D3	c	f	d	Bolt	n
80	180	305	17	200	160	132	19	3	19	M16	8
100	190	340	19	220	180	156	19	3	19	M16	8
150	210	435	19	285	240	211	19	3	23	M20	8
200	230	555	24	340	295	266	20	3	23	M20	12
250	250	635	27	400	355	319	22	3	28	M24	12
300	270	715	27	455	410	370	24.5	4	28	M24	12

* WE RESERVE THE RIGHT TO MAKE TECHNICAL AND DIMENSIONAL MODIFICATIONS AS A CONTINUOUS DEVELOPMENT.

COATING: 250 µm min FBE Acc. to DIN 30677

COLOR: RAL 5015 (SKY BLUE) - POTABLE WATER ✓

RAL 3000 (FLAME RED) - FIRE WATER

TEST PRESSURES Acc. to BS EN 12266 Part 1&2

SHELL : 24 bars

SEAT : 17.6 bars

CLOSING DIRECTION: CLOCKWISE

VALVE OPERATION CAN BE WITH

- HANDWHEEL ✓
- TOP CAP
- GEAR BOX
- ELECTRIC ACTUATOR
- CHAIN WHEEL

ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE INDICATED.
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TEL: (03) 812 1214 FAX: (03) 812 1131

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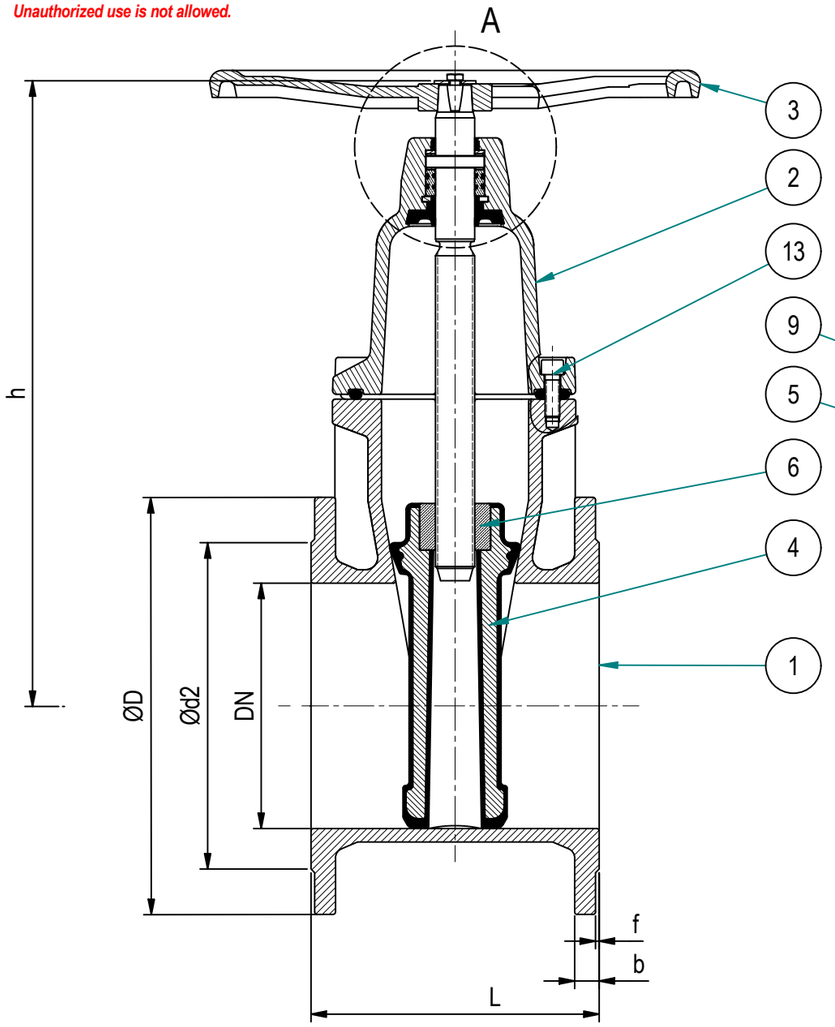
DESCRIPTION
RESILIENT SEAT GATE VALVE
DN80 - DN300 PN16

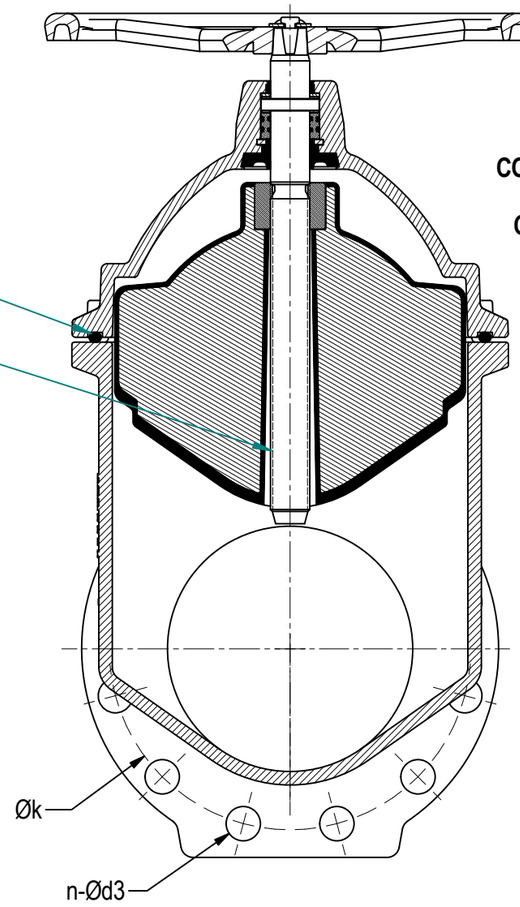
DRAWING NUMBER
1039-GAD

MATERIAL
SEE TABLE

WEIGHT: N/A
SCALE: NTS

2018	BY	DATE
DRAWN	SAT	08.10.18
CHECKED	RCL	15.10.18
APPROVED		
REVISION	SIZE	A3





COATING: 250 µm min, FBE

COLOR: RAL 5015 (SKY BLUE)

BELOW MATERIAL ARE SPECIFIED FOR PORTABLE WATER APPLICATION

REF	DESCRIPTION	MATERIAL
1	BODY	DUCTILE IRON, GGG-40
2	BONNET	DUCTILE IRON, GGG-40
3	HANDWHEEL	DUCTILE IRON, GGG-40
4	WEDGE	GGG-40 + EPDM
5	STEM	STAINLESS STEEL, AISI 420
6	STEM NUT	TIN BRONZE, CuSn6
7	BUSHING	TIN BRONZE, CuSn6
8	BACKUP RING	STAINLESS STEEL, AISI 420
9	BONNET GASKET	EPDM
10	WIPER SEAL	EPDM
11	CUFF	EPDM
12	O-RING	NBR
13	BONNET BOLT	STAINLESS STEEL 304, A2-70
14	HANDWHEEL WASHER	STAINLESS STEEL, A2
15	HANDWHEEL SCREW	STAINLESS STEEL, A2
16	WASHER	TEFLON
17	Split Ring	STAINLESS STEEL, AISI 420

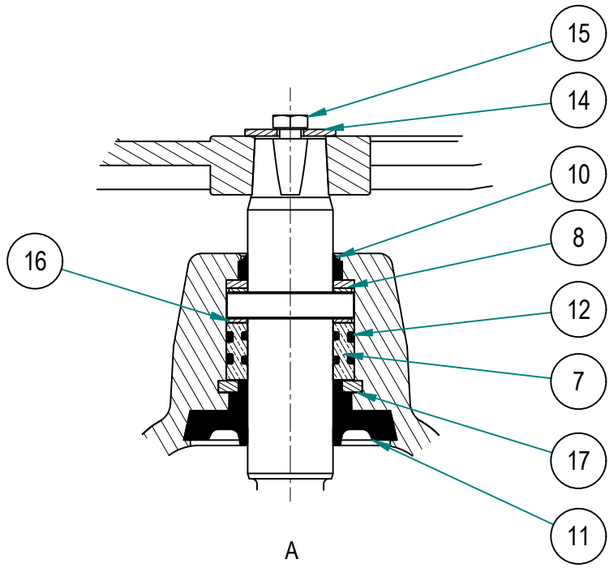
FASTENERS IN CONTACT WITH WATER AS STAINLESS STEEL, A2

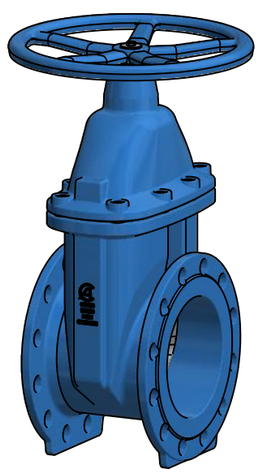
TESTING DETAILS	
DESCRIPTION	TEST PRESSURE
SHELL TEST	37.5 BAR
SEAT TEST	27.5 BAR

REFERENCE STANDARD	
GENERAL DESIGN	EN 1074- 1&2
FACE TO FACE	EN 558 SERIES 14
FLANGE DETAILS	EN 1092-2
TESTING	EN 1074-1&2 \ EN 12266

DN	L	h	FLANGE DETAILS							
			ØD	Øk	b	Ød2	f	n	Bolt	Ød3
80	180	305	200	160	19	132	3	8	M16	19
100	190	340	235	190	19	156	3	8	M20	23
150	210	435	300	250	20	211	3	8	M24	28
200	230	555	360	310	22	274	3	12	M24	28
250	250	593	425	370	24.5	330	3	12	M27	31

SOME DIMENSIONS SUBJECTED TO CHANGE DUE TO CONTINOUS IMPROVEMENT.





ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE INDICATED.
GENERAL MACHINING TOLERANCES IS ACCORDING TO ISO 2768-1 AND ISO 2768-2. IF IN DOUBT, PLEASE ASK. DO NOT SCALE DRAWING.

AMICON valves
P.O. BOX 3430 DAMMAM 31471, KSA
TEL: (03) 812 1214 FAX: (03) 812 1131

AMIANTIT

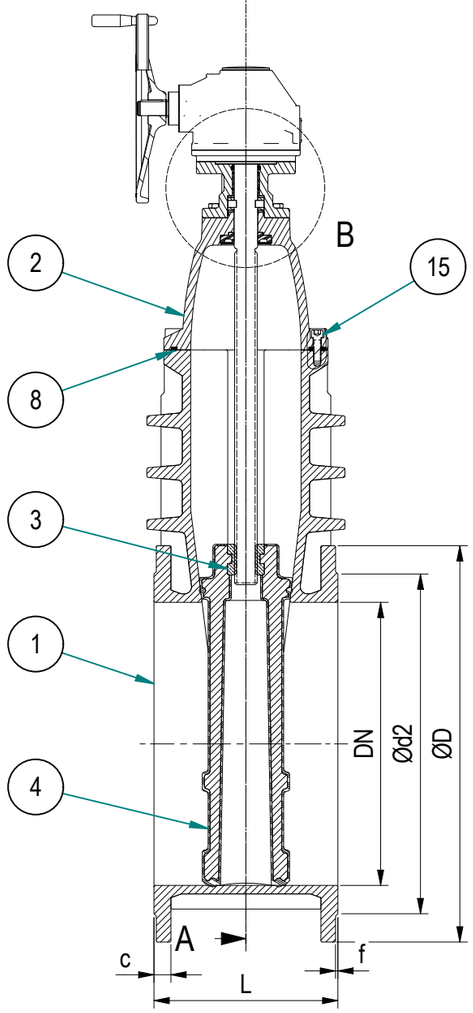
DESCRIPTION
RESILIENT SEAT DN80 - 250 PN25 GATE VALVE WITH HANDWHEEL

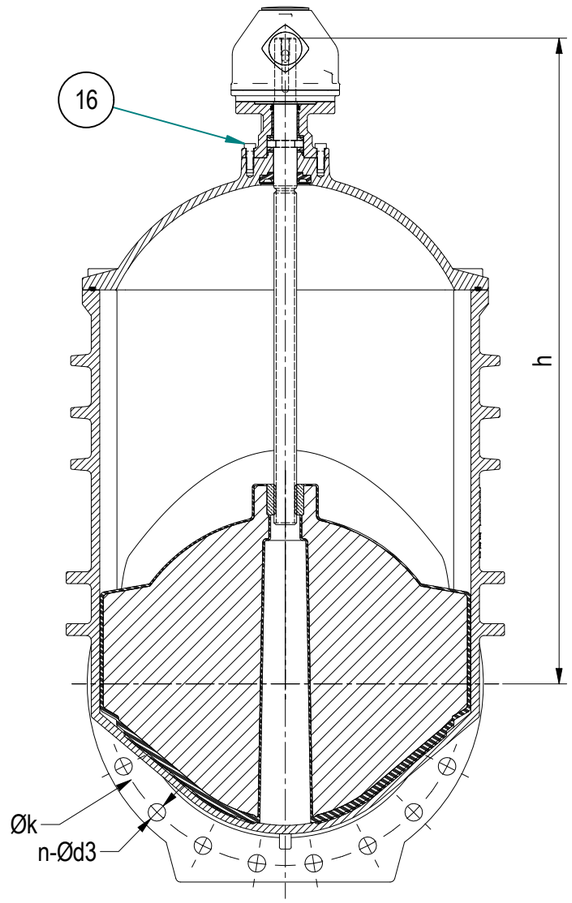
MATERIAL

DRAWING NUMBER
1086-GAD

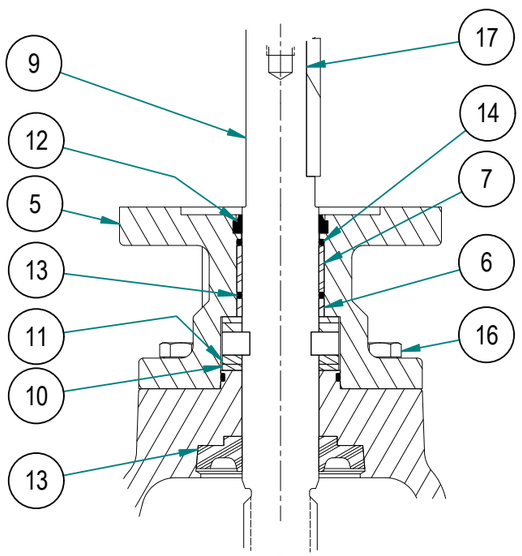
WEIGHT: N/A
SCALE: 1:5

2019	BY	DATE
DRAWN	SAT	23-08
CHECKED	RCL	23-08
APPROVED	RCL	23-08
REVISION	SIZE	A3





A-A



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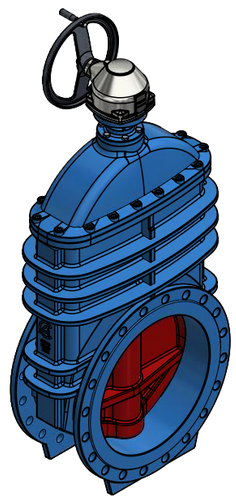


BELOW MATERIAL ARE SPECIFIED FOR WATER APPLICATION

REF	DESCRIPTION	DRAWING / SPECS
1	BODY	DUCTILE IRON, GGG-40
2	BONNET	DUCTILE IRON, GGG-40
3	STEM NUT	TIN BRONZE,CuSn6
4	WEDGE	DUCTILE IRON, GGG-40 + EPDM
5	YOKE	DUCTILE IRON, GGG-40
6	BUSHING BOTTOM	TIN BRONZE, CuSn6
7	BUSHING TOP	TIN BRONZE, CuSn6
8	GASKET	EDPM, SHORE 70A
9	SPINDLE	STAINLESS STEEL, AISI 420
10	SPACER	TEFLON
11	THURST RING	BRONZE
12	WIPER SEAL	EDPM, SHORE 70A
13	CUFF	EDPM, SHORE 70A
14	O-RING	EDPM, SHORE 70A
15	SOCKET HEAD CAP SCREW	STAINLESS STEEL, A2-70
16	HEX HEAD BOLT	STAINLESS STEEL, A2-70
17	KEY	STAINLESS STEEL, AISI316

TESTING DETAILS	
DESCRIPTION	TEST PRESSURE
SHELL TEST	37.5 BAR
SEAT TEST	27.5 BAR

REFERENCE STANDARD	
GENERAL DESIGN	EN 1074- 1&2
FACE TO FACE	EN 558 SERIES 14
FLANGE DETAILS	EN 1092-2
TESTING	EN 1074-1&2 \ EN 12266

DN	L	h	FLANGE DETAILS							
			ØD	Øk	Ød2	c	f	Ød3	Bolt	n
400	310	910	620	550	503	32	4	37	M33	16
300	290	890	485	430	389	27.5	4	31	M27	16
450	330	1080	670	600	548	34.5	4	37	M33	20
500	350	1180	730	660	609	36.5	4	37	M33	20
600	390	1345	845	770	720	42	5	41	M36	20

*SOME DIMENSIONS SUBJECTED TO CHANGE DUE TO CONTINOUS IMPROVEMENT.

ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE INDICATED.
GENERAL MACHINING TOLERANCES IS ACCORDING TO ISO 2768-1 AND ISO 2768-2. IF IN DOUBT, PLEASE ASK. DO NOT SCALE DRAWING.

AMICON valves
P.O. BOX 3430 DAMMAM 31471, KSA
TEL: (03) 812 1214 FAX: (03) 812 1131

AMIANTIT

DESCRIPTION
RESILIENT SEAT GATE VALVE WITH GEARBOX DN300- 600, PN25

DRAWING NUMBER
1087-GAD

MATERIAL

WEIGHT	SCALE
N/A	1 : 13

2022	BY	DATE
DRAWN	VJS	23-05-2022
CHECKED	ASK	23-05-2022
APPROVED	RCL	23-05-2022
REVISION	SIZE	A3

\\csfssadip142\Projects\Valve Plant\Amiantit Valve Technology\GAD Drawings\Resilient seat Gate Valve\Gate Valve DN350-600\1087-GAD.idw

3. Air Release Valve

Air Release Valve – Combination Type (Triple Function)
DN 50–250, PN10/16/25

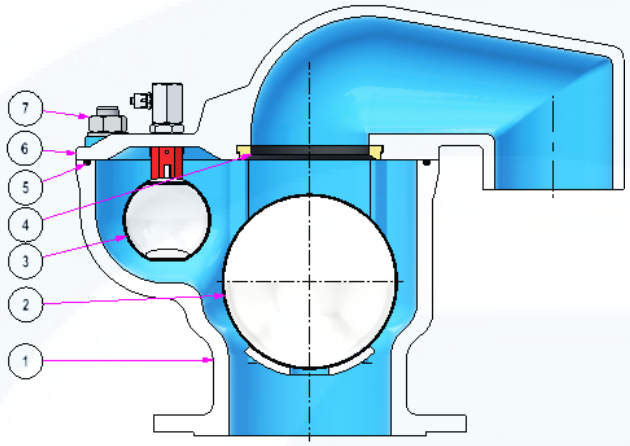
Model: AR10FX

Description

Amicon's Air Release Valve – Combination Type, also known as Double orifice type, is fully automatic triple function for releasing air during pipe filling and bringing air in (anti-vacuum) during pipe emptying, releasing small pockets of accumulated air while the pipeline operates under pressure. The small orifice for discharge of pressurized air during service; air discharge volume can be increased by integrated, manually adjustable control valve. The large orifice for outlet and intake of large air volumes on start and trip of pumps, respectively.

Specification

Model	AR10FX
Design	Valves are designed according to AWWA C512, EN1074-4
Pressure Rating	10/16/25 bars
Connection	Flanged End
Flange Drilling	According to EN 1092-2, DIN2501 (Other Standards are available upon request)
Actuator types	Self-Operated
Operating Temperature	Up to 70 C°
Applications	• Potable Water. • Firefighting Water. • Irrigation Water.
Coating	• WRAS approved Fusion Bonded Epoxy. • Other coating material are available upon request.



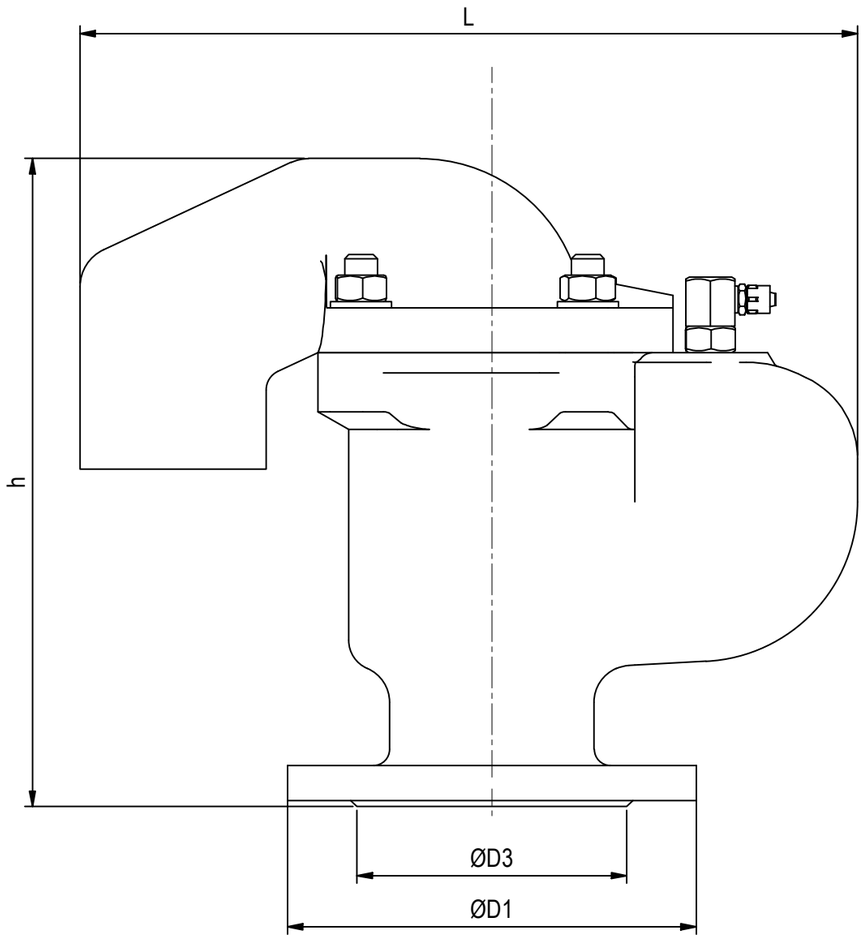
1. Body. 2. Large Ball. 3. Small Ball. 4. Sealing.
5. Sealing. 6. Cover. 7. Bolt.

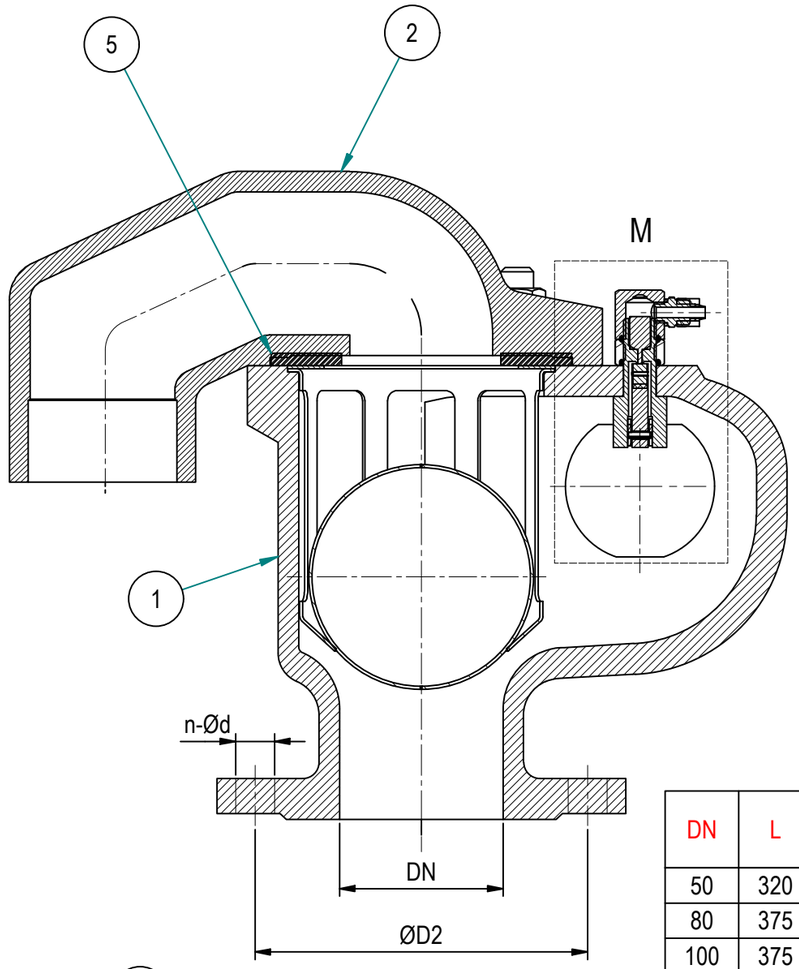
Technical Characteristics

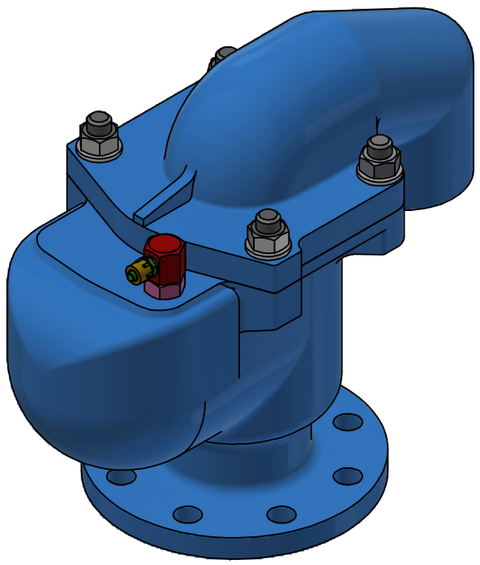
Body	Lightweight construction made of ductile iron to DIN 1693 GGG40/50
Small Ball Large Ball	Balls are made of Stainless Steel SS304 (other grades are available upon request).
Sealings	Made of WRAS approved EPDM rubber.
Cover	Made of ductile iron to DIN 1693 GGG40/50
Bolts	Made of Stainless-steel

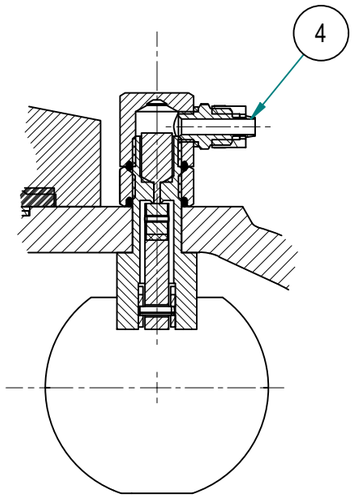
Hydro Test Specification:

Standard	According to BS EN 12266.
Hydrostatic Seat test	1.1 x maximum service pressure.









M (1 : 2)

COATING: 250 µm min FBE
COLOR: RAL 5015 (SKY BLUE)

BELOW MATERIALS ARE SPECIFIED FOR POTABLE WATER APPLICATION

REF	DESCRIPTION	MATERIAL
1	BODY	DUCTILE IRON,GGG-40
2	BONNET	DUCTILE IRON,GGG-40
3	BALL	STAINLESS STEEL, 304
4	VALVE	STAINLESS STEEL, 304
5	SEAL	EPDM

FASTENERS IN CONTACT WITH WATER ARE STAINLESS STEEL, A4-70

REFERENCE STANDARD	
DESIGN & MANUFACTURING	EN 1074-4
FLANGE	EN 1092-2/ISO 7005-2 , DIN 2501,PN16

TESTING DETAILS	
DESCRIPTION	TEST PRESSURE
SHELL TEST	24 BAR
SEAT TEST	17.5 BAR

DN	L	h	FLANGED ENDS							
			ØD1	ØD2	ØD3	c	f	Ød	Bolt	n
50	320	260	165	125	99	19	3	19	M16	4
80	375	317	200	160	132	19	3	19	M16	4
100	375	335	220	180	156	19	3	19	M16	8
150	500	384	285	240	211	19	3	23	M20	8
200	500	387	340	295	266	20	3	23	M20	12
250	570	460	405	355	319	22	3	28	M24	12

* PN10 AND PN16 FLANGES ARE THE SAME FOR DN150 AND BELOW
* SOME DIMENSIONS SUBJECT TO CHANGE DUE TO CONTINOUS IMPROVEMENT

ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE INDICATED.
GENERAL MACHINING TOLERANCES IS ACCORDING TO ISO 2768-1 AND ISO 2768-2. IF IN DOUBT, PLEASE ASK. DO NOT SCALE DRAWING.

AMICON valves
P.O. BOX 3430 DAMMAM 31471, KSA
TEL: (03) 812 1214 FAX: (03) 812 1131

AMIANTIT

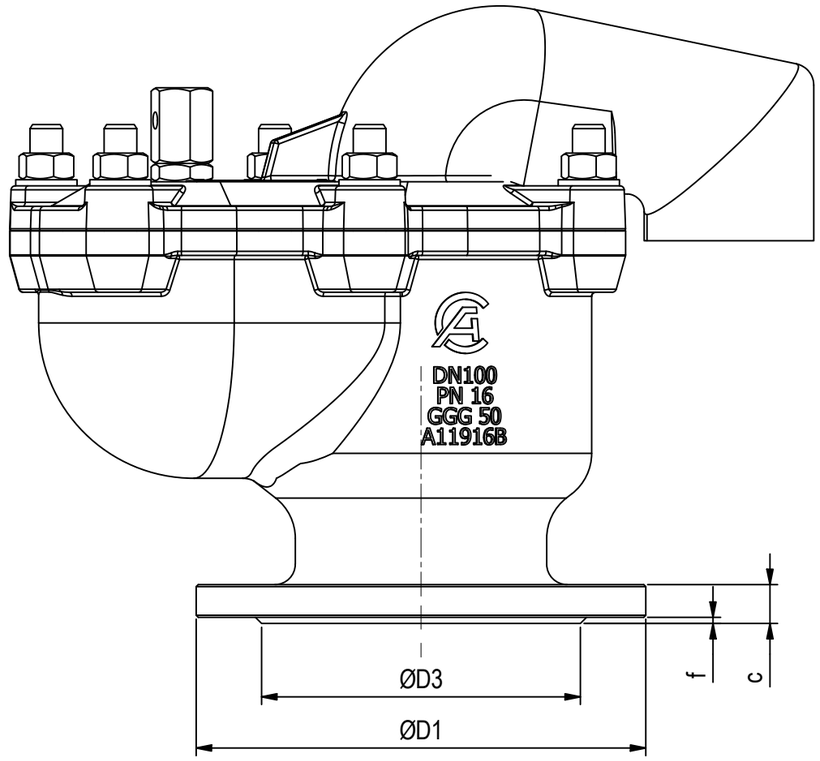
DESCRIPTION
DOUBLE ORIFICE AIR RELEASE VALVE DN50-250 PN16

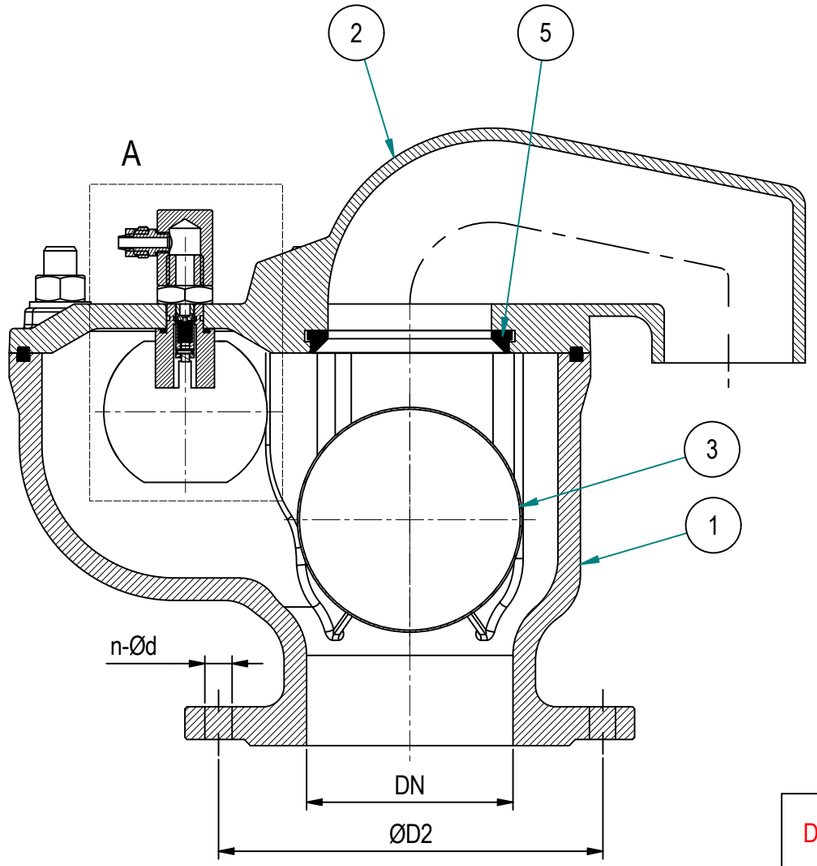
DRAWING NUMBER
1094-GAD

MATERIAL
SEE TABLE

WEIGHT: N/A
SCALE: 1 : 4

2022	BY	DATE
DRAWN	VJS	12-04
CHECKED	ASK	12-04
APPROVED	RCL	12-04
REVISION	SIZE	A3





BELOW MATERIALS ARE SPECIFIED FOR POTABLE WATER APPLICATION

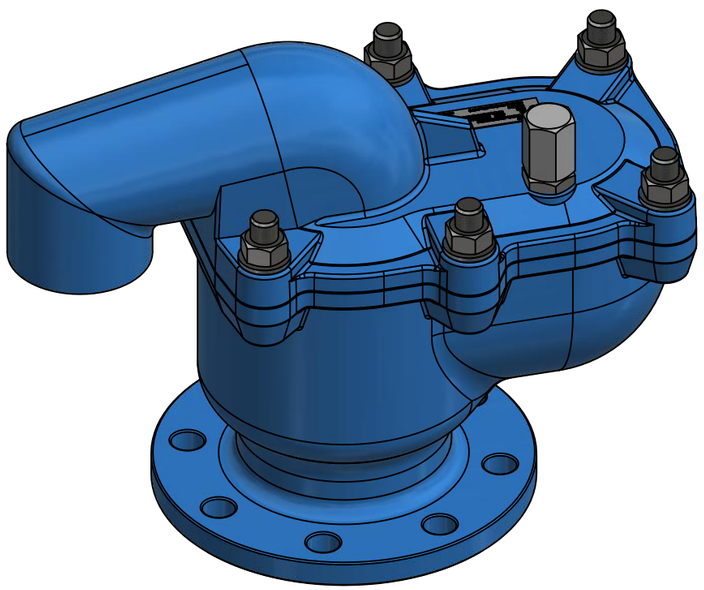
REF	DESCRIPTION	MATERIAL
1	BODY	DUCTILE IRON,GGG-40
2	BONNET	DUCTILE IRON,GGG-40
3	BALL	STAINLESS STEEL, 304
4	VALVE	STAINLESS STEEL,304
5	SEAL	EPDM

FASTENERS IN CONTACT WITH WATER ARE STAINLESS STEEL, A2

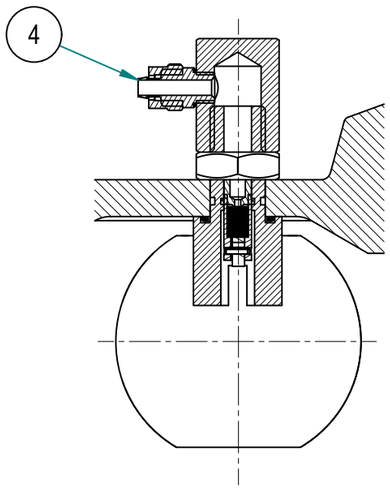
REFERENCE STANDARD	
DESIGN & MANUFACTURING	EN 1074-4
FLANGE	EN 1092-2 / ISO 7005-2, PN25

TESTING DETAILS	
DESCRIPTION	TEST PRESSURE
SHELL TEST	37.5 BAR
SEAT TEST	27.5 BAR

DN	FLANGED ENDS							
	ØD1	ØD2	c	ØD3	f	n	Bolt	Ød
50	165	125	19	99	3	4	M16	19
65	185	145	19	118	3	8	M16	19
80	200	160	19	132	3	8	M16	19
100	235	190	19	156	3	8	M20	23
150	300	250	20	211	3	8	M24	28
200	360	310	22	274	3	12	M24	28
250	425	370	24.5	330	3	12	M27	31



COATING: 250 µm min FBE
COLOR: RAL 5015 (SKY BLUE)



A (1 : 2)

NOTE:-
1) SOME DIMENSIONS SUBJECT TO CHANGE DUE TO CONTINOUS IMPROVEMENT

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GENERAL MACHINING TOLERANCES IS ACCORDING TO ISO 2768-1 AND ISO 2768-2. IF IN DOUBT, PLEASE ASK. DO NOT SCALE DRAWING.

AMICON valves
P.O. BOX 3430 DAMMAM 31471, KSA
TEL: (03) 812 1214 FAX: (03) 812 1131

AMIANTIT

DESCRIPTION
DOUBLE ORIFICE AIR RELEASE VALVE DN50-250 PN25

DRAWING NUMBER
1009-GAD

MATERIAL: SEE TABLE

WEIGHT: N/A
SCALE: 1 : 3.5

2021	BY	DATE
DRAWN	VJS	12-04
CHECKED	ASK	12-04
APPROVED	RCL	12-04
REVISION	SIZE	A3

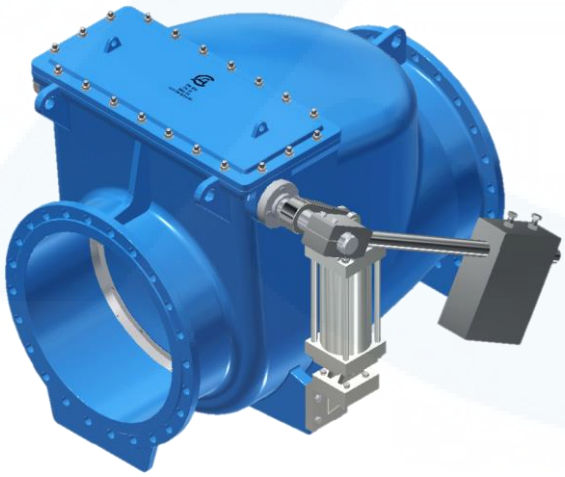
4. Swing Check Valve

Swing Check Valve (Non-Return)
DN 50–600, PN10/16/25

Models: CK10F

Description

Amicon's Swing Check Valve, non-return valve or one-way valve, is a valve that allows the flow to stream in only one direction by using the fluid pressure to open the swing disc towards one direction and closes when the pressure drops. This mechanism is preventing the fluid to backflow to the pump and potentially damaging it. Therefore, Swing Check Valve is installed in the pump stations and in the main valve chamber to protect the pump from backflow.



Swing Check Valve (Non-Return)
DN 50–600, PN10/16/25

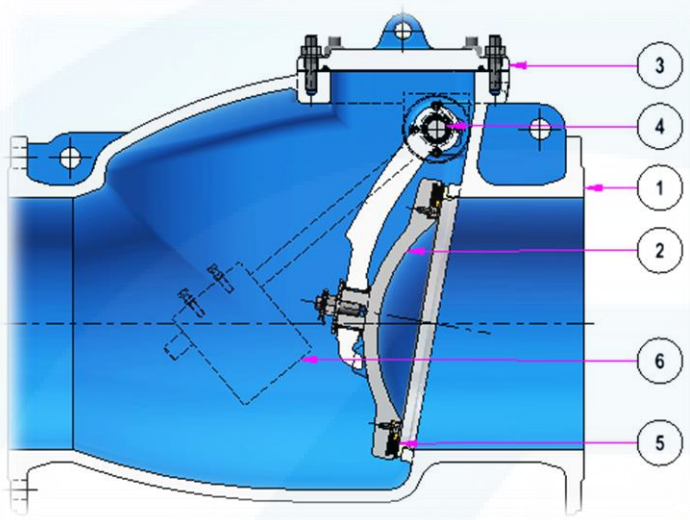
Models: CK10F

Specification

Model	CK10F
Design	Swing Check Valves are designed according to EN12334 & BS EN1074-3
Pressure Rating	10/16/25 bars
Connection	Flanged Ends
Flange Drilling	According to EN 1092-2, DIN2501 (Other Standards are available upon request)
Actuator types	Self-operated.
Disc Closing Mechanism	• Counterweight • Hydraulic Damper
Operating Temperature	Up to 70 C°
Seat Design	• Resilient Seat, designed with WRAS approved rubber ring on disc. • Metallic Seat, metal rings on both disc and body. • The disc is connected to the shaft via a flexible bush that allows disc and valve seat to adjust
Use	Controlling Flow Direction.
Applications	• Potable Water. • Wastewater. • Storm Water. • Irrigation.
Coating	• WRAS approved Fusion Bonded Epoxy. • Other coating material are available upon request.

Swing Check Valve (Non-Return)
DN 50–600, PN10/16/25

Models: CK10F



1. Body.
2. Swing Disc.
3. Cover.
4. Hinge Pin.
5. Sealing.
6. Counterweight.

Technical Characteristics

Body	Made of ductile iron according to DIN 1693 GGG40/50, internally and externally coated with WRAS approved fusion bonded epoxy.
Swing Disc	The swing check valve functions by allowing flow forces to move the closure element, it is a hinged clapper which swings or rotates around a supporting shaft.
Hinge Pin & Sealing	The corrosion-resistant and maintenance-free hinge pin (shaft) works on sealing the shaft preventing leakage to the outside by means of clamp fitted O-ring seal.
Pressure Drop	Swing Check Valve produces the lowest pressure drop, when compared with other check valves of the same size, the internal contours and shapes allow them to fully open at low fluid velocities and create a smooth flow path through the valve.
Counterweight	Swing check valves with lever and weight are recommended for installations in case of increased risk of water hammer at standard velocities.

Swing Check Valve (Non-Return)
DN 50–600, PN10/16/25

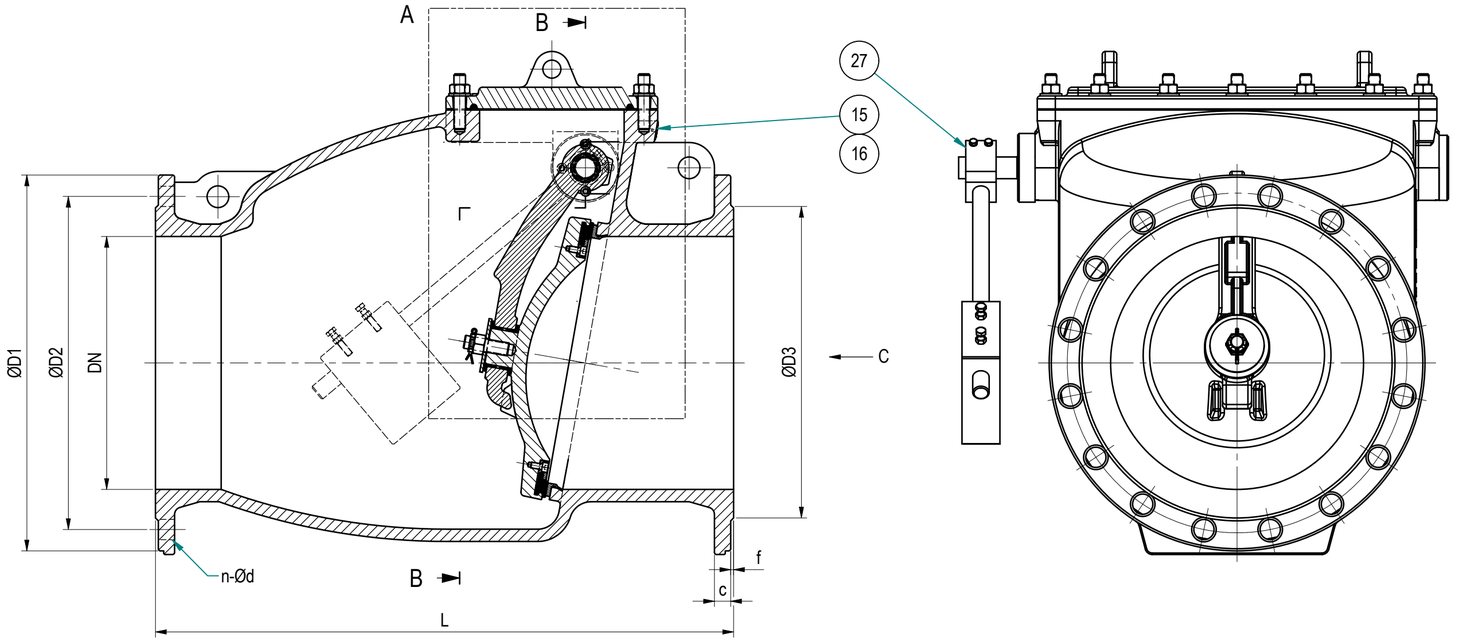
Models: CK10F

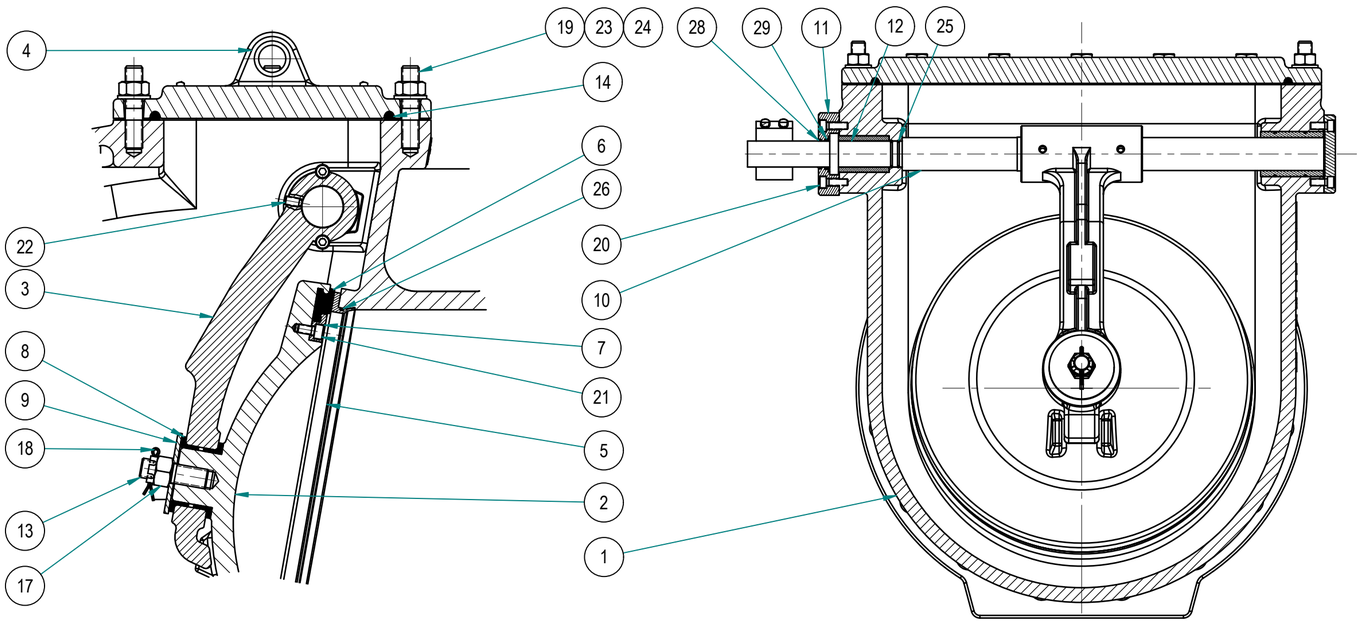
Face to Face Length According to EN 558

DN (mm)	Pressure at 16 bars Series 10 (mm)	Pressure at 25 bars Series 48 (mm)
50	203	200
65	216	240
80	241	260
100	292	350
150	356	400
200	495	500
250	622	600
300	698	700
350	787	800
400	914	900
450	978	1000
500	978	1100
600	1295	1300

Hydro Test Specification:

Standard	According to BS EN 12266.
Hydrostatic Shell test	1.5 x maximum service pressure.
Hydrostatic Seat test	1.1 x maximum service pressure.





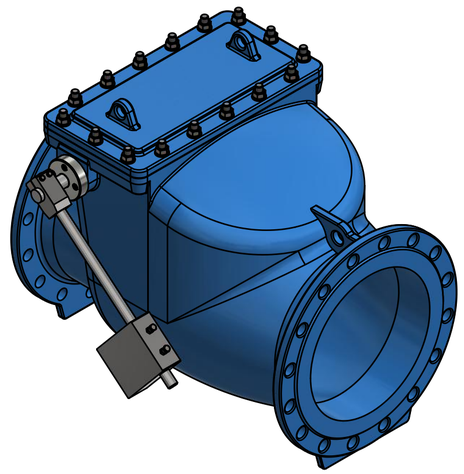
A (1 : 4)

B-B

BELOW MATERIAL ARE SPECIFIED FOR PORTABLE WATER AAPPLICATION

REF	DESCRIPTION	MATERIAL
1	BODY	DUCTILE IRON,GGG 40
2	DISC	DUCTILE IRON,GGG 40
3	SWING ARM	DUCTILE IRON,GGG 40
4	BONNET	DUCTILE IRON,GGG 40
5	SEAT RING	STAINLESS STEEL,AISI 304
6	RUBBER SEAL	EPDM, ShoreA 70
7	RETAINING RING	STAINLESS STEEL,AISI 304
8	RUBBER BUSHING	EPDM, ShoreA 70
9	WASHER	STAINLESS STEEL,AISI 304
10	SHAFT	STAINLESS STEEL,AISI 420
11	SWIVEL BRACKET	STAINLESS STEEL,AISI 420
12	BUSHING	TIN BRONZE, CuSn6
13	STUD BOLT	STAINLESS STEEL,AISI 304
14	BONNET GASKET	EPDM, ShoreA 70
15	NAME PLATE	ALUMINIUM PLATE, 1mm
16	BLIND RIVET	ALUMINIUM
17	SLOTTED HEX NUT	STAINLESS STEEL Gr.A2-70
18	COTTER PIN	STAINLESS STEEL Gr.A2-70
19	DOUBLE END STUD	STAINLESS STEEL Gr.A2-70
20	CYLINDER HEAD CAP SCREW	STAINLESS STEEL Gr.A2-70
21	CYLINDER HEAD CAP SCREW	STAINLESS STEEL Gr.A2-70
22	HEXAGON SOCKET SET SCREW	STAINLESS STEEL Gr.A2-70
23	HEX NUT	STAINLESS STEEL Gr.A2-70
24	WASHER	STAINLESS STEEL Gr.A2-70
25	O-RING	NBR, Shore A70
26	O-RING	NBR, Shore A70
27	COUNTER WEIGHT	DUCTILE IRON, GGG 50
28	WIPER SEAL	NBR
29	SLEEVE BUSHING	TIN BRONZE, CuSn8

-SOME DIMENSION ARE SUBJECTED TO CHANGE DUE TO CONTINOUS IMPROVEMENT



CORROSION PROTECTION
INTERNAL AND EXTERNAL COATING
OF FUSION BONDED EPOXY (FBE).

THICKNESS : 250 µm Min
COLOR : RAL 5015

STANDARS	
FACE TO FACE	EN 558 TABLE 2 SERIES 48
FLANGE	ASME B16.5 CL150

PRESSURE TESTS	
SHELL TEST	24 bar
SEAT TEST	17.6 bar

DN	L	FLANGE DETAILS							
		ØD1	ØD2	ØD3	c	f	Ød(Inch)	Bolt(Inch)	n
300	700	485	431.8	381	30.2	1.6	1	7/8	12
350	800	535	476.3	412.8	33.4	1.6	1 1/8	1	12
400	260	595	539.8	469.9	35	1.6	1 1/8	1	16
450	300	635	577.9	533.4	38.1	1.6	1 1/4	1 1/8	16
500	400	700	635	584.2	41.3	1.6	1 1/4	1 1/8	20
600	500	815	749.3	692.2	46.1	1.6	1 3/8	1 1/4	20

ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE INDICATED.
GENERAL MACHINING TOLERANCES IS ACCORDING TO ISO 2768-1 AND ISO 2768-2. IF IN DOUBT, PLEASE ASK. DO NOT SCALE DRAWING.

AMICON valves
P.O. BOX 3430 DAMMAM 31471, KSA
TEL: (03) 812 1214 FAX: (03) 812 1131

AMIANTIT

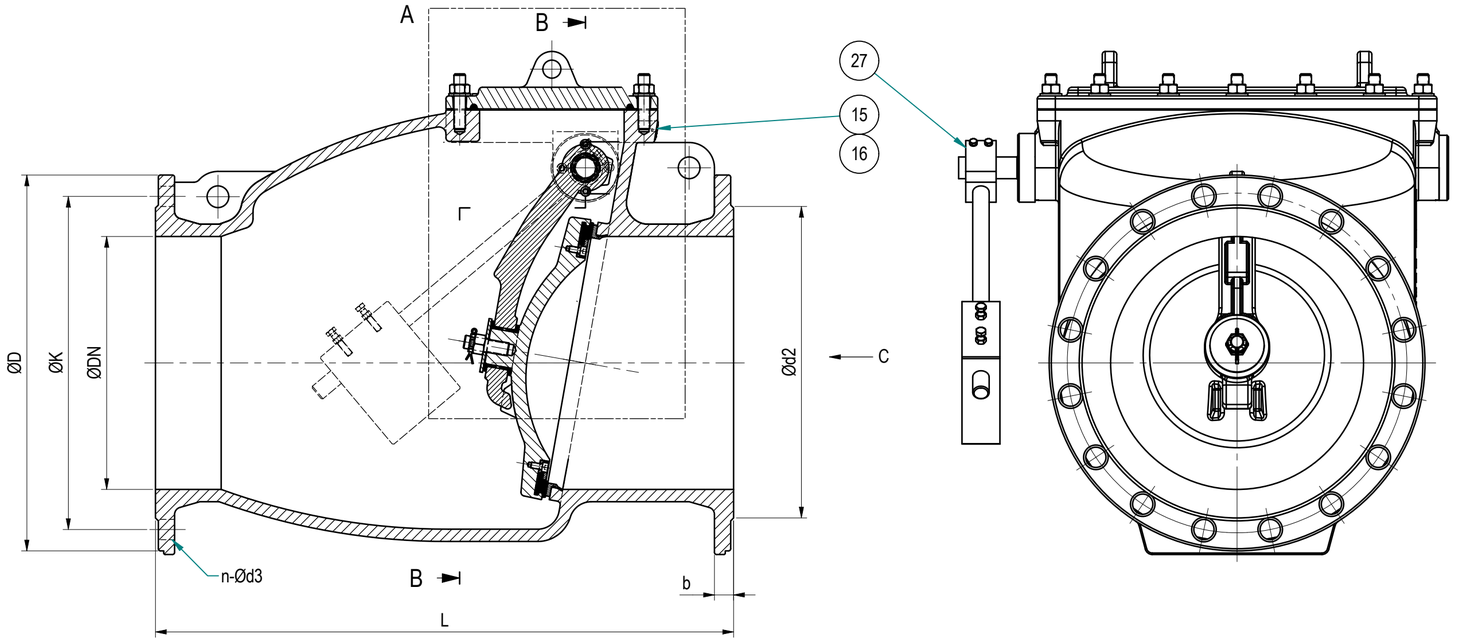
DESCRIPTION
RESILIENT SEAT SWING CHECK VALVE DN300-600, PN16 CL150 WITH COUNTERWEIGHT

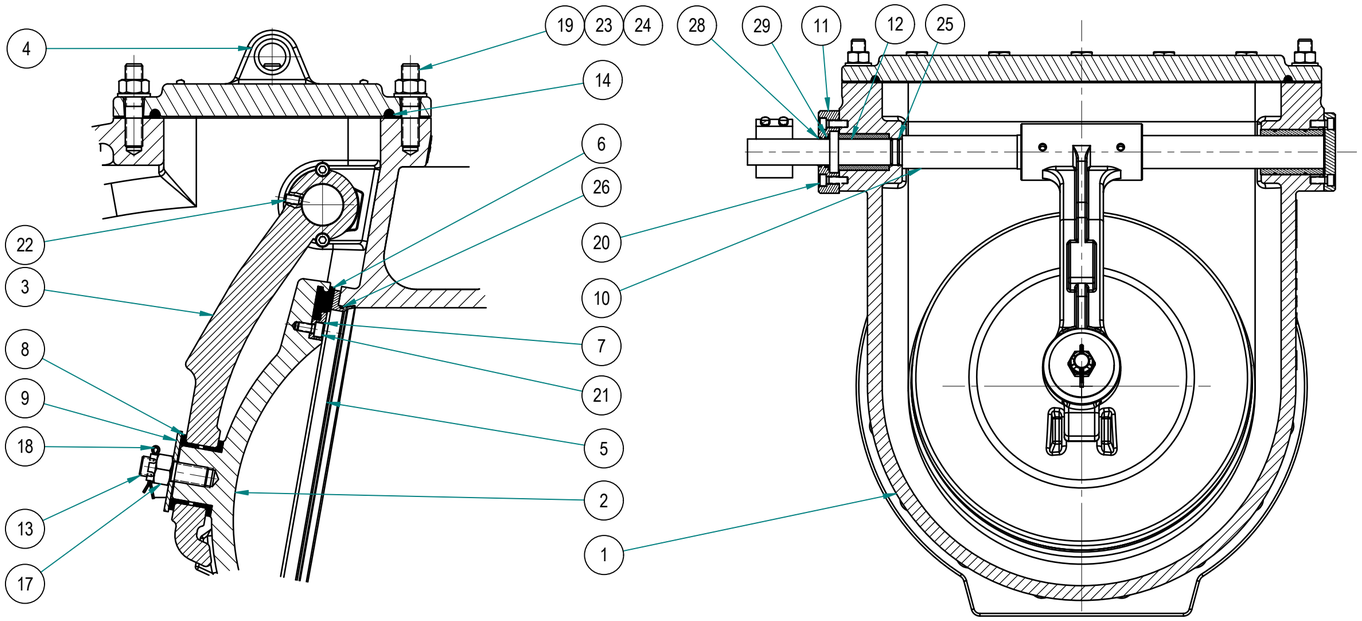
MATERIAL

2021	BY	DATE
DRAWN	VJS	28/07
CHECKED	RCL	28/07
APPROVED	RCL	28/07
REVISION	SIZE	A2

WEIGHT: N/A
SCALE: NTS

DRAWING NUMBER
1076-GAD





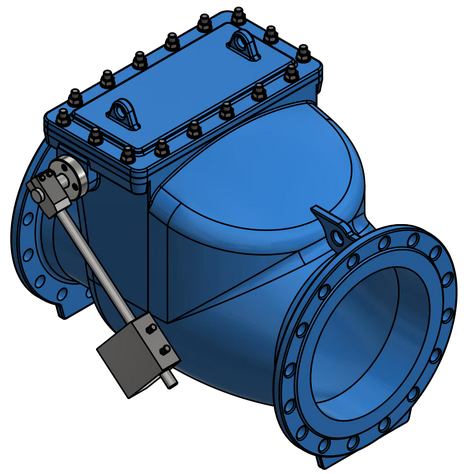
A (1 : 4)

B-B

BELOW MATERIAL ARE SPECIFIED FOR PORTABLE WATER AAPPLICATION

REF	DESCRIPTION	MATERIAL
1	BODY	DUCTILE IRON,GGG 40
2	DISC	DUCTILE IRON,GGG 40
3	SWING ARM	DUCTILE IRON,GGG 40
4	BONNET	DUCTILE IRON,GGG 40
5	SEAT RING	STAINLESS STEEL,AISI 304
6	RUBBER SEAL	EPDM, ShoreA 70
7	RETAINING RING	STAINLESS STEEL,AISI 304
8	RUBBER BUSHING	EPDM, ShoreA 70
9	WASHER	STAINLESS STEEL,AISI 304
10	SHAFT	STAINLESS STEEL,AISI 420
11	SWIVEL BRACKET	STAINLESS STEEL,AISI 420
12	BUSHING	TIN BRONZE, CuSn6
13	STUD BOLT	STAINLESS STEEL,AISI 304
14	BONNET GASKET	EPDM, ShoreA 70
15	NAME PLATE	ALUMINIUM PLATE, 1mm
16	BLIND RIVET	ALUMINIUM
17	SLOTTED HEX NUT	STAINLESS STEEL Gr.A2-70
18	COTTER PIN	STAINLESS STEEL Gr.A2-70
19	DOUBLE END STUD	STAINLESS STEEL Gr.A2-70
20	CYLINDER HEAD CAP SCREW	STAINLESS STEEL Gr.A2-70
21	CYLINDER HEAD CAP SCREW	STAINLESS STEEL Gr.A2-70
22	HEXAGON SOCKET SET SCREW	STAINLESS STEEL Gr.A2-70
23	HEX NUT	STAINLESS STEEL Gr.A2-70
24	WASHER	STAINLESS STEEL Gr.A2-70
25	O-RING	NBR, Shore A70
26	O-RING	NBR, Shore A70
27	COUNTER WEIGHT	DUCTILE IRON, GGG 50
28	WIPER SEAL	NBR
29	SLEEVE BUSHING	TIN BRONZE, CuSn8

-SOME DIMENSION ARE SUBJECTED TO CHANGE DUE TO CONTINOUS IMPROVEMENT



CORROSION PROTECTION
INTERNAL AND EXTERNAL COATING
OF FUSION BONDED EPOXY (FBE).

THICKNESS : 250 µm Min
COLOR : RAL 5015

STANDARDS	
FACE TO FACE	EN 558 TABLE 2 SERIES 48
FLANGE	EN 1092-2, PN16

PRESSURE TESTS	
SHELL TEST	24 bar
SEAT TEST	17.6 bar

DN	L	FLANGE DETAILS							
		ØD	Øk	b	Ød2	f	n	Bolt	Ød3
300	700	455	410	24.5	370	4	12	M24	28
350	800	520	470	26.5	429	4	16	M24	28
400	260	580	525	28	480	4	16	M27	31
450	300	640	585	31.5	548	4	20	M27	31
500	400	715	650	31.5	609	4	20	M30	34
600	500	840	770	36	720	5	20	M33	37

ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE INDICATED.
GENERAL MACHINING TOLERANCES IS ACCORDING TO ISO 2768-1 AND ISO 2768-2. IF IN DOUBT, PLEASE ASK. DO NOT SCALE DRAWING.

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P.O. BOX 3430 DAMMAM 31471, KSA
TEL: (03) 812 1214 FAX: (03) 812 1131

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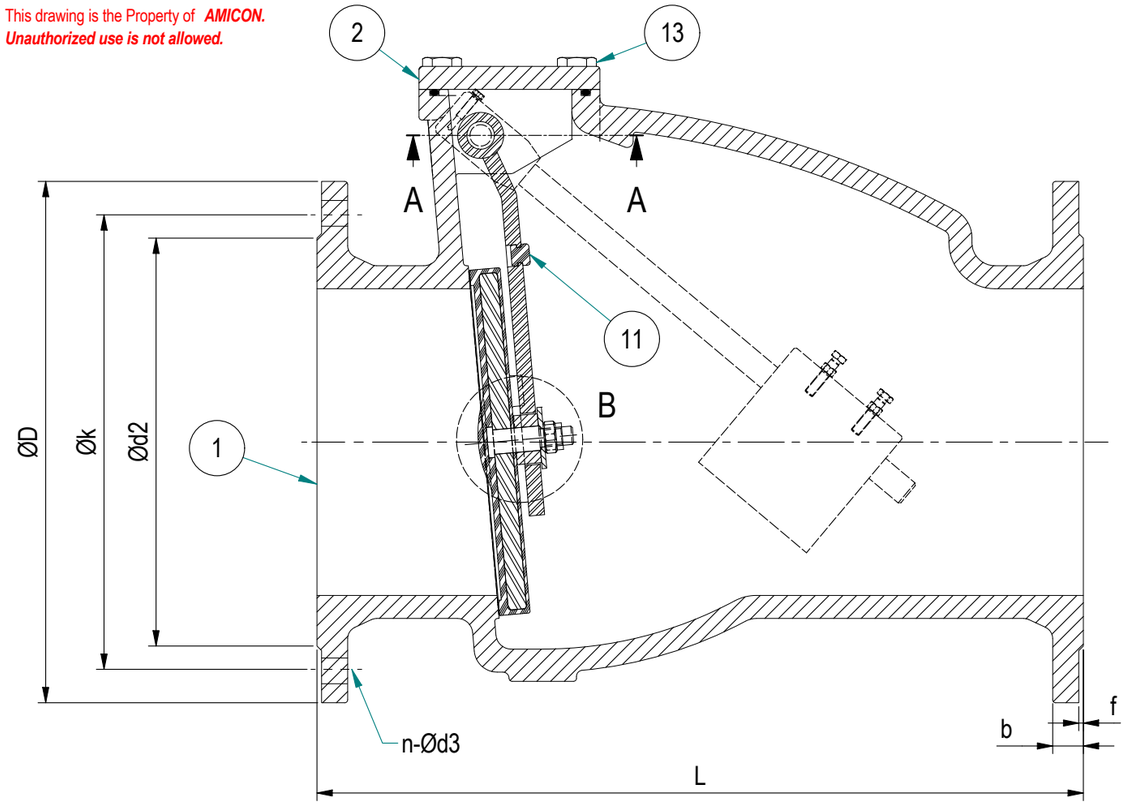
DESCRIPTION
RESILIENT SEAT SWING CHECK VALVE DN300-600, PN16 WITH COUNTER WEIGHT

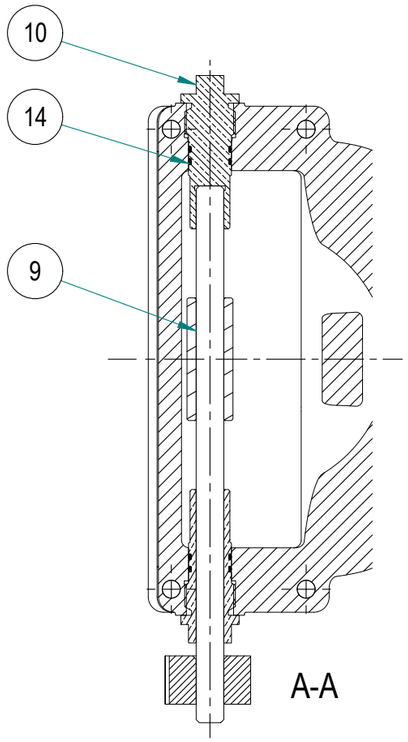
DRAWING NUMBER
1071-GAD

MATERIAL

WEIGHT: N/A
SCALE: NTS

2021	BY	DATE
DRAWN	VJS	28/07
CHECKED	RCL	28/07
APPROVED	RCL	28/07
REVISION	SIZE	A2

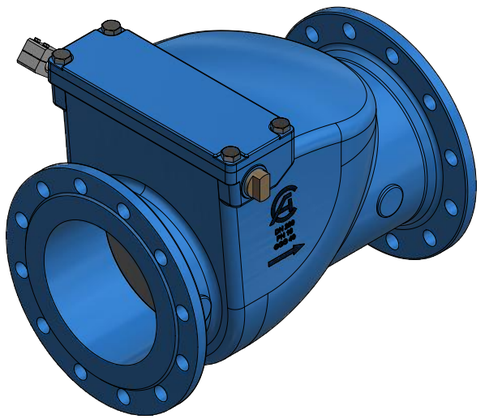


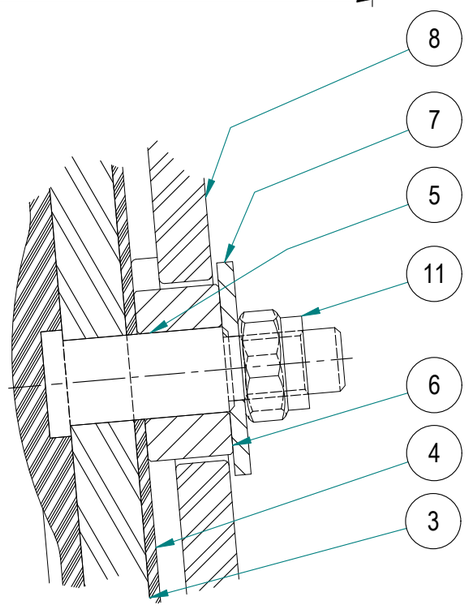


BELOW MATERIAL ARE SPECIFIED FOR PORTABLE WATER APPLICATION

REF	DESCRIPTION	MATERIAL
1	BODY	DUCTILE IRON, GGG 40
2	BONNET	DUCTILE IRON, GGG 40
3	DISC INSERT	STAINLESS STEEL, AISI 304
4	DISC RUBBERIZED	EPDM
5	DISC BOLT	STAINLESS STEEL, AISI 304
6	DISC BUSHING	STAINLESS STEEL, AISI 304
7	DISC WASHER	STAINLESS STEEL, AISI 304
8	HINGE	STAINLESS STEEL, AISI 304
9	HINGE PIN	STAINLESS STEEL, AISI 420
10	SIDE BUSHING	BRONZE, CuSn6
11	RUBBER BUMBER	EPDM, SHORE A 70
12	HEX-NUT	STAINLESS STEEL Gr. A2-70
13	HEX-HEAD BOLT	STAINLESS STEEL Gr. A2-70
14	O-RING	NBR, SHORE A70
15	COUNTER WEIGHT	DUCTILE IRON, GGG 50

STANDARDS	
FACE TO FACE	EN 558 TABLE 2 SERIES 48
FLANGE	EN 1092-2, PN16





B

DN	L	FLANGE DETAILS							
		ØD	Øk	b	Ød2	f	n	Bolt	Ød3
50	200	165	125	19	99	3	4	M16	19
65	240	185	145	19	118	3	4	M16	19
80	260	200	160	19	132	3	8	M16	19
100	300	220	180	19	156	3	8	M16	19
150	400	285	240	19	211	3	8	M20	23
200	500	340	295	20	266	3	12	M20	23
250	600	405	355	22	319	3	12	M24	28

SOME DIMENSION ARE SUBJECTED TO CHANGE DUE TO CONTINOUS IMPROVEMENT

COATING : 250 µm Min

COLOR : RAL 5015 (SKY BLUE)

PRESSURE TESTS	
SHELL TEST	24 Bar
SEAT TEST	17.6 Bar

ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE INDICATED.
GENERAL MACHINING TOLERANCES IS ACCORDING TO ISO 2768-1 AND ISO 2768-2. IF IN DOUBT, PLEASE ASK. DO NOT SCALE DRAWING.

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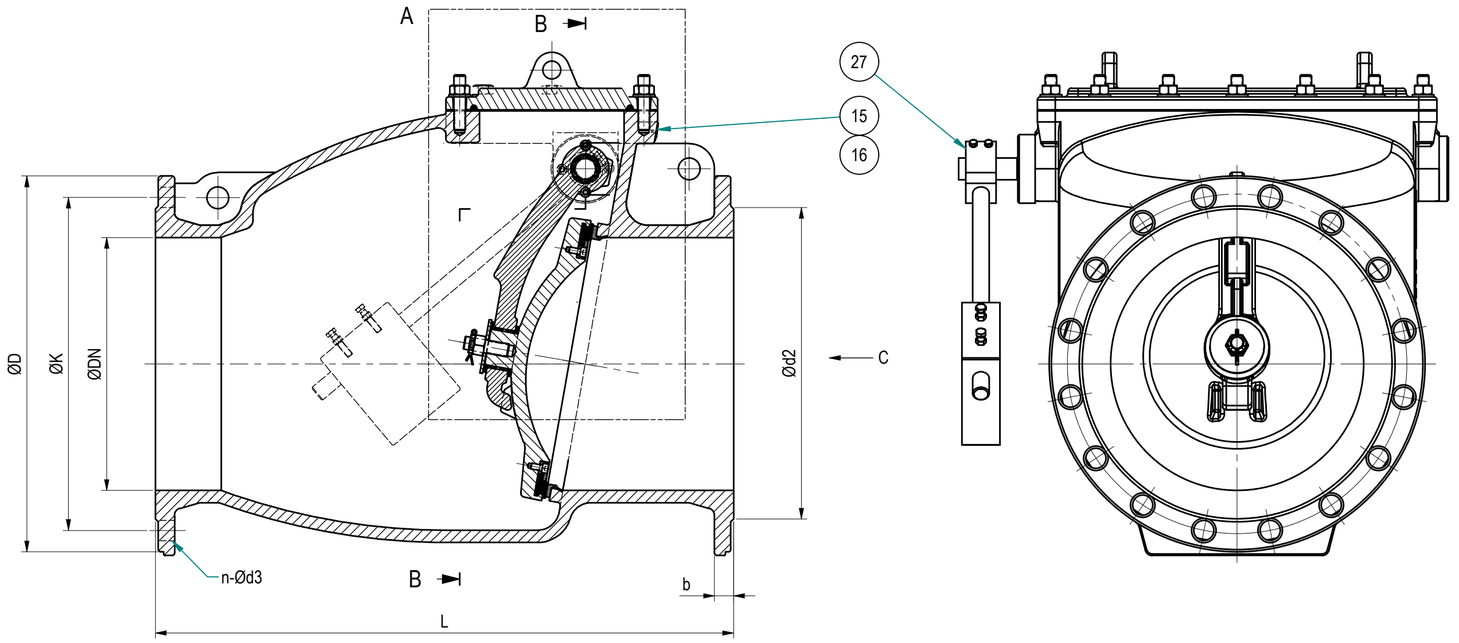
DESCRIPTION
RESILIENT SEAT SWING CHECK VALVE WITH COUNTERWEIGHT,DN50-250 PN16

MATERIAL

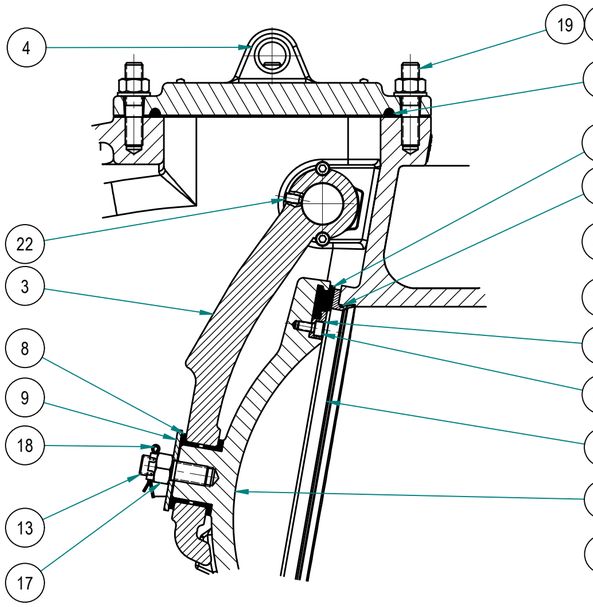
DRAWING NUMBER
1042-GAD

WEIGHT: N/A
SCALE: 1 : 4

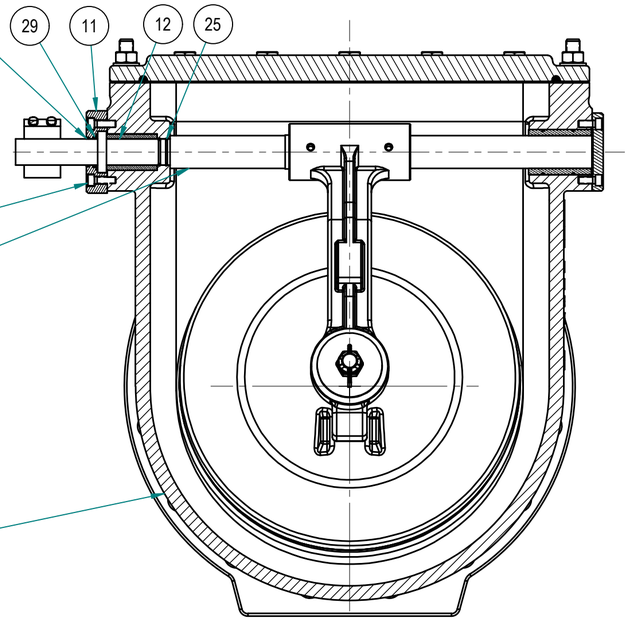
2021	BY	DATE
DRAWN	SAT	25-05
CHECKED	ASK	25-05
APPROVED	RCL	25-05
REVISION	SIZE	**A3**



REF	DESCRIPTION	MATERIAL
1	BODY	DUCTILE IRON,GGG40
2	DISC	DUCTILE IRON,GGG40
3	SWING ARM	DUCTILE IRON,GGG40
4	BONNET	DUCTILE IRON,GGG40
5	SEAT RING	STAINLESS STEEL,AISI 304
6	RUBBER SEAL	EPDM, ShoreA 70
7	RETAINING RING	STAINLESS STEEL,AISI 304
8	RUBBER BUSHING	EPDM, ShoreA 70
9	WASHER	STAINLESS STEEL,AISI 304
10	SHAFT	STAINLESS STEEL,AISI 420
11	SWIVEL BRACKET	STAINLESS STEEL,AISI 420
12	BUSHING	TIN BRONZE, CuSn6
13	STUD BOLT	STAINLESS STEEL,AISI 420
14	BONNET GASKET	EPDM, ShoreA 70
15	NAME PLATE	ALUMINIUM PLATE, 1mm
16	BLIND RIVET	ALUMINIUM
17	SLOTTED HEX NUT	STAINLESS STEEL Gr.A2
18	COTTER PIN	STAINLESS STEEL Gr.A2
19	DOUBLE END STUD	STAINLESS STEEL Gr.A2-70
20	CYLINDER HEAD CAP SCREW	STAINLESS STEEL Gr.A2-70
21	CYLINDER HEAD CAP SCREW	STAINLESS STEEL Gr.A2-70
22	HEXAGON SOCKET SET SCREW	STAINLESS STEEL Gr.A2-70
23	HEX NUT	STAINLESS STEEL Gr.A2
24	WASHER	STAINLESS STEEL Gr.A2
25	O-RING	NBR, Shore A70
26	O-RING	NBR, Shore A70
27	COUNTER WEIGHT	CAST IRON + CARBON STEEL
28	WIPER SEAL	NBR
29	SLEEVE BUSHING	TIN BRONZE, CuSn8



A (1 : 4)



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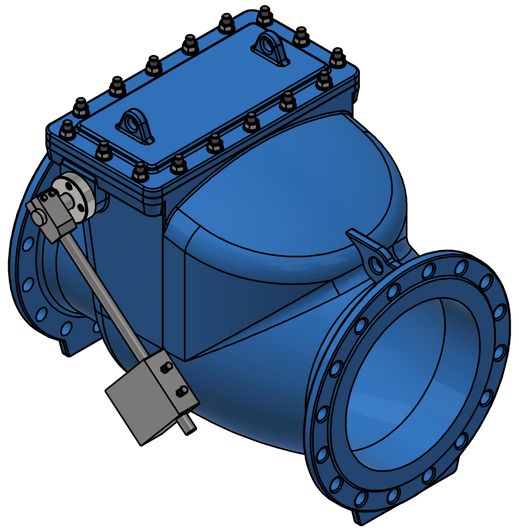

CORROSION PROTECTION
INTERNAL AND EXTERNAL COATING
OF FUSION BONDED EPOXY (FBE).

THICKNESS : 250 µm Min
COLOR : RAL 5015

STANDARDS	
FACE TO FACE	EN 558 TABLE 2 SERIES 48
FLANGE	EN 1092-2, PN25

PRESSURE TESTS	
SHELL TEST	37.5 bar
SEAT TEST	27.5 bar

DN	L	FLANGE DETAILS							
		ØD	Øk	b	Ød2	f	n	Bolt	Ød3
50	200	165	125	19	99	3	4	M16	19
65	240	185	145	19	118	3	8	M16	19
80	260	200	160	19	132	3	8	M16	19
100	300	235	190	19	156	3	8	M20	23
150	400	300	250	20	211	3	8	M24	28
200	500	360	310	22	274	3	12	M24	28
250	600	425	370	24.5	330	3	12	M27	31

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AMICON valves
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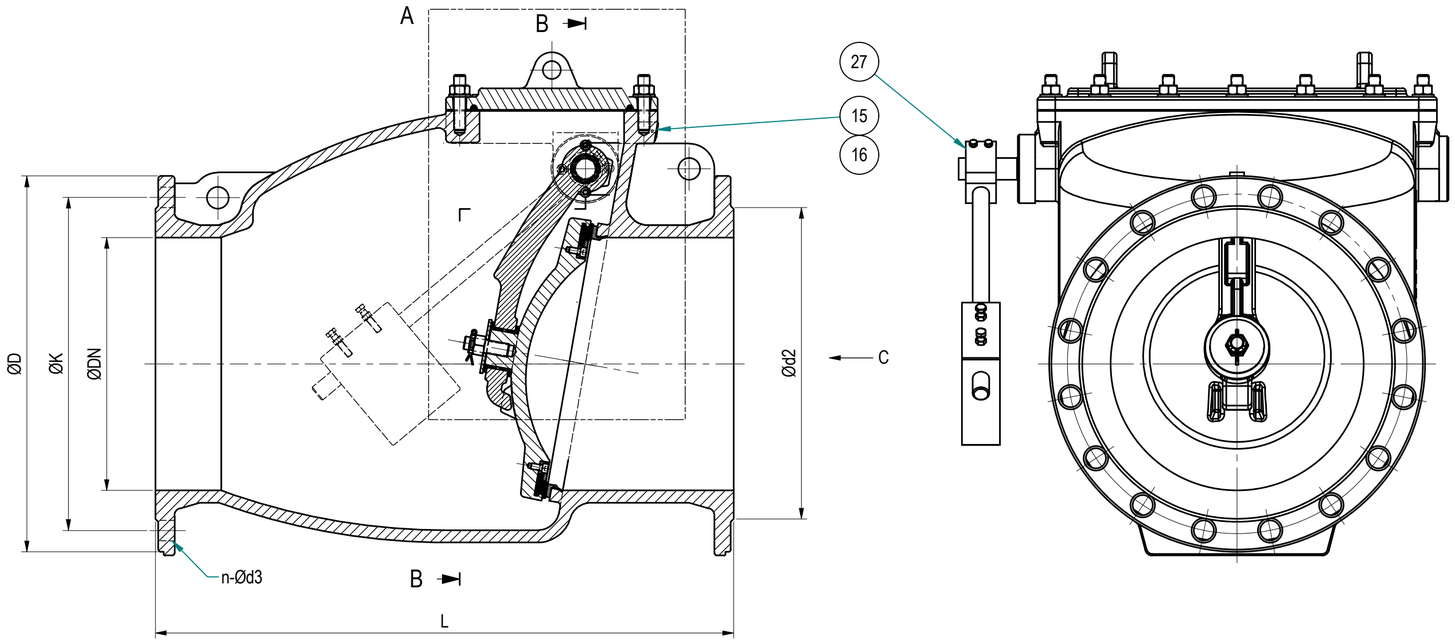
DESCRIPTION
RESILIENT SEAT SWING CHECK VALVE
DN 50-250, PN25 WITH COUNTER WEIGHT

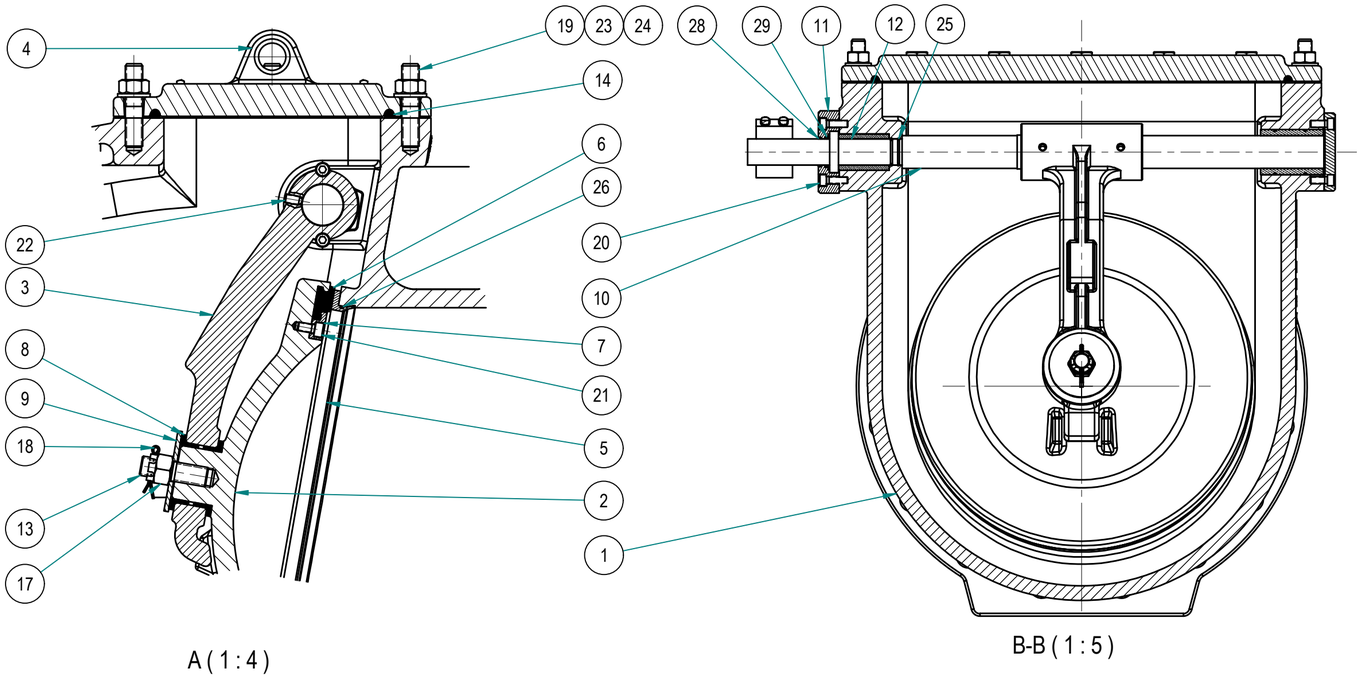
MATERIAL

DRAWING NUMBER
1012-GAD

WEIGHT: N/A
SCALE: NTS

	BY	DATE
2019		
DRAWN	SAT	02/08/2019
CHECKED	RCL	02/08/2019
APPROVED		
REVISION	SIZE	**A2**

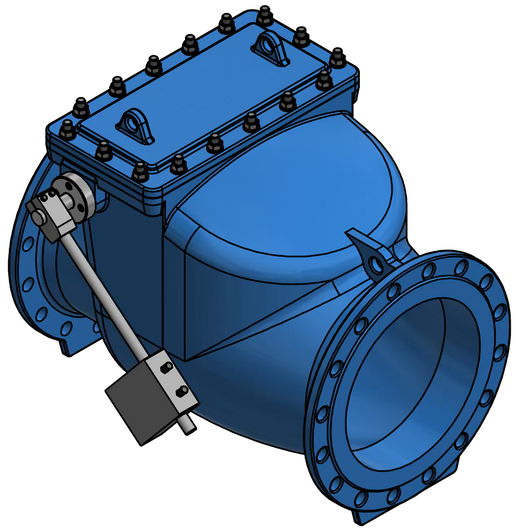




A (1 : 4)

B-B (1 : 5)

REF	DESCRIPTION	MATERIAL
1	BODY	DUCTILE IRON,GGG40
2	DISC	DUCTILE IRON,GGG40
3	SWING ARM	DUCTILE IRON,GGG40
4	BONNET	DUCTILE IRON,GGG40
5	SEAT RING	STAINLESS STEEL,AISI 304
6	RUBBER SEAL	STAINLESS STEEL,AISI 304
7	RETAINING RING	EPDM, ShoreA 70
8	RUBBER BUSHING	STAINLESS STEEL,AISI 304
9	WASHER	STAINLESS STEEL,AISI 304
10	SHAFT	STAINLESS STEEL,AISI 420
11	SWIVEL BRACKET	STAINLESS STEEL,AISI 420
12	BUSHING	TIN BRONZE, CuSn8
13	STUD BOLT	STAINLESS STEEL,AISI 420
14	BONNET GASKET	EPDM, ShoreA 70
15	NAME PALET	ALUMINIUM PLATE, 1mm
16	BLIND RIVET	STAINLESS STEEL Gr.A2
17	SLOTTED HEX NUT	STAINLESS STEEL Gr.A2
18	COTTER PIN	STAINLESS STEEL Gr.A2
19	DOUBLE END STUD	STAINLESS STEEL Gr.A2-70
20	CYLINDER HEAD CAP SCREW	STAINLESS STEEL Gr.A2-70
21	CYLINDER HEAD CAP SCREW	STAINLESS STEEL Gr.A2-70
22	HEXAGON SOCKET SET SCREW	STAINLESS STEEL Gr.A2-70
23	HEX NUT	STAINLESS STEEL Gr.A2
24	WASHER	STAINLESS STEEL Gr.A2
25	O-RING	NBR, Shore A70
26	O-RING	NBR, Shore A70
27	COUNTER WEIGHT	CAST IRON + CARBON STEEL
28	WIPER SEAL	NBR
29	SLEEVE BUSHING	TIN BRONZE, CuSn8



CORROSION PROTECTION
INTERNAL AND EXTERNAL COATING
OF FUSION BONDED EPOXY (FBE).

THICKNESS : 250 µm Min
COLOR : RAL 5015

STANDARDS	
FACE TO FACE	EN 558 TABLE 2 SERIES 48
FLANGE	EN 1092-2, PN25

PRESSURE TESTS	
SHELL TEST	37.5 bar
SEAT TEST	27.5 bar

DN	L	FLANGE DETAILS							
		ØD	ØK	Ød2	b	f	Ød3	Bolt	n
300	700	485	430	389	27.5	4	31	M27	16
350	800	555	490	448	30	4	34	M30	16
400	900	620	550	503	32	4	37	M33	16
450	1000	670	600	548	34.5	4	37	M33	20
500	1100	730	660	609	36.5	4	37	M33	20
600	1300	845	770	720	42	5	41	M36	20

ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE INDICATED.
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أميكون AMICON valves
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DESCRIPTION
RESILIENT SEAT SWING CHECK VALVE
DN 300-600, PN25 WITH COUNTER WEIGHT

DRAWING NUMBER
CK10F-0300025-00

MATERIAL

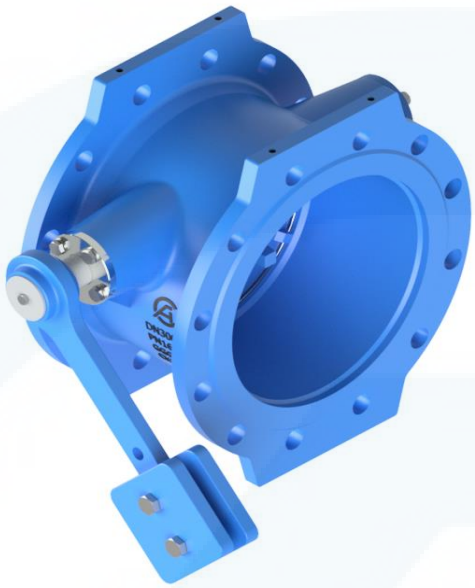
WEIGHT: N/A
SCALE: NTS

	BY	DATE
2019		
DRAWN	SAT	02/08/2019
CHECKED	RCL	02/08/2019
APPROVED		
REVISION	SIZE	**A2**

5. Tilting Check Valve

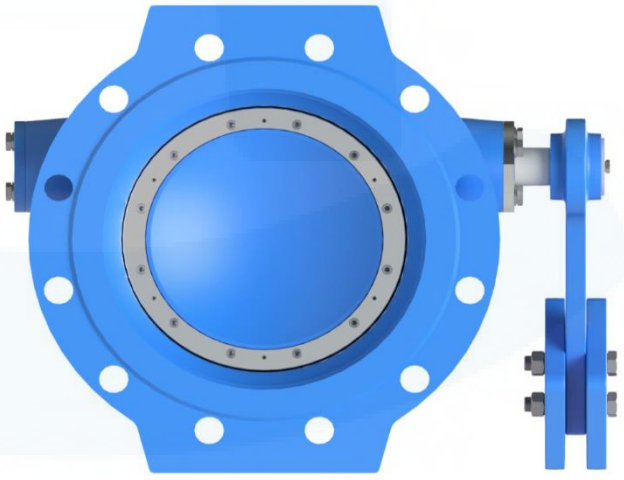
Tilting Check Valve (Non-Return)
DN 100–2000, PN10/16/25

Models: CK20F



Description

The Tilting Check Valve, (non-return valve or a one-way valve), is a device made by Amicon that uses fluid pressure to open a tilting disc in one direction and shuts when the pressure decreases, allowing flow to move in just one direction. By keeping the fluid from returning to the pump, damaging the pump will be prevented. In order to safeguard the pump against backflow, tilting check valves are mounted in the main valve chamber and at the pump stations. With its short body, light weight, and maintenance free design, Amicon's tilting check is one of the best check valves for general-purpose use.



Tilting Check Valve (Non-Return)
DN 100–2000, PN10/16/25

Models: CK20F

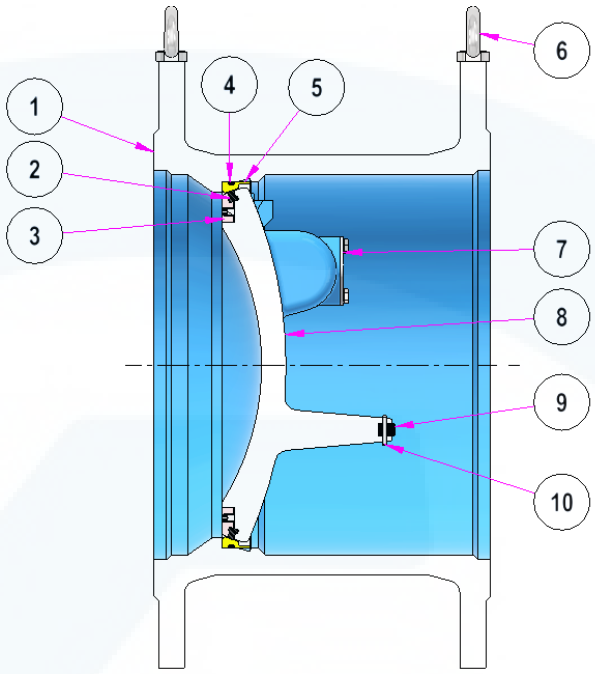
Specification

Model	CK20F
Design	Tilting Check Valves are designed according to EN12334 & BS EN1074-3
Pressure Rating	10/16/25 bars
Connection	Flanged End
Flange Drilling	According to EN 1092-2, DIN2501 (Other Standards are available upon request)
Actuator types	Self-operated.
Disc Closing Mechanism	• Counterweight • Hydraulic Damper
Operating Temperature	Up to 70 C°
Seat Design	• Resilient Seat, designed with WRAS approved rubber ring on stainless steel disc. • The disc is connected to the shaft via a flexible bush that allows disc and valve seat to adjust exactly.
Use	Controlling Flow Direction.
Applications	• Potable Water. • Wastewater. • Storm Water. • Irrigation.
Coating	• WRAS approved Fusion Bonded Epoxy. • Other coating material are available upon request.

Tilting Check Valve (Non-Return)
DN 100–2000, PN10/16/25

Models: CK20F

1. Body.
2. Profile Seal.
3. Retaining Ring.
4. Sealing.
5. Seat Ring.
6. Lifting Eye.
7. Pin Cover.
8. Disc
9. Damper
10. Spring Ring



Technical Characteristics

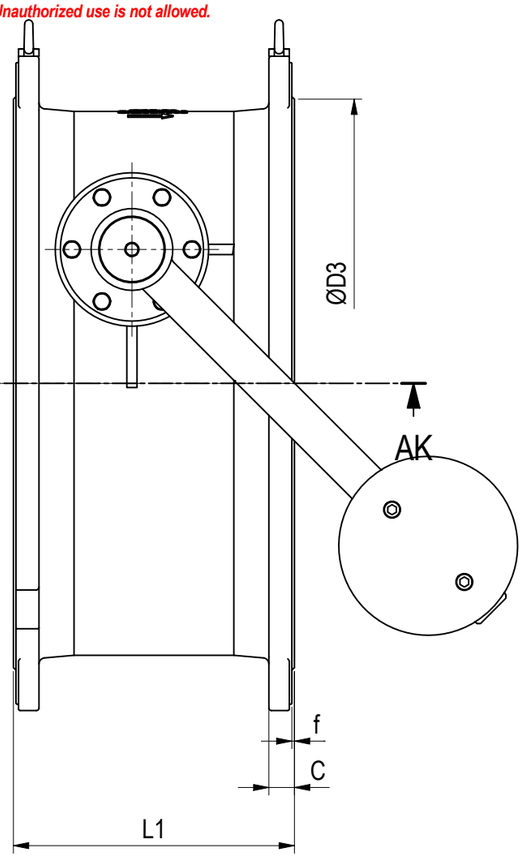
Body	Made of ductile iron according to DIN 1693 GGG40/50, internally and externally coated with WRAS approved fusion bonded epoxy.
Profile Seal	In body grooves for the sealing
Retaining Ring & Sealing Ring	Made of stainless-steel holding the WRAS approved EPDM rubbers ring
Lifting Eye	Made of Stainless-steel and used to mount, left, and handle the valve without damaging it.
Pin Cover & Disc	Made of ductile iron according to DIN 1693 GGG40/50.
Damper	Adjustable weight offers the adaptability to the individual working conditions.

Face to Face Length According to EN 558

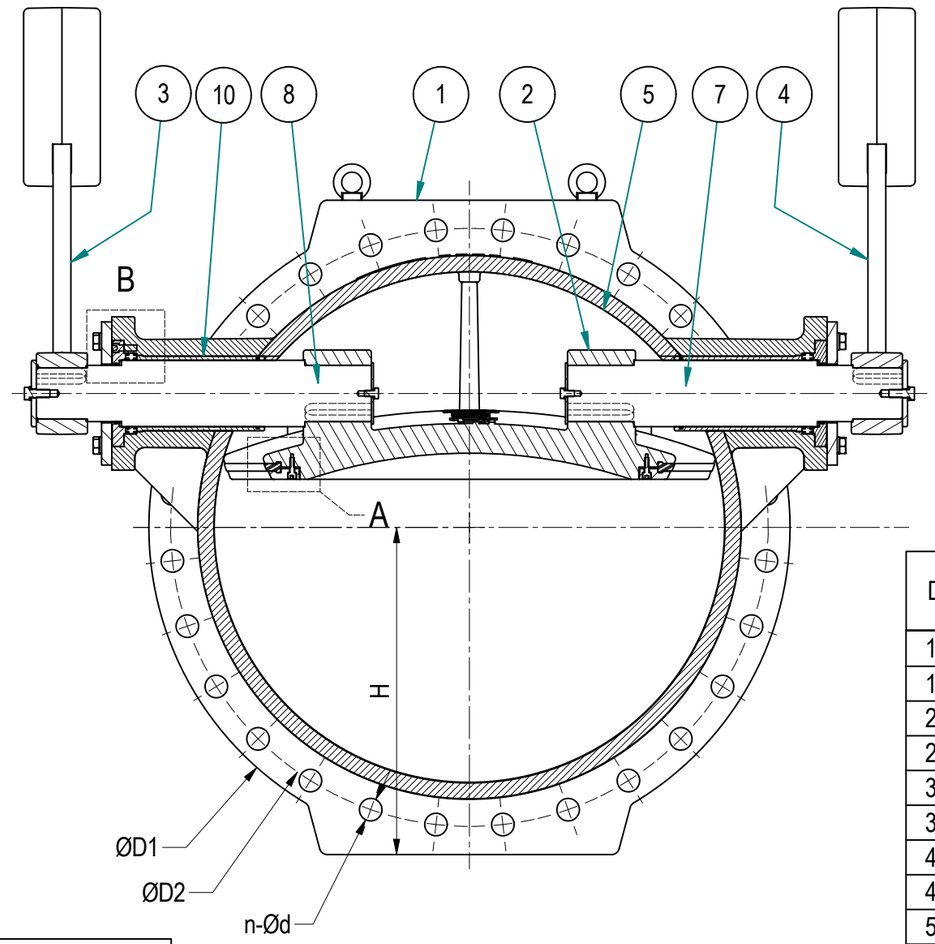
DN (mm)	Series 14 (mm)
50	150
65	170
80	180
100	190
150	210
200	230
250	250
300	270
350	290
400	310
450	330
500	350
600	390

Hydro Test Specification:

Standard	According to BS EN 12266.
Hydrostatic Shell test	1.5 x maximum service pressure.
Hydrostatic Seat test	1.1 x maximum service pressure.



CLOSED POSITION



BELOW MATERIAL ARE SPECIFIED FOR POTABLE WATER APPLICATION

REF	DESCRIPTION	MATERIAL
1	BODY	DUCTILE IRON ,GGG-40
2	DISC	DUCTILE IRON ,GGG-40
3	COUNTER WEIGHT LEFT	DUCTILE IRON ,GGG-40
4	COUNTER WEIGHT RIGHT	DUCTILE IRON ,GGG-40
5	BODY SEAT	STAINLESS STEEL,AISI 304
6	RUBBER SEAL	EPDM
7	DRIVE SHAFT	STAINLESS STEEL , AISI 420
8	STUB SHAFT	STAINLESS STEEL , AISI 420
9	RETAING RING	STAINLESS STEEL , AISI 304
10	BUSHING	TIN BRONZE, CuSn8

- FASTENERS IN CONTACT WITH WATER ARE STAINLESS STEEL, A2-70

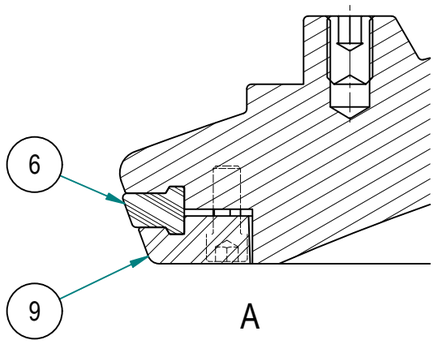
DN	L1	H	FLANGED DETAILS							
			ØD1	ØD2	ØD3	c	f	Ød	Bolt	n
100	190	115	220	180	156	19	3	19	M16	8
150	210	142.5	285	240	211	19	3	23	M20	8
200	230	180	340	295	266	20	3	23	M20	12
250	250	202.5	400	355	319	22	3	28	M24	12
300	270	235	455	410	370	24.5	4	28	M24	12
350	290	265	520	470	429	26.5	4	28	M24	16
400	310	297.5	580	525	480	28	4	31	M27	16
450	330	327.5	640	585	548	31.5	4	31	M27	20
500	350	362.5	715	650	609	31.5	4	34	M30	20
600	390	425	840	770	720	36	5	37	M33	20

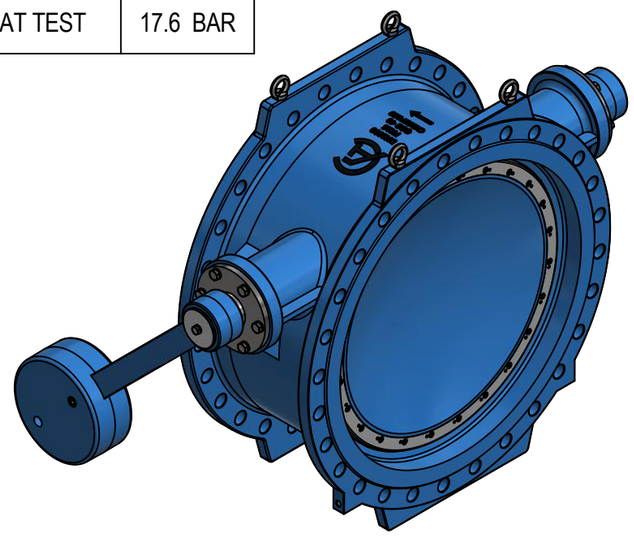
TABLE	
DESIGN & MANUFACTURING	BS EN 1074-1&2, EN593
FLANGE DRILLING	BS EN 1092-2, DIN 2501,PN16
FACE TO FACE	EN 558, SERIES 14
TEST PRESSURE	BS EN 12266

TESTING DETAILS	
DESCRIPTION	TEST PRESSURE
SHELL TEST	24 BAR
SEAT TEST	17.6 BAR

COATING: 250 µm min FBE Acc. to DIN 30677
COLOR: RAL 5015

* WE RESERVE THE RIGHT TO MAKE TECHNICAL AND DIMENSIONAL MODIFICATIONS AS A CONTINUOUS DEVELOPMENT.





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أميكون AMICON valves
P.O. BOX 3430 DAMMAM 31471, KSA
TEL: (03) 812 1214 FAX: (03) 812 1131

أميانتيت AMIANTIT

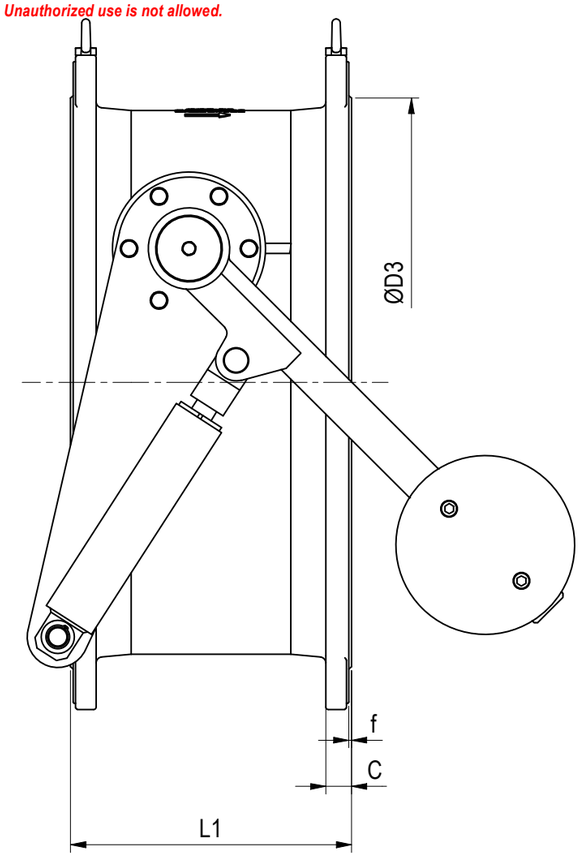
DESCRIPTION
TILTING DISC CHECK VALVE WITH COUNTERWEIGHT ASSEMBLY DN100- DN600 PN16

DRAWING NUMBER
1066-GAD

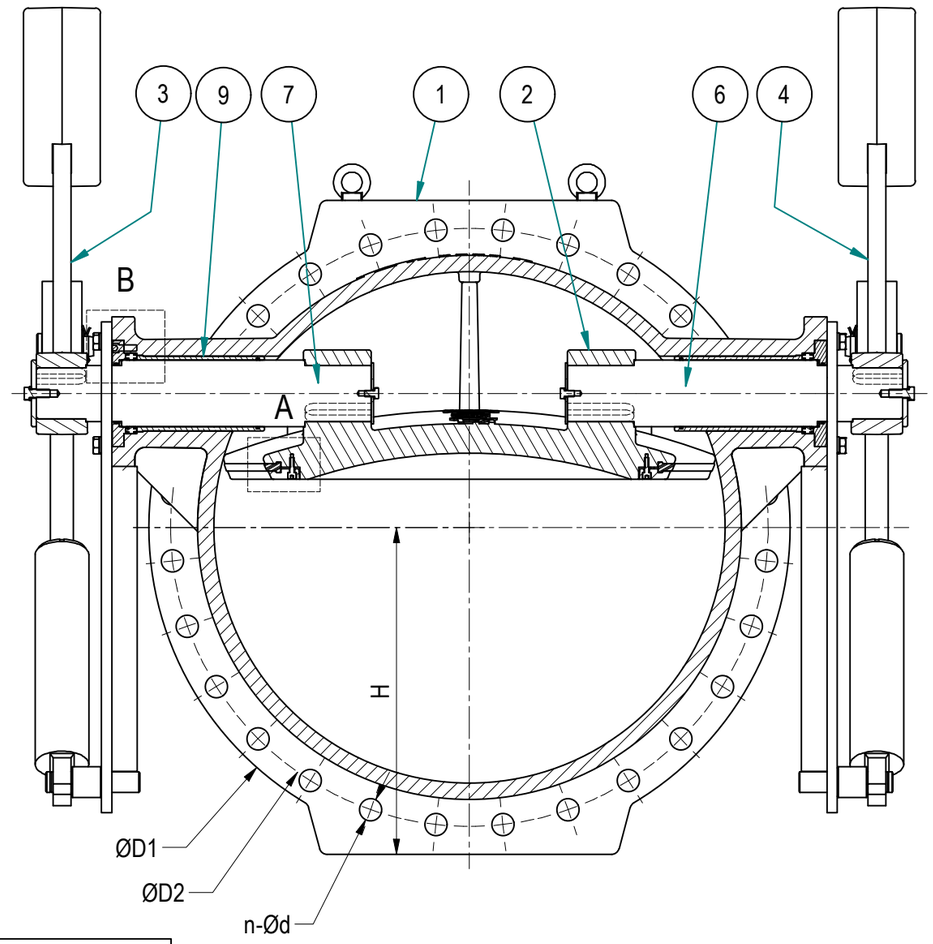
MATERIAL

WEIGHT: N/A
SCALE: 1 : 12

2022	BY	DATE
DRAWN	VJS	23-03
CHECKED	ASK	23-03
APPROVED	RCL	23-03
REVISION	SIZE	A3



CLOSED POSITION



BELOW MATERIAL ARE SPECIFIED FOR POTABLE WATER APPLICATION

REF	DESCRIPTION	MATERIAL
1	BODY	DUCTILE IRON ,GGG-40
2	DISC	DUCTILE IRON ,GGG-40
3	COUNTER WEIGHT LEFT	DUCTILE IRON ,GGG-40
4	COUNTER WEIGHT RIGHT	DUCTILE IRON ,GGG-40
5	RUBBER SEAL	EPDM
6	DRIVE SHAFT	STAINLESS STEEL , AISI 420
7	STUB SHAFT	STAINLESS STEEL , AISI 420
8	RETAING RING	STAINLESS STEEL , AISI 304
9	BUSHING	TIN BRONZE, CuSn8

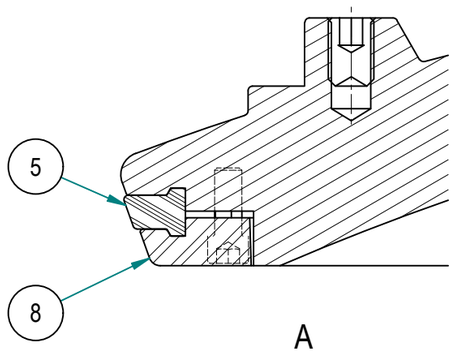
- FASTENERS IN CONTACT WITH WATER ARE STAINLESS STEEL, A2-70

DN	L1	H	FLANGED DETAILS							
			ØD1	ØD2	ØD3	c	f	Ød	Bolt	n
500	350	362.5	715	650	609	31.5	4	34	M30	20
600	390	425	840	770	720	36	5	37	M33	20
700	430	460	910	840	794	39.5	5	37	M33	24
800	470	517.5	1025	950	901	43	5	41	M36	24
900	510	575	1125	1050	1001	46.5	5	41	M36	28
1000	550	632.5	1255	1170	1112	50	5	44	M39	28
1100	590	682	1355	1270	1218	53.5	5	44	M39	32
1200	630	750	1485	1390	1328	57	5	50	M45	32
1400	710	850	1685	1590	1530	64	5	50	M45	36
1500	750	920	1820	1710	1640	67	5	57	M52	36
1600	790	975	1930	1820	1750	70	5	57	M52	40
1800	870	1072	2130	2020	1950	70	5	57	M52	44
2000	950	1220	2345	2230	2150	75	5	62	M56	48

COATING: 250 µm min FBE Acc. to DIN 30677
COLOR: RAL 5015

TABLE	
DESIGN & MANUFACTURING	BS EN 1074-1&2, EN593
FLANGE DRILLING	BS EN 1092-2, DIN 2501,PN16
FACE TO FACE	EN 558, SERIES 14
TEST PRESSURE	BS EN 12266

TESTING DETAILS	
DESCRIPTION	TEST PRESSURE
SHELL TEST	24 BAR
SEAT TEST	17.6 BAR



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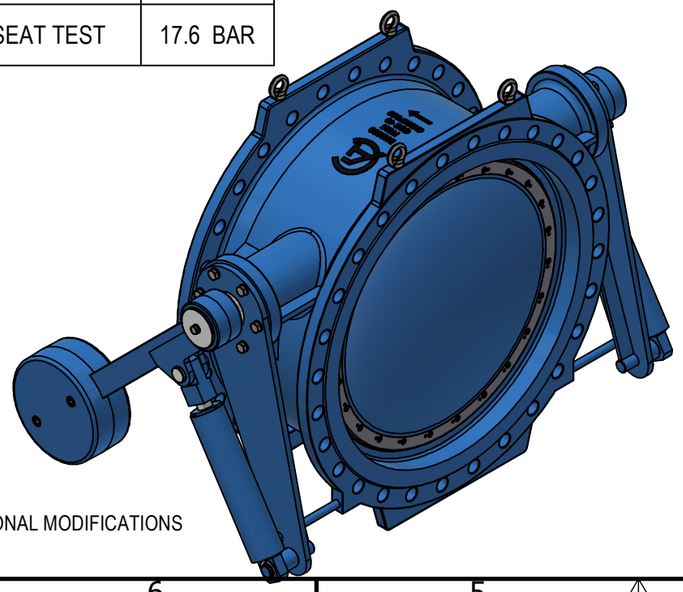

* WE RESERVE THE RIGHT TO MAKE TECHNICAL AND DIMENSIONAL MODIFICATIONS AS A CONTINUOUS DEVELOPMENT.

ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE INDICATED.
GENERAL MACHINING TOLERANCES IS ACCORDING TO ISO 2768-1 AND ISO 2768-2. IF IN DOUBT, PLEASE ASK. DO NOT SCALE DRAWING.

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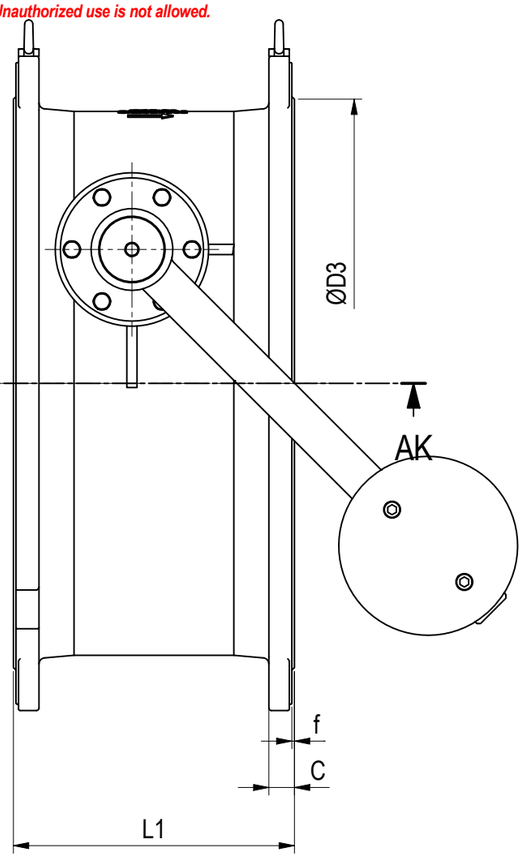
DESCRIPTION
TILTING DISC CHECK VALVE WITH COUNTERWEIGHT ASSEMBLY DN600- DN2000 PN16

DRAWING NUMBER
1047-GAD

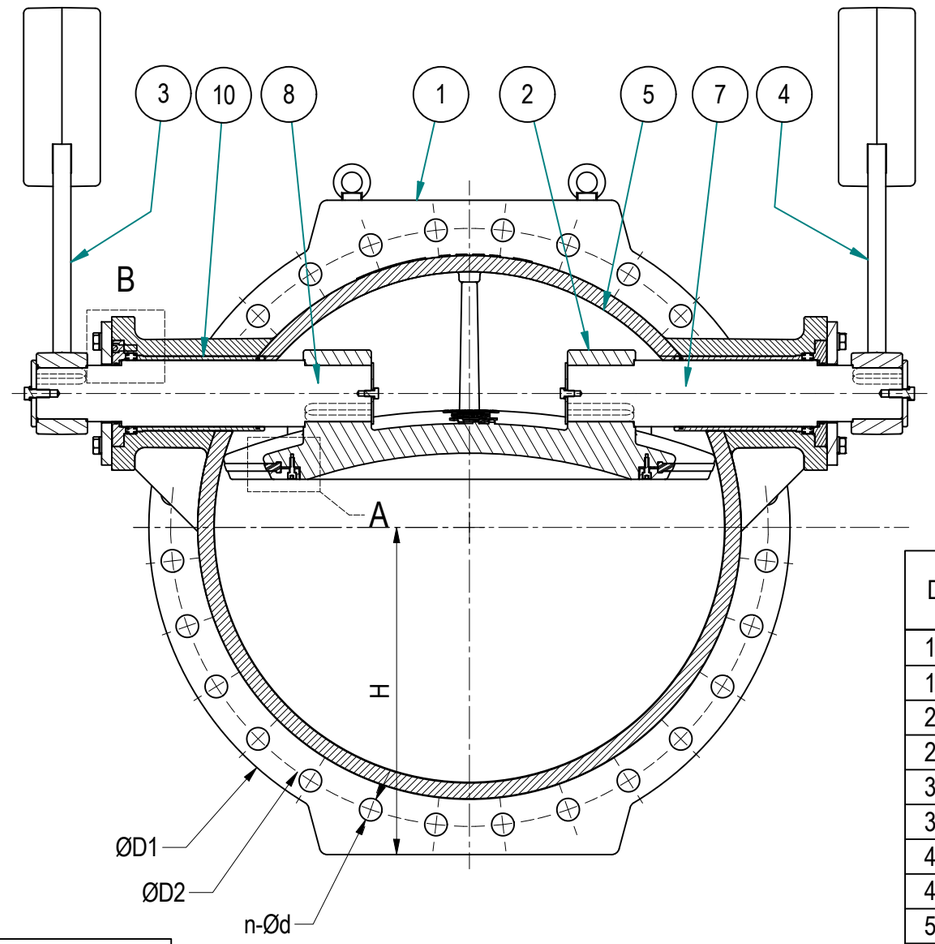
MATERIAL

WEIGHT: N/A
SCALE: 1 : 12

2020	BY	DATE
DRAWN	SAT	04/05
CHECKED	RCL	04/05
APPROVED		
REVISION	SIZE	A3



CLOSED POSITION



BELOW MATERIAL ARE SPECIFIED FOR POTABLE WATER APPLICATION

REF	DESCRIPTION	MATERIAL
1	BODY	DUCTILE IRON ,GGG-40
2	DISC	DUCTILE IRON ,GGG-40
3	COUNTER WEIGHT LEFT	DUCTILE IRON ,GGG-40
4	COUNTER WEIGHT RIGHT	DUCTILE IRON ,GGG-40
5	BODY SEAT	STAINLESS STEEL,AISI 304
6	RUBBER SEAL	EPDM
7	DRIVE SHAFT	STAINLESS STEEL , AISI 420
8	STUB SHAFT	STAINLESS STEEL , AISI 420
9	RETAING RING	STAINLESS STEEL , AISI 304
10	BUSHING	TIN BRONZE, CuSn8

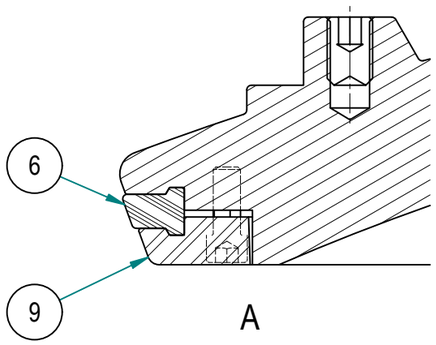
- FASTENERS IN CONTACT WITH WATER ARE STAINLESS STEEL, A2-70

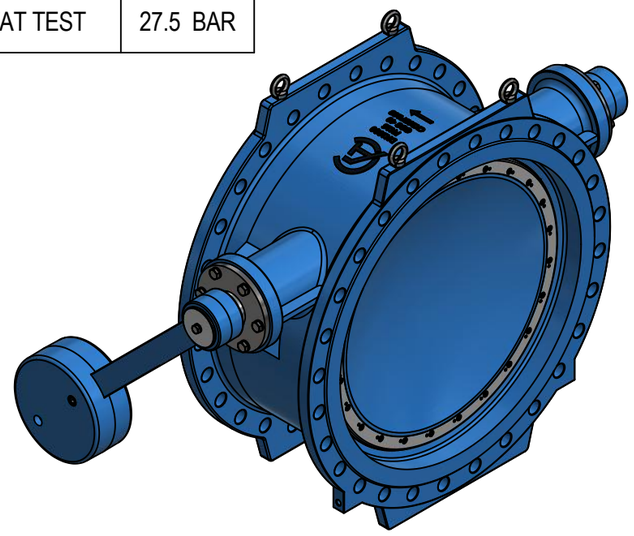
DN	L1	H	FLANGED DETAILS							
			ØD1	ØD2	ØD3	c	f	Ød	Bolt	n
100	190	122.5	235	190	156	19	3	23	M20	8
150	210	155	300	250	211	20	3	28	M24	8
200	230	185	360	310	274	22	3	28	M24	12
250	250	217.5	425	370	330	24.5	3	31	M27	12
300	270	247.5	485	430	389	27.5	4	31	M27	16
350	290	250	555	490	448	30	4	34	M30	16
400	310	317.5	620	550	503	32	4	37	M33	16
450	330	340	670	600	548	34.5	4	37	M33	20
500	350	370	730	660	609	36.5	4	37	M33	20
600	390	427.5	845	770	720	42	5	41	M36	20

TABLE	
DESIGN & MANUFACTURING	BS EN 1074-1&2, EN593
FLANGE DRILLING	BS EN 1092-2, DIN 2501,PN25
FACE TO FACE	EN 558, SERIES 14
TEST PRESSURE	BS EN 12266

TESTING DETAILS	
DESCRIPTION	TEST PRESSURE
SHELL TEST	37.5 BAR
SEAT TEST	27.5 BAR

COATING: 250 µm min FBE Acc. to DIN 30677
COLOR: RAL 5015





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DESCRIPTION
TILTING DISC CHECK VALVE WITH COUNTERWEIGHT ASSEMBLY DN100- DN600 PN25

DRAWING NUMBER
1065-GAD

MATERIAL

WEIGHT: N/A
SCALE: 1 : 12

2022	BY	DATE
DRAWN	VJS	23-03
CHECKED	ASK	23-03
APPROVED	RCL	23-03
REVISION	SIZE	A3