



RESILIENT SEAT GATE VALVES

NON-RISING STEM F4/F5

Ref. 121A-VI / PN 10-16



Application

Drinking water networks
Bulk water storage
Process water systems
Pump stations
Sewage water networks
Irrigation projects

Approvals/Standards

Design: DIN 3352
Manufacture according to: EN 1074-2./GB/T12232-1989
Face to Face: EN 558-1 Series 14/15 (F4/F5)
Mounting between flanges: PN10/16 EN 1092-2, ISO 7005-2.
Pressure Tests acc. to EN 12266-1 Rate A. GB/T13927-1992
Pressure Tests: Body: 1,5 x PN. Seat: 1,1 x PN
EU directive 2014/68/EU:
Products excluded, article 1, § 2b up to ND300. Risk Category I MoD. A from DN350 to DN600
WRAS PZH AWWA DM 174 Certified.

Certifications

CE, WRAS, ACS, EN 1074-2

Range

DN40-1200, PN10-16

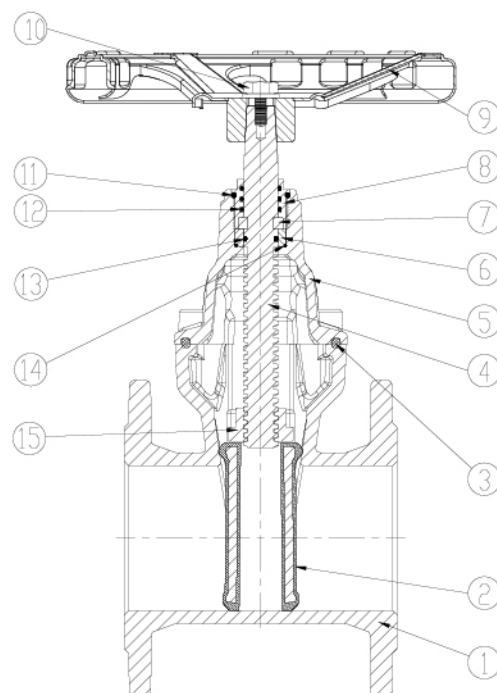




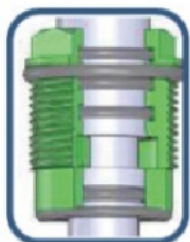
GENERAL CHARACTERISTICS

100% suitable for underground installations
 Range from DN40 up to DN1200
 Full bore.
 100% Tightness in both directions.
 Minimum head loss.
 Repackable under pipeline pressure.
 Low torque values.
 WRAS epoxy paint 250 microns:

Nº	ITEM	MATERIAL	STANDARD
1	Body	GJS500-7	DIN 1693
2	Gate	GJS500-7 + EPDM	DIN 1693
3	Gasket body-bonnet	NBR	ISO 4633
4	Stem	AISI 420	ASTM A959
5	Bonnet	GJS500-7	DIN 1693
6	Washer	CuZn39Pn1	EN 12167
7	Washer	CuZn39Pn1	EN 12167
8	Nut	CuZn39Pn1	EN 12167
9	Handwheel	GJS500-7	ASTM A959
10	Bolts	CS8.8 / A2-70	ASTM A959
11	Stem O-rings	NBR	ISO 4633
12	Stem O-rings	NBR	ISO 4633
13	Stem O-rings	NBR	ISO 4633
14	Stem O-rings	NBR	ISO 4633
15	Stem nut	CuZn39Pn1	EN 12167
	RAL 5015 Painting	Epoxy 250 µm	DIN 3476-1



Components may be replaced with materials of equivalent or superior grade without prior notice, in accordance with our continuous improvement policy.



The stem is sealed with a total of six O-rings inside the bonnet.

The three O-rings placed in the upper internal part of the nut and the one located on the exterior, can be changed with pressure in the pipeline if the valve is fully open.



The liner's sealing face provides a more effective seal and reduces the torque required to close the valve.

Most factories design the gate at the same level as the sealing face. However, when the valve is closed, the increasing inlet pressure pushes the disc outward and forces it against the valve body. Over time, this constant stress damages the rubber coating on the area marked as "A."

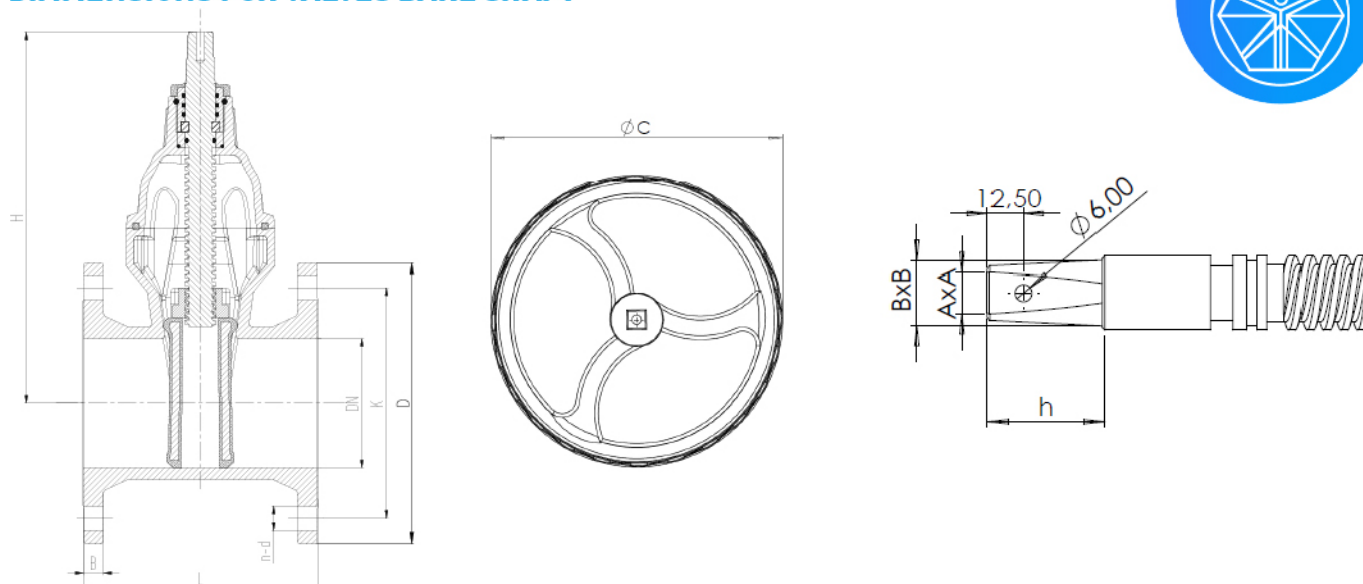
DAVINCI design recognizes this issue and introduces an innovation that prevents such wear, extending significantly the disc's service life and ensuring more reliable valve performance.



The body of the valve has guides to facilitate the movement of the gate and ensure a 100% watertight seal.



DIMENSIONS FOR VALVES BARE SHAFT



DN	L		H	ØC	A	B	h	D		K		n-Ød		B		Torque (N·m)	Nº Turns	Weight (kg)
	F4	F5						PN10	PN16	PN10	PN16	PN10	PN16	PN10	PN16			
40	140	240	215	180	14	17.3	32	150		110		4-19		19		40	9	8.5
50	150	250	215	180	14	17.3	32	165		125		4-19		19		50	9	9
65	170	270	250	200	17	20.7	35	185		145		4-19		19		60	10	12
80	180	280	275	200	17	20.7	35	200		160		8-19		19		60	12	14
100	190	300	320	220	19	23.2	40	220		180		8-19		19		80	12	19
125	200	325	355	250	19	23.2	40	250		210		8-19		19		100	14.5	24
150	210	350	398	280	19	23.2	40	285		240		8-23		19		120	17	30
200	230	400	495	320	24	28.7	45	340		295		8-23	12-23	20		150	18.5	48
250	250	450	590	400	27	31.7	45	405		350	355	12-23	12-28	22		200	23	73
300	270	500	670	400	27	31.7	45	460		400	410	12-23	12-28	24.5		250	27	100
350	290	550	760	500	27	34	45	520		460	470	16-23	16-28	26.5		300	30.5	160
400	31	600	855	500	27	34	45	580		515	525	16-28	16-31	28		350	34.5	223
450	330	650	930	650	32	42	70	640		565	585	20-28	20-31	30		400	28	310
500	350	700	1055	650	32	42	70	670	715	620	650	20-28	20-34	26.5	31.5	450	32.5	327
600	390	800	1265	650	32	42	70	780	840	725	770	20-31	20-37	30	36	550	34.5	632

The designs, materials and technical specifications indicated herein are subject to modification without prior notice, as part of the continuous development of our manufacturing programme, product refinement and technological advancement.

OPERATING OPTIONS AND OPTIONAL ACCESSORIES

Our engineering team provides customized solutions tailored to each customer's specific project requirements. Our manufacturing plan includes the following operation options for manual gate valves.

Standard version:

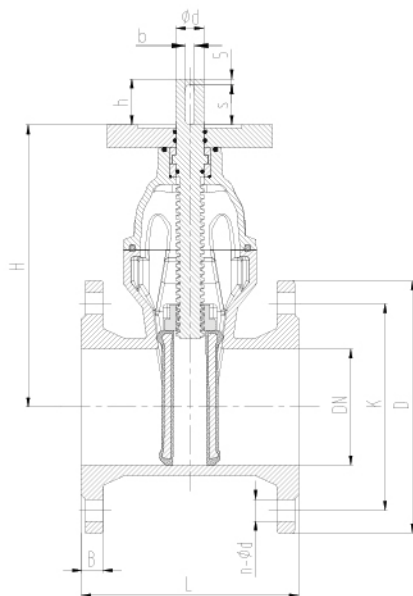
- Supplied with top cap.

Optional accessories:

- Handwheel.
- Position indicator
- Extension spindles.
 - Rigid
 - Telescopic



DIMMENSIONS FOR VALVES WITH ISO TOP FLANGE



DN	L		H	Ød	h	s	b	D		K		n-Ød		B		Torque (N·m)	Nº Turns	Weight (kg)
	F4	F5						PN10	PN16	PN10	PN16	PN10	PN16	PN10	PN16			
40	140	240	160	18	45	40	6	150		110		4-19		19		40	8	8.5
50	150	250	160	18	45	40	6	165		125		4-19		19		40	8	9
65	170	270	190	20	45	40	6	185		145		4-19		19		50	9	12
80	180	280	215	20	45	40	6	200		160		8-19		19		60	11	14
100	190	300	250	20	45	40	6	220		180		8-19		19		80	11	19
125	200	325	295	20	45	40	6	250		210		8-19		19		100	14	24
150	210	350	330	20	45	40	6	285		240		8-23		19		120	17	30
200	230	400	430	30	65	56	8	340		295		8-23	12-23	20		150	18	48
250	250	450	515	30	65	56	8	405		350	355	12-23	12-28	22		200	22	73
300	270	500	590	30	65	56	8	460		400	410	12-23	12-28	24.5		250	26	100
350	290	550	700	30	65	56	8	520		460	470	16-23	16-28	26.5		300	30	160
400	31	600	785	40	80	70	12	580		515	525	16-28	16-31	28		350	34	223
450	330	650	875	40	80	70	12	640		565	585	20-28	20-31	30		400	29	310
500	350	700	950	40	80	70	12	670	715	620	650	20-28	20-34	26.5	31.5	450	32	327
600	390	800	1225	50	100	90	14	780	840	725	770	20-31	20-37	30	36	550	34	632
700	430	900	1335	50	100	90	14	895	910		840	24-31	24-37	32.5	39.5	700	40	910
800	470	1000	1480	50	100	90	14	1015	1025		950	24-34	24-41	35	43	900	45	1160
900	510	1100	1800	60	110	100	18	1115	1125		1050	28-34	28-41	46.5	46.5	1300	57	1750
1000	550	1200	1950	65	110	100	18	1230	1255	1160	1170	28-37	28-43	50	50	1500	62.5	2170
1200	630	--	2240	65	110	100	18	1455	1485	1380	1390	32-40	32-49	55	57	1750	75	2260

OPERATING OPTIONS: GEARBOX or ELECTRIC ACTUATOR



Horizontal gearbox 1 phase



Horizontal gearbox 2 phases



Vertical gearbox 2 phases



Vertical gearbox 1 phase

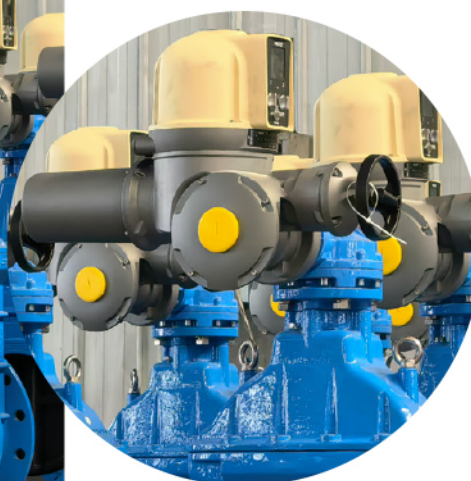


Electric actuator

GEARBOX CONNECTION DETAILS



DN	Gearbox REduction	Input torque gearbox	Nº turns to close gear- box	Gearbox connection	Type
40	2.35:1	22,1	21	F10-EMD05	BA-000D
50	2.35:1	22,1	21	F10-EMD05	
65	2.35:1	27,7	24	F10-EMD05	
80	2.35:1	33,2	28	F10-EMD05	
100	2.35:1	44,3	28	F10-EMD05	
125	2.35:1	55,3	34	F10-EMD10	
150	2.35:1	66,4	40	F10-EMD10	BA-00D
200	2.35:1	83,0	43	F10-EMD10	
250	3:1	86,7	69	F10-EMD10	
300	3:1	108,3	81	F10-EMD15	
350	3:1	130,0	92	F10-EMD15	BA-0D
400	3.6:1	126,4	124	F10-EMD15	
450	3.6:1	144,4	101	F10-EMD15	
500	3.6:1	202,2	117	F14-EMD20	BA-1D
600	4.5:1	158,9	155	F14-EMD20	
700	4:1	150,0	176	F14-EMD20	
800	4:1	150,0	200	F14-EMD30	BA-0D
900	5:1	375,0	285	F14-EMD20	
1000	5:1	500,0	313	F14-EMD20	
1200	5:1	500,0	375	F14-EMD20	



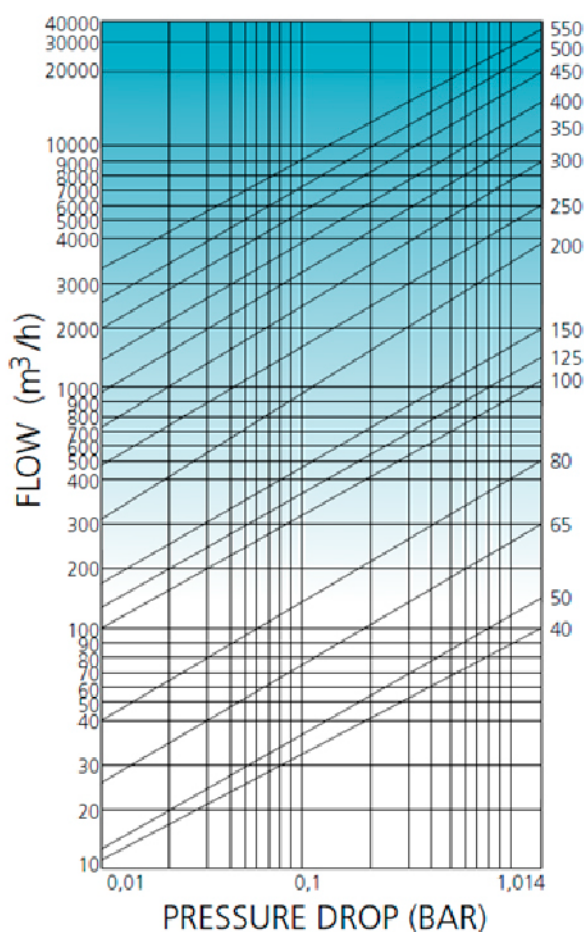
FLOW CHARACTERISTIC CHART

The Flow Characteristic Chart illustrates the relationship between flow rate and pressure drop across the gate valve under different operating conditions. By reading the diagonal curves, end customer can quickly determine how much pressure loss will occur at a given flow rate for various valve sizes.

DAVINCI VALVES full-bore design allows very low flow resistance and minimal pressure drop when the valve is fully open, ensuring efficient performance in water distribution and industrial piping systems.



FLOW CHARACTERISTIC CHARTS



CERTIFICATES AND CERTIFICATIONS

Standard version

- 2 years warranty Certification
- 3.1. Technical Standard Test report supplied
- Possibility of additional Testing proofs, under request
- Certification for components and for whole product per request.

Form GAT_10-005, version 02, effective since October 07th, 2022

VERIFICATION

No. 3N240126.DV0513

Test Report / Technical Construction File no. 8-204012002

Verification's Holder: DAVINCI VALVES
18 Dongyu Street, Square One 11th Floor 1101, Jinyang District, Chengdu, Sichuan, China

Verification ECM Mark:

Product: GATE VALVE DUCTILE IRON
Model(s): 200
DN50-DN1200 PN10-PN16

Verification to: Standard: EN 1074-1:2000, EN 1074-2:2000+A1:2004
related to CE Directive(s): 2014/68/EU (Pressure Equipment)

This document has been issued in accordance with the European Commission's role of 14 September 2022 ref. Ave (2022) 4342894 concerning voluntary certifications with non-simplified procedure and for products intended for third countries outside the EU market.

The manufacturer has voluntarily decided to submit its documents concerning the above-mentioned product for verification. This Certificate Machine confirms that the documentation made available and immediately returned to it, as compared to sensitive data, meets the essential requirements of the above-mentioned directives. The verification activity carried out exclusively concerned the technical documentation and no verification was carried out on the product. This document cannot replace the EC Declaration of Conformity. The above conformity mark can be affixed to the technical documentation in accordance with the ECMA regulation or in law and use, published on the website www.ecma.eu

Issuance date: 24 January 2024
Expiry date: 24 January 2029

For online checks:

Approver: Dine Certificazione Macchine
Legal Representative:

Dine Certificazione Macchine Srl
Via Cor Belli, 240 - Loc. Castello di Serravalle - 40033 Valsamoggia (BO) - ITALY
Tel: +39 051 4702141 - +39 051 4702136 - info@dinemacchine.it - www.dinemacchine.it

WRAS
APPROVED PRODUCT

This certifies that

DAVINCI VALVES

has had the undermentioned product(s) examined, tested and certified as being of an appropriate quality and standard as required in the Water Supply (Water Fittings) Regulations and Scottish Water Byelaws, subject to scheme requirements being met when installed.

Model Number

200 RANGE OF GATE VALVES: DN50-400

The certificate is itself evidence of a valid WRAS Approval. Confirmation of the current status of an approval must be obtained from the WRAS Approval Directory (www.wras.co.uk/directory)

The product so mentioned will be valid until the end of:

April 2028
Certificate No. 2304364

Ian Hughes, WRAS Approvals Manager

NARODOWY INSTYTUT ZDROWIA PUBLICZNEGO PZH
Państwowy Instytut Badawczy
National Institute of Public Health NHI - National Research Institute

ATEST HIGIENICZNY

B.RK.601.10.1585.2025

HYGIENIC CERTIFICATE

NATIONAL INSTITUTE OF PUBLIC HEALTH NHI - NATIONAL RESEARCH INSTITUTE

Wzrost / product: Zestawy filtrów seria 280A, Zestawy czyszczące seria 480A / 428A, kompensatory serii 308A

Zawiera / containing: Jedno etykieta z powłoką aplikacyjną, stal nierdzewna, EPDM

Przeznaczony do / destined: montażu w instalacjach służących do przetwarzania wody przeznaczonej do spożycia przez ludzi

Wymagany wzrost produktu odpowiada wymaganiom higienicznym przy spełnieniu następujących warunków: (The above-mentioned product is acceptable according to hygienic criteria with the following conditions: Instalacja powinna być przeznaczona do użytku w instalacji wodociągowej lub podobnej, a woda powinna być przeznaczona do spożycia przez ludzi)

Atest higieniczny jest ważny przez okres 10 lat od daty wydania, o ile nie nastąpił wycofanie produktu. (The hygienic certificate is valid for 10 years from the date of issue, provided that the product is not withdrawn.)

Wydawca / producer: DAVINCI VALVES
18 Dongyu Street, Square One 11th Floor 1101, Jinyang District, Chengdu, Sichuan Province, China

Niniejszy dokument wydano na wniosek / This certificate issued for: BCTUS POLSKA Sp. z o.o.
41-400 Opatówek
Gmina, ul. Piłsudskiego 14

Atest może być udzielony lub cofnięty po przedłożeniu stosownych dowodów przez przedstawiciela strony. Niniejszy atest nie stanowi gwarancji. (The certificate may be granted or cancelled after appropriate motivation. The certificate does not constitute a warranty.)

Data wydania atestu higienicznego: 30 września 2025
The date of issue of the certificate: 30th September 2025

Kontakt w sprawie atestu higienicznego / To contact regarding this hygienic certificate: Zespół Biomedycyny i Higieny, Państwowy Instytut Badawczy, ul. Żwirki i Wigury 13, 05-717 Warszawa, tel. 22 710 171, fax 22 710 170, e-mail: sekcja@pzh.gov.pl

CE

WRAS

PZH



CONTACT US

DAVINCI GATE VALVES ORDER REQUEST

Ref. 121A-VI / PN 10-16



Head Office CHENGDU

Room 3109 Unit 1 Building 2,
No. 68 Dongda Street
Jinjiang District, Chengdu, Sichuan
CHINA

+86 17340168233 +86 19302892712
valves@davincivalves.com

Europe Office MADRID
SPAIN

zuzana@davincivalves.com

WEBSITE

davincivalves.com



YOUR QUALITY WATER PROJECTS PARTNER
For professionals who looks for more.