

KNIFE GATE VALVE

GV SERIES

Features:

Body

Wafer style cast monoblock with raised faces and reinforcing ribs in large diameters for extra body strength. Internal cast-in gate wedges and guides allow for a tighter shut-off between gate and seat. Full port design for greater flow capacity and minimal pressure drop. The internal body design avoids any accumulation of solids that would prevent the valve from closing.

Seat (resilient)

The innovative design incorporates a mechanism that securely locks the seal within the valve body using a stainless steel retainer ring. Standard EPDM is also offered in various materials, including Viton and PTFE.

Stem

The standard stem is made of stainless steel with a DIN 103 trapezoidal thread, providing exceptional resistance to corrosion. For handwheel actuators with a rising stem, a stem protector is included to shield against dust when the valve is in the open position.

Epoxy Coating

All cast iron and carbon steel valve bodies and components are treated with an epoxy coating applied through an electrostatic process, enhancing corrosion resistance and providing a high-quality finish. The standard color for GOVAL products is RAL-5015 blue.

Gate

Stainless steel gate. The gate is polished finish on both sides to prevent jamming and protect the seating surface. The bottom edge of the gate is beveled to enhance its ability to cut through solids, ensuring a tighter seal when closed. For applications requiring higher pressure, the thickness and/or material of the gate can be customized upon request.

Packing

This packing features a durable construction with multiple layers of braided fiber combined with an EPDM o-ring, and includes an easily accessible packing gland to ensure a secure seal. The long-lasting braided packing is available in a diverse selection of materials.

Yoke or actuator support

Constructed from epoxy-coated steel (stainless steel can be requested), the compact design ensures remarkable robustness, even in the harshest conditions.

Gate Safety Protection

Goval automated valves are equipped with gate guards that comply with EU Safety Standards, designed to prevent accidental entrapment of objects during the gate's movement.

SEAT/SEAL TYPES

Material	Max.T	(°C) Applications
Metal/Metal	>250	High temp./Low tightness
EPDM (E)	120	Acids and non mineral oils
NBR (N)	120	Resistance to petroleum products
FKM-FPM (V)	200	Chemical service / High temp.
VMQ (S)	250	Food service / High temp.
PTFE (T)	250	High corrosion

PACKING TYPES

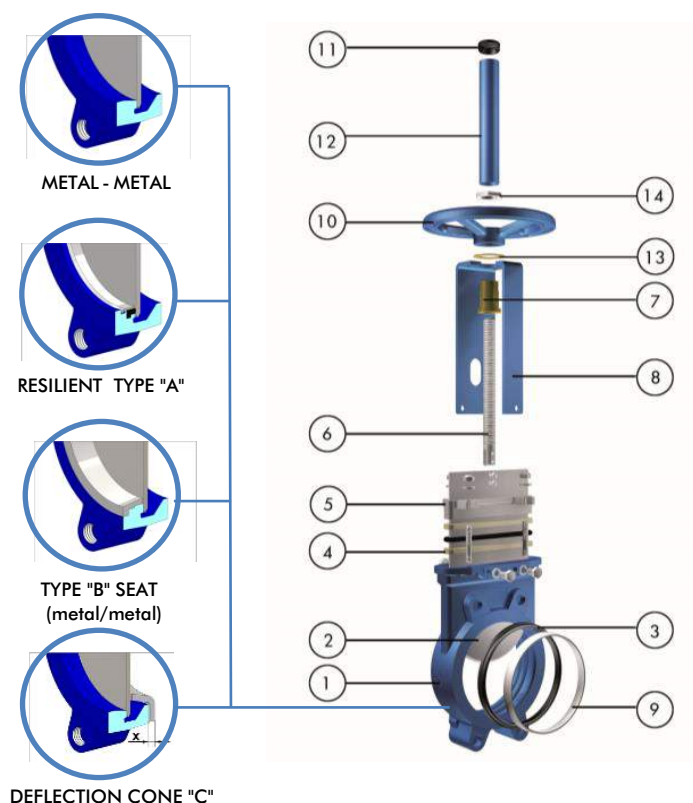
Material	Max.T	(°C) pH
PTFE impregn. synth. fibre (ST)	250	2-13
Braided PTFE (TH)	260	0-14
Graphited (GR)	600	0-14
Ceramic fibre (FC)	1200	



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Standards & Material



STANDARD FLANGE DRILLING

EN-1092 PN10 / PN 16

ASME B16.5 (class 150)

Other flange drillings available on request

WORKING PRESSURE AND TEMPERATURES

50 to DN 250: 10 bar

DN 300 to DN 400: 6 bar

DN 450: 5 bar

DN 500 to DN 600: 4 bar

DN 700 to DN 1200: 2 bar

GJL250 / GJS 400/ GJS-500-7: -10°C / 80°C

CF8M: -20°C / 80°C

Norms

EN 1171 (ISO 1083) DUCTIL IRON GATE VALVES

EN 1074-2 ISOLATING VALVES

EN 1092-2 (ISO 7005-2) DRILLING FLANGES

TESTING

EN 12266-1 PRESSURE TESTS GRADE "A"

ACCESSORIES

ELECTRIC ACTUATOR

PNEUMATIC ACTUATOR

LEVER ACTUATOR

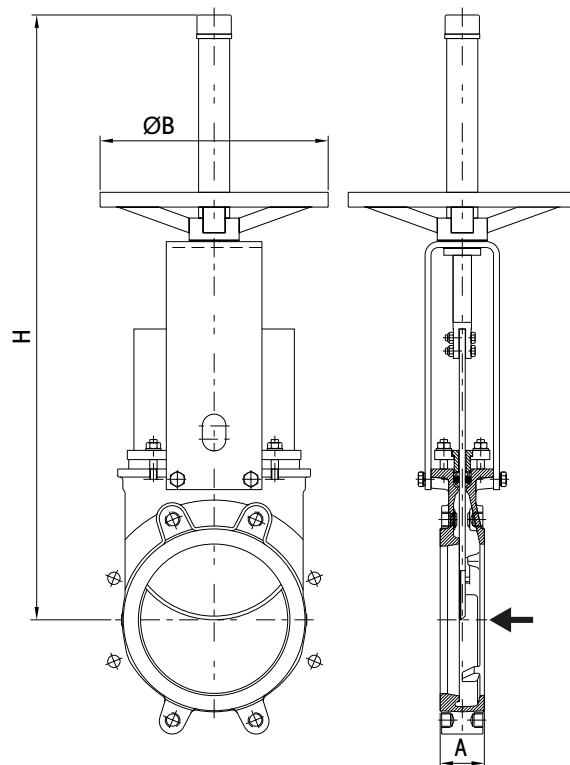
MATERIALI

Part	Description
1 Body	GJL250/GJS400 / EN-GJS-500-7 / CF8M
2 Gate	AISI 304 / AISI 316
3 Seat	Metal-to-Metal, EPDM, NBR
4 Packing	PTFE impreg. synth. fibre with EPDM o-ring
5 Gland Follower	Al. (DN 50-DN 300) / EN-GJS400 (DN 350-DN 1200) / CF8M
6 Stem	Stainless Steel
7 Stem Nut	Brass
8 Yoke	Epoxy-coated carbon steel
9 "A" ring	AISI 304 / AISI 316
10 Handwheel	GJS400
11 Cap	Plastic
12 Stem Protector	Epoxy-coated carbon steel
13 Friction Washer	Brass
14 Nut	Zinc-plated carbon steel

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HANDWHEEL RISING STEM



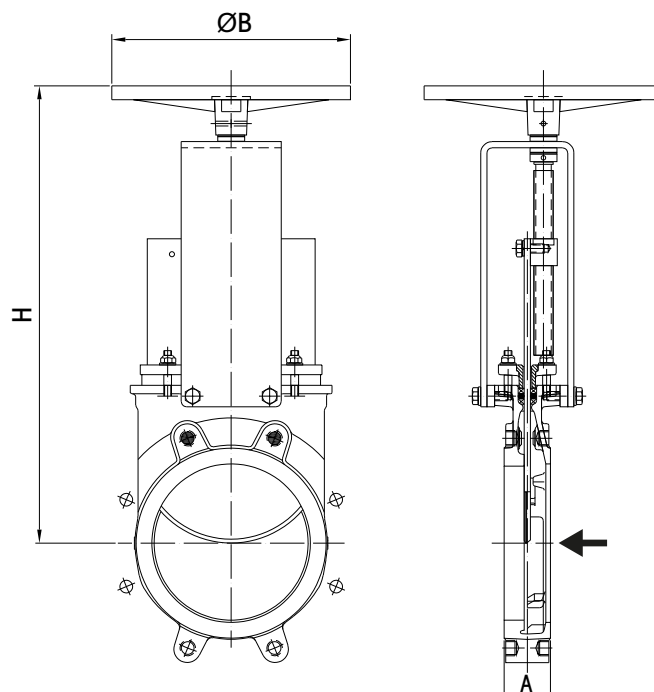
DN	A	ØB	H	Weight (Kg)
50	40	225	420	11
65	40	225	450	12
80	50	225	475	13
100	50	225	520	14
125	50	225	600	17
150	60	225	652	21
200	60	310	822	34
250	70	310	1022	46
300	70	310	1122	64
350	96	410	1323	94
400	100	410	1427	125
450	106	550	1594	162
500	110	550	1707	200
600	110	550	2022	286
700	110	800	2778	405
750	110	800	2900	455
800	110	800	2980	512
900	110	800	3215	680
1000	110	800	3400	865

Standard manual actuator available from DN 50 to DN 1000 and recommended with gearbox from DN 300 and above

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HANDWHEEL NON-RISING STEM



DN	A	ØB	H	Weight (Kg)
50	40	225	312	10
65	40	225	339	11
80	50	225	364	12
100	50	225	405	13
125	50	225	439	15
150	60	225	490	18
200	60	310	595	32
250	70	310	695	45
300	70	310	795	60
350	96	410	945	93
400	100	410	1049	126
450	106	550	1141	179
500	110	550	1254	207
600	110	550	1459	279
700	110	800	1737	-
750	110	800	1856	-
800	110	800	1939	-
900	110	800	2174	-
1000	110	800	2381	-

Standard manual actuator available from DN 50 to DN 1000 and recommended with gearbox from DN 300 and above

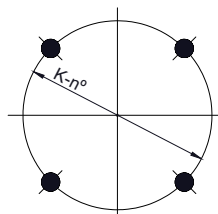


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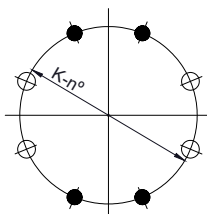
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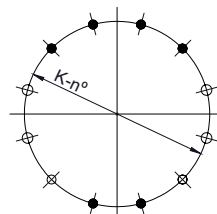
FLANGE AND BOLTING DETAILS EN-1092 PN10



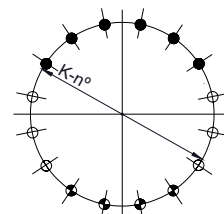
DN 50-65



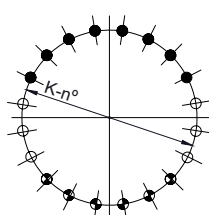
DN 80-200



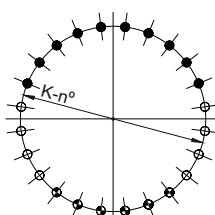
DN 250-300



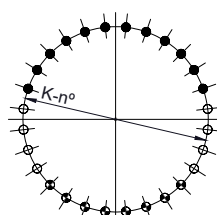
DN 350-400



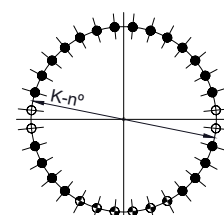
DN 450-600



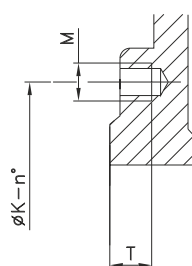
DN 700-800



DN 900-1000



DN 1200



- BLIND TAPPED HOLES
- TAPPED THROUGH
- THROUGHGOING BOLTS

DN	K	n°	M	T			
50	125	4	M-16	11	4	0	0
65	145	4	M-16	11	4	0	0
80	160	8	M-16	11	4	0	4
100	180	8	M-16	11	4	0	4
125	210	8	M-16	11	4	0	4
150	240	8	M-20	14	4	0	4
200	295	8	M-20	14	4	0	4
250	350	12	M-20	18	6	0	6
300	400	12	M-20	18	6	0	6
350	460	16	M-20	22	6	4	6
400	515	16	M-24	24	6	4	6
450	565	20	M-24	24	8	6	6
500	620	20	M-24	24	8	6	6
600	725	20	M-27	24	8	6	6
700	840	24	M-27	20	10	6	8
800	950	24	M-30	20	10	6	8
900	1050	28	M-30	20	12	8	8
1000	1160	28	M-33	20	12	8	8
1200	1380	32	M-36	30	22	6	4

Flange drilling of DN 65 PN10/16 according to EN-1092 allow 4 or 8 drills. Goval designs of DN 65 PN10/16 have 4 drills