PN 16 RESILIENT SEAL GATE VALVE (FAF 6100)

CE 0036

TÜV CERT ISO 9001 : 2000

GOST RUSSIA

PRODUCT FEATURES

- Cast Iron Body & Bonnet.
- Wedge of ductile iron fully rubberized with vulcanized EPDM.
- Inside and outside epoxy powder coated min 250 µ.
- Valve mounting dimensions conform to DIN3202 F4 and EN558-1.
- Flanges are according to ISO 7005-2 and EN1092-2.
- Available sizes from Dn 50 to DN 300.
- Operation with manual handwheels or automatic actuators possible.
- Smooth water way .
- 100% Leak-Tight closure.
- Supplied with plastic flange protection to avoid damages during transport.

APPLICATIONS

Cold and hot water systems, any fluid without acidity or alkalinity.

OPERATING TEMPERATURE

Max + 130°C 266°F

Document No : KA-01
Revision Date : 17/01/2007
Revision No : 01

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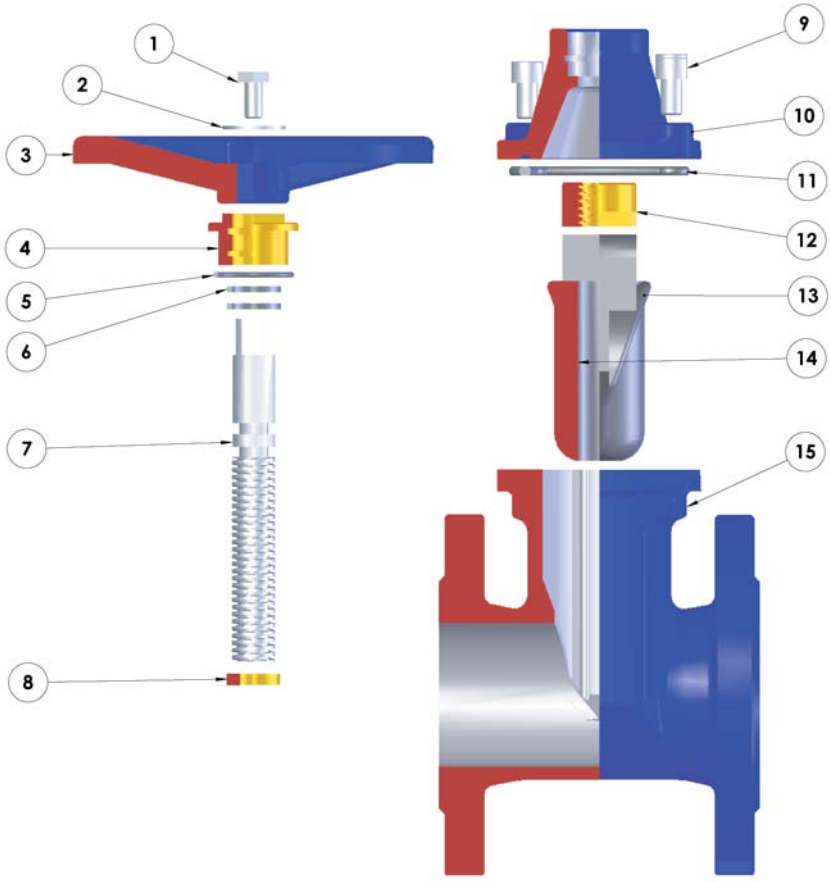
TECHNICAL DRAWING AND MATERIALS



PARTS AND MATERIALS

1. Bolt / DIN 933
2. Washer / Steel
3. Hand wheel / Ductile iron
4. O-Ring bush
5. O-Ring EPDM
6. O-Ring EPDM
7. Steinless stell spindle
8. Bushing / MS58
9. Bolt / DIN 933
10. Bonnet / GG25 cast iron
11. Bonnet sealing ring
12. O-Ring bush / MS58
13. Vulcanized rubber / EPDM
14. Wedge / Ductile iron
15. Body / GG25 cast iron

KV Values

DN 15	DN 20	DN 25	DN 32	DN 40	DN 50	DN 65	DN 80	DN 100	DN 125	DN 150	DN 200	DN 250	DN 300
10	24	44	90	135	260	415	600	1100	1875	2650	4880	7630	11400

KV -The rate of flow of water in cubic meter per hour that will generate a pressure drop of 1 bar accross the valve.

$$KV = \frac{Q\sqrt{G}}{\sqrt{\Delta P}}$$

Q : flow rate m^3/h
G : specific gravity of liquid
ΔP : pressure drop
C_v : 1.17 KV

PN 16 GATE VALVE MAINTENANCE INSTRUCTIONS

Follow the instructions below to perform maintenance and cleaning of PN 16 Gate Valves.

DISMOUNTING

- Make sure that there is no fluid supply on the line where the valve is detached.
- Unscrew the bolt (1) from the hand wheel (3). Remove the washer (2) and detach the hand wheel from the stem (7).
- Unscrew the plug (5) from the bonnet (10).
- Unscrew the opposite inbus bolts (9) and detach the bonnet (10) from the body (15).
- Holding the bonnet (10), remove the wedge set (13-14), the trapeze nut (12), the bonnet sealing ring (11), the stem (7) and the plug (5) sets by pulling up from the body.
- Unscrewing the wedge set, remove it from the stem.
- Detach the trapeze nut from the wedge set canal.
- Take out the stem by pulling it out of the bonnet.
- Remove the plug on the stem.
- Remove the PTFE ring (8) inside of the bonnet.
- Take out the bonnet sealing ring (11) slightly from the bonnet.

INSPECTION AND CLEANING

- Oiling the trapeze nut (12) and the stem (7), inspect if it works easily. If it is tight, request a new one from our company.
- Check if the plug (5) and bonnet (10) threads are deformed. If there is a cut or tear on your bonnet sealing ring (11), request a new one from our company.
- If there is a cut or tear on your wedge set (13-14), request a new one from our company.
- If the PTFE ring (8) is deformed, request a new one from our company.
- Inspect the inbus bolt threads. Replace the deformed ones.
- O-rings must be replaced with new ones.

MOUNTING

- Place the O-rings on the pulp and lightly grease over the O-rings.
- Mount the bonnet sealing ring (11) to its place on the bonnet.
- Mount the PTFE ring (8) to its place on the bonnet.
- Mount the plug (5) through the stem without damaging the O-rings (4).
- Place the stem and plug set into the bonnet. Tighten the plug and the bonnet with hand power.
- Mount the trapeze nut (12) to the canal of wegde set (13-14).
- Finish the mounting of the bonnet set by screwing the wedge set, that stem's (7) end would not come out of.
- Mount the bonnet set to the body (15) and tighten the inbus bolts (9) in the opposite pairs to eliminate the gaps.
- Tighten the plug (5) to the bonnet (10).
- Place the hand wheel (3) on the square over the stem, mounting the washer (2) to the bolt (1), tighten it to the stem and finish the valve mounting.
- Check the closed and open positions turning the hand wheel and let water flow inside the system. Inspect if there is a leak from the bonnet sealing ring or from the plug by opening and closing the valve again. If there is a leak depending on the leaking position, tighten the bonnet sealing ring or the plug.

Note: It is highly recommended to open and close our valves once in 15 days for a longer service life after installation.

PRESSURE / TEMPERATURE RATINGS FOR CAST IRON (GG 25) FLANGES
(REFERENCE ISO 7005-2 TABLE 16)

Pressure ISO PN	TEMPERATURE °C					
	-10 to 120	150	200	250	300	350
	Maximum operating pressure (bar)					
10	10	9,5	9	8	7	5,5
16	16	15,2	14,4	12,8	11,2	8,8
20	15,5	14,8	13,9	12,1	10,2	8,6
25	25	23,8	22,5	20	17,5	13,8
40	40	38	36	32	28	22
50	40,2	39	36	35	33	31

PRESSURE / TEMPERATURE RATINGS FOR DUCTILE IRON (GGG 40) FLANGES
(REFERENCE ISO 7005-2 TABLE 17)

Pressure ISO PN	TEMPERATURE °C						
	-10 to 40	120	150	200	250	300	350
	Maximum operating pressure (bar)						
10	10	10	9,7	9,2	8,7	8	7
16	16	16	15,5	14,7	13,9	12,8	11,2
20	17,5	15,5	14,8	13,9	12,1	10,2	8,6
25	25	25	24,3	23	21,8	20	17,5
40	40	40	38,8	36,8	34,8	32	28
50	44	40,2	39	36	35	33	31

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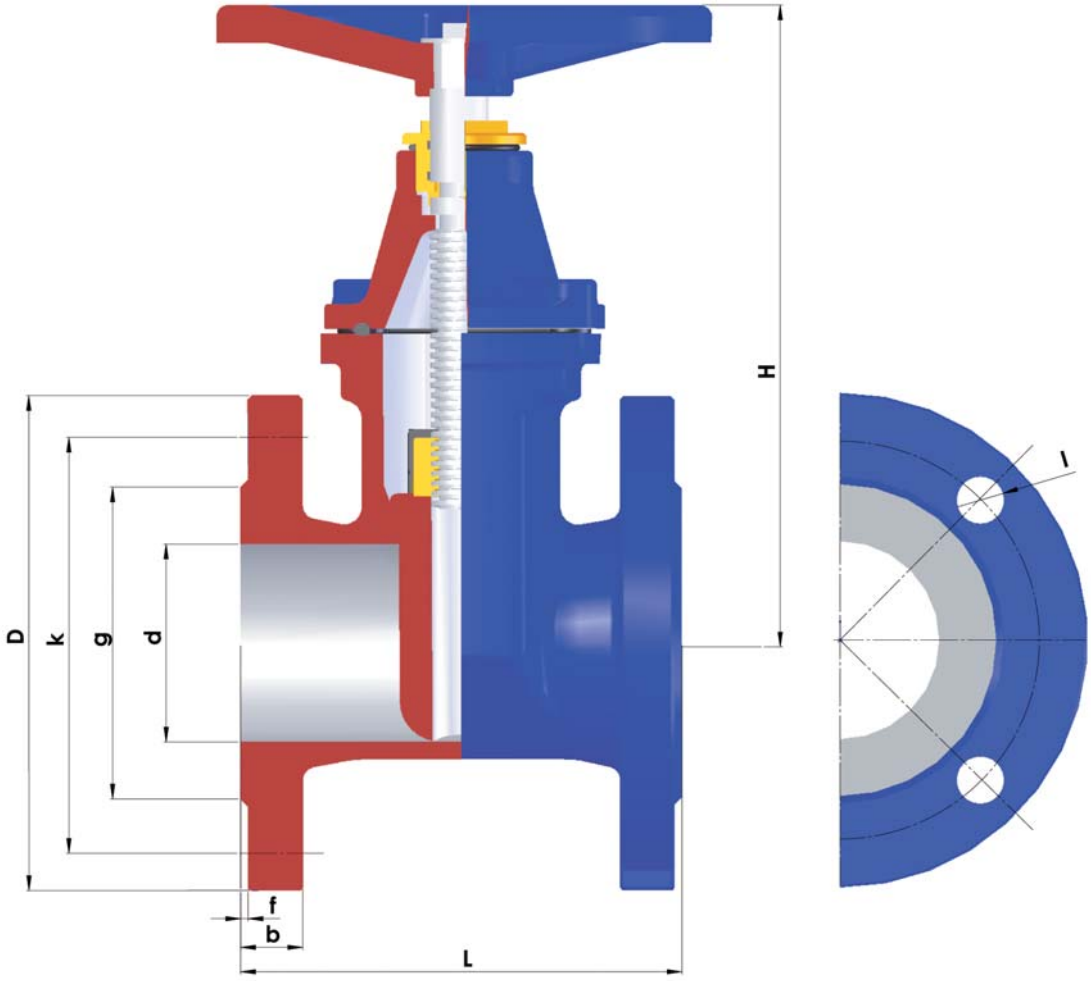
DIMENSIONS AND PRODUCT DATA



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DN	DIMENSIONS EN 558-1		CONNECTIONS ISO 7005-2 / EN 1092-2								
Ø mm	L	H	d	g	k	D	l	b	f	Delik Sayısı	Kg
50	150	198	50	99	125	165	19	20	3	4	10
65	170	22	65	118	145	185	19	20	3	4	15
80	180	251	80	132	160	200	19	22	3	8	18
100	190	285	100	156	180	220	19	24	3	8	25
125	200	350	125	184	210	250	19	26	3	8	33
150	210	387	150	211	240	285	23	26	3	8	45
200	230	485	200	266	295	340	23	30	3	12	70
250	250	558	250	319	355	405	28	32	3	12	106
300	270	735	300	370	410	460	28	32	4	12	130

* Design and materials subject to change without notice.

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