



## GATE VALVE CAST IRON DN50-500, PN10-16



Gate valves with rubber coated disc can be used in + and - grade water pipelines. The valve can only be installed vertically with bottom support. It can provide sealing regardless of the flow direction.

### 1. Purpose and technical characteristics of the product:

- 1.1. The gate valve performs a locking function in the pipeline. Gate valves cannot be used to regulate water flow.
- 1.2. The discs of the valves cannot be used in the semi-open or semi-closed position.
- 1.3. The valves are designed to operate at operating pressures of 1.0 and 1.6 MPa, regardless of the diameter of the transitions.

Type	Nominal pressure PN 10-16	Test pressure		Temperature° C	Environment
		The body sealing tests	Sealing test		
	10 - 16 bar	18-24 bar	12-18 bar	Tmin -20°, Tmax +50°.	Water

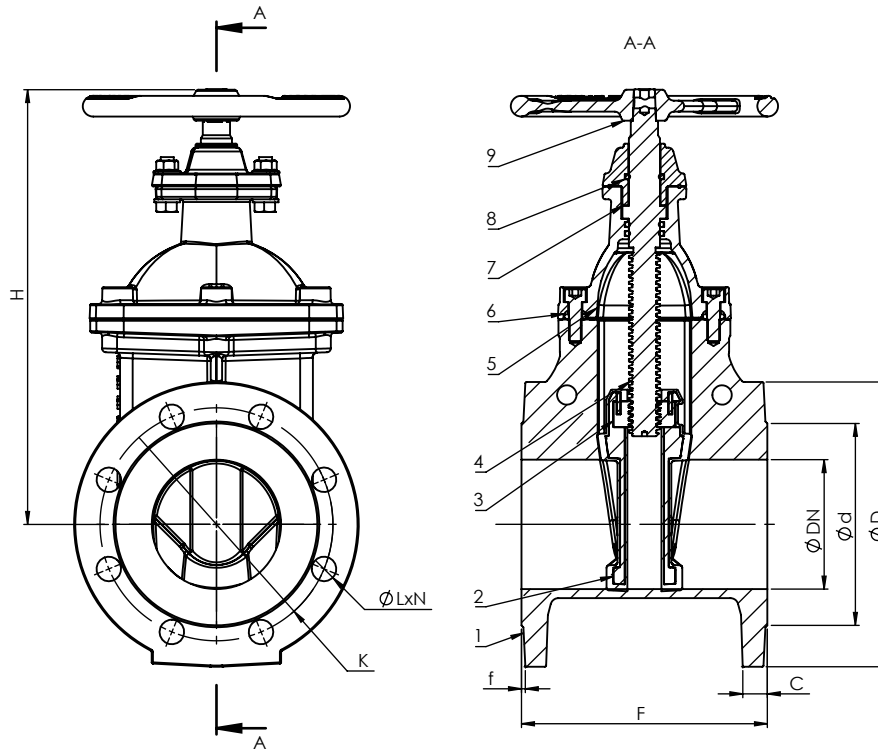
### Maximum allowable pressure 18

### 2. Structure and working principles

- 2.1. Connection to the body; - flange
- 2.2. Work environment; -Water
- 2.3. Valve; coated disc, a handwheel or an electric actuator, a stem, a body and a body cover.
- 2.4. The rubber gasket is located between the body and the body cover flanges.
- 2.5. Valve is locked as the stem inside the groove moves linearly and the transmission of this movement to the valve occurs by rotating the spindle clockwise.

### 3. Basic technical information and features:

#### 3.1 External views and dimensions of connections



No	DETAIL	MATERIAL	QUANTITY
1	Body	Cast iron GGG40	1
2	Disc and coating	Cast iron GGG40/EPDM	1
3	Disc nut	Brass	1
4	Stem	X20Cr13	1
5	Sealing rubber	EPDM	1
6	Cover	Cast iron GGG40	1
7	Cut washer	Brass	1
8	Seal	Brass	1
9	Sealing ring	EPDM	3
10	Hand wheel	Cast iron GGG40	1
11	Bolt	Galvanized steel	-



DN mm	PN atm	F mm	H mm	d mm	K mm	D mm	f mm	C mm	ØL mm	N mm	KG
50	10-16	150	205	99	125	165	3	19	19	4	10,5
65	10-16	170	255	118	145	185	3	19	19	4	15,0
80	10-16	180	280	132	160	200	3	19	19	8	17,3
100	10-16	190	330	156	180	220	3	19	19	8	22,1
125	10-16	200	375	184	210	250	3	19	19	8	32,0
150	10-16	210	420	211	240	285	3	19	23	8	41,0
200	10	230	550	266	295	340	3	19	23	8	64,5
200	16	230	550	266	295	340	3	20	23	12	64,0
250	10	250	680	319	350	395	3	22	23	12	84,5
250	16	250	680	319	355	405	3	22	28	12	85,0
300	10	270	755	370	400	455	4	24,5	23	12	138
300	16	270	755	370	410	455	4	24,5	28	12	147
400	10	310	910	480	525	580	4	28	31	16	236
500	16	350	1110	609	650	715	4	31,5	34	20	393

**\*Note - Depending on the customer's requirement, the steering wheel can be replaced with DN 150, DN200, Dn 250, Dn 300 F10 Actuator, Dn 400 F14 actuator, Dn 500 F16 actuator.**

#### 4. Description of construction:

The body of the valve is made of GGG40 cast iron in accordance with EN1563 and covered with EN 10289 and EN 10339 "WRAS type" "Thermoplastic" "Epoxy powder paint" coating (depending on customer's request) (coating thickness > 250µm), fully protects the valve from the corrosion. The valve is suitable for outdoor installation even though there is not any direct well. The color of the body is blue. Fittings are steel or galvanized 8.8 quality fabrics in accordance with EN 10088. The valve disc is made of GGG40 cast iron in accordance with EN1563 and covered with EPDM material in accordance with STB EN 681-1-2009. The spindle is made of stainless steel X20Cr13.

#### 5. Safety instructions:

5.1 Installation, operation and maintenance of valves are permitted for personnel who have learned the operation of valves.

5.2 It is strictly forbidden to ensure proper operation:

- Work on elimination of defects due to the presence of working pressure in the pipeline;
- O-rings and bolts can be tightened without reducing the pressure in the pipeline.

5.3 To ensure a long and trouble-free service life, it is necessary to install magnetic-mechanical cleaning filters to the discs in the direction of middle flow



## 6. Installation and operation procedure:

6.1 What should be done before installation:

-The pipeline must be cleaned of dirt, gravel, sand and debris remaining inside the pipe;

-During installation, taking into account the weight of the valves, the valves must be fixed either by means of a crane or with a stabilizer other than the bottom, and the weight must be prevented from falling on the bolts and crowns during installation.

6.2 Prior to mounting the bolts and nuts, the seals on the flanges must be fitted with gasket and then the bolts must be tightened.

6.3 Tightening of bolts shall be carried out in an "X" shape so that uneven compression does not occur and bending of the bolts is not observed.

6.4 When installing the valve, care must be taken to ensure that the wheel is facing upwards. 6.5 Prior to installation, perform an external inspection to pre-determine valve damage. 6.6 In the case of installation without a well, in most cases, the installation of a support under the valve is required (after Dn 250). A pile of gravel should be used instead of soil at the installation site.

Well Valve Control:

-Telescopic valve profile

-T-key

If a leak is observed during the opening and closing of the valves, the valve should be checked for closing at the appropriate time.

Otherwise, it is forbidden to load the handwheel by other means. If this happens, the stem or the disc nut could be broken. In this case, the company is not responsible. The company must be notified before intervention.

## 7. Storage information:

7.1 Prior to installation, the valves must be stored in warehouses or under a cover that protects them from contamination and rain, ensures the reliability of the package and the operation of the valve during the warranty period.

7.1 During long-term storage (more than 6 months from the date of manufacture), valves should be inspected periodically (at least twice a year), external dirt and rust must be removed.

7.3 The pipes between the doors must be closed with firmly fixed plugs that must be removed before installation.

7.4 It is recommended to store the valves in an upright position.

## 8. Transportation:

8.1 Valves may be transported by all modes of transport in accordance with the rules for the transportation of goods.

8.2 Unpacked transport is allowed, it is recommended to remove the hand wheel to avoid breaking.

## 9. Warranty:

The equipment is certified. AZERTEXNOLAYN LLC offers consumers a warranty for one year from the date of commissioning by enforcing the rules of transport, storage, installation and operation (excluding climatic conditions, installation and user defects).

The total service life of the sliding valve is 10 years, excluding moving parts.

In case of violation of installation rules, claims on the quality of the sliding valve are not accepted.