

## INSTALLATION OPERATION AND MAINTENANCE INSTRUCTIONS GATE VALVE

**Working temperature 0 °C/100 °C (resilient seated), 0 °C/120 °C (metal seated)**

**Face to face dimensions conform to DIN3202 F4 (flat body), F5 (oval body).**

Resilient seated article numbers for DN40–DN150 are the same for PN10 and PN16 and are always declared as PN16.

**WARNING: NEVER PUT HANDS OR ANY OTHER OBJECT IN THE GATE VALVE—  
SERIOUS INJURIES WILL OCCUR AND VALVE WILL BE DAMAGED.**

### **PRE – INSTALLATION:**

To minimize straining of valve body, make sure the mating flanges are: in line, flat, parallel and correct distance apart.

Remove the flange cover and wipe the flange and gaskets with a lint-free, dry wipe. If installing an O-Ring seal flange, apply a light film of grease to the O-Ring and install in the flange O-Ring groove.

### **INSTALLATION:**

Use gasket material suitable for the pressure, temperature, and media and cut to fit the raised face of the valve. Make sure that no foreign particles enter the valve, proceed with installation. For valve installation proper dimension and length of bolts have to be used. Too long bolts should cause the damage of the body panels, or destroy the seal surface. Lightly grease the flange bolts with high-temperature, non-galling type of grease. Carefully tighten the bolts around the flange using the prescribed torque. Bolts should be tightened gradually in a star or crisscross pattern.

During tightening flange bolts check the compression of the gasket. Value of the required torque depends of: type of gasket, line pressure, bolts type, and bolt lubricant.

### **STORAGE, PROTECTION, OPERATION, DISASSEMBLY AND MAINTENANCE**

#### **STORAGE AND PROTECTION:**

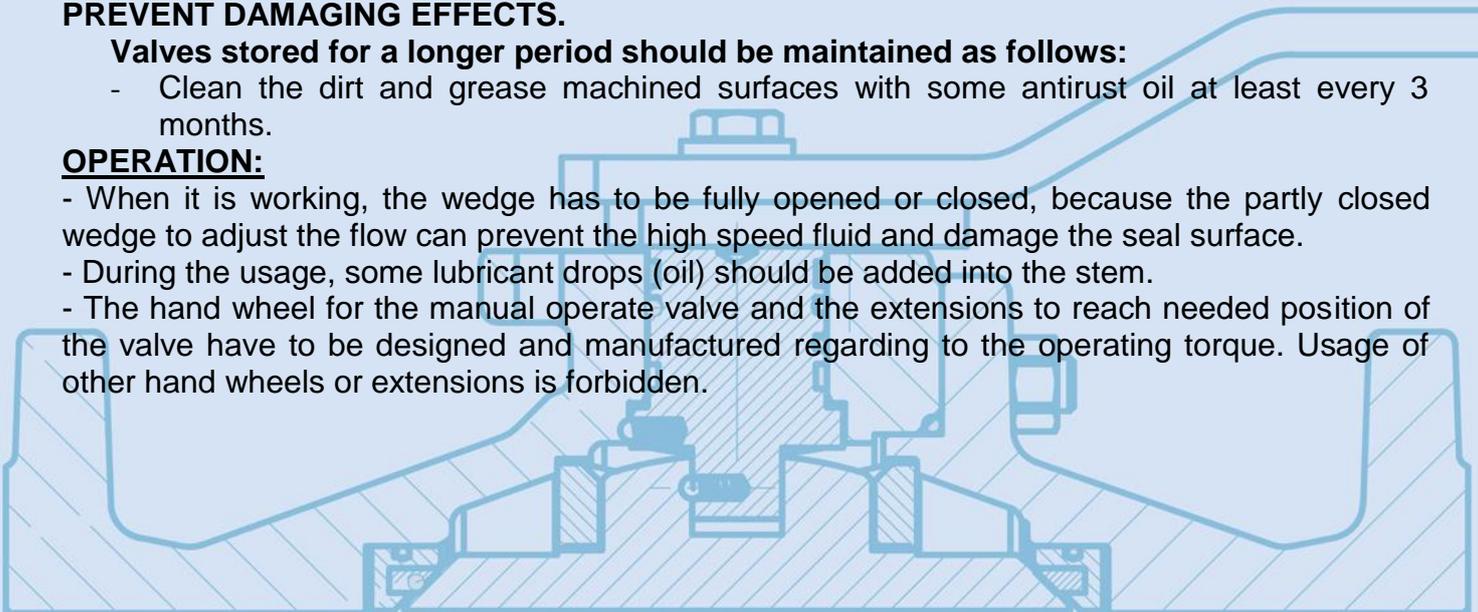
**CAUTION: IF THE VALVE IS TO BE STORED FOR A LONG PERIOD OF TIME BEFORE  
INSTALLATION IT SHOULD BE STORED IN A COOL, DRY AND CLEAN WAREHOUSE TO  
PREVENT DAMAGING EFFECTS.**

**Valves stored for a longer period should be maintained as follows:**

- Clean the dirt and grease machined surfaces with some antirust oil at least every 3 months.

#### **OPERATION:**

- When it is working, the wedge has to be fully opened or closed, because the partly closed wedge to adjust the flow can prevent the high speed fluid and damage the seal surface.
- During the usage, some lubricant drops (oil) should be added into the stem.
- The hand wheel for the manual operate valve and the extensions to reach needed position of the valve have to be designed and manufactured regarding to the operating torque. Usage of other hand wheels or extensions is forbidden.



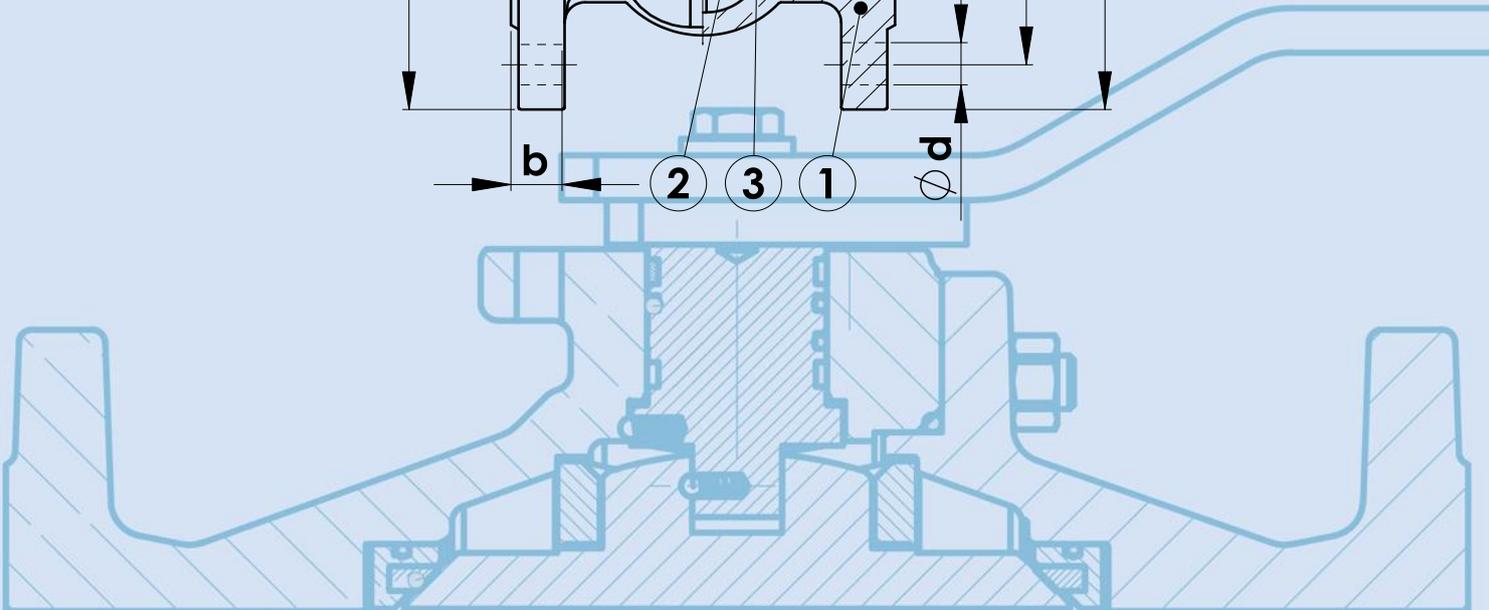
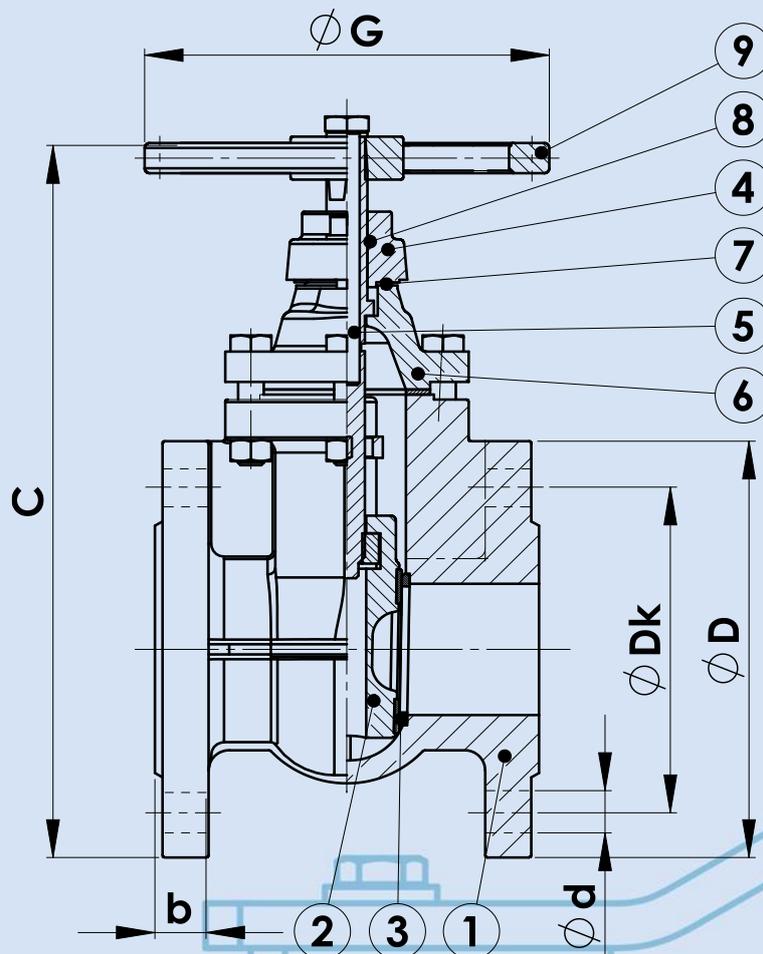
**DISASSEMBLE AND MAINTENANCE:**

- Before disassembly or maintenance, assure that the pressure is not present in the pipeline.
- Dismantle the bonnet bolt and nut. Lift the bonnet component included the wedge.
- Take gasket out of bonnet.
- Turn around stem, take out the stem, then dismantle the bonnet component.

To check and maintain the valve that it is being used for a longer period, the main steps are:

- Check the wear of the seal surface. Once it is damaged, it shall be repaired or replaced.
- Check the wear of the stem and the stem nut's acme thread.
- Check the bolts and nut, assure tight connection.
- Check the gasket, the packing, find out for eventual damages or abnormalities. If necessary, parts have to be replaced. Before replacement make sure pressure is not present in the system.

**WARNING: THE WEDGE MUST BE SLIGHTLY OPEN WHEN INSTALLING.**



1	Body
2	Wedge
3	Body seat ring & disc seat ring
4	Stem nut
5	Stem
6	Bonnet
7	O-Ring
8	Packing
9	Hand wheel

