Materials

Body and bonnet

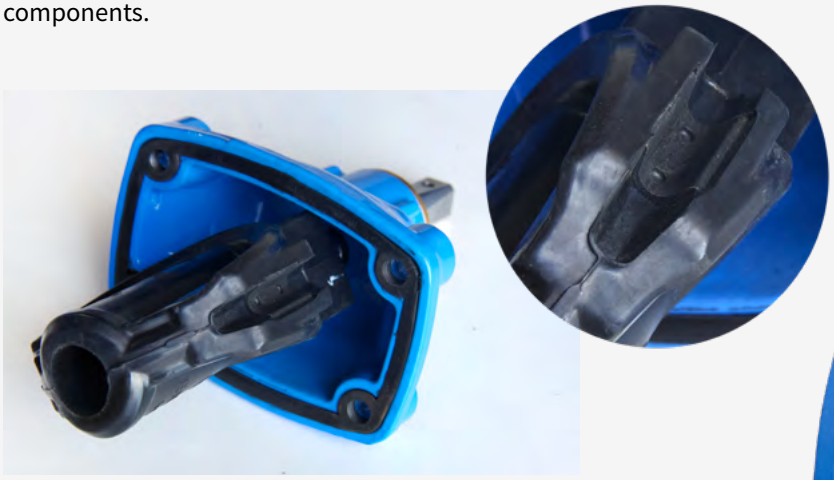
• Body and bonnet og GJS-500-7 (GGG-50).
• V-shaped sealing ring.
• Epoxy coating according to DIN 30677-2 approved internally and externally with a minimum thickness of 250 microns.

Stem and Gland

• The brass gland nut, screwed into the valve bonnet, includes a pin to prevent accidental unscrewing.
• A specially profiled EPDM gasket is used between the body and bonnet.
• The bolts connecting the bonnet and body can be either stainless steel or carbon steel, and are externally sealed.

Wedge and nylon sliding guide

• Wedge of ductile iron fully vulcanized with EPDM rubber and with fixed brass wedge nut.
• The wedge includes two anti-friction nylon bushings that reduce operating torque and prevent wear on both the elastomer and the ductile iron components.



• The inclusion of the nylon guide shoe eliminates friction between the wedge and the valve guide, reducing wear and preventing calcareous deposits from building up on the stem. This protects the vulcanized rubber on the wedge and avoids friction with iron parts, thereby increasing the service life of the system.

Design and Standards

• Resilient-seated gate valve for potable water and wastewater applications, with a maximum operating temperature of 70°C.
• Designed in accordance with EN 1074 parts 1 & 2.
• Face-to-face dimensions according to EN 558.
• Flange drilling as per EN 1092-2 (ISO 7005-2).
• 10-year warranty.
• Hydraulic testing according to EN 1074-1 & 2 and EN 12266.

Stem

• Stem sealing is achieved with three O-rings inserted in the brass gland.
• A dust ring provides protection against external contamination.
• Cold-rolled stem for improved strength and surface finish.

Body/bonnet connection

The unique body-to-bonnet assembly guarantees long-lasting tightness:
• A round rubber bonnet gasket fits securely into a groove in the bonnet, preventing blowout under pressure surges.
• 8.8-grade galvanized bolts are recessed into the bonnet, fully surrounded by the gasket and sealed with hot melt. This prevents exposure to both media and soil, eliminating the risk of corrosion.

Wedge nut

• The fixed wedge nut reduces the number of movable valve parts thus minimizing the risk of corrosion, malfunction.
• The wedge nut is made of dezincification resistant brass with lubricating abilities providing compatibility with the stainless steel stem.

Vulcanized wedge

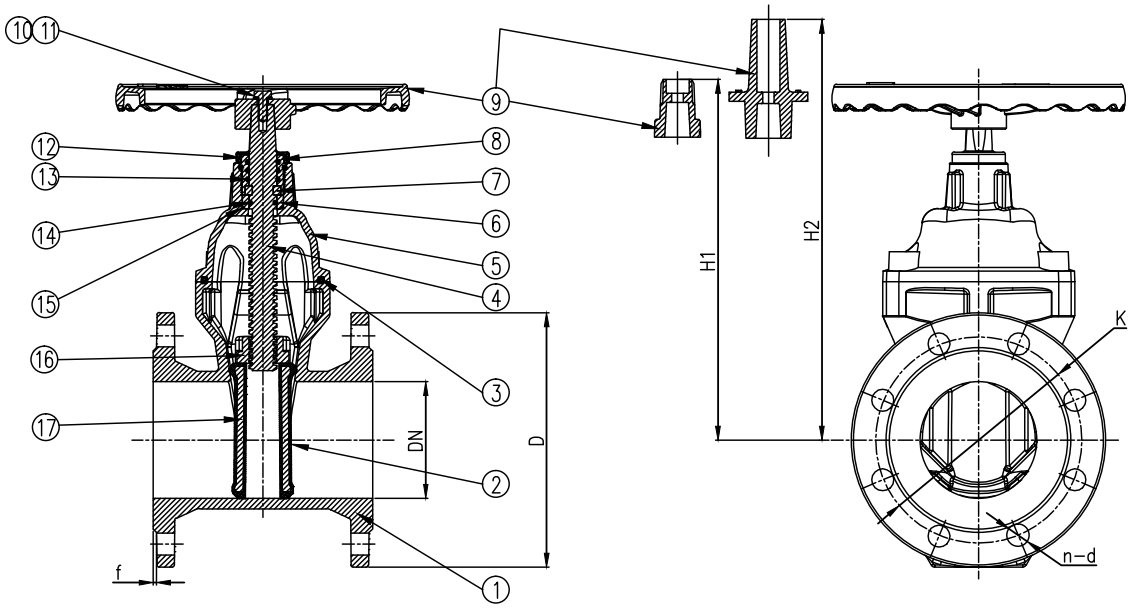
• The ductile iron core is fully vulcanized with drinking water approved EPDM rubber internally and externally.
• No iron parts are exposed to the medium and the excellent rubber vulcanization prevents creeping corrosion underneath the rubber.
• Guides in the wedge and on the valve body ensure a uniform closure regardless of high pressure.
• Safe operation is ensured, as the guides prevent overloading of the stem.
• The wedge has a large through bore and as there are no hollows in the core, stagnant water or impurities cannot collect and cause contamination.

Operation

Valves could be operated by hand wheel/head cap/worm gear/electric actuator etc. according to the customer's requirements.

Generic data

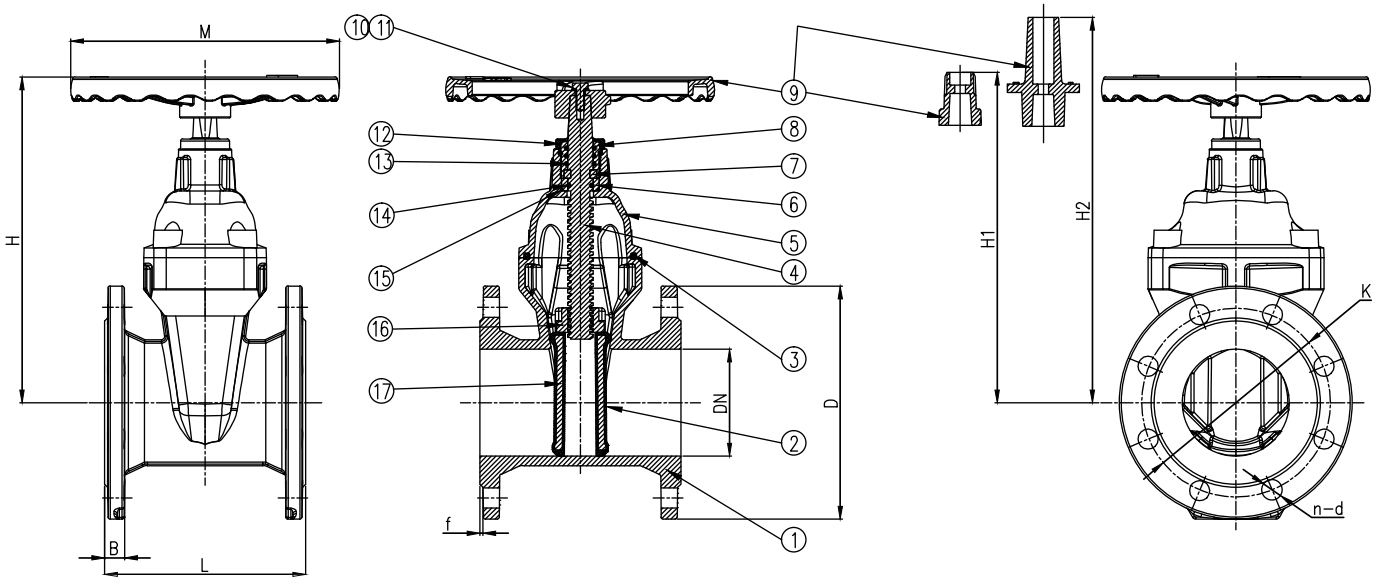
- **Diameter:** DN40 to DN300
- **PN:** PN25
- **Pressure test:** Body 38 Bar
  Seal 28 Bar
- **Applicable medium:** Potable/waste water
- **Temperature:** 0-80ºC
- **Operation:** Handwheel/square cap
- **Maximum flow velocity:** 4 m/s
- **Minimum internal and external coating thickness:** 250 µm
- **Design:** EN 1171
- **Flange:** EN 1092-2
- **Face-to-face:** EN 558-1 Series 15
- **Tests:** EN 12266-1

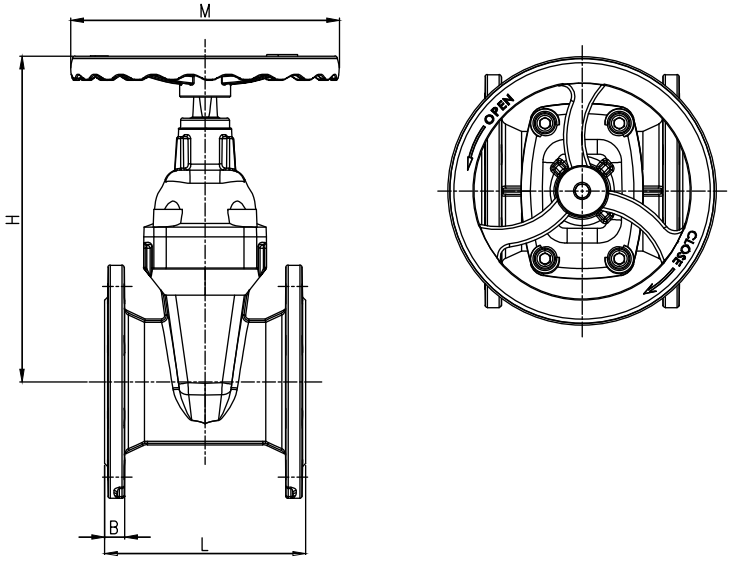


Materials

Nº	PART	MATERIAL
1	Body	Ductile iron
2	Disc	Ductile iron + EPDM
3	Bonnet gasket	NBR
4	Shaft	Stainless steel AISI 420
5	Bonnet	Ductile iron
6	Thrust washer	Brass CuZn39Pb2
7	Retaining ring	Brass CuZn39Pb2
8	Thrust nut	Brass CuZn39Pb2
9	Handwheel	Ductile iron

Nº	PART	MATERIAL
10	Bolt	Stainless steel AISI 304
11	Flat washer	Stainless steel AISI 304
12	Dust cover	NBR
13	O-ring	NBR
14	O-ring	NBR
15	O-ring	NBR
16	Shaft nut	Brass CuZn39Pb2
17	Vulcanization	Ductile iron





Dimensions (mm)

DN	ø ext (mm) DIN-F4 L	M	H	H1	H2	End flange EN1092-2 PN25 mm					No. of Turns	Tightening Torque (N·m)
						D	K	n-d	B	f		
40	140	ø180	215	220	275	150	110	4-ø19	19	3	9	30
50	150	ø180	215	220	275	165	125	4-ø19	19	3	9	40
65	170	ø200	250	250	310	185	145	8-ø19	19	3	10	50
80	180	ø200	275	275	330	200	160	8-ø19	19	3	12	60
100	190	ø220	320	330	380	235	190	8-ø23	19	3	12	80
125	200	ø254	365	370	415	270	220	8-ø28	19	3	14,5	100
150	210	ø280	400	405	450	300	250	8-ø28	20	3	17	120
200	230	ø315	495	515	550	360	310	12-ø28	22	3	18,5	150
250	250	ø406	590	610	645	425	370	12-ø31	24,5	3	23	200
300	270	ø406	670	690	725	485	430	16-ø31	27,5	4	27	250