## Primary characteristics
The NAF wedge gate valve is an ideal solution for use in installations where medium class pressure applications are present. This valve offers very high corrosion resistance and extremely long life cycles and offer a high degree of realibility. The distinctive characteristic of this valve type include:

- Full bore
- Flexible wedge
- Rising stem
- Handwheel with bearing
- Sealing surfaces machined directly in the material of the body

**CE-marked** according to Pressure Equipment Directive (PED 97/23/EG) module H, category III

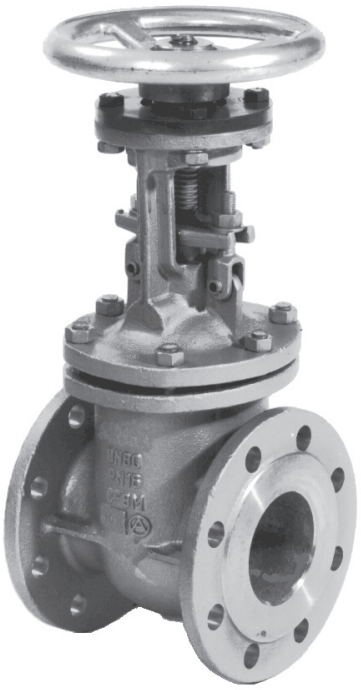
## Design
The valves have a rising stem, outside screw, and handwheel with stem nut mounted in needle thrust bearings. Full bore. Flexible guided wedge. Backseated stuffing box protects the packing in service. The seat facings are machined directly in the body and gate.
The bonnet of sizes DN 80—300 is in one piece. Sizes DN 350 and larger have a bolted yoke. The wedge gate valves can also include an actuator.
Contact NAF for further information about selection of electric actuators.
The design of connection flanges of various sizes of wedge gate valve is stated under "Connections" below.

## Applications
This type of valve is intended for shut-off applications with media that do not attack the material. The packing material of the valves is resistant to most acids and alkalis at temperatures up to 250°C.

## Connections
The valves are delivered with flanges with raised face acc. to PN 16 to the following standards for DN 80-500.

## (Table 1)

| NAF No. | Valves flanges drilled to | Counter flanges for welding |
|---|---|---|
| 488310 | EN1092 | SS 2033 (DIN 2633) |
| DN 200 and larger can be supplied drilled for PN 10. When ordering, always state the required drilling for these DN sizes. The wedge gate valves are always supplied with flange diameters for pressure class PN 16. | | |
| 488200 | EN1092 | SS 2032 (DIN 2632) |



NAF 488310

## Capacities
The resistance factors (Z) below are given for fully open valves:

| | |
|---|---|
| DN 80 — 500 | 0,2 |

Max. dp without bypass valve:

| | |
|---|---|
| DN 80 — 400 | 16 bar |
| DN 500 | 10 bar |

## Working pressures and temperatures (Table 2)

| Pressure rating | NAF No. | DN | Max. temperature °C | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | 20 | 50 | 100 | 150 | 200 | 250 |
| | | | Max. pressure bar (e) | | | | | |
| PN 10 | 488200 | 200-500 | 9,1 | 8,7 | 7,8 | 7,0 | 6,4 | 6,0 |
| PN 16 | 488310 | 80-400 | 14,6 | 14 | 12,4 | 11,2 | 10,3 | 9,6 |

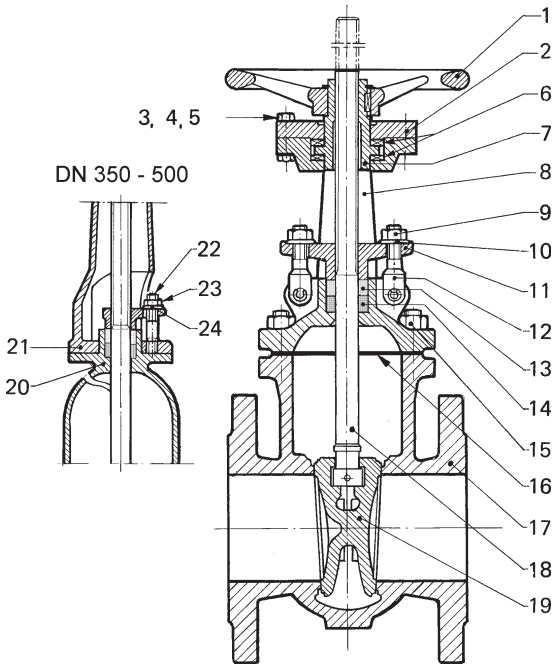
According to EN1092-1:2000

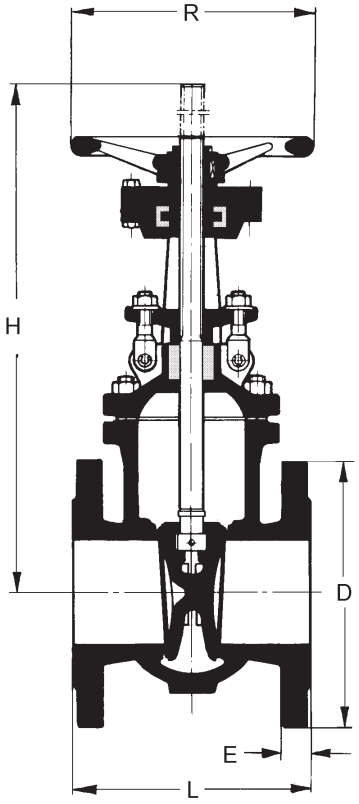
## Technical specification

| | |
|---|---|
| Material: | Stainless steel |
| Range of sizes: | DN 80 — 400, PN 16<br>DN 200 — 500, PN 10 |
| Pressure ratings: | PN 10 and PN 16 |
| Face-to-face and dimensions: | To DIN 3204 F4<br>SSG 1064 PN 10. |
| Connections: | Flanges |
| Temperature range: | Up to 250°C |
| Test pressure: | 1.5 x PN valve open<br>1.1 x PN valve closed<br>Media water |

## Materials (Table 3)

| Item No. | Part | Material |
|---|---|---|
| 1 | Handwheel | Nodular iron (DN 350 Steel) |
| 2 | Plate | Stainless steel EN 1.4436 |
| 3 | Hex. screw | Stainless steel A4 |
| 4 | Washer | Stainless steel |
| 5 | Hex. nut | Stainless steel A4 |
| 6 | Bearing | Steel |
| 7 | Stem nut | Brass CW614N |
| 8 | Bonnet | Stainless steel EN 1.4408 |
| 9 | Hex. nut | Stainless steel A4 |
| 10 | Washer | Stainless steel |
| 11 | Gland | DN 80-150 EN 1.4571<br>DN 200-500 Stainless steel EN 1.4408 |
| 12 | Eye bolt | Stainless steel A4 |
| 13 | Stuffing box | PTFE |
| 14 | Box ring | PTFE/Glassfibre |
| 15 | Stud/Hex. screw | Stainless steel A4 |
| 16 | Bonnet gasket | Reinforced graphite |
| 17 | Body | Cast stainless steel EN 1.4408 |
| 18 | Stem | Cast stainless steel EN 1.4460 |
| 19 | Wedge | Cast stainless steel SS 2324 |
| 20 | Bonnet | Cast stainless steel EN 1.4408 |
| 21 | Yoke bonnet | Cast stainless steel EN 1.4408 |
| 22 | Stud | Stainless steel A4 |
| 23 | Hex. nut | Stainless steel A4 |
| 24 | Washer | Stainless steel |




NAF 488200, 488310

## Dimensions and weight (Table 4)

| DN | Dimensions, mm | | | | | Number of wheel turns | Mass kg |
|---|---|---|---|---|---|---|---|
| | D | E | L | H* | R | | |
| 80 | 200 | 20 | 180 | 440 | 275 | 23 | 23 |
| 100 | 220 | 20 | 190 | 525 | 275 | 28 | 30 |
| 150 | 285 | 22 | 210 | 715 | 275 | 39 | 52 |
| 200 | 340 | 24 | 230 | 910 | 325 | 43 | 87 |
| 250 | 405 | 26 | 250 | 1100 | 325 | 53 | 117 |
| 300 | 460 | 28 | 270 | 1290 | 325 | 63 | 168 |
| 350 | 520 | 30 | 290 | 1545 | 630 | 62 | 220 |
| 400 | 580 | 32 | 310 | 1730 | 710 | 69 | 318 |
| 500 | 715 | 32 | 350 | 2070 | 710 | 74 | 500 |

* Open valve

**NAF AB**
SE-581 87 Linköping
Sweden

Telephone +46 13 31 61 00
Facsimile +46 13 13 60 54
e-mail info@naf.se
Website: www.naf.se

**ISO 9001 Certified**