



## AVK RESILIENT SEATED GATE VALVE, PN16

21/35-002

### With stem cap/Insert for Smart Water

The 21/35-002 Smart Water resilient seat, wedge gate valve for isolation purposes. These valves are equipped with a VID1 Positioner, a smart device for indicating the position of gate valves and whether it is open, close, or any percentage in between and transmits the data wirelessly. Based on the data provided, water utilities can optimise the operation of the water distribution network, asset auditing, efficiently lower water loss.

#### Product description:

Resilient seat gate valve for water. Temperature range: -10° C to +70° C.

#### Design standards:

- BS5163 Type B, EN 1074 part 1 & 2
- Face-to-face dimension according to EN 558 Table 2 Basic Series 3
- Flange drilling to EN1092, PN16
- WIMES 8.09 Compliant

#### Test/Approvals:

- Hydraulic test according to EN 1074-1 and 2 / EN 12266
- Approved according to WRAS
- Drinking Water Inspectorate Regulation 31 compliant

#### Features:

- Communication: NB-IoT (band 8 & 20) or LoRa® (868MHz).
- Detects the position of the valve and transmits data and alerts to the VID1 Cloud or a third-party software.
- Cap top as standard.
- Fitted with an AVK status indicator - see product reference 3004/100-001
- The ductile iron wedge, fully vulcanized with EPDM rubber.
- O-ring stem seals replaceable under pressure.
- Fully corrosion resistant construction.
- Blue fusion bonded epoxy coating, in accordance with WIS 4-52-01 - Class B.
- Body, bonnet and gland bolts sealed with hot melt
- Lifting bars.
- Patent pending.
- Embodied Carbon Data available upon request
- **Options:** Clock wise to open (red stem cap insert), clock wise to close (white stem cap insert). DN50 option - see 21/50-009.

**Safety Note:** The valves now accommodate lifting bars for the safe handling of valves. These lifting bars are rated to the weight of the bare valve and stem cap (where fitted) only and should not be utilised if the valve is fitted with pipe, mechanical pipe joints, gearboxes, actuators or any other external fitment. AVK will not accept any responsibility for loss or damage if the lifting bars are not used in strict accordance with this guidance.

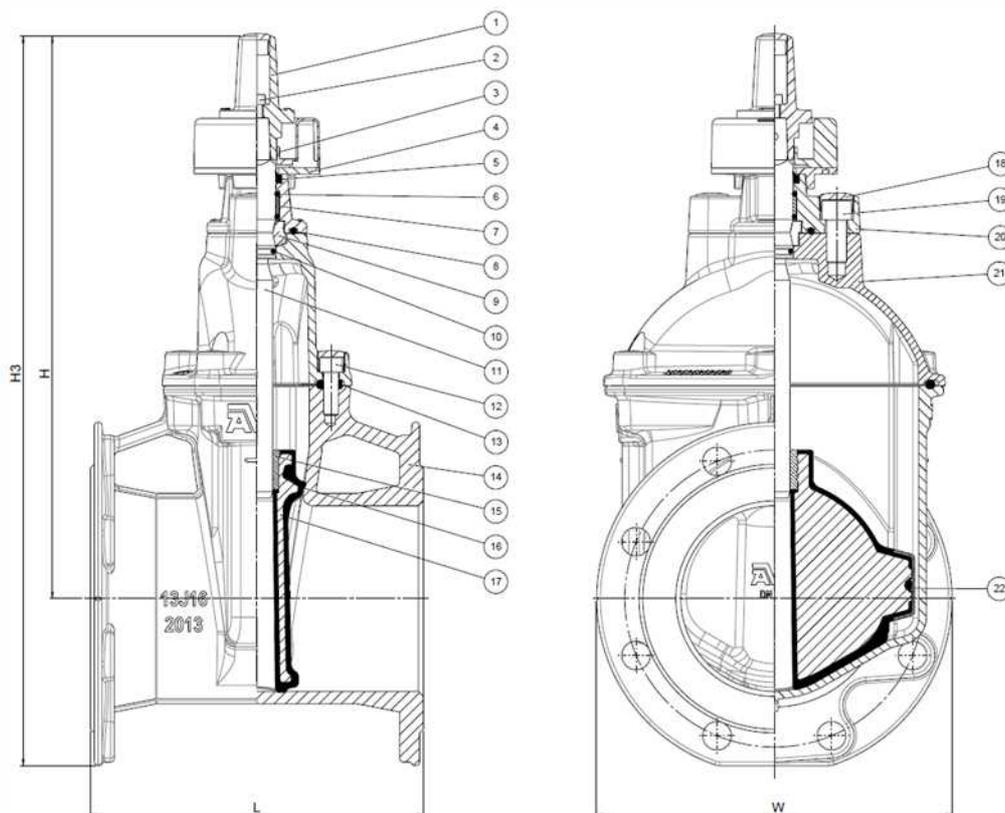
#### Accessories:

Extension spindle, full range of flange adaptors and dismantling joints. Status indicator 3004/100-001.



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The designs, materials and specifications shown are subject to change without notice due to the continuous development of our product range.



**Component list:**

|                    |                           |                |                                 |
|--------------------|---------------------------|----------------|---------------------------------|
| 1. Stem cap        | Cast iron GJL-250 (GG-25) | 12. Bolt       | Steel gr. 8.8                   |
| 2. Screw           | Steel gr. 8.8             | 13. Gasket     | EPDM rubber                     |
| 3. Position sensor | Plastic                   | 14. Body       | Ductile iron GJS-500-7 (GGG-50) |
| 4. Base            | Plastic                   | 15. Wedge nut  | Brass DZR CW626N                |
| 5. Wiper ring      | NBR rubber                | 16. Wedge      | EPDM rubber                     |
| 6. O-ring          | NBR rubber                | 17. Wedge core | Ductile iron GJS-500-7 (GGG-50) |
| 7. Bearing         | Nylon                     | 18. Hot melt   | Hot melt glue                   |
| 8. O-ring          | NBR rubber                | 19. Bolt       | Steel gr. 8.8                   |
| 9. Thrust collar   | Brass DZR                 | 20. Gland      | Ductile iron GJS-500-7 (GGG-50) |
| 10. O-ring         | NBR rubber                | 21. Bonnet     | Ductile iron GJS-500-7 (GGG-50) |
| 11. Stem           | Stainless steel 1.4021    | 22. Wedge shoe | Nylon                           |

Components may be substituted with equivalent or higher class materials without prior notification.

**Reference nos. and dimensions:**

| AVK ref. no.         | DN<br>mm | Flange<br>drilling | Operating<br>Direction | L<br>mm | H<br>mm | H3<br>mm | F1<br>mm | Theoretical<br>weight/kg |
|----------------------|----------|--------------------|------------------------|---------|---------|----------|----------|--------------------------|
| 21-080-35-J140069009 | 80       | PN10/16            | CTC                    | 203     | 343     | 438      | 19       | 14                       |
| 21-080-35-J140069010 | 80       | PN10/16            | CTC                    | 203     | 343     | 438      | 19       | 14                       |
| 21-100-35-J140069009 | 100      | PN10/16            | CTC                    | 229     | 364     | 469      | 19       | 17                       |
| 21-100-35-J140069010 | 100      | PN10/16            | CTC                    | 229     | 364     | 469      | 19       | 17                       |
| 21-150-35-J140069009 | 150      | PN10/16            | CTC                    | 267     | 454     | 589      | 19       | 29                       |
| 21-150-35-J140069010 | 150      | PN10/16            | CTC                    | 267     | 454     | 589      | 19       | 29                       |
| 21-200-35-J140069009 | 200      | PN16               | CTC                    | 292     | 544     | 710      | 19       | 47                       |
| 21-200-35-J140069010 | 200      | PN16               | CTC                    | 292     | 544     | 710      | 19       | 47                       |