



## AVK RESILIENT SEATED GATE VALVE, PN16

21/87-001

Ductile iron, with stem cap/Insert for Smart Water

The AVK Series 21/87-001 resilient seated, wedge gate valve for isolation purposes, designed to BS5163 for ring key and bar operation, prepared for installation of AVK Smart Water surveillance and measurement equipment. These valves are equipped with a VIDI 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 seated, wedge gate valve for isolation purposes suitable for use with water to a maximum temperature of up 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 VIDI Cloud or a third-party software.
- Fitted with an AVK status indicator - see product reference 3004/100-001
- Ring key and bar operation, prepared for installation of AVK Smart Water surveillance and measurement equipment.
- Branch tapping - ¼" BSP ball valve connections suitable for smart sensors such as VIDI Pressure / VIDI Temperature to enable informed decision making prior to operation.
- Cap top as standard.
- 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).
- **Safety Note:** The valve has lifting bars for safe handling. 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

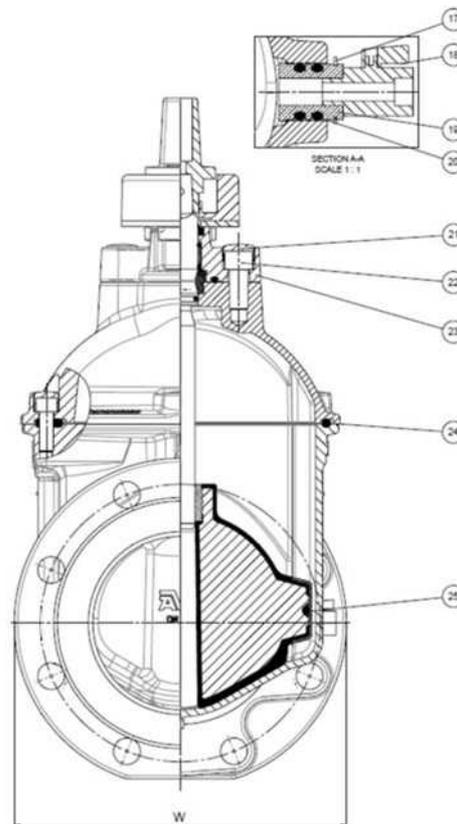
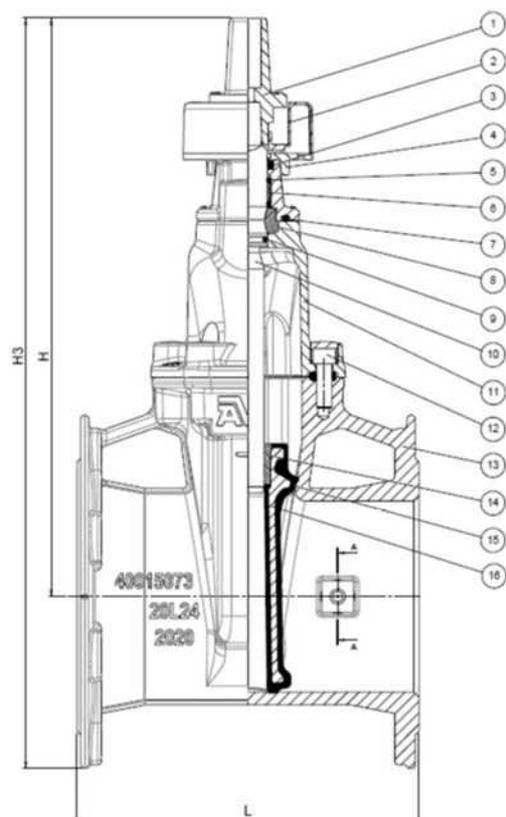
### Accessories:

Extension spindle, flange adaptors, 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	Ductile iron GJS-500-7	14. Wedge nut	Brass DZR CW626N
2. Collar	Luran S 778T (ASA)	15. Wedge rubber	EPDM rubber
3. Wiper ring	NBR rubber	16. Wedge body	Ductile Iron
4. Ring	Luran S 778T (ASA)	17. Circlip ring	Stainless steel
5. O-ring	NBR rubber	18. Ball valve	Nickel Brass
6. Bushing	Polyamide	19. Bushing	Brass DZR CW602N
7. O-ring	EPDM rubber	20. O-ring	NBR rubber
8. Thrust collar	Brass DZR CW724R	21. Seal	Hot melt glue
9. Stem seal O-ring	EPDM rubber	22. Gland flange bolt	Steel gr. 8.8, zinc plated
10. Stem	Stainless steel 1.4021	23. Gland flange	Ductile iron GJS-500-7
11. Bonnet	Ductile iron GJS-500-7	24. Bonnet gasket	EPDM rubber
12. Bonnet bolt	Steel gr. 8.8, zinc plated	25. Wedge shoe	Polyamide
13. Body	Ductile iron GJS-500-7		

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

**Reference nos. and dimensions:**

AVK ref. no.	DN	Flange	L	H	H3	W	Communi-	Theoretical
	mm	drilling	mm	mm	mm	mm	cation	weight/kg
21-050-87-J140069007	50	PN10/16	178	330	412	165	LORA	15
21-050-87-J140069008	50	PN10/16	178	330	412	165	NB-IOT	15
21-080-87-J140069007	80	PN10/16	203	343	438	200	LORA	16
21-080-87-J140069008	80	PN10/16	203	343	438	200	NB-IOT	16
21-100-87-J140069007	100	PN10/16	229	364	469	220	LORA	18
21-100-87-J140069008	100	PN10/16	229	364	469	220	NB-IOT	18
21-150-87-J140069007	150	PN10/16	267	454	589	285	LORA	31
21-150-87-J140069008	150	PN10/16	267	454	589	285	NB-IOT	31
21-200-87-J140069007	200	PN16	292	544	710	340	LORA	49
21-200-87-J140069008	200	PN16	292	544	710	340	NB-IOT	49

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