



Installation & Operating Manual



ART 170 Cast Iron Flanged Swing Check Valve PN16

Albion Valves (UK) Ltd
www.albionvalvesuk.com
Email: sales@albionvalvesuk.com
Tel: 01226 729900



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1. Introduction

- Albion Valves (UK) Ltd ART 170 cast iron swing check valve can be used in pipework systems to prevent backflow and protect water supplies from contamination.
- The ART 170 has been classified in accordance with PED 2014/68/EU.
- Albion's ART 170 will permit flow in one direction only and close automatically if the flow reverses. They are entirely automatic in operation, depending upon pressure and velocity of flow within the line.

2. Technical Data

Valve Type	Size Range	Connection Type	Temperature Rating	Pressure Rating (Max)
ART 170 PN16	DN 50 – DN 600	BS EN 1092 PN16	-10°C – 230°C	16 bar

3. Valve Features

- The ART 170 cast iron swing check valve protects against the risk of backflow and back siphonage contaminations.
- The ART 170 cast iron swing check valve is not approved as a backflow prevention device as defined in Schedule 1 of the Water Supply (Water Fittings) Regulations and/or Scottish Water Byelaws.

4. Valve Installation

- The valve should be sited to ensure ease of access.
- It is the responsibility of the installer to ensure the valve is suitable for service conditions e.g., temperature, pressure, and service media.
- Where fitted, remove flange protectors / dust caps and all other packaging material.
- Care should be taken to ensure the surface finish of the valve is protected during installation.
- The valves may be installed in horizontal or vertical pipework. If installed in vertical pipework the flow direction must be upwards only.
- Suitable gaskets should be used during installation.
- All types of check valves should be installed with x5 diameter of straight length of pipe



upstream and x2 diameters downstream to avoid premature failure of the product due to turbulent flow and are suitable for flow velocities of up to 3m/sec. If situated close to a reciprocating pump then the velocity should not exceed x2m/sec.

- Valves must be provided with adequate support.
- Adjoining pipework must be supported to avoid the imposition of pipeline strain on the body of the valve.
- Bolt tightening must be even and diagonal around the valve face to prevent any alignment distortion. Refer to Albion's Bolt Tightening Sequence document for further information.
- The discs and associated moving parts will be in a constant state of movement if the media velocity is not sufficient to hold the disc in a wide open and stable position.
- In line with BSRIA recommendations, suitable consideration needs to be made as to how the removal of system debris can be achieved during the system flushing process.

5. Approvals Classification

- The valve is classified in accordance with PED 2014/68/EU as Sound Engineering Practice (SEP).

6. Troubleshooting

- If any maintenance is to be undertaken on the valve it is the responsibility of the installer to ensure the system is adequately drained and depressurized.
- The valve should be at zero pressure and ambient temperature prior to any maintenance inspection taking place.
- A full risk assessment should be undertaken prior to any works taking place.
- Albion Valves (UK) Ltd do not offer any spares for this item.

7. Warranty

- For further details of Albion Valves (UK) Ltd warranty period, please refer to Albion Valves (UK) Ltd 'Conditions of Sale' available on our website.



About Albion Valves (UK) Ltd

Albion has been supplying valves and fittings to the building services and industrial markets for the past 40 years.

Albion was created with the sole purpose of providing quality products at an affordable price. With a growing reputation for quality and reliability, Albion is now an established brand providing the industry with a trusted alternative to premium-priced products.

Our commitment to setting the highest standards in all areas of our business means, if you're looking for quality, service, delivery and choice — you'll find it's all at Albion.

Quality

Whatever you need, you can rest assured that if it comes from Albion it has been designed and manufactured to deliver optimum performance and is accredited with the necessary approvals. Our in-house quality department are always on hand too!

Service

We pride ourselves on our customer service – we have even won awards for it! Our cradle to grave approach means you will never be on your own!

Delivery

We know that time is money, and when a priority project depends on a part you can trust Albion to deliver – next day for all orders placed before 4:00PM.

Choice

We may have started out with a single brass ball valve, but our range has grown substantially since and we now consider ourselves to be a 'One Stop Shop' with our comprehensive range. It is becoming more and more apparent to the industry, that it really is all at Albion.