

# Installation & Operating Manual



CORE 492
Cast Iron Flanged Swing
Check Valve PN16



### **Contents**

- 1. Introduction
- 2. Technical Data
- Valve Features
- 4. Valve Installation
- 5. Approvals Classification
- 6. Troubleshooting
- 7. Warranty

### 1. Introduction

- The CORE 492 cast iron swing check valve can be used in pipework systems to prevent backflow and protect water supplies from contamination.
- The CORE 492 has been classified in accordance with PED 2014/68/EU.
- The CORE 492 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)
CORE 492 PN16	DN 50 – DN 600	BS EN 1092 PN16	-10°C – 230°C	16 bar

### 3. Valve Features

- The CORE 492 cast iron swing check valve protects against the risk of backflow and back siphonage contaminations.
- The CORE 492 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. For further details regarding bolting sequences please contact your CORE representative.
- 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.
- CORE do not offer any spares for this item.

## 7. Warranty

 For further details about the CORE range's warranty period, please contact your CORE representative.